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Beyond Rational Choice: The Social Dynamics of How People Seek Help¹

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> A classic problem common to sociology and other social sciences revolves around how people make decisions. Some recent approaches start with and revise an individually focused, rational action framework. While this orientation to building transdisciplinary, multilevel models provides many insights, it fails to capture essential features of social life. The social organization strategy (SOS) framework presented in this article offers a complementary approach to social action in general and decision making in particular. This orientation, a network and event-centered counterpart to rational choice, rests on fundamental principles that distinguish the discipline of sociology: social interaction is the basis of social life, and social networks provide the mechanism (interaction) through which individuals learn about, come to understand, and attempt to handle difficulties. This approach shifts the focus from individual "choice" to socially constructed patterns of decisions, including consultation with others. Utilization research in medical sociology serves as a case for reviewing theoretical approaches to decision making and provides the background necessary to a theoretical exposition of the SOS approach using data from the National Survev of Access to Medical Care (1975-76). The results support the utility of pursuing the SOS framework.

INTRODUCTION

By the early 1980s, many social scientists had come to recognize that the complexity of social life needs to be matched by a companionate complexity in the theories we construct, the data collection efforts we mount, and

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the analytic tools we bring to bear on the interpretation of data. For Alexander (1990), this phase of postwar sociology stresses synthesis and reintegration, with some theorists focusing on integrating the nowdivergent streams in sociology (e.g., Collins's [1981] microinteraction chains, Stryker's [1980] structural symbolic interaction, Maines's [1982] mesostructure, Cicourel's [1981] negotiated order perspective, Giddens's [1984, 1989] structuration theory). For Coleman (1990, p. 664), it demands a "new social science" which "must cross the traditional boundaries of disciplines within which knowledge is ordered," with other theorists focusing on the building of cross-disciplinary bridges (see also Etzioni's [1988] socioeconomics and Ostrom's [1989] public choice). This movement toward a synthetic perspective by various authors in various ways heralds, perhaps, the beginning of a mature social science.

Much of the boundary-maintenance rhetoric within sociology and across social science disciplines is being replaced by attempts to build a transdisciplinary, multilevel framework based on a contextualized view of rational actors engaged in purposive action. Some argue that the growing currency of this view represents a "paradigmatic struggle," a "new methodenstreit," or an "imperialist intrusion" within sociology (Etzioni 1988, p. ix; Swedberg 1989; Collins 1986, respectively). Their concern reflects, at least in part, a failure by sociologists to offer "a widely shared and powerful conception" of action which, for Mechanic (1990, p. 93), underlies the current dominance of rational-choice-based approaches in areas like health care.² The critical issues here lie not in the stale debate over the viability of rational choice logic. They center on whether to

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² The lack of development of a unified perspective from sociology reflects a number of developments in the discipline's history. Unlike economics where microeconomists virtually exiled economic historians in the late 1800s (Swedberg 1989) or anthropology where individualistic models were introduced relatively recently (Izmirilian 1971; Schneider 1974), sociology has always been more eclectic, tolerant of diversity, and, as a result, more bifurcated. The debate between structure and agency has been especially heated and enduring, producing distinct schools and subfields where little cross-fertilization has occurred (Boudon 1988; Stryker 1987). Moreover, survey methodology has led to an emphasis on individuals' social characteristics to the exclusion of explicating underlying mechanisms or constructing measurements for larger structures (Abbott 1988; Alba 1981; Coleman 1986; Collins 1986).

accept or reject the idea that a synthesis based on revised rational choice theory either (1) represents the only way to meld the seemingly incongruous insights of the social sciences in one overriding perspective of action or (2) fully exploits the most basic sociological insights in building bridges across disciplines and levels of analysis. I argue that the rational choice explanation, with economic psychology as the fundamental microdynamic, presents but one useful way of exploring social action and denies what is the most likely contribution of sociology to understanding decision making.

To advance this argument requires the development of a different but complementary orienting framework that starts with and makes problematic those very things that rational choice theorists have ignored or brought in to overlay the psychological and economic bases of their perspective. Despite all our intradisciplinary disputes on theoretical position and methodological approaches, sociologists do appear to agree on the primacy of social interaction in forming the very essence of social life, that is, of society and individuals, and on social structure as defining the bounds of the possible. The social organization strategy (SOS) framework proposed here is social network centered and event centered. It begins with these sociological premises about human nature and social life stated above and overlays them with notions of utility maximization, purposive action, and bounded rationality derived from psychological and economic theory. The primacy of social interaction in decision making and the systematic patterning of interaction networks form the proper analytic focus for study, allowing direct consideration of agency (albeit in revised fashion as the agent in interaction) and allowing notions of social structure and context to take on concrete meaning.

This article offers a first step toward the development of this sociological counterpart to the recently advanced transdisciplinary multilevel orientation to action that is based on a revised rational choice. This first step builds on the ideas of others, from network theorists to symbolic interactionists (e.g., Heise 1987; Laumann and Knoke 1987; Simmel 1955; Stryker 1980; White and Eccles 1986) and requires two critical tasks. First, it involves consideration of efforts within sociology to link subfields and levels of analysis—taking stock, broadly but not exhaustively, of our conceptual tools. Second, it requires a consideration of the insights of other social science disciplines including anthropology and history as well as economics and psychology.

Seeing sociological insights merely as corrective relegates the discipline to a minor status and supports pessimistic predictions of its demise (see Wolfe 1989). Building the social organization strategy (SOS) framework does not require rejecting or denying the utility of a rational-action-based synthesis. The latter remains a particular and useful way of slicing through a problem (Gray 1987, p. 47). Its sociologically based counterpart provides another—recasting questions; calling for different methodological approaches; and providing new insights to social phenomena. The two strategies together might produce a more comprehensive understanding of social action, each focused on the same general phenomena with lenses aimed at different angles. The two orientations also share the same goal: to get beyond traditional bifurcations within and across social science disciplines and develop a more encompassing perspective. Where they differ is in the starting point for action and in how to build a foundation for a transdisciplinary, multilevel framework. The synthesis based on sociology does not ignore individuals, their self-interest, their purposive action, or their rationality; it simply assigns them a different priority in action.

The issue of lay decision making for medical care provides an arena in which the utility of both approaches can be seen. This substantive focus offers two major benefits. First, the movement toward a counterpart orientation has been a conclusion reached more directly in medical sociology, in part because of a strong, unwavering multidisciplinary tradition and also in part because a number of shifts in the larger sociomedical profile of health, illness, and healing highlight the problems with traditional approaches. The wide range of cross-national studies of medical care choice using "thick description" (Janzen 1978), a "career" approach (e.g., Aday, Anderson, and Fleming 1980; Clausen and Yarrow 1955), and a "lay referral system" framework (e.g., Freidson 1970a; Furstenberg and Davis 1984; Horwitz 1977; Salloway and Dillon 1973) as well as the shift to greater societal burden of chronic illness generate an uneasiness with an individual, rationally focused perspective and provide the basis for a counterpart. Second, decision making for medical care offers a crucial arena for evaluating frameworks about decisions that is less biased in favor of rational choice than the economic arena where its relevance can be assumed to be more pronounced.

THEORETICAL BACKGROUND: SOCIAL SCIENCE MODELS OF ACTION AND DECISION MAKING

Reflecting the movement toward synthesis outlined in the Introduction, those adopting a rational choice perspective have been led to reconsider the effect of more social and dynamic factors in decision making. For example, the newer "public choice" or "political economy" school in political science (not to be confused with the neo-Marxist political economy approach in sociology; see Mueller [1976]) has rediscovered social

norms, influence processes, and the situation or social context.³ In this revised framework, decisions in the social world are "purposive" and best seen as being made by individual social actors (including organizations and nations) mulling over the costs and benefits of a particular action in situations with variable characteristics and under a social structure that offers constraints and opportunities (operationalized as additional utilities). According to Lindenberg (1985): "the theoretical starting point is the *individual* who, having preferences and being confronted with constraints, has to make choices" (p. 99; emphasis in original). Generally, approaches in this vein share a view of the individual as an egoistic, rational, utility maximizer, but they drop assumptions unrealistic for noneconomic phenomena (those that deal with uncertainty and incomplete knowledge or variability in situations), and they reject notions of omniscience, structural irrelevance, and total atomism (e.g., Coleman 1990, 1987; Elster 1978; Marsden 1981; Ostrom 1989). The new strategically rational actors (as Elster [1979] calls them) take account of the environment and others and are involved in dynamic processes such as learning and reflection (Friedman and Hechter 1988; Lindenberg 1985; Mueller 1976; Radnitzky and Bernholz 1987).

This approach based on rational and purposive action by individuals is compelling for two reasons. First, it draws on an elegant, parsimonious, and cleanly deductive approach to decision making that corresponds to the most sophisticated developments in empirical modeling and methodology (Coleman 1988). It is, in fact, unmatched in its theoretical development by competing formulations. Second, seen in the light of sociology of knowledge, it matches the worldview of most people living in advanced capitalist democracies, which includes the ultimate importance of agency (whatever structural constraints may exist); the conjoint nature of modern society, autonomy, and rational thinking; and the everyday notions of the inescapable need to balance pros and cons. As Coleman (1990) asserts, this approach represents the theory of action used implicitly by most social theorists and by most people in the "commonsense psychology" they use to understand what they and others do (p. 5). Unless individuals are seen as puppets of sociocultural locations, as posed in many early sociological and anthropological theories, ultimately individuals either act or they do not; ultimately, even if bounded in their rationality or structural or normative constraints, they weigh beliefs and perceptions about the consequences of their actions.

³ These current efforts are, in part, a reaction to overspecialization as evidenced by a renewed interest in the broad-based orientation of early social theorists that had been downplayed with the development of distinct social science disciplines (e.g., Elster 1975 on Leibniz; Wolfe 1989; Etzioni 1988; Stryker 1980 on Adam Smith).

With this new inclusive framework and revised definition of central concepts, what quarrel can sociologists have with a synthesis based on a rational choice framework? The answer rests on the relative place and significance of social life. Specifically, I argue that in using this orienting approach, we strip individuals from society in five related ways. First, while reducibility to individuals' mental calculus must be acknowledged at some level, the critical question is whether this calculus is sociologically meaningful. Is it the individual or the individual in interaction (and the structure of interactional events) that is the appropriate and most basic unit of analysis? (See Tilly 1984.) This cannot be accommodated in the rational choice framework. As Etzioni (1988) points out, the assumption of free-standing individuals as the decision-making unit in that perspective "is much more than a working hypothesis; it is an article of faith grounded in a deep commitment to the value of liberty" (p. 10).

Second, by bringing in the social merely as an overlay to individual mental events, we abandon sociological notions of the pivotal process of interaction as the mechanism through which social phenomena, including but not limited to decision making, occur. Interaction with others forms an essential element in the dynamics of decision-making processes. No matter how sophisticated, for example, the Prisoner's Dilemma game cannot simulate what happens in decision making, except in the most rare and bizarre cases (Wolfe 1989, p. 43). According to Granovetter (1985, p. 486), this general approach to social relations "has the paradoxical effect of preserving atomized decision making even when decisions are seen to involve more than one individual."

Third, by focusing on individuals and their purposive action, we remove, almost without recognition, the embeddedness of problems and their solutions in the social network including the resort to social network contacts as decisions or actions in themselves. Problems are often not simply individual matters. Instead, they frequently represent a shock to a network that calls forth the purpose of or the need for action. Actions of other people cannot be conceptualized only as exogenous factors in rational choice (i.e., conditioning preferences) or as another utility in the individual cost-benefit calculus or as being rationally pursued by actors in certain situations. In the revised rational-choice-based perspective, relations among persons facilitate action but are not, themselves, seen as action. The consultation of network ties, however, minimally implies action and represents a choice or solution in many cases. These contacts are part of a set of choices that are socially organized and need to be made problematic.

Fourth, the general focus in this framework lies often on a choice (on occasion, a series of discrete choices), plucking it from the larger event that necessitates action and that sets in motion a course of action (Fjell-

man 1976). As Tuma and Hannan (1984, pp. 5 ff.) suggest, microeconomic assumptions may have diverted attention from processes and change. The basic issue is not whether the new revised rational-choicebased framework is dynamic in theory, but whether it sufficiently reflects social dynamics. As Tilly (1984, p. 32) notes, even game theory will not replace the need to put relationships rather than individuals at the center of theories of action or decision making. Dynamic rational choice models force one action at a time and ignore how sequences of events are patterned, contingent, and emergent.

