

**NETWORKS
AND
ORGANIZATIONS:
STRUCTURE, FORM, AND ACTION**

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Problems of Explanation in Economic Sociology

MARK GRANOVETTER

I argue in this paper that a well-conceived economic sociology can, under certain circumstances, improve on the explanations of economic action and institutions typically offered by neoclassical economics. First I want to discuss in a general way why such improvements are possible.

I see three fundamental reasons, each of which identifies a characteristic deficiency in economic explanation: (1) The pursuit of economic goals is typically accompanied by that of such noneconomic ones as sociability, approval, status, and power. Analyses that abstract away from the latter as a matter of principle are handicapped at the outset. (2) Economic action (like all action) is socially situated and cannot be explained by reference to individual motives alone. It is embedded in ongoing networks of personal relationships rather than carried out by atomized actors. (3) Economic institutions (like all institutions) do not arise automatically in some form made inevitable by external circumstances; rather, they are "socially constructed" (Berger and Luckmann 1966). An understanding of this process requires that both theory and empirical research pay attention to dynamics. Limitation of theory to the comparative statics of equilibrium states encourages elliptical accounts of the origins of institutions, such as reliance on functionalist or culturalist explanation.

The qualifying phrases "under certain circumstances" and "characteristic deficiency" refer to the two logical cases where economic sociology will not lead to improved explanation: (1) where economic explanation does not display the deficiencies named and (2) where these characteristics are not in fact deficiencies. Thus some economists take account of noneconomic motives, embeddedness, and the processes by which economic institutions

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are constructed, though it is rare to see all three in a single analysis, and all are discouraged by the present theoretical synthesis. Rather, most economists who discuss the issue claim that the economic sphere is sufficiently disentangled and autonomous from other social spheres that noneconomic motives, social relations, and detailed historical processes can be set aside. Part of the contribution of a theoretically vital economic sociology should be a specification of the circumstances under which such claims are correct, rather than a blanket insistence that they can never be.

1. NONECONOMIC MOTIVES, EMBEDDEDNESS, AND ATOMIZATION IN SOCIAL THOUGHT

The first two reasons are analytically separable but empirically related. One reason why people can and do seek such noneconomic goals as sociability, approval, status, and power in the course of their economic activity is that this activity occurs in networks of personal relations. If economic activity were impersonal and atomized, it would be much harder to do so. People could then still seek such goals *indirectly*, in that accumulation of economic resources might be the royal road to power and prestige. But these goals would then be analytically separable from the economic ones, and you would not need to worry about trade-offs among economic and noneconomic motives in the course of economic activity itself, as where corporate executives must balance their interest in profit maximization against their desire to be respected in their upper-class social circle (cf. Useem 1983).

Conversely, one (though not the only) reason why people *conduct* their economic activity through networks of known personal acquaintances is that sociability, approval, status, and power are central human motives; since economic activity is a large part of the lives of many actors, they could hardly be expected to play out that large part in an arena utterly cut off from the chance to achieve those motives, as would be the case in an impersonal, atomized economic life. It is thus common for economic relations that begin in a neutral, impersonal way to develop noneconomic content as people try actively to *prevent* economic and noneconomic aspects of their lives from being separated. This progression was already clear to Durkheim and is a central theme in his *Division of Labor in Society*:

[E]ven where society rests wholly upon the division of labor, it does not resolve itself into a myriad of atoms juxtaposed together, between which only external and transitory contact can be established. The members are linked by ties that extend well beyond the very brief moment when the act of exchange is being accomplished ([1893] 1984:173).

That people have noneconomic as well as economic motives is hardly news. The issue is whether economic analysis can in fact be segregated from such motives. There are obvious gains in simplification from doing

so. But the intellectual history of such segregation is more complex. Albert Hirschman (1977) has traced over several centuries the distinction between the "passions" and the "interests," in which the latter, referring to economic motivations, came to be assumed the province of calm, rational, and benevolent behavior. Noneconomic motives were gradually subsumed to the category of "passions" with the accompanying assumption that their pursuit was not a matter of rational action and therefore not suitable for economic analysis. By the time of Adam Smith this distinction was firmly fixed; it is so clear in the writing of Pareto that his economics and his sociology are so utterly separate that one could read one without suspecting the existence of the other.¹

