Exchange, Network, and Rational Choice Theories

Chapter Outline Exchange Theory

Network Theory Network Exchange Theory Rational Choice Theory

In this chapter we focus on three related theories—exchange theory, rational choice theory, and network theory. Rational choice theory was one of the intellectual influences that shaped the development of exchange theory, especially its tendency to assume a rational actor. However, while contemporary exchange theory continues to demonstrate the influence of rational choice theory, it has been affected by other intellectual currents and has gone off in a series of unique directions (Willer and Emanuelson, 2008). Thus, contemporary exchange and rational choice theories are far from coterminous. One fundamental difference is that rational choice theorists focus on individual decision making, whereas the basic unit of analysis to exchange theorists is the social relationship. Recently, exchange theorists have been devoting more attention to networks of social relationships, and this focus tends to connect them with network theory itself. Network theory has much in common with rational choice theory, although it rejects the assumption of the rationality of human actors (Mizruchi, 1994). Overall, and unlike the theories discussed in the preceding two chapters, these theories share a positivistic orientation.

Exchange Theory

We begin, following Molm and Cook (1995; Cook and Rice, 2001, 2005; Lovaglia, 2007), with an overview of the history of the development of exchange theory, beginning with its roots in behaviorism.

Behaviorism

Behaviorism is best known in psychology, but in sociology it had both direct effects on behavioral sociology (Bushell and Burgess, 1969; Baldwin and Baldwin, 1986) and indirect effects, especially on exchange theory (Molm, 2005a). The behavioral sociologist

is concerned with the relationship between the effects of an actor's behavior on the environment and its impact on the actor's later behavior. This relationship is basic to *operant conditioning*, or the learning process by which "behavior is modified by its consequences" (Baldwin and Baldwin, 1986:6). One might almost think of this behavior, at least initially in the infant, as a random behavior. The environment in which the behavior exists, whether social or physical, is affected by the behavior and in turn "acts" back in various ways. That reaction—positive, negative, or neutral—affects the actor's later behavior. If the reaction has been rewarding to the actor, the same behavior is likely to be emitted in the future in similar situations. If the reaction has been painful or punishing, the behavior is less likely to occur in the future. The behavioral sociologist is interested in the relationship between the *history* of environmental reactions or consequences and the nature of present behavior. Past consequences of a given behavior govern its present state. By knowing what elicited a certain behavior in the past, we can predict whether an actor will produce the same behavior in the present situation.

Of great interest to behaviorists are rewards (or reinforcers) and costs (or punishments). Rewards are defined by their ability to strengthen (that is, reinforce) behavior, while costs reduce the likelihood of behavior. As we will see, behaviorism in general, and the ideas of rewards and costs in particular, had a powerful impact on early exchange theory.

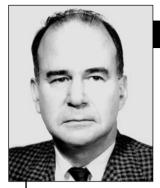
Rational Choice Theory

The basic principles of rational choice theory are derived from neoclassical economics (as well as utilitarianism and game theory; Levi et al., 1990; Lindenberg, 2001; Simpson, 2007). Based on a variety of different models, Debra Friedman and Michael Hechter (1988) have put together what they describe as a "skeletal" model of rational choice theory.

The focus in rational choice theory is on actors. Actors are seen as being purposive, or as having intentionality. That is, actors have ends or goals toward which their actions are aimed. Actors also are seen as having preferences (or values, utilities). Rational choice theory is not concerned with what these preferences, or their sources, are. Of importance is the fact that action is undertaken to achieve objectives that are consistent with an actor's preference hierarchy.

Although rational choice theory starts with actors' purposes or intentions, it must take into consideration at least two major constraints on action. The first is the scarcity of resources. Actors have different resources as well as differential access to other resources. For those with lots of resources, the achievement of ends may be relatively easy. However, for those with few, if any, resources, the attainment of ends may be difficult or impossible.

Related to scarcity of resources is the idea of *opportunity costs* (D. Friedman and Hechter, 1988:202). In pursuing a given end, actors must keep an eye on the costs of forgoing their next-most-attractive action. An actor may choose not to pursue the most highly valued end if her resources are negligible, if as a result the chances of achieving that end are slim, and if in striving to achieve that end she jeopardizes her chances of achieving her next-most-valued end. Actors are seen as trying to maximize



GEORGE CASPAR HOMANS

An Autobiographical Sketch

How I became a sociologist, which was largely a matter of accident, I have described in other publications. [For a full autobiography, see Homans, 1984.] My sustained work in sociology began with my association, beginning in 1933, with Professors Lawrence Henderson and Elton

Mayo at the Harvard Business School. Henderson, a biochemist, was studying the physiological characteristics of industrial work; Mayo, a psychologist, the human factors. Mayo was then and later the director of the famous researches at the Hawthorne Plant of the Western Electric Company in Chicago.

I took part in a course of readings and discussions under Mayo's direction. Among other books, Mayo asked his students to read several books by prominent social anthropologists, particularly Malinowski, Radcliffe-Brown, and Firth. Mayo wanted us to read these books so that we should understand how in aboriginal, in contrast to modern, societies social rituals supported productive work.

I became interested in them for a wholly different reason. In those days the cultural anthropologists were intellectually dominant, and friends of mine in this group, such as Clyde Kluckhohn, insisted that every culture was unique. Instead I began to perceive from my reading that certain institutions of aboriginal societies repeated themselves in places so far separated in time and space that the societies could not have borrowed them from one another. Cultures were not unique and, what was more, their similarities could only be explained on the assumption that human nature was the same the world over. Members of the human species working in similar circumstances had independently created the similar institutions. This was not a popular view at the time. I am not sure it is now.

By this time I had also been exposed to a number of concrete or "field" studies of small human groups both modern and aboriginal. When I was called to active duty in the Navy in World War II, I reflected on this material during long watches at sea. Quite suddenly, I conceived that a number of these studies might be described in concepts common to them all. In a few days I had sketched out such a conceptual scheme.

Back at Harvard with a tenured position after the war, I began working on a book, later entitled *The Human Group* (1950), which was intended to apply my conceptual scheme to the studies in question. In the course of this work it occurred to me that a conceptual scheme was useful only as the starting point

their benefits,¹ and that goal may involve assessing the relationship between the chances of achieving a primary end and what that achievement does for the chances of attaining the second-most-valuable objective.

¹ Although contemporary rational choice theorists recognize that there are limits on the desire and ability to maximize (Heckathorn, 1997).

of a science. What was next required were propositions relating the concepts to one another. In *The Human Group*, I stated a number of such propositions, which seemed to hold good for the groups I had chosen.

I had long known Professor Talcott Parsons and was now closely associated with him in the Department of Social Relations. The sociological profession looked upon him as its leading theorist. I decided that what he called theories were only conceptual schemes, and that a theory was not a theory unless it contained at least a few propositions. I became confident that this view was correct by reading several books on the philosophy of science.

Nor was it enough that a theory should contain propositions. A theory of a phenomenon was an explanation of it. Explanation consisted in showing that one or more propositions of a low order of generality followed in logic from more general propositions applied to what were variously called given or boundary conditions or parameters. I stated my position on this issue in my little book *The Nature of Social Science* (1967).

I then asked myself what general propositions I could use in this way to explain the empirical propositions I had stated in *The Human Group* and other propositions brought to my attention by later reading of field and experimental studies in social psychology. The general propositions would have to meet only one condition: in accordance with my original insight, they should apply to individual human beings as members of a species.

Such propositions were already at hand—luckily, for I could not have invented them for myself. They were the propositions of behavioral psychology as stated by my old friend B. F. Skinner and others. They held good of persons both when acting alone in the physical environment and when in interaction with other persons. In the two editions of my book *Social Behavior* (1961 and revised in 1974), I used these propositions to try to explain how, under appropriate given conditions, relatively enduring social structures could arise from, and be maintained by, the actions of individuals, who need not have intended to create the structures. This I conceive to be the central intellectual problem of sociology.

Once the structures have been created, they have further effects on the behavior of persons who take part in them or come into contact with them. But these further effects are explained by the same propositions as those used to explain the creation and maintenance of the structures in the first place. The structures only provide new given conditions to which the propositions are to be applied. My sociology remains fundamentally individualistic and not collectivistic.

[George Homans died in 1989. See Bell, 1992, for a biographical sketch of Homans. See also Fararo, 2007; Molm, 2005b.]

A second source of constraints on individual action is social institutions. As Friedman and Hechter put it, an individual typically will

find his or her actions checked from birth to death by familial and school rules; laws and ordinances; firm policies; churches, synagogues and mosques; and hospitals and funeral parlors. By restricting the feasible set of courses of action available to individuals, enforceable rules of the game—including norms, laws, agendas, and voting rules—systematically affect social outcomes.

(D. Friedman and Hechter, 1988:202)

These institutional constraints provide both positive and negative sanctions that serve to encourage certain actions and discourage others.

Friedman and Hechter enumerate two other ideas that they see as basic to rational choice theory. The first is an aggregation mechanism, or the process by which "the separate individual actions are combined to produce the social outcome" (D. Friedman and Hechter, 1988:203). The second is the importance of information in making rational choices. At one time, it was assumed that actors had perfect, or at least sufficient, information to make purposive choices among the alternative courses of action open to them. However, there is a growing recognition that the quantity or quality of available information is highly variable and that that variability has a profound effect on actors' choices (Heckathorn, 1997).

At least in its early formation, exchange theory was affected by a rudimentary theory of rationality. Later in this chapter, when we deal with rational choice theory itself, we will discuss some of the greater complexity associated with it.

The Exchange Theory of George Homans

The heart of George Homans's exchange theory lies in a set of fundamental propositions. Although some of his propositions deal with at least two interacting individuals, Homans was careful to point out that these propositions are based on psychological principles. According to Homans, they are psychological for two reasons. First, "they are usually stated and empirically tested by persons who call themselves psychologists" (Homans, 1967:39–40). Second, and more important, they are psychological because of the level at which they deal with the individual in society: "They are propositions about the behavior of individual human beings, rather than propositions about groups or societies as such; and *the behavior of men, as men,* is generally considered the province of psychology" (Homans, 1967:40; italics added). As a result of this position, Homans admitted to being "what has been called—and it is a horrid phrase—a psychological reductionist" (1974:12). Reductionism to Homans is "the process of showing how the propositions of one named science [in this case, sociology] follow in logic from the more general propositions of another named science [in this case, psychology]" (1984:338).

Although Homans made the case for psychological principles, he did not think of individuals as isolated. He recognized that people are social and spend a considerable portion of their time interacting with other people. He attempted to explain social behavior with psychological principles: "What the position [Homans's] does assume is that the general propositions of psychology, which are propositions about the effects on human behavior of the results thereof, do not change when the results come from other men rather than from the physical environment" (Homans, 1967:59). Homans did not deny the Durkheimian position that something new emerges from interaction. Instead, he argued that those emergent properties can be explained by psychological principles; there is no need for new sociological propositions to explain social facts. He used the basic sociological concept of a norm as illustration:

The great example of a social fact is a social norm, and the norms of the groups to which they belong certainly constrain towards conformity the behavior of many more individuals. The question is not that of the existence of constraint, but of its explanation... The norm does not constrain automatically: individuals conform, when they do so, because they perceive it is to their net advantage to conform, and it is psychology that deals with the effect on behavior of perceived advantage.