Fifth, the conceptualization of action as rational choice raises questions of the applicability of this framework as a general orientation to social action. Certain actions are targeted as choices and others are ignored as habits. As Camic (1986, p. 1075) points out, this is a direct function of adopting the rational actor paradigm since habits "are not something one is at all prompted to investigate, or even notice, when one assumes that action always takes the form of a reflective weighing." But to the extent that social action proceeds through cultural routines rather than individual cost-benefit calculation, as Corsaro and Rizzo (1988) among others contend, then much social action remains outside the purview of the framework. Etzioni (1988) and Stryker (1980) share the notion that the neoclassical view has experienced, in Veatch's (1973) terms, "a generalization of expertise." That is, ideas relevant to economic behavior have been converted into a general perspective that encompasses all action and, in the process, neglects the vast domain of actions that are not economic.

In sum, even when norms, networks, and situations are brought in as additional items on the individual's checklist, social forces remain either restricted to those perceived or acknowledged by the individual or to an enumeration of additional constraints. To adopt this basis for a synthetic model of the social sciences is to focus on an isolated choice or set of circumscribed choices that encompasses a restricted subset of action where individuals make cost-benefit calculations. The critical dynamic relationship among individuals and their networks and the larger structures that form from and shape them are downplayed, even dismissed.

THE SOCIAL ORGANIZATION STRATEGY FRAMEWORK: BASIC SKETCH OF A COUNTERPART

The SOS framework provides an explicitly dynamic, network-centered, event-based approach built on a sociological foundation. As the citations below to basic building blocks indicate below, it draws liberally and broadly from a number of sociological research traditions, incorporating and organizing many sociological insights and arguments. Its starting point lies in the fundamental social nature of individuals and action, with social relationships rather than individual mental events at the center of social life (Tilly 1984). The "self" is a social product, defined and developed in social interaction; "society" is an ongoing process, both shaping and shaped by interaction in social networks; and "action" is composed of substantively organized episodes of interaction rather than discrete individual acts (Fine and Kleinman 1983; Granovetter 1985; Knorr-Cetina 1981; Simmel 1955; Stryker 1980). Beginning with the primacy of social life provides the SOS framework with four basic, related building blocks drawn from diverse research traditions in sociology.

First, the "elementary actor" (Coleman 1990, p. 503) becomes social and pragmatic (which is what much anthropology as well as sociology suggests)—not isolated and ever-consciously rational. This does not mean that individuals become social dopes or social dupes. People are not unconscious; they are knowledgable, skillful actors with a "practical consciousness" that allows them to both improvise and routinize (Giddens 1984; Haines 1988; Heise 1989b). Second, in linking the symbolic interactionist tradition with network theory, we find an alternative to the dominant theoretical emphasis on the individual. If people are social, the focus of analysis shifts from the individual to the individual in patterned interaction with others. Drawing from Simmel, Dewey, and the more recent life-course perspective, we can conceptualize social life as dynamic streams of action with social interaction instead of mental calculation as the mechanism through which it proceeds. Third, with individuals embedded in an ongoing relational dynamic, the proper unit of analysis is the social network—but not simply as a linking mechanism between actor and structure or as a way of synthesizing embeddedness into an actor-oriented framework.⁴ Interactional events replace individuals; social networks replace social atoms (Tilly 1984, p. 27). Fourth, global macrovariables tapping context (e.g., time, place) represent different substantive and structural networks. As such, they are not seen as isolated from action or individuals but as fundamentally tied to them and to their histories in particular. By systematically addressing embeddedness with a network focus (White and Eccles 1986), we can deal concretely with

⁴ This approach diverges from Etzioni's (1988, p. 188) socioeconomics where collectivities, like communities, are the decision-making units. A network approach acknowledges the multiplicity of social circles to which individuals belong and the often divergent social norms and loyalties that create tensions as well as moral obligations (Simmel 1955; Fischer 1982; Wellman and Wortley 1986). This view also can accommodate explanations of socialization and internalization that Coleman (1990, p. 932) finds difficult to bring into the framework he develops (see, e.g., Pescosolido [1986], for a dynamic, network theory of socialization; Macy [1990] on learning theory, rational choice, and social movements).

Giddens's (1984) duality of structure or Sewell's (1988) dialectic theory of action. Individuals and structure, as "abstractions from ongoing interactions," become inextricably intertwined and cannot be understood apart from each other or from the networks that shape them (Stryker 1980, p. 2; see also Heise 1989*b*; Collins 1986; Knorr-Cetina 1981).

With this basic foundation, the SOS framework brings a different but complementary perspective to the understanding of human behavior. The revised rational choice perspective focuses on the individual but tilts the analytic lens upward in an attempt to capture other larger conditions (including networks) that affect the individual unit of analysis (e.g., Coleman 1990). The SOS perspective takes different aim: it focuses directly at the middle level of networks and interaction with a wide-angle lens capable of capturing some of the intricacy of the outer edges of individuals and social structures.⁵ There is a difference between seeing social norms and social networks as influences on decisions or individuals, as rational choice theory suggests, and seeing social interaction in bounded networks as the mechanism that underlies action. In the approach I develop here, a particular action, choice, or decision is embedded in a social process where the network interactions of individuals not only influence preference formation and define the situation but also drive the process of deciding whether something is wrong, whether anything can be done about it, what should be done, and how to evaluate the results. By doing so, network interactions produce systematic structures and contents (or cultures) and sometimes become crystallized into organizations and institutions that, in turn, affect social interactions.

Applying this overall framework to decision making requires an explicit understanding of (1) how concrete problems or issues are dealt with in the ongoing stream of social life; (2) the dynamics that operate in interaction; and (3) the roles played by structure and content in such an approach. Without the first, the SOS framework becomes a theory of society, basically compatible with Giddens's (1984) scheme but woefully underdeveloped in comparison. Without the second, it shares the fundamental flaw Coleman (1988) identifies in most sociological theory—there is no "engine of action," no understanding of what drives micro-processes. Without the third, it reduces structure to the aggregation of microprocesses accompanied by somewhat global contextual limiting factors such as time, space, and place (e.g., Collins 1981; see also Hilbert's revision [1990]). The building of these three components of a SOS frame-

⁵ Other synthetic efforts that attempt to link the actor with the larger structure (even through a network mechanism) simultaneously employ two lenses, one focused from the bottom and the other from the top, and attempt to capture the interaction of the two (e.g., Burt's [1982] structural theory of action).

work draws from diverse but well-established research lines in sociology. My primary task here is to integrate their insights.

The SOS Framework and Decision Making

The SOS approach frames the process of decision making in terms of the episode rather than the choice. Conrad (1987, p. 8) provides the initial premise: "What is sociologically most interesting about uncertainty is how people manage it." The initial focus of decision making is the event that necessitates action; the primary frame for study is the entire episode that encapsulates the actions surrounding the event (see Laumann and Knoke [1987] for a similar view). Once the study of decision making is framed in this way, "strategies" of action in Simon's (1976) sense (i.e., the patterns, combinations, or sequences of choices or decisions over the course of the episode), and how they are socially organized become the central phenomena to be explained. As life-course theorists and social historians have suggested, unless we reconceptualize the phenomena away from "a" decision or even a set of decisions to more of an emergent "multi-phased decision process" (Elder 1978), it is unlikely that we can, in fact, capture some semblance of ongoing history in our models (Sewell 1988).

The SOS approach assumes, following Laumann and Knoke (1987), that networks are antecedent to an event and that these networks do have a structure and content to them, although it makes problematic how individuals, in response to a particular event, choose to activate particular sectors of the multiple networks in which they are embedded (Aronson 1970; Huckfeldt and Sprague 1986). The overall system of relations, with its a priori structure and content, provides the basis for issues, problems, or other events and calls for specific attention (whether action or inaction). This is key—in the SOS framework, decision making itself is a dynamic, interactive process fundamentally intertwined with the structured rhythms of social life. A decision-making process, like other processes (e.g., social control), is "mounted on the back of ongoing social processes" (White and Eccles 1986, p. 131). Events set into motion a specific process of coping with uncertainty-initiated either by the focal individual's facing a problem or by network members who perceive a shift in the ongoing rhythm of social life. In this sense, events can be conceptualized as network phenomena rather than as simply individual phenomena. They can be seen as a "shock" to a network, reverberating through it and altering the overall system of relations. Dealing with problems can reaffirm, create, or destroy networks and can shift the ongoing trajectory of social life, sometimes in profound ways. In the ultimate case, it can create a new structure of social relations, change the content

of networks (e.g., beliefs, values, priorities), and, as a result, influence the cultural orientations, not only of a focal person or of those who remain connected to the individual, but of the society at large (on the latter point, see Wolfe [1989, p. 216]).

To understand these complex processes and structural ramifications we must separate, even if only analytically, the larger dynamic from the particular stream related to the event. First, the stream of network interactions surrounding a particular event (the episode) are much like "careers" (e.g., the "illness career," the "occupational career") in the life-course perspective and provide conceptual descriptions, not explanations (Elder 1978; see also Abbott and Hrycak 1990; MacKinnon and Heise, in press). Second, the theoretical explanation of decision-making episodes focuses on the larger, overall pattern of structured interactions or networks in which careers operate. Here individuals recognize or fail to recognize a problem, find the limits of social resources (e.g., knowledge, beliefs, instrumental aid), and find a way to evaluate the outcomes of action.

Adopting this approach allows for the conceptualization of both *static* hypotheses that freeze the larger stream to examine the effect of the overall set or system of networks on the career stream or a particular embedded act or sequence of action and *dynamic* hypotheses that allow the examination of how change affects the course of decision making. In illness, for example, having access to a dense network with beliefs skeptical of the efficacy of modern medicine increases both the resort to alternative healers and the delay in seeking out physicians (Freidson 1970*a*). And, if the illness "damages" network ties over time, perhaps through stigma or the burden of care, any continued compliance with a treatment regime is affected by the new mix of network density and ideology (see Pescosolido [1991] for a theoretical medical care model with static and dynamic hypotheses, based on an SOS framework).

Focusing Downward: The Microprocesses of Social Action

The SOS framework rejects the sole reliance on rational, cost-benefit calculation as the "engine of action" but does not eliminate it from consideration. As symbolic interactionists, ethnomethodologists, and cultural anthropologists have documented, people do not have to solve each problem anew or even understand the logic of old solutions; much human behavior is habitual, predictable, expected, taken-for-granted, and recurrent (Collins 1981; Corsaro and Rizzo 1988; Heise 1989*a*). Cultural routines, which form the basis of much day-to-day action, are largely acquired through association, "produced" through interaction, and dependent to a large extent on affective reactions (Corsaro 1990; Heise

1979; Kemper and Collins 1990; Stryker 1980). Affect underlies "acquired instinct" allowing people to sense what they should do without necessarily knowing why (Heise 1989b), to tap an "embodied history" (Bourdieu 1981) where much of the "cultural heritage of reasoned action" is stored (Heise 1987, p. 15), and to continually build for themselves a tacit dictionary, a font of experience and information, which makes the unfamiliar familiar. However, when cultural routines do not produce effective solutions to problems, individuals often become consciously aware of the need to think through situations. In short, much recent research suggests a multifaceted base of action-affect and rationality, emotion and cognition. In the SOS framework, action is seen as proceeding on the basis of both, each intrinsically social rather than individual (Collins 1981; Etzioni 1988, pp. 90 ff.). People do not necessarily engage in cost-benefit calculations when seeking information from others. Effective network ties are often neither costly nor of decreasing efficiency over time as Coleman (1990, p. 310) suggests, instead they are built into the routine of daily life (see e.g., Granovetter 1973).⁶

Focusing Upward: Structures and Decision Making

To argue that decisions are made through some mix of affect and cognition in interaction is not to suggest that the result is random, totally emergent, or idiosyncratic (Heise 1989*b*; Stryker 1980). The SOS framework makes it possible to link actors to each other, to the larger social system, and to such abstract entities as the state, the economy, and the community, which some sociologists claim represent the stable and recurring operation of social networks (Alba 1981; Fischer 1982; Laumann and Knoke 1987; Tilly 1984). This connection between action, interaction, and structure through networks needs to be elaborated at four levels—the relationship between network structure and (1) affect and interaction, (2) social characteristics, (3) ideas of context, and (4) the nature of institutions and organizations.