Influenced by Pareto, Paul Samuelson (1947) thus commented in his *Foundations of Economic Analysis* that "many economists would separate economics from sociology upon the basis of rational or irrational behavior" (90).² It has been extraordinarily difficult for a discipline whose very conception of itself involves an analysis of rational action to contemplate the inclusion of supposedly irrational motives in its arguments.³

I attempt no extended analysis of the nature and texture of noneconomic motives here, as this would require a treatise on human motivation. Rather, I argue that the social nature of motives such as sociability, approval, prestige, and power leads immediately to the problem of embeddedness, since only in networks of ongoing social relations are such motives achievable.

The assertion that *economic* action is embedded in networks of personal relations among actors ties into the classic question in social theory of just how *any* behavior and institutions are affected by social relations. Since such relations are in fact always present, the situation occasioned by their absence can be imagined only through a thought experiment like Thomas Hobbes's "state of nature" or John Rawls's "original position." In assuming rational, self-interested behavior affected minimally by social relations, modern economics assumes an idealized state not far from that of these thought experiments. At the other extreme lies what I will call the "strong embeddedness argument": that economic action and institutions are so constrained by ongoing social relations that to construe them as independent is a grievous misunderstanding; and further, that in pre-capitalist societies, the economizing motives taken as given by classical and neoclassical economic theory cannot be assumed, and the theory thus gives us no insight whatsoever into such action and institutions.

Most sociologists, anthropologists, and historians have taken the strong embeddedness position for economic action in "primitive" or "non-market" societies: that such action was heavily embedded there but has become much more autonomous with modernization; that in modern society the economy is more a separate sphere, where economic transactions are no longer determined mainly by the social or kinship obligations of transactors but by rational pursuit of individual gain. It is sometimes further argued that the traditional situation is even reversed: Instead of economic life being submerged in social relations, these relations become

an epiphenomenon of the market. The strong embeddedness position is associated with the "substantivist" school in anthropology, identified especially with Karl Polanyi (1944; Polanyi, Arensberg, and Pearson 1957) and with the idea of "moral economy" in history and political science (Thompson 1971; Scott 1976), with neoevolutionism in sociology (Parsons 1937) and with many traditional theories of economic development. It has also some obvious affinity to Marxist thought.

Few economists have accepted this conception of a break in embeddedness with modernization; most assert instead that embeddedness in earlier societies was not substantially greater than the low level they attribute to modern markets. Adam Smith set the tone, postulating a "certain propensity in human nature . . . to truck, barter and exchange one thing for another" ([1776] 1976, Book 1, Ch. 2) and assuming that in primitive society, with labor the only factor of production, people must have exchanged goods in proportion to their labor costs, as in the general classical theory of rational exchange ([1776] 1976, Book 1, Ch. 6). From the 1920s on, certain anthropologists took a similar position, which came to be called the "formalist" one: that even in tribal societies, economic behavior was sufficiently independent of social relations for standard neoclassical analysis to be useful. This position has recently received a new infusion as economists and fellow travelers in history and political science have developed a new interest in the economic analysis of social institutions—much of which falls into what is called the "new institutional economics"—and have argued that behavior and institutions previously interpreted as embedded in earlier societies, as well as our own, can be better understood as resulting from the pursuit of self-interest by rational, more or less atomized individuals (e.g., North and Thomas 1973; Williamson 1975).

My own view, which I will characterize as the "weak embeddedness position," diverges from both schools of thought.⁴ While I agree with the economists (and their fellow travelers) that the transition to modernity did not much change the level of embeddedness, I also argue that it has always been and remains substantial: less all-encompassing in the earlier period than claimed in the "strong embeddedness position" of substantivists, development theorists, and evolutionists, but more so in the later period than supposed by them or by economists.

2. OVER- AND UNDERSOCIALIZED CONCEPTIONS OF ACTION IN SOCIOLOGY AND ECONOMICS

I begin the argument by recalling Dennis Wrong's (1961) complaint about an "oversocialized conception of man in modern sociology," a conception of people as overwhelmingly sensitive to the opinions of others and hence obedient to the dictates of consensually developed norms and values, internalized through socialization so that obedience is not perceived as a burden.