(Homans, 1967:60)

Homans detailed a program to "bring men back in[to]" sociology, but he also tried to develop a theory that focuses on psychology, people, and the "elementary forms of social life." According to Homans, this theory "envisages social *behavior* as an exchange of activity, tangible or intangible, and more or less rewarding or costly, between at least two persons" (1961:13; italics added).

For example, Homans sought to explain the development of power-driven machinery in the textile industry, and thereby the Industrial Revolution, through the psychological principle that people are likely to act in such a way as to increase their rewards. More generally, in his version of exchange theory, he sought to explain elementary social behavior in terms of rewards and costs. He was motivated in part by the structural-functional theories of his acknowledged "colleague and friend" Talcott Parsons. He argued that such theories "possess every virtue except that of explaining anything" (Homans, 1961:10). To Homans, the structural functionalists did little more than create conceptual categories and schemes. Homans admitted that a scientific sociology needs such categories, but sociology "also needs a set of general propositions about the relations among the categories, for without such propositions explanation is impossible. No explanation without propositions!" (1974:10). Homans, therefore, set for himself the task of developing those propositions that focus on the psychological level; these form the groundwork of exchange theory.

In *Social Behavior: Its Elementary Forms* (1961, 1974),² Homans acknowledged that his exchange theory is derived from both behavioral psychology and elementary economics (rational choice theory). In fact, Homans (1984) regrets that his theory was labeled "exchange theory" because he sees it as a behavioral psychology applied to specific situations. Homans began with a discussion of the exemplar of the behaviorist paradigm, B. F. Skinner, in particular of Skinner's study of pigeons:³

Suppose, then, that a fresh or naïve pigeon is in its cage in the laboratory. One of the items in its inborn repertory of behavior which it uses to explore its environment is the peck. As the pigeon wanders around the cage pecking away, it happens to hit a round red target, at which point the waiting psychologists or, it may be, an automatic machine feeds it grain. The evidence is that the probability

² In the following discussion I move back and forth between the two editions of Homans's book. I do not restrict myself to the revised edition because many aspects of the first edition more clearly reflect Homans's position. In the preface to the revised edition, Homans said that although it was a thorough revision, he had not "altered the substance of the underlying argument" (Homans, 1974:v). Thus I feel safe in dealing simultaneously with both volumes.

³ Skinner also studied other species, including humans.

of the pigeon's emitting the behavior again—the probability, that is, of its not just pecking but pecking on the target—has increased. In Skinner's language the pigeon's behavior in pecking the target is an *operant;* the operant has been *reinforced;* grain is the *reinforcer;* and the pigeon has undergone *operant conditioning.* Should we prefer our language to be ordinary English, we may say that the pigeon has learned to peck the target by being rewarded for doing so. (Homans, 1961:18)

Skinner was interested in this instance in pigeons; Homans's concern was humans. According to Homans, Skinner's pigeons are not engaged in a true exchange relationship with the psychologist. The pigeon is engaged in a one-sided exchange relationship, whereas human exchanges are at least two-sided. The pigeon is being reinforced by the grain, but the psychologist is not truly being reinforced by the pecks of the pigeon. The pigeon is carrying on the same sort of relationship with the psychologist that it would have with the physical environment. Because there is no reciprocity, Homans defined this as *individual behavior*. Homans seemed to relegate the study of this sort of behavior to the psychologist, whereas he urged the sociologist to study social behavior "where the activity of each of at least two animals reinforces (or punishes) the activity of the other, and where accordingly each influences the other" (1961:30). However, it is significant that, according to Homans, no new propositions are needed to explain social behavior as opposed to individual behavior. The laws of individual behavior as developed by Skinner in his study of pigeons explain social behavior as long as we take into account the complications of mutual reinforcement. Homans admitted that he might ultimately have to go beyond the principles derived by Skinner, but only reluctantly.

In his theoretical work, Homans restricted himself to everyday social interaction. It is clear, however, that he believed that a sociology built on his principles ultimately would be able to explain all social behavior. Here is the case Homans used to exemplify the kind of exchange relationship he was interested in:

Suppose that two men are doing paperwork jobs in an office. According to the office rules, each should do his job by himself, or, if he needs help, he should consult the supervisor. One of the men, whom we shall call Person, is not skillful at the work and would get it done better and faster if he got help from time to time. In spite of the rules he is reluctant to go to the supervisor, for to confess his incompetence might hurt his chances for promotion. Instead he seeks out the other man, whom we shall call Other for short, and asks him for help. Other is more experienced at the work than is Person; he can do his work well and quickly and be left with time to spare, and he has reason to suppose that the supervisor will not go out of his way to look for a breach of rules. Other gives Person help and in return Person gives Other thanks and expressions of approval. The two men have exchanged help and approval. (Homans, 1961:31–32)

Focusing on this sort of situation, and basing his ideas on Skinner's findings, Homans developed several propositions.

The Success Proposition

For all actions taken by persons, the more often a particular action of a person is rewarded, the more likely the person is to perform that action. In terms of Homans's Person-Other example in an office situation, this proposition means that a person is more likely to ask others for advice if he or she has been rewarded in the past with useful advice. Furthermore, the more often a person received useful advice in the past, the more often he or she will request more advice. Similarly, the other person will be more willing to give advice and give it more frequently if he or she often has been rewarded with approval in the past. Generally, behavior in accord with the success proposition involves three stages: first, a person's action; next, a rewarded result; and finally, a repetition of the original action or at minimum one similar in at least some respects.

Homans specified a number of things about the success proposition. First, although it is generally true that increasingly frequent rewards lead to increasingly frequent actions, this reciprocation cannot go on indefinitely. At some point individuals simply cannot act that way as frequently. Second, the shorter the interval is between behavior and reward, the more likely a person is to repeat the behavior. Conversely, long intervals between behavior and reward lower the likelihood of repeat behavior. Finally, it was Homans's view that intermittent rewards are more likely to elicit repeat behavior than regular rewards are. Regular rewards lead to boredom and satiation, whereas rewards at irregular intervals (as in gambling) are very likely to elicit repeat behaviors.

The Stimulus Proposition

If in the past the occurrence of a particular stimulus, or set of stimuli, has been the occasion on which a person's action has been rewarded, then the more similar the present stimuli are to the past ones, the more likely the person is to perform the action, or some similar action.

(Homans, 1974:23)

Again we look at Homans's office example: If, in the past, Person and Other found the giving and getting of advice rewarding, they are likely to engage in similar actions in similar situations in the future. Homans offered an even more down-to-earth example: "A fisherman who has cast his line into a dark pool and has caught a fish becomes more apt to fish in dark pools again" (1974:23).

Homans was interested in the process of *generalization*, that is, the tendency to extend behavior to similar circumstances. In the fishing example, one aspect of generalization would be to move from fishing in dark pools to fishing in any pool with any degree of shadiness. Similarly, success in catching fish is likely to lead from one kind of fishing to another (for instance, freshwater to saltwater) or even from fishing to hunting. However, the process of *discrimination* is also of importance. That is, the actor may fish only under the specific circumstances that proved successful in the past. For one thing, if the conditions under which success occurred were too complicated, similar conditions may not stimulate behavior. If the crucial stimulus occurs too long before behavior is required, it may not actually stimulate that behavior. An actor can become oversensitized to stimuli, especially if they are very valuable to the actor. In fact, the actor could respond to irrelevant stimuli, at least until the situation is corrected by repeated failures. All this is affected by the individual's alertness or attentiveness to stimuli.

The Value Proposition

The more valuable to a person is the result of his action, the more likely he is to perform the action.

(Homans, 1974:25)

In the office example, if the rewards each offers to the other are considered valuable, the actors are more likely to perform the desired behaviors than they are if the rewards are not valuable. At this point, Homans introduced the concepts of rewards and punishments. Rewards are actions with positive values; an increase in rewards is more likely to elicit the desired behavior. Punishments are actions with negative values; an increase in punishment means that the actor is less likely to manifest undesired behaviors. Homans found punishments to be an inefficient means of getting people to change their behavior, because people may react in undesirable ways to punishment. It is preferable simply not to reward undesirable behavior; then such behavior eventually becomes extinguished. Rewards are clearly to be preferred, but they may be in short supply. Homans did make it clear that his is not simply a hedonistic theory; rewards can be either materialistic (for example, money) or altruistic (helping others).

The Deprivation-Satiation Proposition

The more often in the recent past a person has received a particular reward, the less valuable any further unit of that reward becomes for him.

(Homans, 1974:29)

In the office, Person and Other may reward each other so often for giving and getting advice that the rewards cease to be valuable to them. Time is crucial here; people are less likely to become satiated if particular rewards are stretched over a long period of time.

At this point, Homans defined two other critical concepts: cost and profit. The *cost* of any behavior is defined as the rewards lost in forgoing alternative lines of action. *Profit* in social exchange is seen as the greater number of rewards gained over costs incurred. The latter led Homans to recast the deprivation-satiation proposition as "the greater the profit a person receives as a result of his action, the more likely he is to perform the action" (1974:31).

The Aggression-Approval Propositions

Proposition A: When a person's action does not receive the reward he expected, or receives punishment he did not expect, he will be angry; he becomes more likely to perform aggressive behavior, and the results of such behavior become more valuable to him.

(Homans, 1974:37)

In the office case, if Person does not get the advice he or she expected and Other does not receive the praise he or she anticipated, both are likely to be angry.⁴ We are

⁴ Although Homans still called this the "law of distributive justice" in the revised later edition, he developed the concept more extensively in the first edition. *Distributive justice* refers to whether the rewards and costs are distributed fairly among the individuals involved. In fact, Homans originally stated it as a proposition: "The more to a man's disadvantage the rule of distributive justice fails of realization, the more likely he is to display the emotional behavior we call anger" (1961:75).

surprised to find the concepts of frustration and anger in Homans's work because they would seem to refer to mental states. In fact, Homans admitted as much: "When a person does not get what he expected, he is said to be frustrated. A purist in behaviorism would not refer to the expectation at all, because the word seems to refer . . . to a state of mind" (1974:31). Homans went on to argue that frustration of such expectations need *not* refer "only" to an internal state. It also can refer to "wholly external events," observable not just by Person but also by outsiders.

Proposition A on aggression-approval refers only to negative emotions, whereas Proposition B deals with more positive emotions:

Proposition B: When a person's action receives the reward he expected, especially a greater reward than he expected, or does not receive punishment he expected, he will be pleased; he becomes more likely to perform approving behavior, and the results of such behavior become more valuable to him.

(Homans, 1974:39)

For example, in the office, when Person gets the advice that he or she expects and Other gets the praise that he or she expects, both are pleased and are more likely to get or give advice. Advice and praise become more valuable to each one.

The Rationality Proposition

In choosing between alternative actions, a person will choose that one for which, as perceived by him at the time, the value, V, of the result, multiplied by the probability, p, of getting the result, is the greater.

(Homans, 1974:43)

While the earlier propositions rely heavily on behaviorism, the rationality proposition demonstrates most clearly the influence of rational choice theory on Homans's approach. In economic terms, actors who act in accord with the rationality proposition are maximizing their utilities.