In the first, affect control theory provides a way in the SOS framework to link the "internal processing that generates social behavior to the sociocultural system that makes social interactions coherent" (Smith-Lovin 1987, p. 174). It does so through role identities: roles are not simply sets of behavioral guides but real identity-confirming actions where small

⁶ Even here, the two are not incompatible. Affect, as Etzioni (1988, pp. 103 ff.) points out, does not subvert mental processes, twist reason, or play a disturbing role in cost-benefit calculations; it often provides the necessary base. Heise's work (1989*a*) suggests that affect may directly relate to assessment of utility in rational choice and thereby adjust rational processes.

amounts of affectively encoded information give regularity to social interaction and link it to social structure (Heise 1979). As Bourdieu (1981, p. 309) notes, we engage in suitable role behavior "without ever having to 'pretend.'" In interaction, people see themselves and others as occupants of identities that evoke sentiments about moral value, power, and social energy. Maintaining these conceptions contributes as much to our understanding of action as rational calculation does (Heise 1987, 1979).

On social characteristics, urban anthropologists and network theorists have long contended and documented that among the most striking new aspects of complex societies is the importance of social relationships that take place outside bounded groups and institutions (Aronson 1970; White, Boorman, and Brieger 1976; Simmel 1955). Relying on the "cultural background of the participant" to measure the "extent to which individuals share norms" (Ostrom 1989, p. 17) falls into the structuralist trap of a static and homogeneous view of culture. Social characteristics can be bad proxies for social networks except under conditions of network homogeneity (similar to what Coleman [1990] calls closure). However, at least at this point in the development of the SOS framework, they hold a provisional status. Stryker and Serpe (1983) note that most social interaction does, in fact, occur between and among persons who are members of some common group. Social locations, tapped by characteristics such as age, sex, race, geographic, or organizational placement, partially shape the opportunity for network contact (Furstenberg and Davis 1984; Huckfeldt 1983; Marsden 1987; Whitten 1970). As we understand more about the nature of networks, their formation, stability, and operation, we will be able to describe more concretely their grounding in and divergence from sociocultural characteristics.

Concerning context, even though Tilly (1984, p. 17) charges us to discard the idea of society as a thing apart, I argue that we do need to treat network structures and their cultural content as such at some point. One key reason comes from rational choice theory. As Ostrom (1989, p. 20) notes: "the larger the set of individuals using the same resources and the more diverse their strategies, the more difficult it is for anyone to gain an accurate perception of another's strategic behavior." It may be that society is not a reality, sui generis, but empirically the expanse of network ties is so great and multilayered that we need to treat it as if it were (see Coleman 1990; Granovetter 1985; Ordershook 1986; for the similar status of rationality in their perspective). People do not, nor could they, monitor the set of ties in a church or school; yet, these structures affect social action (Freeman and Romney 1987; Killworth and Bernard 1976). To see them simply as global context variables such as place and time (e.g., Cicourel 1981; Collins 1981; Giddens 1984, 1989) misses an opportunity for understanding their substantive meaning. Context is, in

essence, a shorthand in the SOS framework for the operation of different network structures and contents, as ethnomethodological "indifference" to structure attests (Hilbert 1990). For example, what is different about rural and urban contexts in Taiwan is not the structure or operation of migrants' networks regarding medical care choices, instead, it is geographic context that taps variable network content regarding proper or ideal medical care, guiding migrants who are embedded in similar network structures in different geographic spaces to make dissimilar choices for either traditional or modern healers (Pescosolido 1986; see also Kadushin 1983).

On organizations and institutions, sometimes network interactions become so routine and patterned that they crystallize and, in turn, affect social life directly. And, in the SOS framework, physical and temporal barriers are seen as constraining or facilitating social interaction. For example, formal organizations affect important communication networks by structuring different daily work activities in separated physical locations. As a result, certain employees come into more frequent contact with some people but not others (e.g., see Kanter 1977; see also Knoke 1990, chap. 4). In this way, physical space, from the home to the nationstate, affects the formation and operation of networks. In social interaction, people do in fact bang up against real physical and temporal boundaries; to conceptualize these simply as global contextual factors again misses the opportunity to see how social interaction and networks are linked both to history and to social change.

In sum, the SOS approach builds a different but complementary framework for action that begins with assumptions about the social nature of individuals and their actions. Individuals are neither puppets of some abstract structure nor calculating individualists; people both shape and are shaped by social networks. The SOS framework sees interaction networks as the proper arena of analysis, the episode as the focus, affect and rationality as driving action in tandem, and social structure as tied fundamentally to network interaction patterns with a sui generis character. Incorporating the centrality of social networks demystifies and gives specific meaning to the idea of structure as a reality, particularly to the more chimeric notions of global contexts such as time and space.

THE STUDY OF MEDICAL CARE CONTACTS: ILLUSTRATING PROBLEMS AND PROVIDING DIRECTION

The study of individuals' medical care decision making (or utilization) as part of the subfield of medical sociology, offers a useful case to highlight the benefits and challenges of the SOS framework. Medical sociology, in general, has been relatively unfettered by interdisciplinary squab-

bles and has borrowed liberally from multidisciplinary traditions. Still its theoretical development broadly mirrors that of social science as discussed in the introduction. Early sociological and anthropological frameworks of medical care choice, although they differentially emphasized structure and culture, respectively, cast lay decision making in the structural-normative terms that echoed the larger historical reaction to microeconomics. Education, social class, and rural-urban location, for example, were conceptualized as reflecting the strength of traditional, nonscientific belief systems that discouraged the use of modern medicine (e.g., Koos 1954; Rivers 1927; Saunders 1954). However, very early on, interdisciplinary teams (e.g., Falk, Klem, and Sinai 1933) employed multifactor models and mounted national-level surveys. And Parsons's (1951) conceptualization of illness problems as a "sick role" drew great interdisciplinary attention and generated hundreds of research articles delineating contingencies of choice he had ignored (see Twaddle and Hessler [1977] for a review).

By the mid-1960s, two influential formal theoretical models organizing these important contingencies had been developed, with wide currency in the sociomedical sciences. It is interesting although not causal, that each initially reflected the polarity of approaches within sociology itself. The Health Belief Model (HBM) (Rosenstock 1966) focused on the social psychology of decision making, primarily the role of motivations, beliefs, and perceptions on individuals' decisions to seek formal medical care. The Socio-Behavioral Model (SBM) (Andersen 1968) was more structurally oriented—focusing primarily on access to and "need" for care but incorporating "predisposing" attitudes, beliefs, and characteristics. Over time, each model drew insights from the other and moved toward synthesis (see, e.g., Eraker, Kirscht, and Becker's [1984] "third generation" HBM; see also Stoner [1985] for an overview).⁷

What is striking about this synthesis is the extent to which it begins with the economic psychology of a rational choice perspective and is overlaid with corrections from other social sciences. Decision making is seen in preset dualistic terms—on the selection of one alternative, a modern medical professional, from the universe of potential sources for care, conceptualizing use or nonuse (or, alternatively, the volume of use) as the dependent variable. Given the rise of a modern profession of medicine based explicitly on notions of the superiority of scientific forms of medical

⁷ Not only have these models held widespread transdisciplinary currency, they have also had great impact. By successfully constructing a social profile of users and nonusers, they have been critical in the development of social policy in medical care, particularly during the 1960s and 1970s (see Aday 1972; Maurana et al. [1981] for comprehensive reviews).

care over any and all preexisting competitors (e.g., Larson 1977), this conceptualization of utilization as simply the decision to use a modern scientific practitioner, service, or facility reflected a "medical model bias" (Gold 1977) in medical sociology and "medical ethnochauvinism" in medical anthropology (Unschuld 1981). Along with these biases came the acceptance of "medicine's view of the patient as a singular, insular individual" (Conrad 1987, p. 6), which reinforced the utility of both random samples in survey data collection and sociodemographic characteristics as explanatory correlates (Freidson 1970*b*; McKinlay 1972).⁸

The most important alternative view to the dominant one, the "illness career" perspective, was pursued primarily by medical sociologists and anthropologists in the qualitative tradition, many of whom defined their research squarely in the grounded theory tradition. The notion of an "illness career" (a sequence of actions related to the attempt to rectify a health problem) has early, albeit limited, roots in medical sociology and anthropology. In sociological studies of these "pathways" to care, clergymen, police, lawyers, as well as friends and relatives, have been documented as critical actors in the social process of seeking care (Clausen and Yarrow 1955; Freidson 1970a; Gurin, Veroff, and Feld 1960; Kadushin 1966; Roth 1963; Suchman 1964). In addition, medical anthropologists, exploring choices in Western and non-Western countries, have documented the use of "alternative healers" such as shamans, chiropractors, curanderos, homeopaths, family, and others (Press 1969; Romanucci-Ross 1977; Rubel 1966; Unschuld 1976). Most recently, self-care, nonprescription, and home remedies have been incorporated as important options by sociomedical researchers (Ailinger 1977; Levin, Katz, and Holst 1976).

All of these eclectic research lines on the help-seeking process have broadened our view of the range of medical care options and the dynamic nature of lay decision making. By the mid-1970s, the image of competition among practitioners of different traditions with individuals making rational decisions to use one or another tradition was being replaced by an image of "complementarity" and simultaneous or sequential use

⁸ As well as speeding the development of a synthesized multidisciplinary, multilevel perspective based on rational choice, medical sociology's transdisciplinary view simultaneously facilitated a critique of this framework and the development of alternatives. These commentaries and studies do not share the integrated and cumulative history of utilization models drawn above. Medical sociologists, like those in the discipline generally, tended to draw dichotomies (particularly in qualitative/quantitative terms) and to argue over superior approaches. But taken together, a number of research lines provide a substantial set of building blocks for a counterpart offering an expanded to conceptualization of the nature and range of choices, the importance of process, and the central role of structural embeddedness.

throughout "events," "episodes," or "therapy courses" (Fabrega 1978, 1970; Janzen 1978; Unschuld 1976; Young 1981). By the mid-1970s, even developers of dominant utilization models based on a rational choice framework were incorporating these ideas as a way of dealing with questions of continuity, compliance, and delay in seeking care not amenable to analysis under their perspective (e.g., Aday et al. 1980, pp. 199 ff.).

In addition, four other lines of inquiry have contributed to the building of a counterpart approach. First, in spotty and somewhat unconnected fashion, a small network tradition of utilization research developed. Freidson (1970a) presented a first coherent framework for understanding the effect of network structure and content on the type of healer likely to be sought and the delay in seeking help. Following this, a few studies have marked the network paths to get to mental health clinics (Horwitz 1977; Kadushin 1966), child guidance clinics (Raphael 1964) and maternity clinics (McKinlay 1973). Second, in mostly unrelated developments from epidemiology, social and cognitive psychology, and social psychiatry, ideas of social support were offered as important in the etiology, treatment, and outcome of health and illness (see, e.g., Cassell 1976; Coates and Wortman 1980; Myers, Lindenthal, and Pepper 1975; Thoits 1983). Social support involved the existence of various ties including those of family and church, but researchers focused on the implicit and explicit benefits emanating from these ties (e.g., emotion aid, instrumental support). Third, documentation of demographic shifts in the medical care profile of health and illness in industrial and postindustrial society increased the dissatisfaction with traditional approaches. A greater chronic illness burden (as opposed to an infectious-parasitic profile) identified the career rather than the choice as the focal phenomenon, thus bringing the individual's social networks to the forefront (Clausen 1986; Haug 1981; Knipscheer and Antonucci 1990; Riley 1988). Fourth, the somewhat unexpected documentation of continued medical pluralism in both Western and non-Western nations further indicated the need for a wider conceptualization of decision making (Baer 1981; Berliner and Salmon 1980; Bhardwaj 1980; Cobb 1977).⁹ Table 1 presents a fairly comprehensive, though not necessarily exhaustive, listing of the vast reserve of people all societies potentially hold who can be and are consulted during an illness episode.

This review of "alternative" themes in sociomedical research on health care raises four points similar in theoretical significance to the general critique of rational choice. First, the most obvious choice (i.e., the use or nonuse of formal medical care facilities and practitioners) does not

⁹ Medical pluralism, characteristic of all societies, is the synchronic existence of diverse medical approaches to healing (Bhardwaj 1980; see also Leslie 1980).

How People Seek Help

Option	Advisor	Examples
Modern medical		
practitioners	M.D.'s, osteopaths (gen- eral practitioners; spe- cialists), allied health professions	Physicians, psychiatrists, podiatrists, optome- trists, nurses, midwives opticians, psychologists, druggists, technicians, aides
Alternative medical		
practitioners	"Traditional" healers	Faith healers, spiritualists, shamans, curanderos, diviners, herbalists, acu- puncturists, bonesetters, granny midwives
	"Modern" healers	Homeopaths, chiroprac- tors, naturopaths, nutri- tional consultants, holis- tic practitioners
Nonmedical professionals	Social workers	
	Legal agents Clergymen	Police, lawyers
	Supervisors	Bosses, teachers
Lay advisors	Family Neighbors Friends Co-workers, classmates	Spouse, parents
Other	Self-care	Nonprescription medicines, self-examination proce- dures, folk remedies, health foods
N.T.		nearth foods
None		

TABLE 1

THE RANGE OF CHOICES FOR MEDICAL CARE AND ADVICE

adequately reflect the realities of the medical marketplace or the nature of lay decision making for medical care. Second, people generally neither make a single choice nor plan a set of choices; they continue to ask advice and seek help from a wide variety of lay, professional, and semiprofessional others until the situation is resolved or options are exhausted. Third, illness triggers a dynamic, social process of coping. It is through contact with others that individuals deal with situations of medical uncertainty and find ways to solve emotional and physical problems (Kulka, Veroff, and Douvan 1979). Individuals in social networks are more than an influence on help seeking, they *are* caregivers and advisors, part of a "therapy managing group" (Janzen 1978). These habitual consultations

must be incorporated into decision-making models since studies document that the mundane options are often the most important in determining outcomes (Young 1981, p. 6). Finally, medical care systems can be conceptualized in terms of dynamic networks of interaction. Leslie (1978) makes this point forcefully: "Medical systems are generated by acts of consultation between laymen and specialists, or as concerted acts among laymen to cure, alleviate or otherwise with physical [or mental] affliction" (p. xii).

In sum, the SOS framework can draw support from the medical care arena and, in turn, has the potential to offer a more process-oriented perspective by organizing insights and providing a general conceptual base. In the SOS approach, illness careers start with an event that sets into motion a process of attempting to cope with a physical or emotional problem, given an ongoing structured system of social relations. These attempts at coping are created in negotiation with others and constrained by social structure. This orientation provides the freedom to isolate a single decision but it also emphasizes (1) ideas such as timing, spacing, duration, and order of choices (Elder 1978) and (2) that the use of official medical care practitioners, like any choice, is enmeshed in a wider pattern of help seeking. Some of the conceptual and analytic changes are possible under a rational choice framework, but the SOS framework shifts the focus to the *process* of decision making for medical care; that is, to the primacy of studying interaction and the social organization of patterned interactions directly; and, in doing so, reconceptualizes how sociodemographic contingencies influence health-care decisions by constraining or facilitating network ties (see Pescosolido [1991] for the delineation of a theoretical model of medical care choice based on an SOS framework).

A Theoretical Exposition

Adopting the social network and event-centered approach of the SOS framework leads to asking basic questions that complement those posed under rational choice models. At the same time, it exposes the current limits of adopting and pursuing a counterpart approach. There are two basic issues involved—one conceptual and one methodological. First, different orienting frameworks, as Kuhn (1970) and Merton (1957) contend, provide a base for reformulating questions and suggesting alternative ways of addressing the same issues. Conceptually, taking the SOS framework seriously, the first questions researchers adopting this approach are led to ask have not been raised in previous studies employing the dominant utilization approach. As indicated earlier, the majority of empirical studies in the dominant tradition ask: Who is most likely to use a physician, hospital, or clinic? And, under what conditions are they

likely to do so? These are the research questions that guide the rationalchoice-based analysis that follows. Individuals using any other options or who do nothing are lumped together. Under the SOS perspective, the focus shifts to patterns, combinations, sets, or sequences of a wide range of lay and professional sources of aid consulted during the illness episode. The basic questions raised and pursued in the empirical exposition that follows are: Is there, in fact, a discernable set of patterns, combinations of options, or strategies that individuals use during an illness episode? And, if so, are these patterns socially organized? The sets of questions posed under the two frameworks are not contradictory; they are simply different. In the end, these differing sets of questions are complementary, providing different angles of inquiry, and ultimately, different insights on the same phenomenon.

Second, methodological issues arise. As Tuma and Hannan (1984, p. 14) note, one major obstacle to dynamic analysis is the dearth of appropriate data; here (and in general), our ability to conceptualize outstrips our ability to follow through empirically (Watkins 1980). Problems are greater for the SOS framework since most extant data, including the set used here, were organized under the dominant framework. In addition, traditional analytic strategies come from microeconomics and provide a well-traveled course for operationalizing the dependent variable and statistically examining the contingencies of decision making under the rational-choice-based framework (e.g., using OLS or logit regression for dichotomous choice). The episode approach suggested by the SOS framework, on the other hand, often calls for analyses outside standard techniques and has been difficult to take beyond empirical description (Aday et al. 1980). Under the SOS framework, even the operationalization of the dependent variable is complex and less clear-cut. The phenomenon of interest is conceptualized profoundly as a strategy, but even in the following analysis where we can only examine unique choice sets, we need to utilize an analytic technique that allows us to see the number and type of strategies that individuals employ. One way to do this is to use clustering techniques to see whether there is a limited set of unique combinations that individuals resort to over the course of a severe episode of illness (see Abbott and Hrycak [1990] for another approach to a similar problem). Even according to their developers (e.g., Hartigan 1975), these analytic tools do not have the precision of other approaches nor are they as clear-cut in their final solutions.

In addition, previous attempts to pursue alternative theoretical conceptualizations show the need to tailor methodological approaches to theoretical frameworks. Even before the incorporation of social capital into the rational choice perspective, medical sociologists faced the limits of overlaying network insights into empirical examinations based on ratio-

nal choice models. Simply appending network contacts as additional independent variables added little to overall explained variance because social characteristics share variance with network characteristics when both are conceptualized at the same level. The SOS framework suggests that, at minimum, later choices must be operationalized in conditional terms that depend on previous ones. Furthermore, the approach does not suggest the effect of mobilizing one network tie on the probability of using modern medical care practitioners but posits the central role of the structure and content of the *overall network* on the range, nature, and timing of options used.

The similarities and differences in analytic strategy called for by one or another framework as well as the potential for insights to be gained from employing both are revealed in an actual comparison. The purpose of the sections that follow is not to provide a critical test of any specific propositions of any rational-choice-based or SOS-based model but to use an available set of data (the 1975–76 National Survey of Access to Health Care) to examine the potential utility of the SOS framework premises, to illustrate the different research strategies and analytic techniques employed, and to see if taking different analytic angles on the same phenomenon leads to different insights.¹⁰ The SOS approach requires an analytic step prior to the direct comparison of contingency effects. That is, an analysis is required to establish whether the first premise of the SOS framework, the one that remains unexplored under the rational-choicebased approach, receives support. Is there a complex but limited set of strategies that individuals use for advice and treatment during an illness episode?

The Strategies of Help Seeking

Figure 1 presents both the density and image matrices for the eightstrategy solution (i.e., seven clusters plus "none") derived under the clustering algorithm.¹¹ The cell entries of the density matrix represent the percentage of individuals in each pattern that choose a particular

¹⁰ The analysis that follows is inductive because the SOS framework is an orientation to analysis and, "indispensable though these orientations are, they provide only the broadest framework for empirical inquiry" (Merton 1957, p. 88; see also Etzioni 1988, p. 17; Ordershook 1976, p. 16; Stryker 1980, p. 13). Further, the focus is on combination of options rather than time-ordered sequences.

¹¹ The Appendix presents details on the data, the analysis, and the interpretation of coefficients; here I include only the basics necessary for understanding the empirical results. Even in this preliminary inductive exploration into the social organization of medical care contacts, data that fit the requirements to provide a useful theoretical exposition of both frameworks are rare (details on request).

	Family	Friend	Co-Worker/Classmate	Physician	Non-Prescription Drugs	Home Remedies	Druggist	None	Family	Friend	Co-Worker/Classmate	Physician	Non-Prescription Drugs	Home Remedies	Druggist	None	(N)
PATTERN 1	100	14	0	100	0	0	0	0	1	0	0	1	0	0	0	0	(506)
PATTERN 2	83	18	8	57	100	20	0	0	1	0	0	1	1	0	0	0	(65)
PATTERN 3	0	0	0	100	4	0	0	0	0	0	0	1	0	0	0	0	(302)
PATTERN 4	100	20	0	0	0	4	6	0	1	0	0	0	0	0	0	0	(66)
PATTERN 5	58	4	1	84	4	100	0	0	1	0	0	1	0	1	0	0	(71)
PATTERN 6	0	100	2	82	13	5	2	0	0	1	0	1	0	0	0	0	(77)
PATTERN 7	54	7	100	82	7	0	3	0	1	0	1	1	0	0	0	0	(68)
PATTERN 8	0	0	0	0	0	0	0	100	0	0	0	0	0	0	0	1	(42)
I	•		D	ENSIT	Y MA	TRIX					ІМ	AGE	MAT	RIX			

FIG. 1.—Density and image matrices for patterns of medical care contacts (N = 1, 199).

medical option. A high density indicates high resort to that medical care choice in that strategy. The patterning of high densities across the row of each cluster reveals the substantive nature of the strategy. The image matrix translates these frequencies into a use or nonuse dichotomy by using an arbitrary cut-off (here, the 50% level).

These results suggest that there are, in fact, unique histories, different "cascades" of network interactions in illness episodes. As expected, because the study selected episodes on the basis of severity and recency, strategies with physicians dominate. But, to anticipate, all individuals who use physicians are not the same—their pathways are not the same, the social process that leads them to consult a physician are not the same. And, there are two patterns that do not include the use of physicians, even with this limitation. Pattern 4 (N = 66) indicates the use of the family alone for medical care advice and treatment, while pattern 8 (N = 42) represents those respondents who report doing nothing about their condition. In total, there are only three "single" strategies, where only one source of medical care was sought. In addition to those above, pattern 3 represents a single strategy, the decision-making strategy that is the focus of the rational-choice-based analyses—simply going to a physician. Respondents choosing this strategy are the individuals Freidson (1961), Ailinger (1977), and Raphael (1964) call the self-referrals. While the "physician alone" pattern represents one of the more dominant strategies (N = 302), given the severity delimiter, the data-collection method, and the existence of other strategies (which 75% of respondents use), the data in general support the utility of a conceptual framework with greater complexity of medical care choice. These results indicate that we can

gain insights by not assuming homogeneity among individuals who either seek out a physician or among those who do not.

There are, in fact, differences among respondents who seek out a physician. All remaining patterns (1, 2, and 5-7) indicate help-seeking strategies that include a physician *in combination* with some other source of advice or treatment. Pattern 1 represents the combination of consulting family and physicians and is the pattern of greatest resort (N = 506, 42.3%). Individuals in pattern 2 report a strategy that combines consultation of family and physicians with the use of nonprescription drugs, while those in pattern 5 seek out the same advisors but use home remedies as well. Those in pattern 7 also use family and physicians but seek out co-workers or classmates for additional medical care advice. Finally, in pattern 6, the family is not part of the therapy managing group; instead, individuals consult only friends and physicians during the illness episode.

These results do not reject the utility of a rational-choice-based approach to lay decision making for medical care nor do they support the superiority of one approach over another. Rather, they show that there are, in fact, different ways to conceptualize individuals' responses to the uncertainty of illness problems, each which provides different insights. Further, these results suggest that the SOS framework provides a real counterpart, giving additional insights into the dynamics of coping by documenting that there are different pathways to the use or nonuse of physicians.