Basically, people examine and make calculations about the various alternative actions open to them. They compare the amount of rewards associated with each course of action. They also calculate the likelihood that they actually will receive the rewards. Highly valued rewards will be devalued if the actors think it unlikely that they will obtain them. In contrast, lesser-valued rewards will be enhanced if they are seen as highly attainable. Thus, there is an interaction between the value of the reward and the likelihood of attainment. The most desirable rewards are those that are *both* very valuable *and* highly attainable. The least desirable rewards are those that are not very valuable and are unlikely to be attained.

Homans relates the rationality proposition to the success, stimulus, and value propositions. The rationality proposition tells us that whether people will perform an action depends on their perceptions of the probability of success. But what determines this perception? Homans argues that perceptions of whether chances of success are high or low are shaped by past successes and the similarity of the present situation to past successful situations. The rationality proposition also does not tell us why an actor values one reward more than another; for this we need the value proposition. In these ways, Homans links his rationality principle to his more behavioristic propositions.



PETER M. BLAU

A Biographical Sketch

Peter Blau was born in Vienna, Austria, on February 7, 1918. He emigrated to the United States in 1939 and became a United States citizen in 1943. In 1942 he received his bachelor's degree from the relatively little known Elmhurst College in Elmhurst, Illinois. His schooling was

interrupted by World War II, and he served in the United States Army and was awarded the Bronze Star. After the war, he returned to school and completed his education, receiving his Ph.D. from Columbia University in 1952 (Bienenstock, 2005).

Blau first received wide recognition in sociology for his contributions to the study of formal organizations. His empirical studies of organizations as well as his textbooks on formal organizations are still widely cited in that subfield, and he continued to be a regular contributor to it until his death in 2002. He was also noted for a book he coauthored with Otis Dudley Duncan, *The American Occupational Structure* (1967), which won the prestigious Sorokin Award from the American Sociological Association in 1968. That work constitutes a very important contribution to the sociological study of social stratification.

Although he is well known for a range of work, what interests us here is Blau's contribution to sociological theory. What is distinctive about it is that Blau made important contributions to two distinct theoretical orientations. His 1964 book *Exchange and Power in Social Life* is a major component of contemporary exchange theory. Blau's chief contribution there was to take the primarily small-scale exchange theory and try to apply it to larger-scale issues. Although it has some notable weaknesses, it constitutes an important effort to theoretically integrate large- and small-scale sociological issues. Blau was also in the forefront of structural theory. During his term as president of the American Sociological Association (1973–1974), he made this the theme of the annual meeting of the association. He published a number of books and articles designed to clarify and extend structural theory. Among his later works in this area are *Structural Contexts of Opportunities* (1994) and the second edition of *Crosscutting Social Circles* (Blau and Schwartz, 1997).

Peter Blau died on March 12, 2002.

In the end, Homans's theory can be condensed to a view of the actor as a rational profit seeker. However, Homans's theory was weak on mental states (Abrahamsson, 1970; Mitchell, 1978) and large-scale structures (Ekeh, 1974). For example, on consciousness Homans admitted the need for a "more fully developed psychology" (1974:45).

Despite such weaknesses, Homans remained a behaviorist who worked resolutely at the level of individual behavior. He argued that large-scale structures can be understood if we adequately understand elementary social behavior. He contended that exchange processes are "identical" at the individual and societal levels, although he granted that at the societal level, "the way the fundamental processes are combined is more complex" (Homans, 1974:358).

Peter Blau's Exchange Theory

Peter Blau's (1964) goal was "an understanding of social structure on the basis of an analysis of the social processes that govern the relations between individuals and groups. The basic question . . . is how social life becomes organized into increasingly complex structures of associations among men" (1964:2). Blau's intention was to go beyond Homans's concern with elementary forms of social life and into an analysis of complex structures: "The main sociological purpose of studying processes of face-to-face interaction is to lay the foundation for an understanding of the social structures that evolve and the emergent social forces that characterize their development" (1964:13).⁵

Blau focused on the process of exchange, which, in his view, directs much of human behavior and underlies relationships among individuals as well as among groups. In effect, Blau envisioned a four-stage sequence leading from interpersonal exchange to social structure to social change:

- Step 1: Personal exchange transactions between people give rise to . . .
- Step 2: Differentiation of status and power, which leads to . . .
- Step 3: Legitimization and organization, which sow the seeds of . . .
- Step 4: Opposition and change

Micro to Macro

On the individual level, Blau and Homans were interested in similar processes. However, Blau's concept of social exchange is limited to actions that are contingent, that depend, on rewarding reactions from others—actions that cease when expected reactions are not forthcoming. People are attracted to each other for a variety of reasons that induce them to establish social associations. Once initial ties are forged, the rewards that they provide to each other serve to maintain and enhance the bonds. The opposite situation is also possible: with insufficient rewards, an association will weaken or break. Rewards that are exchanged can be either intrinsic (for instance, love, affection, respect) or extrinsic (for instance, money, physical labor). The parties cannot always reward each other equally; when there is inequality in the exchange, a difference of power will emerge within an association.

When one party needs something from another but has nothing comparable to offer in return, four alternatives are available. First, people can force other people to help them. Second, they can find another source to obtain what they need. Third, they

⁵ It is interesting to note that Blau (1987) no longer accepts the idea of building macro theory on a micro base.

can attempt to get along without what they need from the others. Finally, and most important, they can subordinate themselves to the others, thereby giving the others "generalized credit" in their relationship; the others then can draw on this credit when they want them to do something. (This last alternative is, of course, the essential characteristic of power.)

Up to this point, Blau's position is similar to Homans's position, but Blau extended his theory to the level of social facts. He noted, for example, that we cannot analyze processes of social interaction apart from the social structure that surrounds them. Social structure emerges from social interaction, but once this occurs, social structures have a separate existence that affects the process of interaction.

Social interaction exists first within social groups. People are attracted to a group when they feel that the relationships offer more rewards than those from other groups. Because they are attracted to the group, they want to be accepted. To be accepted, they must offer group members rewards. This involves impressing the group members by showing them that associating with the new people will be rewarding. The relationship with the group members will be solidified when the newcomers have impressed the group—when members have received the rewards they expected. Newcomers' efforts to impress group members generally lead to group cohesion, but competition and, ultimately, social differentiation can occur when too many people actively seek to impress each other with their abilities to reward.

The paradox here is that although group members with the ability to impress can be attractive associates, their impressive characteristics also can arouse fears of dependence in other group members and cause them to acknowledge their attraction only reluctantly. In the early stages of group formation, competition for social recognition among group members actually acts as a screening test for potential leaders of the group. Those best able to reward are most likely to end up in leadership positions. Those group members with less ability to reward want to continue to receive the rewards offered by the potential leaders, and this usually more than compensates for their fears of becoming dependent on them. Ultimately, those individuals with the greater ability to reward emerge as leaders, and the group is differentiated.

The inevitable differentiation of the group into leaders and followers creates a renewed need for integration. Once they have acknowledged the leader's status, followers have an even greater need for integration. Earlier, followers flaunted their most impressive qualities. Now, to achieve integration with fellow followers, they display their weaknesses. This is, in effect, a public declaration that they no longer want to be leaders. This self-deprecation leads to sympathy and social acceptance from the other also-rans. The leader (or leaders) also engages in some self-deprecation at this point to improve overall group integration. By admitting that subordinates are superior in some areas, the leader reduces the pain associated with subordination and demonstrates that he or she does not seek control over every area of group life. These types of forces serve to reintegrate the group despite its new, differentiated status.

All this is reminiscent of Homans's discussion of exchange theory. Blau, however, moved to the societal level and differentiated between two types of social organization. Exchange theorists and behavioral sociologists also recognize the emergence of social organization, but there is, as we will see, a basic difference between Blau and "purer" social behaviorists on this issue. The first type, in which Blau recognized the emergent properties of social groups, emerges from the processes of exchange and competition discussed earlier. The second type of social organization is not emergent but is explicitly established to achieve specified objectives—for example, manufacturing goods that can be sold for a profit, participating in bowling tournaments, engaging in collective bargaining, and winning political victories. In discussing these two types of organization, Blau clearly moved beyond the "elementary forms of social behavior" that are typically of interest to social behaviorists.

In addition to being concerned with these organizations, Blau was interested in the subgroups within them. For example, he argued that leadership and opposition groups are found in both types of organization. In the first type, these two groups emerge out of the process of interaction. In the second, leadership and opposition groups are built into the structure of the organization. In either case, differentiation between the groups is inevitable and lays the groundwork for opposition and conflict within the organization between leaders and followers.

Having moved beyond Homans's elementary forms of behavior and into complex social structures, Blau knew that he must adapt exchange theory to the societal level. Blau recognized the essential difference between small groups and large collectivities, whereas Homans minimized this difference in his effort to explain all social behavior in terms of basic psychological principles.

The complex social structures that characterize large collectives differ fundamentally from the simpler structures of small groups. A structure of social relations develops in a small group in the course of social interaction among its members. Since there is no direct social interaction among most members of a large community or entire society, some other mechanism must mediate the structure of social relations among them. (Blau, 1964:253)

This statement requires scrutiny. On the one hand, Blau clearly ruled out social behaviorism as an adequate paradigm for dealing with complex social structures (see the Appendix). On the other hand, he ruled out the social-definitionist paradigm because he argued that social interaction and the social definitions that accompany it do not occur directly in a large-scale organization. Thus, starting from the social-behavior paradigm, Blau aligned himself with the social-facts paradigm in dealing with more complex social structures.

Norms and Values

For Blau, the mechanisms that mediate among the complex social structures are the norms and values (the value consensus) that exist within society:

Commonly agreed upon values and norms serve as media of social life and as mediating links for social transactions. They make indirect social exchange possible, and they govern the processes of social integration and differentiation in complex social structures as well as the development of social organization and reorganization in them. (Blau, 1964:255)

Other mechanisms mediate among social structures, but Blau focused on value consensus. Looking first at social norms, Blau argued that they substitute indirect

exchange for direct exchange. One member conforms to the group norm and receives approval for that conformity and implicit approval for the fact that conformity contributes to the group's maintenance and stability. In other words, the group or collectivity engages in an exchange relationship with the individual. This is in contrast to Homans's simpler notion, which focused on interpersonal exchange. Blau offered a number of examples of collectivity-individual exchanges replacing individual-individual exchanges:

Staff officials do not assist line officials in their work in exchange for rewards received from them, but furnishing this assistance is the official obligation of staff members, and in return for discharging these obligations they receive financial rewards from the company.

Organized philanthropy provides another example of indirect social exchange. In contrast to the old-fashioned lady bountiful who brought her baskets to the poor and received their gratitude and appreciation, there is no direct contact and no exchange between individual donors and recipients in contemporary organized charity. Wealthy businessmen and members of the upper class make philanthropic contributions to conform with the normative expectations that prevail in their social class and to earn the social approval of their peers, not in order to earn the gratitude of the individuals who benefit from their charity.

(Blau, 1964:260)

The concept of the norm in Blau's formulation moves Blau to the level of exchange between individual and collectivity, but the concept of values moves him to the largest-scale societal level and to the analysis of the relationship *among collectivities*. Blau said:

Common values of various types can be conceived of as media of social transactions that expand the compass of social interaction and the structure of social relations through social space and time. Consensus on social values serves as the basis for extending the range of social transactions beyond the limits of direct social contacts and for perpetuating social structures beyond the life span of human beings. Value standards can be considered media of social life in two senses of the term; the value context is the mediaum that molds the form of social relationships; and common values are the mediating links for social associations and transactions on a broad scale.