The Social Organization of Help Seeking

The first research question requires the conceptualization and operationalization of different dependent variables for medical care under the two approaches. But the second, at this early stage of the empirical exploration using an SOS framework, shares the same fundamental structure. The basic question raised is: What are the explanatory factors at work? Or in other words, how are choices and strategies socially organized? For the rest of the analysis, we have, in essence, two dependent variablesthe set of strategies derived above and the either-or decision of whether to use modern medical practitioners or not. According to the SOS framework, the fundamental mechanism at work is the operation of networks, conditioned in part by the social characteristics that tap important contextual limits on social networks. Available data do not allow a direct examination of networks; we can use social characteristics as proxies (even if not optimal) to see whether strategies are socially organized. Given this constraint, the SOS model specification reduces to the same one as in the rational choice approach with contingencies and analyses organized under the SBM (i.e., predisposing, enabling, and need characteristics). This similarity, however, does allow us to see whether we can gain additional, perhaps complementary insights into decision making from the SOS approach, insights not available in analysis guided by a rational-choice-based approach.

Table 2, under "Bivariate Logit Analysis," presents the kind of analysis done routinely using a traditional, rational-choice-based framework employing a dichotomous variable (1 = used physician [85%], 2 = didnot use [15%]) and logit techniques. The results are suggestive from both theoretical and policy perspectives. They indicate that blacks (twice as likely as whites), those with chronic illnesses (more than three and onehalf times as likely than those with acute illnesses), and those with more severe problems (doubling their odds with each increase in severity) are significantly more likely to seek out physicians during the illness episode. Overall, the effects of social variables are quite small (and nonsignificant, even at the liberal .10 level) with size of place ($b^s = 1.89$), public insurance $(b^s = .61)$, and no insurance $(b^s = .79)$ having the largest standardized effects. In short, standard predisposing (with the exception of race) and enabling factors do not distinguish users from nonusers. Only characteristics of the illness (i.e., need) distinguish choices that suggest a very rationally based decision-making process.

In the SOS-based approach, the social organization of strategies can be assessed in the traditional regression framework. However, because the dependent variable, the strategy set, is a polytomous dependent variable (i.e., nonordered or nominal categories), multinomial logit models are the appropriate choice.¹² The second section of table 2 represents one contrast in the multinomial analysis suggested under an SOS framework and the one most like that in the rational-choice-based analysis. At first glance, the SOS approach appears to offer no additional or complementary insights into health-care decision making. Here the omitted or reference category are those individuals who report that they employed none of the many options in the survey. People with more severe conditions (as before) are more likely to use strategies involving physicians (unless

¹² Given the number of strategies (eight) and the number of independent variables in the final model (13), there are 28 possible coefficients (each potentially in original, unstandardized, and standardized forms with an associated *t*-test) with all but one providing unique information (Long and McGinnis 1981). Space limitations prohibit a complete presentation of these multivariate logit results. The tables present the unstandardized effect coefficient and where applicable (i.e., ordinal level variables), the standardized effect coefficient. An unstandardized coefficient, e.g., for race (black coded 1; white 0) with a value of 2 would indicate that blacks are twice as likely as whites to choose a particular strategy over the omitted strategy; a value of .5 would indicate that they are half as likely to do so. The standardized coefficients allow a comparison of magnitude effects across variables.

Logit Analysis of Social Correlates of Rational Choice (Physician/Not Physician) and Social Organization Strategy (Patterns of Choice; "Nothing" Omitted) Conceptualizations of Help-Seeking	SOCIAL CORRELATES OF RATIONAL CHOICE (PHYSICIAN/NOT PHYSICIAN) AND SOCIAL ORG. (PATTERNS OF CHOICE; "NOTHING" OMITTED) CONCEPTUALIZATIONS OF HELP-SEEKING	ATIONAL NOTHING	CHOICE (P) 3" OMITTEI	hysician/N	ot Physic) fualizatio	AN) AND SOCIAL NS OF HELP-SEER	Organization St ing	RATEGY
				MULTI	NOMIAL LOG	MULTINOMIAL LOGIT ANALYSIS (VS. NOTHING)	THING)	
	BIVARIATE LOGIT					Family +	Family + Physician +	Family +
INDEPENDENT	ANALYSIS: USE A PHYSICIAN	Family Only	Physician Only	Friend + Physician	Family + Physician	Physician + Home Remedies	Non-Prescription Drugs	Co-worker + Physician
VARIABLES	(vs. Not)	(1)	(2)	(3)	(4)	(2)	(9)	(2)
Social location:								
Race (black)	2.20^{+}	.84	2.15	.82	.87	1.73	.29	66.
Age	1.01	66.	1.01	66.	66.	66.	1.02	66.
	(1.16)	(67.)	(1.31)	(.93)	(86.)	(66.)	(1.38)	(.95)
Head's education	.92	1.14	.94	.98	.94	1.05	1.37^{+}	.83
	(1.13)	(1.22)	(16.)	(86.)	(1.10)	(1.07)	(1.62)	(.76)
Work status (working)	.93	1.42	1.77	2.51^{+}	1.29	1.59	1.37	3.35*
Marital status (married)	.94	2.09	.73	.24*	1.43	.92	1.51	.47+
Log of time in neighborhood	96.	1.17	1.02	1.00	1.06	1.21	1.17	.94
)	(.94)	(1.29)	(1.04)	(1.00)	(1.10)	(1.37)	(1.29)	(10)
Size of place	1.00	1.00	1.00^{+}	1.00^{+}	1.00	1.00^{+}	1.00	1.00^{+}
r	(1.89)	(2.15)	(9.92)	(11.27)	(6.67)	(11.27)	(2.69)	(12.02)
Skepticism of medicine	.95	.87+	.93	66.	.87*	.95	1.05	.95
×	(.88)	(69)	(.82)	(66')	(69)	(.87)	(1.13)	(.87)

TABLE 2

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Enabling characteristics:								
Family income	1.00	66.	1.00	66.	1.00	1.00	1.00	66.
	(1.06)	(16.)	(1.05)	(99)	(1.15)	(1.03)	(1.40)	(.93)
Insurance:								
Public	.61	1.58	.70	.53	.93	0	1.68	.57
None	.79	1.67	1.01	1.17	1.30	1.80	2.27	.22
Characteristics of the illness:								
Condition type (chronic)	3.66*	.71	2.16	2.82^{+}	3.02^{*}	.67	1.12	1.06
Severity	1.86^{*}	1.09	2.40*	2.27*	2.14*	1.56^{+}	1.01	1.84^{*}
	(1.80)	(1.08)	(2.28)	(2.16)	(2.04)	(1.52)	(1.01)	(1.78)
Likelihood ratio statistic	105.245**				34	344.26**		
df	13				84			
Norre — All analyses are unstandardized effect coefficients. Standardized effect coefficients were computed and. where appropriate are presented in parentheses. All	ted effect coefficien	ts. Standardi	zed effect coe	efficients wer	e computed an	d. where appropri	iate are presented i	parentheses. All

where appropriate are presented in parentheses. All	
Standardized effect coefficients were computed and,	value coded 1 in dummy variables. $N = 1, 101$.
NOTE.—All analyses are unstandardized effect coefficients. §	variables are coded from low to high; parentheses indicate the v

+ P ≤ .10 (two-tailed test). * P ≤ .05 (two-tailed test). ** P ≤ .01.

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nonprescription drugs are included; see col. 6), but few significant effects for predisposing and enabling factors appear. To reach this conclusion, however, would be misleading. As Long and McGinnis (1981, p. 430) note, in multinomial logit analysis, individual tests of statistical significance need to be considered in combination with the overall pattern of effects (and overall significance) for a particular independent variable.

Table 3 presents the overall chi-square test for variable effects. Overall, social contingency variables are associated significantly with strategies and, most important, distinguish *among* strategies in which physicians are sought. Race, age, marital status, size of place, skepticism of medicine, and family income, as well as characteristics of the illness (both type and severity), are associated with the string of medical care options that individuals employ during a severe illness episode.

Rather than concentrating on any other specific contrast, the results are more accurately summarized through a consideration of effects across contrasts. The discussion of the effects of independent variables that follows depends heavily on the information summary provided by the graphic representations in figure 2 (based on Long 1987). Both the magni-

Independent Variables	Overall χ^2 for variable effective
Social location	
Race (black)	16.17*
Age	16.84*
Head's education	14.35
Work status (working)	10.83
Marital status (married)	52.70*
Log of time in neighborhood	6.62
Size of place	11.82+
Skepticism of medicine	21.34*
Enabling characteristics:	
Family income	12.59+
Insurance	
Public	3.85
None	9.84
Characteristics of the illness	
Condition type (chronic):	28.16*
Severity	55.36*

TABLE 3

CHI-SQUARE TESTS FOR OVERALL EFFECT OF THE SOCIAL CORRELATES OF Help-seeking Strategies across All Contrasts

NOTE.—All variables are coded from low to high; parentheses indicate the value coded "1" in dummy variables. N = 1,101.

+ $P \leq .10$ (two-tailed test).

^{*} $P \leq .05$ (two-tailed test).

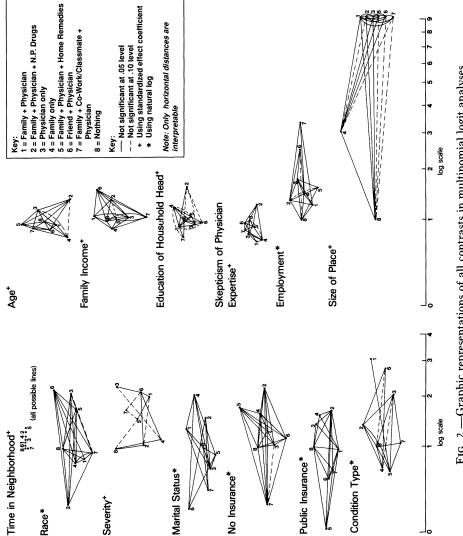


FIG. 2.—Graphic representations of all contrasts in multinomial logit analyses

tude distances (indicated by the place on the graph) and the significance of effects (indicated by the *absence* of lines connecting coefficient pairs) are important. The further away a coefficient effect is and the less it is connected to other effects, the more the effect of an independent variable is unique to that pattern. If coefficients are close on the graph and are connected by all possible lines, then the effect of that independent variable does not differ across contrasts.

Specifically, blacks appear to be more likely to use the physician-only strategy or a strategy that combines using physicians and friends (and to a lesser extent, a strategy including family, home remedies, and physicians). They are least likely to employ the strategy that combines the use of physicians, the family, and nonprescription drugs. Older people, on the other hand, are more likely to use this strategy that includes nonprescription drugs, but, like blacks, they are also more likely to rely only on a physician. Older people are also likely to rely on the family alone or to employ pluralist strategies that incorporate friends or co-workers. These results for older people suggest the limited nature of networks' health care advisors available to people in particular social locations.

Another group that is likely to include the use of nonprescription drugs in their help-seeking strategies are those who live in households where the head has higher levels of education. These people are also more likely to rely on home remedies in addition to family and physicians, or to rely on the family alone. They are least likely to incorporate co-workers (with family and physicians) into their medical care contacts. And while the effect of having no insurance is not significant overall, the pattern of effects is similar to that for education where the use of pluralist strategies incorporating home remedies, nonprescription drugs, or the family alone are more likely and the use of co-workers less likely. This is interesting because the latter may reflect network opportunity but the former may indicate preference.

The results continue to support the importance of social network opportunity structure in the help-seeking process. People who are working are more likely to use co-workers (in addition to the family and physicians) or friends (in addition to physicians) and are less likely to report that they do nothing about their condition. Married individuals report medical care contacts that rely heavily on the family. They are more likely to use the family alone, the family in combination with physicians, or both family and physicians combined with nonprescription drugs. They are least likely to use strategies that incorporate friends or co-workers into the therapy managing group or to rely simply on a physician.

Finally, people who report a greater skepticism of physician expertise are more likely to resort to the use of nonprescription drugs in combination with family and physicians and are more likely to use any strategy than simply consult family members or use family and physicians. A somewhat similar pattern is found for those with higher family incomes who are more likely to employ the strategy with nonprescription drugs (also to consult friends and physicians) and less likely to rely solely on family members. Those who live in larger places are least likely to do nothing or simply consult family members, and, there appears to be a greater willingness to widen the circle of medical care advisors to include friends and co-workers (and home remedies).

In this analysis (as in the bivariate logit model), the character of the health problem is associated with utilization. Here, we are provided with much more information. Individuals with chronic or severe illnesses are more likely to employ strategies with friends (in combination with physicians), family members (in combination with physician directly. They are less likely to rely on home remedies or the family alone, and those with severe illnesses are least likely to do nothing or employ strategies incorporating nonprescription drugs.

These results provide a wealth of information about medical care contacts over the illness episode, information that is both more detailed, different from, but complementary to that provided by the analysis under the dominant framework. One of the most important results lies in the meaning and role of social life in help seeking. We begin to see how and where social characteristics play a role in the differential use of strategies. Social factors, more or less dismissed in the results of the rational-choicebased analysis, affect pathways to care. The effects of social characteristics in these pluralist strategies that include physicians differ in sign and magnitude in comparison with the physician-only strategy (details on request). For example, while age, income, and work status do not distinguish those who consult physicians from those who do, they do separate individuals who employ different strategies which, sooner or later, include consultation with a physician. The results do not support the sole sufficiency of a physician-no physician conceptualization, even if our goal is to understand when and why individuals seek out a physician. In sum, the findings from the multinomial and clustering analyses considered simultaneously provide support for the utility of an SOS framework for understanding medical care decision making.

CONCLUSION

At this point in the development of social science, and sociology in particular, it is no longer realistic to maintain the dichotomies that have been the source of traditional battlelines if we are to attend to the task of explaining social phenomena. Debates within sociology on the superiority of qualitative or quantitative methods, macro or micro levels of explana-

tion, static or dynamic models, to name a few, are now acknowledged to lead to unfruitful and irresolvable discussion (Bourdieu 1981; Hilbert 1990; Maines 1982; White and Eccles 1986). As Collins (1987, p. 180) notes, "we cannot live forever by merely repeating the same metatheoretical points and lambasting the same enemies." This article has addressed the movement in the social sciences away from these arid debates and toward transdisciplinary, multilevel frameworks for understanding social action. On the forefront of development lies a theoretical orientation based on an individual rational-choice-based foundation. Its wide adoption suggests, according to Swedberg (1989), a convergence toward the preeminence of a revised rational choice perspective as the basis of an explanatory framework for social science (see also Friedman and Hechter 1988; Lindenberg 1985). My purpose is not to heat up the debate about the "new Methodenstreit" (Swedberg 1989); but I do not believe that attempts to forge a synthetic framework will be represented by one, and only one, "correct mega-theory."

I have proposed a counterpart, equally synthetic and equally balanced in incorporating ideas from various social sciences to the dominant rational-choice-based orientation. This counterpart emphasizes the particular contributions and insights of sociology to form the base of an orienting framework and then profits from the insights of rational choice theory. The SOS framework begins with sociological premises (the primacy of social interaction and the nature of the situation) and overlays economic insights (utility maximization, cost-benefit analysis, purposive action). To do so does not reduce our explanation to the irrational or idiosyncratic. Rather, it shifts the focus to the sociosyncratic where rationality, purposive action, and cost-benefit calculation take place within systematically structured patterns of network interaction. The basic dynamic and starting point of the framework is social interaction (rather than individual action) with socially patterned networks of interaction producing systematic structures that link micro and macro levels. Events occur that call for action to resolve a particular situation-these career streams piggyback on the ongoing system of social life. As such, they are intertwined in social life, drawing both on affect and rationality to drive social action.

The utility of this counterpart is illustrated in the field of medical sociology where a strong interdisciplinary tradition and larger changes in social conditions have allowed greater cross-fertilization of ideas and have fueled the development of both a synthetic framework as well as alternative approaches. Taken seriously in a theoretical exposition, the SOS approach offers a different but complementary set of research questions requiring the use of more unusual statistical techniques. Even with the data limitations, the results presented here indicate that adopting the SOS approach can provide additional insights into individuals' medical care decision making. In particular, it leads to a more refined understanding of the role of social factors in the process of coping with illness. In short, these findings support the utility of pursuing a counterpart orienting framework. Help-seeking strategies appear to be socially organized into embedded strategies. That is, (1) there appears to be a limited repertoire of patterns of choice, most of them pluralistic and some single, and (2) individuals appear to be limited in their strategies by social and medical contingencies that affect network opportunity and set the stage for the illness event.

Shifting to a new focus, as Hannan and Freeman (1986) point out in their work on organizations, opens exciting research possibilities but also poses new challenges. Stryker (1980, p. 9) strongly suggests the need to go beyond frames of reference to more precise relations among important concepts. The SOS framework presented here provides only broad, general guides. The elaboration of specific theories will require empirical descriptions of network formation and operation across diverse contexts. We have not yet developed dynamic, multimethod data collection protocols to capture both social processes and network influence (Alba 1981; Tilly 1984, pp. 26 ff.; Watkins 1980). This article represents an effort both to guide the construction of theories and to indicate the changes in data collection and empirical analysis (whether qualitative or quantitative) that should result from adopting this orientation to social action. This agenda, while complex and difficult, would move us closer to incorporating distinct contributions of sociology into multidisciplinary efforts to understand social action. But I argue in this article that it is well worth the effort to develop such theories and methods, and the theoretical exposition presented supports this contention.

APPENDIX

Detail on Data, Methods, and Measures

The National Survey of Access to Medical Care, 1975-76 (ICPSR 7730) was collected by the Center for Health Administration Studies, University of Chicago, under the auspices of the National Opinion Research Center (Aday et al. 1980, esp. chap. 6; Andersen and Aday 1980). The study is based on a household survey of the entire U.S. noninstitutionalized population (85% response rate). On the advice of one of the project's principal investigators (Aday 1985), this analysis focuses on the self-weighting main subsample of adults (i.e., N = 1,199 in the "illness episode" section not including data on any of the oversamples [Aday et al. 1980]). For a selected condition, individuals were asked to report

(1) in sequence, whom they talked to or contacted about their illness and what was recommended, (2) in checklist form, if they talked to a set of other practitioners (e.g., curanderos, chiropractors), and (3) whether they used any home remedies (e.g., over-the-counter medicines, homemade ingested or applied medicine). Any conditions discovered by a physician in the course of a routine preventive examination (i.e., not representing a decision for an illness problem) are excluded. The data set does present limits, however (e.g., no temporal sequence; a focus on severe illnesses). Since the study is retrospective, the analysis relies on relatively stable sociodemographic characteristics and respondent information provided specifically on the illness prosented here provides a conservative estimate of the utility of a social-organization-strategy approach to medical care choice (details on request).

To examine the patterns of medical care decision making, all options for the focal subsample were constructed so that individuals were scored as using (coded 1) or not using (coded 0) that option (see table A1). For stability in the clustering analysis, at least 10 individuals must have selected an option. To explore the social structuring of these patterns, a number of variables were run in preliminary analyses (details on request). To increase the stability of the coefficients and to decrease the complexity

TABLE A1

Use of Medical Care Advisors and Treatment for Most Severe Illness Episode during the Last Year

	FREQUENCY OF CONTACT			
Source of Care	N	%		
Physician	1,024	85.4		
Druggist	10	.8		
Podiatrist	4	.3		
Chiropractor	4	.3		
Social worker	1	.1		
Psychologist	1	.1		
Co-worker, classmate	76	6.3		
Friend	180	15.0		
Family	704	58.7		
Nonprescription drugs	95	7.9		
Home remedies	91	7.6		
None	40	3.3		
N (total)	1,199			

SOURCE.-NSAMC study, 1975-76.

NOTE.—Each cell in last column represents the percentage of the total number of respondents using each source of advice and/or treatment.

of interpretation in multinomial logit framework, the final model specification was determined by dropping variables that either had no effect across any pattern of medical care choice or had produced no change on the effects of other independent variables. Table A2 provides detail on the coding of independent variables in this final model.

To cluster the data, we begin with an $M \times N$ nonsymmetrical matrix of the type presented in figure A1 (M = 1,199; N = 7). The M represents the rows that are the number of adults who report a severe illness, in the main subsample. The N represents the columns of the eight medical care options that were selected for the clustering analysis. As figure A1 indicates, each row of the matrix represents an individual and his or her

Variable	Coding
Race	Dummy variable: $0 =$ white; $1 =$ black
Age	18–87 years
Head education	Eight categories from low to high attainment
Employment	Dummy variable: 0 = not working; 1 = working
Marital status	Dummy variable: 0 = not married; 1 = married
Time in neighborhood	Log of the number of months the respondent has lived in present neighborhood
Family income	In dollars from low to high incomes
Insurance status	Dummy variable set (private insurance omitted)
Public insurance	1 = public insurance; $0 =$ otherwise
No insurance	1 = uninsured; $0 = $ otherwise
Skepticism of physician expertise	Likert scale of four items from "Health Opin- ions" section of the survey (questions and answers in nos. A1, A2, A4, and A5; see Aday et al. 1980, p. 402). Higher score means greater skepticism of efficacy of mod- ern medical care.
Condition type	Collapsed version of the first "condition" code for the health problem selected for the epi- sode section of the survey: 0 = acute men- tal or physical illness; 1 = chronic mental or physical illness.
Severity	Physician judgment of the severity of the first reported condition of the illness episode: 1 (low) to 4 (greater) severity
Size	Census Bureau categorization of size of re- spondent's community: from small to large

TABLE A2

DETAIL ON CODING OF VARIABLES USED IN THE FINAL MODEL

	Family	Friend	Co-worker/Classmate	Physician	Non-Prescription Drugs	Home Remedies	Druggist	
SUBJECT NO.								-
1	1	0	0	0	0	0	0	
2	0	0	1	1	0	0	0	
3	1	1	0	0	0	1	0	
4	0	1	0	0	1	0	0	
5	1	0	0	1	0	0	0	
6	0	0	0	0	1	1	0	
7	1	0	0	1	0	0	1	
8	0	0	1	0	0	0	0	
9	0	0	0	1	1	0	1	
10	0	0	0	0	0	1	0	
	1	0	0	1	0	0	1	
(N)								

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FIG. A1.—Hypothetical data matrix for the clustering analysis

set of choices during the episode. So, for example, the first person consulted only his or her family for advice and treatment.

The clustering method (FASTCLUS, SAS 1985) is designed for disjoint clustering (i.e., nonhierarchical) of large data sets and clusters on the basis of Euclidian distances. The Cubic Clustering Criterion (CCC) represents an approximation of the expected value of the within-sum of squares. Values greater than three indicate structure in the data (i.e., a nonrandom set of clusters). To determine the "best" cluster set, a range of partitions (2-30 clusters) is run. Plotting the cluster values against the number of clusters run produces a graph, ideally showing a rise in the CCC, followed by a decline. However, if the data have a hierarchical structure, there may be several peaks in the graph. Such results would suggest that data are "grainy" and here, a combination of parsimony, checks for "chaining off" of small groups, as well as the CCC, is used

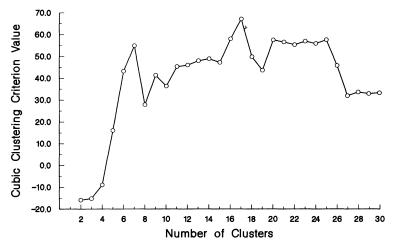


FIG. A2.—Values of the cubic clustering criterion by number of clusters specified.

to make the final decision. Here, as seen in figure A2 the seven-cluster solution (with the eighth cluster, "none," added later) represented the first peak on the graph. While it appears that the data might have a hierarchical structure, a comparison of cluster solutions with CCC values in the same range (i.e., 16, 17) indicates the basic soundness of the seven-cluster solution. Respondents who report that they did nothing about their health problem are held out as a separate vector and attached later to the pattern set for the multivariate analysis (due to its collinearity with the set of other vectors).