(Blau, 1964:263-264)

For example, *particularistic* values are the media of integration and solidarity. These values serve to unite the members of a group around such things as patriotism or the good of the school or the company. These are seen as similar at the collective level to sentiments of personal attraction that unite individuals on a face-to-face basis. However, they extend integrative bonds beyond mere personal attraction. Particularistic values also differentiate the in-group from the out-group, thereby enhancing their unifying function.

Blau's analysis carries us far from Homans's version of exchange theory. The individual and individual behavior, paramount for Homans, have almost disappeared in Blau's conception. Taking the place of the individual are a wide variety of *social facts*. For example, Blau discussed groups, organizations, collectivities, societies, norms,

and values. Blau's analysis is concerned with what holds large-scale social units together and what tears them apart, clearly traditional concerns of the social factist.

Although Blau argued that he was simply extending exchange theory to the societal level, in so doing he twisted exchange theory beyond recognition. He was even forced to admit that processes at the societal level are fundamentally different from those at the individual level. In his effort to extend exchange theory, Blau managed only to transform it into another macro-level theory. Blau seemed to recognize that exchange theory is concerned primarily with face-to-face relations. As a result, it needs to be complemented by other theoretical orientations that focus mainly on macro structures. Blau (1987, 1994) came to recognize this explicitly, and his later work focuses on macro-level, structural phenomena.

The Work of Richard Emerson and His Disciples

In 1962 Richard Emerson published an important paper on power-dependence relations, but it was two related essays written in 1972 (Emerson, 1972a, 1972b) that "marked the beginning of a new stage in the development of social exchange theory" (Cook and Whitmeyer, 2000; Molm and Cook, 1995:215). Molm and Cook see three basic factors as the impetus for this new body of work. First, Emerson was interested in exchange theory as a broader framework for his earlier interest in power dependence. It seemed clear to Emerson that power was central to the exchange theory perspective. Second, Emerson felt that he could use behaviorism (operant psychology) as the base of his exchange theory but avoid some of the problems that had affected Homans. For one thing, Homans and other exchange theorists had been accused of assuming an overly rational image of human beings, but Emerson felt he could use behaviorism without assuming a rational actor. For another, Emerson believed he could avoid the problem of tautology that ensnared Homans:

Homans predicted individual exchange behavior from the reinforcement provided by another actor, but behavioral responses and reinforcement do not have independent meaning in operant psychology. A reinforcer is, by definition, a stimulus consequence that increases or maintains response frequency.

(Molm and Cook, 1995:214)

In addition, Emerson felt he could avoid the charge of reductionism (one that Homans reveled in) by being able to develop an exchange perspective capable of explaining macro-level phenomena. Third, unlike Blau, who resorted to an explanation reliant on normative phenomena, Emerson wanted to deal with social structure and social change by using "social relations and social networks as building blocks that spanned different levels of analysis" (Molm and Cook, 1995:215). In addition, the actors in Emerson's system could be either individuals or larger corporate structures (albeit structures working through agents). Thus, Emerson used the principles of operant psychology to develop a theory of social structure.

In the two essays published in 1972, Emerson developed the basis of his integrative exchange theory. In the first of those essays (1972a) Emerson dealt with the psychological basis for social exchange, while in the second (1972b) he turned to macro-level and exchange relations and network structures. Later, Emerson made the



RICHARD **E**MERSON

A Biographical Sketch*

Richard Emerson was born in Salt Lake City, Utah, in 1925. Raised near mountains, he never seemed to stray too far from rivers, mountain peaks, and glaciers. One of his most prized personal accomplishments was his participation in the successful ascent of Mt. Everest in 1963. Aspects of

this experience are captured in his publication "Everest Traverse" in the December 1963 edition of the *Sierra Club Annual Bulletin* and in an article published in *Sociometry* in 1966. He received a grant from the National Science Foundation to study group performance under prolonged stress on this climb. That project earned him the Hubbard Medal, presented to him by President Kennedy on behalf of the National Geographic Society in July 1963 (Cook, 2005).

His love of mountains and the rural social life of the mountain villages of Pakistan became a constant source of sociological inspiration for Richard Emerson during his career. His studies of interpersonal behavior, group performance, power, and social influence were often driven by his close personal encounters with expedition teams for which the intensity of cooperation and competition were exacerbated by environmental stress.

After World War II and a tour of duty with the Army in Western Europe, he completed his B.A. in 1950 at the University of Utah and then went on to earn an M.A. (1952) and a Ph.D. (1955) from the University of Minnesota, where his major field was sociology and his minor field was psychology. His doctoral dissertation was titled "The Determinants of Influence in Face to Face Groups."

micro-macro linkage more explicit: "I am attempting to extend exchange theory and research from *micro* to more *macro* levels of analysis through the study of *exchange network structures*" (cited in Cook, 1987:212). As Karen Cook (Whitmeyer, 2005a), Emerson's most important disciple, points out, it is the idea of exchange network structures that is central to the micro-macro linkage: "The use of the notion, exchange networks, allows for the development of theory that bridges the conceptual gap between isolated individuals or dyads and larger aggregates or collections of individuals (e.g., formal groups or associations, organizations, neighborhoods, political parties, etc.)" (1987:219).⁶

Both Emerson and Cook accept and begin with the basic, micro-level premises of exchange theory. Emerson, for example, says, "The exchange approach takes as its first focus of attention the benefits people obtain from, and contribute to, the process of social interaction" (1981:31). More specifically, Emerson accepts behavioristic

⁶ Emerson and Cook (as well as Blau) are not the only ones to have developed integrative exchange theories. See also Uehara (1990) and Willer, Markovsky, and Patton (1989).

Emerson's first academic post was at the University of Cincinnati (1955–1964). Upon leaving Cincinnati Emerson wrote, "A recurring theme in my work was crystallized in the article on power-dependence relations. However, this theory is clearly a springboard for the future rather than a summary of the past. I have rather specific plans for both theoretical and empirical extensions into stratification and community power structure." He was still engaged in this work when he died unexpectedly in December 1982. His work on power-dependence relations (1962) is now a citation classic and has influenced much current work on power in American sociology.

Two other pieces have been highly influential. These are his two chapters on social exchange theory which were written in 1967 and subsequently published in 1972. This work was completed at the University of Washington, where he joined the faculty in 1965. He was drawn to the Northwest, I am sure, by the lure of the Olympics and Cascades.

Emerson's influence on sociological theory crystallized while he was at the University of Washington, where he collaborated with Karen Cook for a ten-year period (1972–1982) on the empirical development of social exchange theory. They carried out a program of research in the first computerized laboratory for conducting research of this type in the United States. This work was funded by three successive grants from the National Science Foundation.

Emerson is remembered by former colleagues and students as a "thinker." This aspect of his personality is best captured in a quote from an article he wrote in 1960 in Robert Bowen's book *The New Professors:* "So, what is there of value in the academic (that is, 'nonpractical, removed-from-life') study of a topic? People ask this question, too. Such questions are difficult to answer because those who ask have never climbed a mountain and have no interest in a topic. I say they are far removed from life."

*This biographical sketch was written by Karen Cook.

principles as his starting point. Emerson (1981:33) outlines three core assumptions of exchange theory:

- 1. People for whom events are beneficial tend to act "rationally," and so such events occur.
- 2. Because people eventually become satiated with behavioral events, such events come to be of diminishing utility.
- 3. The benefits that people obtain through social processes are dependent on the benefits that they are able to provide in exchange, giving exchange theory "its focus [on] the flow of *benefits through social interaction*."

All this is quite familiar, but Emerson begins to point behavioristically oriented exchange theory in a different direction at the close of his first, micro-oriented 1972 essay: "Our main purpose in this chapter is to incorporate operant principles into a framework which can handle more complex situations than operant psychology confronts" (1972a:48).

This theme opens the second 1972 essay: "The purpose of this essay is to begin construction of a theory of social exchange in which *social structure* is taken as the dependent variable" (Emerson, 1972b:58). Whereas in the first 1972 essay Emerson was concerned with a single actor involved in an exchange relation with his or her environment (for example, a person fishing in a lake), in the second essay he turns to social-exchange relationships as well as to exchange networks.

The actors in Emerson's macro-level exchange theory can be either individuals or collectivities. Emerson is concerned with the exchange relationship among actors. An *exchange network* has the following components (Cook et al., 1983:277):

- 1. There is a set of either individual or collective actors.
- 2. Valued resources are distributed among the actors.
- 3. There is a set of exchange opportunities among all the actors in the network.
- 4. Some exchange opportunities have developed into actually used exchange relations.
- 5. Exchange relations are connected to one another in a single network structure.

In sum: "An 'exchange network' is a specific social structure formed by two or more connected exchange relations between actors" (Cook et al., 1983:277).

The idea of an exchange network links exchange between two actors (dyadic exchange) to more macro-level phenomena (Yamagishi, Gillmore, and Cook, 1988:835).

Each exchange relation is embedded within a larger exchange network consisting of sets of connected exchange relations. By connected, it is meant that the exchange in one relationship affects the exchange in another.

Thus, we may say that two dyadic-exchange relations, A-B and A-C, form a minimal network (A-B-C) when exchange in one affects exchange in the other. It is *not* enough for A, B, and C to have a common membership for an exchange network to develop; there must be a relationship between exchanges in A-B and B-C. For example, Abe may exchange information with Bill about office politics and Bill may exchange services with Cathy, but that alone would not make them an exchange network unless Abe's information positively or negatively affected Bill's exchange of services with Cathy.

An important distinction is that between positive and negative exchange connections (Emerson, 1972b). Connections are positive when the exchange in one positively affects the exchange in another (for example, the information that Abe gives Bill helps Bill provide services for Cathy), negative when one serves to inhibit the exchange in the other (Abe might tell Bill some gossip about Cathy that interferes with Bill and Cathy's relationship), or mixed.

Power-Dependence

Emerson defined *power* as "the level of potential cost which one actor can induce another to 'accept,'" while *dependence* involves "the level of potential cost an actor will accept within a relation" (1972b:64). These definitions lead to Emerson's powerdependence theory (Molm, 2007), which Yamagishi, Gillmore, and Cook summarize in the following way: "The power of one party over another in an exchange relation is an inverse function of his or her dependence on the other party" (1988:837; Whitmeyer, 2005b). Unequal power and dependency lead to imbalances in relationships, but over time these move toward a more balanced power-dependence relationship.

Molm and Cook (1995) regard dependence as the critical concept in Emerson's work. As Molm puts it, "The actors' *dependencies* on each other are the major structural determinants of their interaction and of their power over each other" (1988:109). Here is the way Emerson originally dealt with the issue: "The dependence of actor A upon actor B is (1) directly proportional to A's *motivational investment* in goals mediated by B, and (2) inversely proportional to the *availability* of those goals to A outside of the A-B relation" (1962:32). Thus, a sense of dependence is linked to Emerson's definition of power: "the power of A over B is equal to, and based upon, the dependence of B upon A" (1962:33). There is balance in the relationship between A and B when the dependence of A on B equals the dependence of B on A. Where there is an imbalance in the dependencies, the actor with less dependence has an advantage in terms of power. Thus, power is a potential built into the structure of the *relationship* between A and B. Power also can be used to acquire rewards from the relationship. Even in balanced relationships, power exists, albeit in a kind of equilibrium.