The density matrix is produced by computing the percentage of respondents in that pattern who select that option. It is calculated by:

$$\frac{\text{(the number of } i\text{'s in cluster C)}}{M_c J_c}$$
(A1)

For the multinomial logit model, the form is:

$$P_{i} = e^{\mathbf{X}\boldsymbol{\beta}_{i}} / \sum_{j=1}^{j} e^{\mathbf{X}\boldsymbol{\beta}_{j}}, \tag{A2}$$

where \mathbf{X} represents a vector of independent variables and the constraints are represented by

$$P_1 + P_2 + P_3 + \dots P_n = 1,$$
 (A3)

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where β_i is a vector of parameters that satisfy the following condition:

$$\sum_{i=1}^{J} \boldsymbol{\beta}_{i} = 0. \tag{A4}$$

Parameters are estimated by maximum-likelihood techniques that assess the effects of the independent variables on the log of the odds of being in one category or another of the patterns of medical care (using CATMOD in SAS 1985). Estimates are computed by comparing the effect of being in each of the patterns as opposed to being in a chosen omitted pattern (usually "none"). Only the parameter estimates that indicate the log likelihood of being in patterns 1, 2, 3 . . . N - 1 versus pattern N are given by the program; others can be derived (see Hanushek and Jackson 1977, pp. 210–14; McFadden 1974).

The overall fit of the model is provided by a difference of likelihood ratio statistics that is distributed as chi square with degrees of freedom equal to the number of estimated parameters and defined by 2(log likelihood at convergence $-\log$ likelihood at zero). There are a number of coefficients that can be presented. The program produces a multinomial logit coefficient of limited interpretive value and not presented here (see Long 1987). Rather, the individual effect coefficient is calculated, which is interpreted as how a unit increase in the independent variable affects the odds of respondents selecting a particular strategy versus the omitted strategy. Where applicable (where independent variables are, at least, measured at the ordinal level), a standardized coefficient can be used to compare effect magnitudes. There are two tests of statistical significance for independent variables, one indicating whether the independent variable has an effect across all comparisons and an asymptotic *t*-test indicating whether the variable significantly affects the choice between a particular strategy and the omitted one (Aldrich and Nelson 1984; Long 1987).

A few examples might serve to clarify the interpretation of the graphic presentation. When we look at figure 2, the graphic presentation indicates that "time in the neighborhood" does not appear to discriminate choices. All the coefficient effects are close together and the differences between them are not significant (indicated by lines between all pairs of coefficients). "Condition type" provides an example in which the independent variable does discriminate. The contrasts involving patterns 1, 6, and 3 tend to cluster together on the right-hand side of the graph and show a different effect for chronic illness from other strategies (indicated by the relative lack of lines between these and other strategies). The clustering of 4, 5, and 8 on the left-hand side of the graph (with the lines between them suggesting they hang together, i.e., are nonsignificantly different from each other) indicates choices that individuals with chronic condi-

tions are less likely to make. That is, they are less likely to employ strategies with home remedies, family alone or doing nothing.

REFERENCES

- Abbott, Andrew. 1988. "Transcending General Linear Reality." Sociological Theory 6:169–86.
- Abbott, Andrew, and Alexandra Hrycak. 1990. "Measuring Resemblance in Sequence Data: An Optimal Matching of Musicians' Careers." American Journal of Sociology 96:144-85.
- Aday, LuAnn. 1972. The Utilization of Health Services: Indices and Correlates. Washington, D.C.: Department of Health, Education and Welfare.
 - ——. 1985. Personal communication with the author.
- Aday, LuAnn, Ronald Andersen, and Gretchen V. Fleming. 1980. Health Care in the U.S.-Equitable for Whom? Beverly Hills, Calif.: Sage.
- Ailinger, Rita. 1977. "A Study of Illness Referral in a Spanish-speaking Community." Nursing Research 26:53-56.
- Alba, Richard D. 1981. "Taking Stock of Network Analysis: A Decade's Results." Research in the Sociology of Organizations 1:39-74.
- Aldrich, John H., and Forrest D. Nelson. 1984. Linear Probability, Logit, and Probit Models. Beverly Hills, Calif.: Sage.
- Alexander, Jeffrey C. 1990. "Commentary: Structure, Value and Action." American Sociological Review 55:339-45.
- Andersen, Ronald. 1968. "A Behavioral Theory of Families' Use of Health Services." Center for Health Administration Studies, University of Chicago.
- Andersen, Ronald, and LuAnn Aday. 1980. National Survey of Access to Medical Care, 1975-76 (MRDF). ICPSR Data Set 7730. Ann Arbor, Mich.: Inter-University Consortium for Political and Social Research.
- Aronson, Dan R. 1970. "Social Networks: Toward Structure or Process?" Canadian Review of Sociology and Anthropology 7:258-68.
- Baer, Hans. 1981. "The Organizational Rejuvenation of Osteopathy: A Reflection of the Decline of Professional Dominance in Medicine." *Social Science and Medicine* 15A:701-12.
- Berliner, Howard, and J. Warren Salmon. 1980. "The Holistic Alternative to Scientific Medicine: History and Analysis." *International Journal of Health Services* 10:133-47.
- Bhardwaj, S. M. 1980. "Medical Pluralism and Homeopathy: A Geographic Perspective." Social Science and Medicine 14B:209-16.
- Boudon, Raymond. 1988. "Will Sociology Ever Be a Normal Science?" Theory and Society 17:747-71.
- Bourdieu, Pierre. 1981. "Men and Machines." Chap. 11 in Advances in Social Theory and Methodology, edited by Karin D. Knorr-Cetina and Aaron V. Cicourel. Boston: Routledge & Kegan Paul.
- Burt, Ronald S. 1982. *Toward a Structural Theory of Action*. New York: Academic Press.
- Camic, Charles. 1986. "The Matter of Habit." American Journal of Sociology 91:1039-87.
- Cassell, John. 1976. "The Contribution of the Social Environment to Host Resistance." American Journal of Epidemiology 104:107-23.
- Cicourel, Aaron V. 1981. "Notes on the Integration of Micro- and Macro-levels of Analysis." Chap. 1 in Advances in Social Theory and Methodology, edited by Karin D. Knorr-Cetina and Aaron V. Cicourel. Boston: Routledge & Kegan Paul.
- Clausen, John A. 1986. The Life Course: A Sociological Perspective. Englewood Cliffs, N.J.: Prentice-Hall.

Clausen, John A., and Miriam Yarrow. 1955. "Paths to the Mental Hospital." Journal of Social Issues 11:25-33.

Coates, D., and Camille Wortman. 1980. "Depression Maintenance and Interpersonal Control." Chap. 7 in Advances in Environmental Psychology, edited by A. Baum, Y. Epstein, and J. Siner. New York: Erlbaum.

Cobb, Ann. 1977. "Pluralistic Legitimation of an Alternative Therapy System: The Case of Chiropractic." *Medical Anthropology* 4:1–23.

Coleman, James S. 1986. "Social Theory, Social Research, and a Theory of Action." American Journal of Sociology 91:1309-35.

——. 1987. "Norms as Social Capital." Pp. 133–56 in *Economic Imperialism: The Economic Approach Applied Outside the Field of Economics*, edited by Gerald Radnitzky and Peter Bernholz. New York: Paragon.

——. 1988. "Social Capital in the Creation of Human Capital." American Journal of Sociology 94 (suppl.): S95–S120.

——. 1990. The Foundations of Social Theory. Cambridge: Belknap.

Collins, Randall. 1981. "On the Microfoundations of Macrosociology." American Journal of Sociology 86:984-1014.

-------. 1986. "Is 1980s Sociology in the Doldrums?" American Journal of Sociology 91:1336-55.

——. 1987. "Looking Forward or Looking Back: Reply to Denzin." American Journal of Sociology 93:180-84.

Conrad, Peter. 1987. "The Experience of Illness: Recent and New Directions." Research in the Sociology of Health Care 6:1-31.

Corsaro, William A. 1990. "Interpretive Reproduction," chap. 1, manuscript. Indiana University, Bloomington.

Corsaro, William A., and Thomas A. Rizzo. 1988. "Discussione and Friendship: Socialization Processes in the Peer Culture of Italian Nursery School Children." American Sociological Review 53:879-94.

Elder, Glen H., Jr. 1978. "Family and Life Course." Pp. 14-16 in *Transitions in the Life Course in Historical Perspective*, edited by T. K. Hareven. New York: Academic Press.

Elster, Jon. 1975. Leibniz and the Development of Economic Rationality. Oslo: University of Oslo Press.

——. 1978. Logic and Society. New York: Wiley.

——. 1979. Ulysses and the Sirens. Cambridge: Cambridge University Press.

Eraker, Stephen A., John P. Kirscht, and Marshall Becker. 1984. "Understanding and Improving Patient Compliance." Annals of Internal Medicine 100:258-68.

Etzioni, Amitai. 1988. The Moral Dimension. New York: Free Press.

Fabrega, Horatio. 1970. "Dynamics of Medical Practice in a Folk Community." Milbank Memorial Fund Quarterly 48:391-412.

. 1978. "Ethnomedicine and Medical Science." Medical Anthropology Quarterly 2:11-24.

Falk, I. J., M. C. Klem, and N. Sinai. 1933. *The Costs of Medical Care*. Chicago: University of Chicago Press.

Fine, Gary, and Sherryl Kleinman. 1983. "Networks and Meaning: An Interactionist Approach to Structure." *Symbolic Interaction* 6:97–110.

Fischer, Claude. 1982. To Dwell among Friends. Chicago: University of Chicago Press.

Fjellman, Stephen. 1976. "Natural and Unnatural Decision Making: A Critique of Decision Theory." Ethos 4:73-91.

Frank, Richard G., and Mark S. Kamlet. 1989. "Determining Provider Choice for the Treatment of Mental Disorder: The Role of Health and Mental Health Status." *Health Services Research* 24:83-103.

Freeman, Linton C., and A. Kimball Romney. 1987. "Words, Deeds, and Social Structure." Human Organization 46:330-34.

Freidson, Eliot. 1961. Patient's View of Medical Practice. New York: Russell Sage. ———. 1970a. Profession of Medicine. New York: Dodd, Mead.

—. 1970b. Professional Dominance. New York: Atherton.

Friedman, Debra, and Michael Hechter. 1988. "The Contribution of Rational Choice Theory to Macrosociological Research." Sociological Theory 6:201–18.

Furstenberg, Anne Linda, and Linda J. Davis. 1984. "Lay Consultation of Older People." Social Science and Medicine 18:827-37.

- Giddens, Anthony. 1984. The Constitution of Society: Outline of the Theory of Structuration. Cambridge: Polity Press.
- ——. 1989. "A Reply to My Critics." Chap. 12 in Social Theory of Modern Societies: Anthony Giddens and His Critics, edited by David Held and John B. Thompson. Cambridge: Cambridge University Press.
- Gold, Margaret. 1977. "A Crisis of Identity: The Case of Medical Sociology." Journal of Health and Social Behavior 18:16–68.
- Granovetter, Mark. 1973. "The Strength of Weak Ties." American Journal of Sociology 78:1360-80.

——. 1985. "Economic Action and Social Structure: The Problem of Embeddedness." *American Journal of Sociology* 91:481–510.