Power-dependence studies have focused on positive outcomes—the ability to reward others. However, in a series of studies, Molm (1988, 1989, 1994, 1997; Peterson, 2005) has emphasized the role of negative outcomes—punishment power—in power-dependence relationships. That is, power can be derived from both the ability to reward and the ability to punish others. In general, Molm has found that punishment power is weaker than reward power, in part because acts of punishment are likely to elicit negative reactions. This means that the risk of escalating negative reactions is an important part of punishment power. The element of risk leads to the conclusion that punishment power is used more strategically than is reward power (Molm, 2001).

However, in one study, Molm (1994) has suggested that the relative weakness and associated risk of punishment power may arise because it is not widely used, not because it is inherently less effective than reward power. Molm, Quist, and Wisely (1994) found that the use of punishment power is more likely to be perceived as fair when it is used by those who also have the power to reward but that it is likely to be perceived as unfair and therefore a weak reinforcer when partners are expecting rewards.

A More Integrative Exchange Theory

Cook, O'Brien, and Kollock (1990) define exchange theory in inherently integrative terms as being concerned with exchanges at various levels of analysis, including those among interconnected individuals, corporations, and nation-states. They identify two strands of work in the history of exchange—one at the micro level, focusing on social behavior as exchange, and the other at the more macro level, viewing social structure as exchange. They see the strength of exchange theory in micro-macro integration because "it includes within a single theoretical framework propositions that apply to individual actors as well as to the macro level (or systemic level) and it attempts to formulate explicitly the consequences of changes at one level for other levels of analysis" (Cook, O'Brien, and Kollock, 1990:175).

Cook, O'Brien, and Kollock identify three contemporary trends, all of which point toward a more integrative exchange theory. The first is the increasing use of field research focusing on more macroscopic issues, which can complement the traditional use of the laboratory experiment to study microscopic issues. Second, they note the shift in substantive work away from a focus on dyads and toward larger networks of exchange. Third, and most important, is the ongoing effort, discussed further below, to synthesize exchange theory and structural sociologies, especially network theory.

Along the way, Cook, O'Brien, and Kollock discuss the gains to be made from integrating insights from a variety of other micro theories. Decision theory offers "a better understanding of the way actors make choices relevant to transactions" (Cook, O'Brien, and Kollock, 1990:168). More generally, cognitive science (which includes cognitive anthropology and artificial intelligence) sheds "more light on the way in which actors perceive, process, and retrieve information" (Cook, O'Brien, and Kollock, 1990:168). Symbolic interactionism offers knowledge about how actors signal their intentions to one another, and this is important in the development of trust and commitment in exchange relationships. Most generally, they see their synthetic version of exchange theory as being well equipped to deal with the centrally important issue of the agency-structure relationship. In their view, "Exchange theory is one of a limited number of theoretical orientations in the social sciences that explicitly conceptualize purposeful actors in relation to structures" (Cook, O'Brien, and Kollock, 1990:172).

There are a number of recent examples of efforts by exchange theorists to synthesize their approach with other theoretical orientations. For example, Yamagishi and Cook (1993) have sought to integrate exchange theory with social dilemma theory (Yamagishi, 1995), a variant of rational choice theory. The social dilemma approach is derived from the famous dyadic concept of the prisoner's dilemma and the research on it: "A social dilemma is defined as a situation involving a particular type of incentive structure, such that (1) if all group members cooperate, all gain, whereas (2) for each individual it is more beneficial not to cooperate" (Yamagishi and Cook, 1993:236; Yamagishi, 2005). Without going into the details of their study, Yamagishi and Cook find that the nature of the exchange relationship and structure affects the way people deal with social dilemmas.

In another effort, Hegtvedt, Thompson, and Cook (1993) sought to integrate exchange theory with one approach that deals with cognitive processes: attribution theory. The integration with this theory gives exchange theory a mechanism to deal with the way people perceive and make attributions, and exchange theory compensates for the weakness in attribution theory in dealing with "the social structural antecedents and the behavioral consequences of attribution" (Hegtvedt, Thompson, and Cook, 1993:100). Thus, for example, the authors found support for the hypotheses that perceived power is related to one's structural power position and that those "who perceive themselves to have greater power are more likely to attribute their exchange outcomes to personal actions or interactions" (Hegtvedt, Thompson, and Cook, 1993:104). Although not fully supportive of the authors' hypotheses, this study points to the importance of studying the relationship between social structure, cognitive processes (perception and attribution), and behavior.

An important proposal was made by Meeker (1971) that would disconnect exchange theory from its reliance on rational choice theory and allow its integration with a variety of micro theories of agency. Meeker suggested that rationality be looked at as one type of exchange rule and that exchanges could be based on other exchange rules, such as altruism, competition, reciprocity, and status consistency.

In recent years, exchange theory has begun to move in a variety of new directions (Molm, 2001). First, there is increasing attention to the risk and uncertainty involved in exchange relationships (Kollock, 1994). For example, one actor may provide valuable outcomes for the other without receiving anything of value in return. Second, an interest in risk leads to a concern for trust in exchange relations. The issue is: Can one actor trust another to reciprocate when valued outcomes have been provided? Third, there is the related issue of actors reducing risk and increasing trust by developing a set of mutual commitments to one another (Molm, 1997). This, in turn, is linked to a fourth issue—increasing attention to affect and emotions in a theory that has been dominated by a focus on self-interested actors. Fifth, while much of recent exchange theory has focused on structure, there is increasing interest in fleshing out the nature and role of the actor in exchange relationships. In terms of issues in need of greater attention, Molm argues that exchange theory has tended to focus on exchange structures but needs to do more with change, or exchange dynamics. Finally, the new direction that has seen most attention in recent years has been the integration of exchange theory with network theory. We will come back to this network exchange theory after we have discussed network theory.

Network Theory

Network analysts (for example, Harrison White, 1992; Mizruchi, 2005; Wasserman and Faust, 1994; Wellman and Berkowitz, 1988/1997) take pains to differentiate their approach from what Ronald Burt calls "atomistic" and "normative" sociological approaches (Burt, 1982; see also Granovetter, 1985). Atomistic sociological orientations focus on actors making decisions in isolation from other actors. More generally, they focus on the "personal attributes" of actors (Wellman, 1983). Atomistic approaches are rejected because they are too microscopic and ignore relationships among actors. As Barry Wellman puts it, "Accounting for individual motives is a job better left to psychologists" (1983:163). This, of course, constitutes a rejection of a number of sociological theories that are in one way or another deeply concerned with motives.

In the view of network theorists, normative approaches focus on culture and the socialization process through which norms and values are internalized in actors. In the normative orientation, what holds people together are sets of shared ideas. Network theorists reject such a view and argue that one should focus on the objective pattern of ties linking the members of society (Mizruchi, 1994). Here is how Wellman articulates this view:

Network analysts want to study regularities in how people and collectivities behave rather than regularities in beliefs about how they ought to behave. Hence network analysts try to avoid normative explanations of social behavior. They dismiss as non-structural any explanation that treats social process as the sum of individual actors' personal attributes and internalized norms.

(Wellman, 1983:162)

Basic Concerns and Principles

Having made clear what it is not, network theory then clarifies its major concern—social relationships, or the objective pattern of ties linking the members (individual and collective) of society (Burt, 1992). Let us look at how Wellman articulates this focus:

Network analysts start with the simple, but powerful, notion that the primary business of sociologists is to study social structure. . . . The most direct way to study a social structure is to analyze the pattern of ties linking its members. Network analysts search for deep structures—regular network patterns beneath the often complex surface of social systems. . . . Actors and their behavior are seen as constrained by these structures. Thus, the focus is not on voluntaristic actors, but on structural constraint.

(Wellman, 1983:156–157)

One distinctive aspect of network theory is that it focuses on a wide range of micro to macro structures. That is, to network theory the actors may be people (Wellman and Wortley, 1990), but they also may be groups, corporations (W. Baker, 1990; Clawson, Neustadtl, and Bearden, 1986; Mizruchi and Koenig, 1986), and societies. Links occur at the large-scale, social-structural level as well as at more microscopic levels. Mark Granovetter describes such micro-level links as action "embedded" in "the concrete personal relations and structures (or 'networks') of such relations" (1985:490). Basic to any of these links is the idea that any "actor" (individual or collective) may have differential access to valued resources (wealth, power, information). The result is that structured systems tend to be stratified, with some components dependent on others.

One key aspect of network analysis is that it tends to move sociologists away from the study of social groups and social categories and toward the study of ties among and between actors that are not "sufficiently bounded and densely knit to be termed groups" (Wellman, 1983:169). A good example of this is Granovetter's (1973, 1983, 2005; Tindall and Malinick, 2007) work on "the strength of weak ties." Granovetter differentiates between "strong ties," for example, links between people and their close friends, and "weak ties," for example, links between people and mere acquaintances. Sociologists have tended to focus on people with strong ties or social groups. They have tended to regard strong ties as crucial, whereas weak ties have been thought of as being of little sociological importance. Granovetter's contribution is to make it clear that weak ties can be very important. For example, weak ties between two actors can serve as a bridge between two groups with strong internal ties. Without such a weak tie, the two groups might be totally isolated. This isolation, in turn, could lead to a more fragmented social system. An individual without weak ties would find himself or herself isolated in a tightly knit group and would lack information about what is going on in other groups as well as in the larger society. Weak ties therefore prevent isolation and allow individuals to be better integrated into the larger society. Although Granovetter emphasizes the importance of weak ties, he hastens to make it clear "that strong ties can also have value" (1983:209; see Bian, 1997). For example, people with strong ties have greater motivation to help one another and are more readily available to one another.

Network theory is relatively new and undeveloped. As Burt says, "There is currently a loose federation of approaches referenced as network analysis" (1982:20). But it is growing, as evidenced by the number of papers and books being published from a network perspective and the fact that there is now a journal (*Social Networks*) devoted to it. Although it may be a loose conglomeration of work, network theory does seem to rest on a coherent set of principles (Wellman, 1983).

First, ties among actors usually are symmetrical in both content and intensity. Actors supply each other with different things, and they do this with greater or lesser intensity. Second, the ties among individuals must be analyzed within the context of the structure of larger networks. Third, the structuring of social ties leads to various kinds of nonrandom networks. On the one hand, networks are transitive: if there is a tie between A and B and between B and C, there is likely to be a tie between A and C. The result is that there is more likely to be a network involving A, B, and C. On the other hand, there are limits to how many links can exist and how intense they can be. The result is that network clusters with distinct boundaries separating one cluster from another are also likely to develop. Fourth, the existence of clusters leads to the fact that there can be cross-linkages between clusters as well as between individuals. Fifth, there are asymmetric ties among elements in a system, with the result that scarce resources are differentially distributed. Finally, the unequal distribution of scarce resources leads to both collaboration and competition. Some groups band together to acquire scarce resources collaboratively, whereas others compete and conflict over resources. Thus, network theory has a dynamic quality (Rosenthal et al., 1985), with the structure of the system changing with shifting patterns of coalition and conflict.