- Gray, John H. 1987. "The Economic Approach to Human Behavior: Its Prospects and Limitations." Pp. 33-49 in *Economic Imperialism: The Economic Approach Applied Outside the Field of Economics*, edited by Gerard Radnitzky and Peter Bernholz. New York: Paragon.
- Gurin, Gerald, Joseph Veroff, and Sheila Feld. 1960. Americans View Their Mental Health. New York: Basic.
- Haines, Valerie. 1988. "Social Network Analysis, Structuration Theory and the Holism-Individualism Debate." Social Networks 10:157-82.
- Hannan, Michael T., and John Freeman. 1986. "Where Do Organizational Forms Come From?" Sociological Forum 1:50-62.
- Hanushek, Eric, and John Jackson. 1977. Statistical Methods for Social Scientists. New York: Academic Press.
- Hartigan, John. 1975. Clustering Algorithms. New York: Wiley.
- Haug, Marie R. 1981. Elderly Patients and Their Doctors. New York: Springer.
- Heise, David. 1979. Understanding Events: Affect and the Social Construction of Action. New York: Cambridge University Press.
- ——. 1987. "Affect Control Theory: Concepts and Model." *Journal of Mathematical Sociology* 13:1–33.
- ——. 1989*a*. "Improvisation to Institutionalization." Paper presented at the annual meetings of the American Sociological Association.
- . 1989b. "Modeling Event Structures." Journal of Mathematical Sociology 14:139-69.
- Hilbert, Richard A. 1990. "Ethnomethodology and the Micro-Macro Order." American Sociological Review 55:794-808.
- Horwitz, Allan. 1977. "Social Networks and Pathways to Psychiatric Treatment." Social Forces 56:86–105.
- Huckfeldt, R. Robert. 1983. "Social Context, Social Networks and Urban Neighborhoods: Environmental Constraints on Friendship Choice." American Journal of Sociology 89:651-69.
- Huckfeldt, Robert, and John Sprague. 1986. "Networks in Context: The Social Flow of Political Information." Unpublished paper. Indiana University, Bloomington.
- Izmirilian, Harry. 1971. "Structural and Decision-Making Models: A Political Example." American Anthropologist 73:1062-74.
- Janzen, John M. 1978. The Quest for Therapy in Lower Zaire: Medical Pluralism in Lower Zaire. Berkeley: University of California Press.

- Kadushin, Charles. 1966. "The Friends and Supporters of Psychotherapy: On Social Circles in Urban Life." American Sociological Review 31:786-802.
 - . 1983. "Mental Health and Interpersonal Environment: A Reexamination of Some Effects of Social Structure on Mental Health." *American Sociological Review* 48:188–98.

Kanter, Rosabeth Moss. 1977. Men and Women of the Corporation. New York: Basic.

- Kemper, Theodore D., and Randall Collins. 1990. "Dimensions of Microinteraction." American Journal of Sociology 96:32-68.
- Killworth, Peter D., and H. Russell Bernard. 1976. "Informant Accuracy in Social Network Data." *Human Organization*, pp. 269-86.
- Knipscheer, Kees C. P. M., and Toni C. Antonucci. 1990. Social Network Research: Substantive Issues and Methodological Questions. Rockland, Mass.: Swets & Zeitlinger.
- Knoke, David. 1990. Political Networks: The Structural Perspective. New York: Cambridge University Press.
- Knorr-Cetina, Karin D. 1981. "The Micro-sociological Challenge of Macro-sociology: Toward a Reconstruction of Social Theory and Methodology." Introduction to Advances in Social Theory and Methodology, edited by Karin D. Knorr-Cetina and Aaron V. Cicourel. Boston: Routledge & Kegan Paul.
- Koos, Earl. 1954. The Health of Regionville. New York: Columbia University Press.
- Kuhn, Thomas. 1970. The Social Structure of Revolutions, 2d ed. Chicago: University of Chicago Press.
- Kulka, Richard, Joseph Veroff, and Elizabeth Douvan. 1979. "Social Class and the Use of Professional Help for Personal Problems: 1957–1976." Journal of Health and Social Behavior 20:2–17.
- Larson, Magali Sarfatti. 1977. The Rise of Professionalism. Berkeley: University of California Press.
- Laumann, Edward O., and David Knoke. 1987. The Organizational State: Social Choice in National Policy Domains. Madison: University of Wisconsin Press.
- Leslie, Charles. 1978. Foreword. Pp. xi-xv in *The Quest for Therapy in Lower Zaire:* Medical Pluralism in Lower Zaire by John M. Janzen. Berkeley: University of California Press.

- Levin, Lowell, Alfred Katz, and Erik Holst. 1976. Self-Care. New York: Prodist.
- Lindenberg, Siegwart. 1985. "An Assessment of the New Political Economy: Its Potential for the Social Sciences and Sociology in Particular." *Sociological Theory* 3:99–114.
- Long, J. Scott. 1987. "A Graphical Method for the Interpretation of Multinomial Logit Analysis." Sociological Methods and Research 15:420-46.
- Long, J. Scott, and Robert McGinnis. 1981. "Organizational Context and Scientific Productivity." American Sociological Review 46:422-42.
- MacKinnon, Neil J., and David R. Heise. In press. "Affect Control Theory: Delineation and Development." In *Theoretical Research Programs: Studies in Theory Growth*, edited by Joseph Berger and Morris Zelditch, Jr. Palo Alto, Calif.: Stanford University Press.
- Macy, Michael. 1990. "Learning Theory and the Logic of Critical Mass." American Sociological Review 55:809-26.
- Maines, David R. 1982. "In Search of Mesostructure." Urban Life 11:267-79.

Marsden, Peter V. 1981. "Introducing Influence Processes into a System of Collective Decisions." *American Journal of Sociology* 86:1203–35.

^{——. 1987. &}quot;Core Discussion Networks of Americans." American Sociological Review 52:122–31.

- Maurana, Cheryl A., Robert L. Eichorn, and Lynn E. Lonnquist. 1981. The Use of Health Services: Indices and Correlates. Washington D.C.: National Center for Health Services Research.
- McFadden, Daniel. 1974. "Conditional Logit Analysis of Qualitative Choice Behavior." Pp. 105-42 in *Frontiers of Econometrics*, edited by Paul Zarembka. New York: Academic Press.
- McKinlay, John. 1972. "Some Approaches and Problems in the Study of the Use of Services—an Overview." Journal of Health and Social Behavior 13:115–51.
- ——. 1973. "Social Networks, Lay Consultation and Help-seeking Behavior." Social Forces 51:275–92.
- Mechanic, David. 1990. "The Role of Sociology in Health Affairs." Health Affairs (Spring), pp. 85-97.
- Merton, Robert K. 1957. Social Theory and Social Structure. Glencoe, Ill.: Free Press.
- Mueller, Dennis C. 1976. "Public Choice: A Survey." Journal of Economic Literature 19:395-433.
- Myers, Jerome K., Jacob J. Lindenthal, and Max P. Pepper. 1975. "Life Events, Social Integration and Psychiatric Symptomatology." *Journal of Health and Social Behavior* 16:421-27.
- Ordershook, Peter C. 1986. *Game Theory and Political Theory*. Cambridge: Cambridge University Press.
- Ostrom, Elinor. 1989. "Microconstitutional Change in Multiconstitutional Political Systems." *Rationality and Society* 1:11-49.
- Parsons, Talcott. 1951. The Social System. Glencoe, Ill.: Free Press.
- Pescosolido, Bernice A. 1986. "Migration, Medical Care Preference and the Lay Referral System: A Network Theory of Role Assimilation." American Sociological Review 51:523-90.

——. 1991. "Illness Careers and Network Ties: A Conceptual Model of Utilization and Compliance." Pp. 161–84 in *Advances in Medical Sociology*, vol. 2. Edited by Gary Albrecht and Judith Levy. Greenwich, Conn.: JAI.

- Press, Irwin. 1969. "Urban Illness: Physicians, Curers and Dual Use on Bogota." Journal of Health and Social Behavior 10:209-18.
- Radnitzky, Gerard, and Peter Bernholz, eds. 1987. Economic Imperialism: The Economic Approach Applied Outside the Field of Economics. New York: Paragon.
- Raphael, Edna. 1964. "Community Structure and Acceptance of Psychiatric Aid." American Journal of Sociology 69:340-58.
- Riley, Matilda White. 1979. Aging from Birth to Death. Boulder, Colo: Westview. ——. 1988. Social Change and the Life Course. Newbury Park, Calif.: Sage.
- Rivers, W. H. R. 1927. *Medicine, Magic and Religion*. London: Kegan Paul, Trench, Truber.
- Romanucci-Ross, Lola. 1977. "The Hierarchy of Resort in Curative Practices: The Admiralty Islands, Melanesia." Pp. 481–86 in *Culture, Disease and Healing*, edited by David Landy. New York: Macmillan.
- Rosenstock, I. M. 1966. "Why People Use Health Services." Milbank Memorial Fund Quarterly 44:94-106.
- Roth, Julius A. 1963. Timetables. Cleveland: Bobbs-Merrill.
- Rubel, Arthur S. 1966. Across the Tracks. Austin: University of Texas Press.
- Salloway, Jeffrey C., and P. B. Dillon. 1973. "A Comparison of Family Networks in Health Care Utilization." Journal of Comparative Family Services 4:131-42.
- SAS Institute, Inc. 1985. SAS User's Guide: Statistics, ver. 5.0. Cary, N.C.: SAS Institute, Inc.
- Saunders, Lyle. 1954. Cultural Differences and Medical Care: The Case of Spanishspeaking People of the Southwest. New York: Russell Sage.

Schneider, Harold K. 1974. Economic Man: The Anthropology of Economics. New York: Free Press.

Sewell, William H., Jr., 1988. "Theory of Action, Dialectic, and History: Comment on Coleman." American Journal of Sociology 93:166-71.

Simmel, Georg. 1955. "The Web of Group Affiliation." Pp. 127-95 in Conflict and the Web of Group Affiliations. New York: Free Press.

Simon, Herbert. 1976. Administrative Behavior. New York: Free Press.

- Smith-Lovin, Lynn. 1987. "Affect Control Theory: An Assessment." Journal of Mathematical Sociology 13:171-92.
- Stoner, Bradley P. 1985. "Formal Modeling of Health Care Decisions: Some Applications and Limitations." Medical Anthropology Quarterly 16:41-46.
- Stryker, Sheldon. 1980. Symbolic Interactionism. Menlo Park, Calif.: Benjamin/ Cummings.
- ——. 1987. "The Vitalization of Symbolic Interactionism." Social Psychology Quarterly 50:83–94.
- Stryker, Sheldon, and Richard Serpe. 1983. "Toward a Theory of Family Influence in the Socialization of Children." Pp. 471-91 in Research in the Sociology of Education and Socialization, Vol. 4, edited by Alan Kerckhoff. Greenwich, Conn.: JAI.
- Suchman, Edward. 1964. "Sociomedical Variation among Ethnic Groups." American Journal of Sociology 70:319-31.
- Swedberg, Richard. 1989. "Socioeconomics and the New Methodenstreit: On the Paradigmatic Struggle in Contemporary Economics." Paper presented at the Conference on Socio-Economics at the Harvard Business School.
- Thoits, Peggy. 1983. "Dimensions of Life Events that Influence Psychological Distress: An Evaluation and Synthesis of the Literature." Pp. 33-103 in *Psychosocial Stress*, edited by Howard Kaplan. New York: Academic Press.
- Tilly, Charles. 1984. Big Structures, Large Processes, Huge Comparisons. New York: Russell Sage.
- Tuma, Nancy Brandon, and Michael T. Hannan. 1984. Social Dynamics. Orlando, Fla.: Academic Press.
- Twaddle, Andrew C., and Richard M. Hessler. 1977. A Sociology of Health. St. Louis: Mosby.
- Unschuld, Paul. 1976. "Western Medicine and Traditional Healing Systems: Competition, Cooperation or Integration." *Ethics in Science and Medicine* 3:1-20.

Veatch, Robert M. 1973. "Generalization of Expertise." Hastings Center Studies 1:29-40.

- Watkins, Susan C. 1980. "On Measuring Transitions and Turning Points." Historical Methods 13:181–86.
- Wellman, Barry, and Scot Wortley. 1990. "Different Strokes from Different Folks: Community Ties and Social Support." American Journal of Sociology 96:558-88.
- White, Harrison, Scott Boorman, and Ronald Brieger. 1976. "Social Structure from Multiple Networks I. Blockmodels of Roles and Positions." American Journal of Sociology 88:135-60.
- White, Harrison C., and Robert G. Eccles. 1986. "Control via Concentration? Political and Business Evidence." Sociological Forum 1:131-57.
- Whitten, Norman E. 1970. "Network Analysis in Ecuador and Nova Scotia: Some Critical Remarks." Canadian Review of Sociology and Anthropology 7:269-80.
- Wolfe, Alan. 1989. Whose Keeper? Social Science and Moral Obligation. Berkeley and Los Angeles: University of California Press.
- Young, James Clay. 1981. Medical Choice in a Mexican Village. New Brunswick, N.J.: Rutgers University Press.

^{. 1981. &}quot;Cross-cultural Relations: Medical Ethno-masochism." Social Science and Medicine 15A:1–2.