To take one example, Mizruchi (1990) is interested in the issue of the cohesion of corporations and its relationship to power. He argues that historically cohesion has been defined in two different ways. The first, or subjective view, is that "cohesion is a function of group members' feelings of identification with the group, in particular their feeling that their individual interests are bound up with the interests of the group" (Mizruchi, 1990:21). The emphasis here is on the normative system, and cohesion is produced either by the internalization of the normative system or by group pressure. The second, or objective, view is that "solidarity can be viewed as an objective, observable process independent of the sentiments of individuals" (Mizruchi, 1990:22). Needless to say, given his alignment with network theory, Mizruchi comes down on the side of the objective approach to cohesion.

Mizruchi sees similarity of behavior as a result not only of cohesion but also of what he calls *structural equivalence:* "Structurally equivalent actors are those with identical relations with other actors in the social structure" (1990:25). Thus, structural equivalence exists among, say, corporations, even though there may be no communication among them. They behave in the same way because they stand in the same relationship to some other entity in the social structure. Mizruchi concludes that structural equivalence plays at least as strong a role as cohesion in explaining similarity of behavior. Mizruchi accords great importance to structural equivalence, which, after all, implies a network of social relations.

A More Integrative Network Theory

Ronald Burt (1982) has been in the forefront of network theorists who have sought to develop an integrated approach instead of another form of structural determinism. Burt begins by articulating a schism within action theory between the "atomistic" and "normative" orientations. The atomistic orientation "assumes that alternative actions are evaluated independently by separate actors so that evaluations are made without reference to other actors," whereas the "normative perspective is defined by separate actors within a system having interdependent interests as social norms generated by actors socializing one another" (Burt, 1982:5).

Burt develops a perspective that "circumvents the schism between atomistic and normative action," one that "is less a synthesis of the existing two perspectives on action than it is a third view intellectually bridging the two views" (1982:8). Although he admittedly borrows from the other two perspectives, Burt develops what he calls a *structural perspective* that differs from the other two "in the criterion for the postulate of marginal evaluation. The criterion assumed by the proposed structural perspective is an actor's status/role-set as generated by the division of labor. An actor evaluates the utility of alternative actions partly in regard to his personal conditions and partly in regard to the conditions of others" (1982:8). He sees his approach as a logical extension of the atomistic approach and an "empirically accurate restriction" on normative theory.

Figure 12.1 depicts Burt's structural theory of action. According to Burt's description of the premise of a structural theory of action, "actors are purposive under social structural constraints" (1982:9; see also Mizruchi, 1994). In his view:

Actors find themselves in a social structure. That social structure defines their social similarities, which in turn pattern their perceptions of the advantages to be had by taking each of several alternative actions. At the same time, social structure differentially constrains actors in their ability to take actions. Actions eventually taken are therefore a joint function of actors pursuing their interests to the limit of their ability where both interests and ability are patterned by social structure. Finally, actions taken under social structural constraint can modify social structure itself, and these modifications have the potential to create new constraints to be faced by actors within the structure.

(Burt, 1982:9)

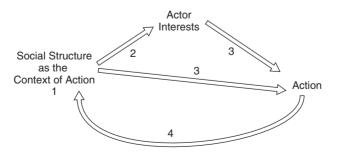


FIGURE 12.1 Ronald Burt's Integrative Model

Network Exchange Theory

Network exchange theory (Markovsky, 2005) combines social exchange theory and network analysis. The combination is assumed to preserve the advantages of both theories while remedying their deficiencies. On the one hand, network analysis has the advantage of being able to build complex representations of social interactions from simple, diagrammable models of social relations, but Cook and Whitmeyer (1992:123) argue that it has a deficient conception of exactly what the relation is. On the other hand, social exchange theory has the advantage of a simple model of actors who make choices based on possible benefits, but it is deficient because it sees social structures mainly as an outcome of individual choices rather than a determinant of those choices. To put it more simply, network theory has a strong model of structure (networks of relations) but a vague model of what the relations consist of, whereas exchange theory has a strong model of the relations between actors (exchanges) but a weak model of the social structures within which they operate. Social exchange theory's model of the actor exchanging in order to increase benefits provides the content that network analysis is lacking, and network analysis provides the model of social structure as an independent variable that exchange theory is lacking.

The fundamental idea behind network exchange theory is that any social exchange occurs in the context of larger networks of social exchanges. What is being exchanged is less important in this approach than the various sizes, shapes, and connections of the networks within which these exchanges occur. Like social exchange, network exchange theory focuses primarily on the issue of power. A basic premise is that the more opportunities an actor has for exchange, the greater the actor's power is. It is assumed that these opportunities for exchange are directly related to the structure of the network. As a result of their position in the network, actors vary in their opportunities to exchange benefits and therefore in their ability to control or accumulate benefits.

Emerson (1972a, 1972b) initiated the research on social exchange networks when he concluded that social exchange theory was limited by its focus on two-person, or dyadic, exchange relations. By treating those relations as interconnected, Emerson moved toward seeing exchange as being embedded in larger network structures. Emerson's (1972b:58) original intent was to develop "a theory of social exchange in which social structure is taken as the dependent variable." However, his research soon demonstrated that social structure also could be an independent variable; in other words, not only was structure determined by exchange relations, exchange relations were determined by social structures.

Yamagishi, Gillmore, and Cook (1988) went further by linking exchange theory and network theory. They argued that power is central to exchange theory but that power cannot be studied meaningfully in the dyad. Rather, power "is fundamentally a social structural phenomenon" (Yamagishi, Gillmore, and Cook, 1988:834). A fully adequate theory must combine an analysis of exchange relations with an analysis of the linkages between exchange relations. To do this, they built on Emerson's idea of positively and negatively linked exchanges to generate predictions about the distribution of power in networks. In a subsequent article, Cook and Whitmeyer (1992) more rigorously examined the possibility of combining exchange theory and network analysis. They looked at the compatibilities between the two approaches' views of actors and their views of structure. They concluded that the two theories' views of actors were essentially the same, because virtually all exchange theories explicitly and most network analyses implicitly assume that actors are rationally pursuing the maximization of their selfinterest in whatever way they define it. They also noted a great deal of similarity in the two approaches' view of structure. The main difference is that exchange theory sees the social relations that constitute the structure only in terms of actual exchanges, whereas network analysis is inclined to include any kind of relation, whether exchange is believed to occur or not.

It is this difference in their definitions of a relation that constitutes the essential difference between an exchange network (Friedkin, 2005) and the kind of network of interest to network analysis. Network exchange theorists are interested only in relations of exchange, whereas network theorists are interested in many types of relations. As an example, many network studies focus on "centrality." This might mean the advantage of being linked to many different people. According to network exchange theorists, just being "linked" is not enough; the relations must be ones of exchange. Thus, in the earlier example of Abe, Bill, and Cathy, Bill is "central," according to network exchange and, in addition, one dyad's exchanges have some sort of effect on the other's exchanges. In contrast, for network analysis, it is enough if they are linked, and the precise nature of the link is irrelevant.

Structural Power

One of the reasons for linking exchange theory and network analysis was to be able to move beyond an analysis of power within dyadic relations and be able to analyze the distribution of power in the network as a whole. This has become one of the most important topics in contemporary network exchange theory. In one of the first attempts to look at the distribution of power in a network, Cook and her colleagues (1983) developed a theory of "vulnerability." They argued that the determination of the power of a position is based on the amount of dependence of the entire structure on that position. In their view, this systemwide dependence is a function of both the structural centrality of the position and the nature of power-dependence on a particular structural position.

Another important attempt to look at the distribution of power in networks was developed by Markovsky, Willer, and their colleagues (Markovsky, Willer, and Patton, 1988; Willer and Patton, 1987). This approach has become so influential that it usually goes by the name of *network exchange theory* (Markovsky, 2005), often abbreviated as NET. The theory assumes that power is determined by the structure of the network, in particular the availability of alternative connections among actors. The theory uses a graph-theoretical power index (GPI) based on counting alternative network

paths and a resistance model based on actors' expectations about outcomes to predict relative power in networks.

Strong and Weak Power Structures

NET distinguishes between two types of networks—strong and weak power—based on whether actors can be excluded from exchanges. Strong power networks include some actors who must be excluded (low power actors) and other actors who cannot be excluded (high power actors). For example, in a company, the decision about whom to promote to a higher position can be looked at as an exchange. The higher position is exchanged for the work done for the boss who can grant the higher position. If we assume that there is only one boss and there are many competitors for the position, we would have a strong power network. The boss cannot be excluded from the exchange, whereas all but one of the competitors must be. The theory predicts that high power actors in strong power networks will obtain virtually all the available resources. In this case, the competitors will be motivated to provide whatever work the boss demands. However, if we introduce another boss into the network who also can promote a competitors for the portion the theory predicts that both bosses would have much less power because the competitors for the promotion would now have an alternative for exchange.

The introduction of a second boss would make this a weak power structure. In weak power structures, all positions are vulnerable to exclusions. The presence of Boss 2 means that Boss 1 can be excluded from the exchange. Competitors therefore can perform services for a boss who will promote them while demanding the least amount of work in exchange. In weak power networks, positions may have different possibilities for exclusion. Let us say that there are twenty competitors for the promotion and only two bosses. This makes a given competitor more likely to be excluded than a given boss. The theory predicts that positions less likely to be excluded (bosses) benefit proportionally more than do positions more likely to be excluded (competitors).

One of the great advantages of linking exchange theory to network analysis is the expanded view of agency. Network analysis has tended to downplay agency and concentrate on descriptions of the properties of given structures. Exchange theory has a model of a rational self-interested agent, but this model has disregarded the power of agents to change structure to enhance their bargaining positions. Leik (1992) has used network exchange theory to examine actor's "strategic manipulation of network linkages." This suggests that low power positions, such as the competitors for the promotion, may seek out other sources of promotion in order to enhance their position, while "high power actors prefer to isolate those dependent on them" (Leik, 1992: 316).

One other, more ambiguous characteristic of network exchange theory should be mentioned: its propensity for laboratory experiments. Most of the theory's developments have been driven by experiments with test subjects in controlled laboratory conditions. It is, of course, a great advantage to be able to test theories under controlled conditions, and the rarity of this situation in sociology is often a source of embarrassment. However, in order to isolate relevant characteristics, these laboratory conditions have been extremely artificial. Even in laboratories, the theory's predictions are obviated if subjects are allowed to know the unequal effects of their exchanges because normative considerations interfere (Molm, 2001:264). This means that experimental results must be interpreted carefully when applied to social interactions outside the laboratory. Furthermore, the artificial conditions of the laboratory can encourage an artificial theory. As Willer (1999:289) points out, "When an established experimental paradigm governs what will and will not be investigated, theory development becomes one-sided and research focuses on issues that have no importance or no known importance outside the laboratory." As an example Willer cites the intense interest in weak power networks. "No one has studied weak power networks in the field. Therefore, their empirical significance, even their empirical existence, is not known" (Willer, 1999:290).

Rational Choice Theory

Although it influenced the development of exchange theory, rational choice theory was generally marginal to mainstream sociological theory (Hechter and Kanazawa, 1997). It is largely through the efforts of one man, James S. Coleman, that rational choice theory has become one of the "hot" theories in contemporary sociology (Heckathorn, 2005; Chriss, 1995; Lindenberg, 2000; Tilly, 1997). For one thing, in 1989 Coleman founded a journal, *Rationality and Society*, devoted to the dissemination of work from a rational choice perspective. For another, Coleman (1990b) published an enormously influential book, *Foundations of Social Theory*, based on this perspective. Finally, Coleman became president of the American Sociological Association in 1992 and used that forum to push rational choice theory and to present an address entitled "The Rational Reconstruction of Society" (Coleman, 1993b).

Since we have outlined the basic tenets of rational choice theory, it would be useful to begin with Coleman's (1989) introductory comments to the first issue of *Rationality and Society*. The journal was to be interdisciplinary because rational choice theory (or, as Coleman calls it, "the paradigm of rational action" [1989:5]) is the only theory with the possibility of producing paradigmatic integration. Coleman does not hesitate to argue that the approach operates from a base in methodological individualism and to use rational choice theory as the micro-level base for the explanation of macro-level phenomena. Even more interesting is what Coleman's approach does not find "congenial":

work that is methodologically holistic, floating at the system level without recourse to the actors whose actions generate that system . . . the view of action as purely expressive, the view of action as irrational, and also the view of action as something wholly caused by outside forces without the intermediation of intention or purpose. It excludes that empirical work widely carried out in social science in which individual behavior is "explained" by certain factors or determinants without any model of action whatsoever.

(Coleman, 1989:6)

Thus, a large portion of work in sociology is excluded from the pages of *Rationality and Society*. Not to be excluded, however, are macro-level concerns and their linkage to rational action. Beyond such academic concerns, Coleman wants work done from

a rational choice perspective to have practical relevance to our changing social world. For example, Heckathorn and Broadhead (1996) have examined the issue of public policies aimed at AIDS prevention from a rational choice perspective.

Foundations of Social Theory

Coleman argues that sociology should focus on social systems but that such macro phenomena must be explained by factors internal to them, prototypically individuals. He favors working at this level for several reasons, including the fact that data usually are gathered at the individual level and then aggregated or composed to yield the system level. Among the other reasons for favoring a focus on the individual level is that this is where "interventions" ordinarily are made to create social changes. As we will see, central to Coleman's perspective is the idea that social theory is not merely an academic exercise but should affect the social world through such "interventions."

Given his focus on the individual, Coleman recognizes that he is a methodological individualist, although he sees his particular perspective as a "special variant" of that orientation. His view is special in the sense that it accepts the idea of emergence and that while it focuses on factors internal to the system, those factors are not necessarily individual actions and orientations. That is, micro-level phenomena other than individuals can be the focus of his analysis.

Coleman's rational choice orientation is clear in his basic idea that "persons act purposively toward a goal, with the goal (and thus the actions) shaped by values or preferences" (1990b:13). But Coleman (1990b:14) then goes on to argue that for most theoretical purposes, he will need a more precise conceptualization of the rational actor derived from economics, one that sees the actors choosing those actions that will maximize utility, or the satisfaction of their needs and wants.

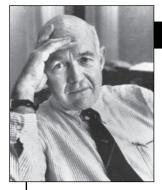
There are two key elements in his theory—actors and resources. Resources are those things over which actors have control and in which they have some interest. Given these two elements, Coleman details how their interaction leads to the system level:

A minimal basis for a social system of action is two actors, each having control over resources of interest to the other. It is each one's interest in resources under the other's control that leads the two, as purposive actors, to engage in actions that involve each other \ldots a system of action. \ldots It is this structure, together with the fact that the actors are purposive, each having the goal of maximizing the realization of his interests, that gives the interdependence, or systemic character, to their actions.

(Coleman, 1990b:29)

Although he has faith in rational choice theory, Coleman does not believe that this perspective, at least as yet, has all the answers. But it is clear that he believes that it can move in that direction, since he argues that the "success of a social theory based on rationality lies in successively diminishing that domain of social activity that cannot be accounted for by the theory" (Coleman, 1990b:18).

Coleman recognizes that in the real world people do not always behave rationally, but he feels that this makes little difference in his theory: "My implicit assumption is that the theoretical predictions made here will be substantively the same whether the



JAMES S. COLEMAN

A Biographical Sketch

James S. Coleman had a remarkably varied career in sociology; the label "theorist" is only one of several that can be applied to him. He received his Ph.D. from Columbia University in 1955 (on the importance of the Columbia "school" to his work, see Swedberg, 1996),

and a year later he began his academic career as an assistant professor at the University of Chicago (to which he returned in 1973, after a fourteenyear stay at Johns Hopkins University, and where he remained until his death). In the same year that he began teaching at Chicago, Coleman was the junior author (with Seymour Martin Lipset and Martin A. Trow) of one of the landmark studies in the history of industrial sociology, if not sociology as a whole, Union Democracy (1956). (Coleman's doctoral dissertation at Columbia, directed by Lipset, dealt with some of the issues examined in Union Democracy.) Coleman then turned his attention to research on youth and education, the culmination of which was a landmark federal government report (it came to be widely known as the "Coleman Report") that helped lead to the highly controversial policy of busing as a method for achieving racial equality in American schools. It is through this work that Coleman has had a greater practical impact than any other American sociologist. Next, Coleman turned his attention from the practical world to the rarefied atmosphere of mathematical sociology (especially Introduction to Mathematical Sociology [1964] and The Mathematics of Collective Action [1973]). In later years, Coleman turned to sociological theory, especially rational choice theory, in the publication of the book Foundations of Social Theory (1990b) and the founding in 1989 of the journal Rationality and Society. The body of work mentioned here reflects almost unbelievable diversity, and it does not even begin to scratch the surface of the 28 books and 301 articles listed on Coleman's résumé.

Coleman received a B.S. from Purdue University in 1949 and worked as a chemist for Eastman Kodak before he entered the famous department of sociology at Columbia University in 1951. One key influence on Coleman was the theorist Robert Merton (see Chapter 7), especially his lectures on Durkheim and the social determinants of individual behavior. Another influence was the famous methodologist Paul Lazarsfeld, from whom Coleman derived his lifelong interest in quantitative methods and mathematical sociology. The third important influence was Seymour Martin Lipset, whose research team Coleman joined, thereby ultimately participating in the production of the landmark study *Union Democracy*. Thus, Coleman's graduate training gave him a powerful introduction to theory, methods, and their linkage in empirical research. This was, and is, the model for all aspiring sociologists.

On the basis of these experiences, Coleman described his "vision" for sociology when he left graduate school and embarked on his professional career:

Sociology . . . should have the social system (whether a small system or a large one) as its unit of analysis, rather than the individual; but it should use quantitative methods, leaving behind the unsystematic techniques which lend themselves to investigator bias, fail to lend themselves to replication, and often lack an explanatory or causation focus. Why did I, and other students at Columbia at the time, have this vision? I believe it was the unique combination of Robert K. Merton and Paul Lazarsfeld.

(Coleman, 1994:30-31)

Looking back from the vantage point of the mid-1990s, Coleman found that his approach had changed, but not as much as he had assumed. For example, with respect to his work on social simulation games at Johns Hopkins in the 1960s he said that they "led me to change my theoretical orientation from one in which properties of the system are not only determinants of action (à la Emile Durkheim's Suicide study), to one in which they are also consequences of actions sometimes intended, sometimes unintended" (Coleman, 1994:33). Thus, Coleman needed a theory of action, and he chose, in common with most economists,

the simplest such foundation, that of rational, or if you prefer, purposive action. The most formidable task of sociology is the development of a theory that will move from the micro level of action to the macro level of norms, social values, status distribution, and social conflict.

(Coleman, 1994:33)

It is this interest that explains why Coleman was drawn to economics:

What distinguishes economics from the other social sciences is not its use of "rational choice" but its use of a mode of analysis that allows moving between the level of individual action and the level of system functioning. By making two assumptions, that persons act rationally and that markets are perfect with full communication, economic analysis is able to link the macro level of system functioning with the micro level of individual actions.

(Coleman, 1994:32)

Another aspect of Coleman's vision for sociology, consistent with his early work on schools, is that it be applicable to social policy. Of theory he said, "One of the criteria for judging work in social theory is its potential usefulness for informing social policy" (Coleman, 1994:33). Few sociologists would disagree with Coleman's goal of linking theory, methods, and social policy, although many would disagree with at least some of the ways in which Coleman chose to link them. Whether or not they agree with the specifics, future sociologists will continue to be challenged by the need to do a better job of linking these three key aspects of sociological practice, and at least some of them will find in the work of James Coleman a useful model.

James Coleman died on March 25, 1995 (J. Clark, 1996; Lindenberg, 2005; Marsden, 2007).

actors act precisely according to rationality as commonly conceived or deviate in the ways that have been observed" (1990b:506; Inbar, 1996).

Given his orientation to individual rational action, it follows that Coleman's focus in terms of the micro-macro issue is the micro-to-macro linkage, or how the combination of individual actions brings about the behavior of the system. Although he accords priority to this issue, Coleman also is interested in the macro-to-micro linkage, or how the system constrains the orientations of actors. Finally, he evinces an interest in the micro-micro aspect of the relationship, or the impact of individual actions.

In spite of this seeming balance, there are at least three major weaknesses in Coleman's approach. First, he accords overwhelming priority to the micro-to-macro issue, thereby giving short shrift to the other relationships. Second, he ignores the macro-macro issue. Finally, his causal arrows go in only one direction; in other words, he ignores the dialectical relationship among and between micro and macro phenomena.

Utilizing his rational choice approach, Coleman explains a series of macro-level phenomena. His basic position is that theorists need to keep their conceptions of the actor constant and generate from those micro-constants various images of macro-level phenomena. In this way, differences in macro phenomena can be traced to different structures of relations at the macro level and not to variations at the micro level.

A key step in the micro-to-macro movement is the granting of the authority and rights possessed by one individual to another. This action tends to lead to the subordination of one actor to another. More important, it creates the most basic macro phenomenon—an acting unit consisting of two people, rather than two independent actors. The resulting structure functions independently of the actors. Instead of maximizing his or her own interests, in this instance an actor seeks to realize the interests of another actor, or of the independent collective unit. Not only is this a different social reality, it is one that "has special deficiencies and generates special problems" (Coleman, 1990b:145). Given his applied orientation, Coleman is interested in the diagnosis and solution of these problems.

Collective Behavior

One example of Coleman's approach to dealing with macro phenomena is the case of collective behavior (Zablocki, 1996). He chooses to deal with collective behavior because its often disorderly and unstable character is thought to be hard to analyze from a rational choice perspective. But Coleman's view is that rational choice theory can explain all types of macro phenomena, not just those that are orderly and stable. What is involved in moving from the rational actor to "the wild and turbulent systemic functioning called collective behavior is a simple (and rational) transfer of control over one's actions to another actor . . . made unilaterally, not as part of an exchange" (Coleman, 1990b:198).

Why do people unilaterally transfer control over their actions to others? The answer, from a rational choice perspective, is that they do this in an attempt to maximize their utility. Normally, individual maximization involves a balancing of control among several actors, and this produces equilibrium within society. However, in the case of collective behavior, because there is a unilateral transfer of control, individual maximization does not necessarily lead to system equilibrium. Instead, there is the disequilibrium characteristic of collective behavior.

Norms

Another macro-level phenomenon that comes under Coleman's scrutiny is norms. Most sociologists take norms as given and invoke them to explain individual behavior, but they do not explain why and how norms come into existence. Coleman wonders how, in a group of rational actors, norms can emerge and be maintained. Coleman argues that norms are initiated and maintained by some people who see benefits resulting from the observation of norms and harm stemming from the violation of those norms. People are willing to give up some control over their own behavior, but in the process they gain some control (through norms) over the behavior of others. Coleman summarizes his position on norms:

The central element of this explanation . . . is the giving up of partial rights of control over one's own action and the receiving of partial rights of control over the actions of others, that is, the emergence of a norm. The end result is that control . . . which was held by each alone, becomes widely distributed over the whole set of actors, who exercise that control.

(Coleman, 1990b:292)

Once again, people are seen as maximizing their utility by partially surrendering rights of control over themselves and gaining partial control over others. Because the transfer of control is not unilateral, there is equilibrium in the case of norms.

But there are also circumstances in which norms act to the advantage of some people and the disadvantage of others. In some cases, actors surrender the right to control their own actions to those who initiate and maintain the norms. Such norms become effective when a consensus emerges that some people have the right to control (through norms) the actions of other people. Furthermore, the effectiveness of norms depends on the ability to enforce that consensus. It is consensus and enforcement that prevent the kind of disequilibrium characteristic of collective behavior.

Coleman recognizes that norms become interrelated, but he sees such a macro issue as beyond the scope of his work on the foundations of social systems. However, he is willing to take on the micro issue of the internalization of norms. He recognizes that in discussing internalization he is entering "waters that are treacherous for a theory grounded in rational choice" (Coleman, 1990b:292). He sees the internalization of norms as the establishment of an internal sanctioning system; people sanction themselves when they violate a norm. Coleman looks at this in terms of the idea of one actor or set of actors endeavoring to control others by having norms internalized in them. Thus, it is in the interests of one set of actors to have another set internalize norms and be controlled by them. He feels that this is rational "when such attempts can be effective at reasonable cost" (Coleman, 1990b:294).

Coleman looks at norms from the point of view of the three key elements of his theory—micro to macro, purposive action at the micro level, and macro to micro. Norms are macro-level phenomena that come into existence on the basis of micro-level purposive action. Once in existence, norms, through sanctions or the threat of sanctions, affect the actions of individuals. Certain actions may be encouraged, while others are discouraged.

The Corporate Actor

With the case of norms, Coleman has moved to the macro level, and he continues his analysis at this level in a discussion of the corporate actor (J. Clark, 1996). Within such a collectivity, actors may not act in terms of their self-interest but must act in the interest of the collectivity.

There are various rules and mechanisms for moving from individual choice to collective (social) choice. The simplest is the case of voting and the procedures for tabulating the individual votes and coming up with a collective decision. This is the micro-to-macro dimension, whereas such things as the slate of candidates proposed by the collectivity involve the macro-to-micro linkage.

Coleman argues that both corporate actors and human actors have purposes. Furthermore, within a corporate structure such as an organization, human actors may pursue purposes of their own that are at variance with corporate purposes. This conflict of interest helps us understand the sources of revolts against corporate authority. The micro-to-macro linkage here involves the ways in which people divest authority from the corporate structure and vest legitimacy in those engaged in the revolt. But there is also a macro-to-micro linkage in that certain macro-level conditions lead people to such acts of divestment and investment.

As a rational choice theorist, Coleman starts with the individual and with the idea that all rights and resources exist at this level. The interests of individuals determine the course of events. However, this is untrue, especially in modern society, where "a large fraction of rights and resources, and therefore sovereignty, may reside in corporate actors" (Coleman, 1990b:531). In the modern world corporate actors have taken on increasing importance. The corporate actor may act to the benefit or the harm of the individual. How are we to judge the corporate actor in this regard? Coleman contends that "only by starting conceptually from a point where all sovereignty rests with individual persons is it possible to see just how well their ultimate interests are realized by any existing social system. The postulate that individual persons are sovereign provides a way in which sociologists may evaluate the functioning of social systems" (1990b:531–532).

To Coleman, the key social change has been the emergence of corporate actors to complement "natural person" actors. Both may be considered actors because they have "control over resources and events, interests in resources and events, and the capability of taking actions to realize those interests through that control" (Coleman, 1990b:542). Of course, there have always been corporate actors, but the old ones, such as the family, are steadily being replaced by new, purposively constructed, freestanding corporate actors. The existence of these new corporate actors raises the issue of how to ensure their social responsibility. Coleman suggests that we can do this by instituting internal reforms or by changing the external structure, such as the laws affecting such corporate actors or the agencies that regulate them.

Coleman differentiates between primordial structures based on the family, such as neighborhoods and religious groups, and purposive structures, such as economic

organizations and the government. He sees a progressive "unbundling" of the activities that once were tied together within the family. The primordial structures are "unraveling" as their functions are being dispersed and being taken over by a range of corporate actors. Coleman is concerned about this unraveling as well as about the fact that we are now forced to deal with positions in purposive structures rather than with the people who populated primordial structures. He thus concludes that the goal of his work is "providing the foundation for constructing a viable social structure, as the primordial structure on which persons have depended vanishes" (Coleman, 1990b:652).

Coleman is critical of most of social theory for adopting a view that he labels *homo sociologicus*. This perspective emphasizes the socialization process and the close fit between the individual and society. Therefore, *homo sociologicus* is unable to deal with the freedom of individuals to act as they will in spite of the constraints placed upon them. Furthermore, this perspective lacks the ability to evaluate the actions of the social system. In contrast, *homo economicus*, in Coleman's view, possesses all these capacities. In addition, Coleman attacks traditional social theory for doing little more than chanting old theoretical mantras and for being irrelevant to the changes taking place in society and incapable of helping us know where society is headed. Sociological theory (as well as sociological research) must have a purpose, a role in the functioning of society. Coleman is in favor of social theory that is interested not just in knowledge for the sake of knowledge but also in "a search for knowledge for the reconstruction of society" (1990b:651).

Coleman's views on social theory are closely linked to his views on the changing nature of society. The passing of primordial structures and their replacement by purposive structures have left a series of voids that have not been filled adequately by the new social organizations. Social theory and the social sciences more generally are made necessary by the need to reconstruct a new society (Coleman, 1993a, 1993b; Bulmer, 1996). The goal is not to destroy purposive structures but rather to realize the opportunities and avoid the problems of such structures. The new society requires a new social science. The linkages among institutional areas have changed, and as a result the social sciences must be willing to cut across traditional disciplinary boundaries.

Criticisms

Needless to say, rational choice theory in general (Goldfield and Gilbert, 1997; D. Green and Shapiro, 1994; Imber, 1997) has come under heavy fire in sociology. In fact, as Heckathorn (1997:15) points out, there is a kind of "hysteria" in some quarters of sociology about rational choice theory. James Coleman's work has been attacked from many quarters (Alexander, 1992; Rambo, 1995). For example, Tilly (1997:83) offers the following basic criticisms of Coleman's theory:

- 1. Neglected to specify causal mechanisms.
- 2. Promoted an incomplete and therefore misleading psychological reductionism.
- 3. Advocated a form of general theory—rational choice analysis—that has for some time been enticing social scientists into blind alleys, where they have wandered aimlessly, falling victim to local thugs and confidence men selling various brands of individual reductionism.

More generally, some researchers have found rational choice theory wanting (Weakliem and Heath, 1994), but the vast majority of the criticisms have come from supporters of alternative positions within sociology (Wrong, 1997). For example, given his macro-structural position, Blau (1997) argues that sociology should focus on macro-level phenomena, and as a result, the explanation of individual behavior that is the metier of rational choice theory falls outside the bounds of sociology.

Rational choice theory has been criticized from many quarters for being overly ambitious, for seeking to replace all other theoretical perspectives. Thus, Donald Green and Ian Shapiro (1994:203) argue that rational choice theory would do well "to probe the limits of what rational choice can explain" and to "relinquish the . . . tendency to ignore, absorb, or discredit competing theoretical accounts."

From a feminist point of view, England and Kilbourne (1990) have criticized the assumption of selfishness in rational choice theory; from their perspective selfishness-altruism should be considered as a variable. The assumption of selfishness represents a masculine bias. They recognize that rejecting this assumption, and looking at it as a variable, would reduce the "deductive determinacy" of rational choice theory, but they think the benefits of such a more realistic, less-biased theoretical orientation outweigh the costs.

From a symbolic-interactionist perspective, Denzin (1990b; see also Chapter 10 of this book) offers just the critique one might expect from such a diametrically opposed theoretical orientation:

Rational choice theory . . . fails to offer a convincing answer to the question: How is society possible? . . . its ideal norms of rationality do not fit everyday life and the norms of rationality and emotionality that organize the actual activities of interacting individuals.

Rational choice theory has limited utility for contemporary social theory. Its scheme of group life and its picture of the human being, of action, interaction, the self, gender, emotionality, power, language, the political economy of everyday life, and of history, are woefully narrow and completely inadequate *for interpretive purposes*. (Denzin, 1990a:182–183; italics added)

Most of those operating from a broadly interpretive perspective would accept Denzin's strong criticisms of rational choice theory.

In addition to general criticisms, rational choice theory has been attacked for underplaying or ignoring things such as culture (Fararo, 1996) and chance events (G. Hill, 1997).

Finally, although many other criticisms could be delineated, we might mention Smelser's (1992) argument that like many other theoretical perspectives, rational choice theory has degenerated as a result of internal evolution or responses to external criticisms. Thus, rational choice theory has become tautological and invulnerable to falsifiability, and most important, it has developed the "capacity to explain every-thing and hence nothing" (Smelser, 1992:400).

Rational choice theory has many supporters (Hedstrom and Swedberg, 1996). We will see many efforts to legitimize it further as a sociological theory and even more attempts to apply and extend the theory. We also are likely to see a further escalation of the criticisms leveled at rational choice theory.

Summary

This chapter deals with three interrelated theories that, among other things, share a positivistic orientation. Modern exchange theory has evolved out of a series of intellectual influences, especially behaviorism and rational choice theory. The founder of modern exchange theory is George Homans. His reductionistic, determinedly microoriented exchange theory is summarized in a small number of propositions. Blau sought to extend exchange theory to the macro level, primarily by emphasizing the importance of norms. Much of the contemporary work in exchange theory has been influenced by Richard Emerson's more structural effort to develop an integrative, micro-macro approach to exchange. Emerson's disciples, and others, are busy extending his theoretical perspective into a variety of new domains.

One of Emerson's concerns is with networks, a concern also of those associated with network theory. Although there are many overlaps between exchange theory and network theory, many network theorists operate outside an exchange framework. Network theory is distinguished by its focus on the objective pattern of ties within and between micro and macro levels of social reality.

Network exchange theory combines social exchange theory and network analysis in order to focus on the distribution of power in a network of exchange. It looks at the way in which the structures themselves can be said to be strong or weak.

Thanks largely to the efforts of James Coleman, rational choice theory, which had played a role in the development of exchange theory, has come into its own as a theoretical perspective. Utilizing a few basic principles derived largely from economics, rational choice theory purports to be able to deal with micro- and macro-level issues, as well as the role played by micro-level factors in the formation of macro-level phenomena. The number of supporters of rational choice theory is increasing in sociology, but so is the resistance to it by those who support other theoretical perspectives.