Wrong approved the attack on an atomized conception of human action and the emphasis on actors' embeddedness in social context, the crucial factor absent from Hobbes's thinking, but warned of exaggerating the degree of this embeddedness and the extent to which it might eliminate conflict:

It is frequently the task of the sociologist to call attention to the intensity with which men desire and strive for the good opinion of their immediate associates in a variety of situations, particularly those where received theories or ideologies have unduly emphasized other motives. . . . Thus sociologists have shown that factory workers are more sensitive to the attitudes of their fellow workers than to purely economic incentives. . . . It is certainly not my intention to criticize the findings of such studies. My objection is that . . . [a]lthough sociologists have criticized past efforts to single out one fundamental motive in human conduct, the desire to achieve a favorable self-image by winning approval from others frequently occupies such a position in their own thinking (1961:188–189).

To the extent that such a conception was prominent in 1961, it resulted in large part from Talcott Parsons's attempt in *The Structure of Social Action* (1937:89–94) to transcend the problem of order as posed by Thomas Hobbes by emphasizing commonly held societal values. Parsons classified Hobbes in what he called the "utilitarian" tradition, which he attacked for treating individual action as atomized, isolated from the influence of others or from any broad cultural or social traditions. But a close reading of such utilitarians as Hume, Smith, Bentham, and John Stuart Mill does not support such a depiction. Rather, they do show considerable interest in how social institutions, norms, and interaction modify and shape individual action (see Camic 1979).

Nevertheless, most of what Parsons alleged to be the case for the "utilitarian" and "positivistic" tradition does seem an appropriate account of the stance of classical—and especially neoclassical—economics on human economic action.⁵ In contrast to the oversocialized view pilloried by Wrong (1961), classical and especially neoclassical economics operate with an atomized, *undersocialized* conception of human action. The theoretical arguments disallow by hypothesis any impact of social structure or relations on production, distribution, or consumption. In competitive markets, no producer or consumer noticeably influences aggregate supply or demand or, therefore, prices or other terms of trade. As Albert Hirschman has noted, such idealized markets, involving as they do

large numbers of price-taking anonymous buyers and sellers supplied with perfect information . . . function without any prolonged human or social contact between the parties. Under perfect competition there is no room for bargaining, negotiation, remonstrance, or mutual adjustment and the various operators that contract together need not enter into recurrent or continuing relationships as a result of which they would get to know each other well (1982:1473).

When the classical writers treated traders' social relations at all it was as a drag on the competitive character of markets. In a much-quoted line,

Adam Smith complained that "people of the same trade seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public or in some contrivance to raise prices." His laissez-faire politics did not permit him to recommend antitrust action, but he did suggest repeal of regulations requiring all those in the same trade to sign a public register, since "the public existence of such information connects individuals who might never otherwise be known to one another and gives every man of the trade a direction where to find every other man of it" ([1776] 1979:232-233). Noteworthy here is not the rather lame policy prescription but the tacit recognition that *social atomization is prerequisite to perfect competition*.

Though some economists in the main line of classical work (e.g., John Stuart Mill) and others in what came to fall outside the main line (such as Marx and the German historical school) were interested in the general social conditions of economic action, a more rigorous and quantitative tradition beginning with David Ricardo (1816) increasingly narrowed the focus in a way that excluded noneconomic matters.⁶ This exclusion was extended by the triumph of the neoclassical "marginalists" over the German historical school in the *Methodenstreit* conducted from the 1870s through the early twentieth century. The marginalist approach of Menger, Walras, and Jevons, especially as codified by Marshall, "solved" the classical problem of value by reducing it to the determination of market prices by supply and demand, which was to be understood by the mathematics of maximization.

Twentieth-century economists have continued this line, identifying social influences as involving nonrational action, as in the preceding quotation from Paul Samuelson. In recent years some economists have begun to take social influences more seriously, as more than just frictional drag; but even they continue to interpret them as divergent from rational action. Instead, they conceive social influences as processes in which actors acquire customs, habits, or norms that they follow mechanically and automatically, irrespective of their bearing on rational choice. This view, close to Wrong's "oversocialized conception," is reflected in James Duesenberry's quip that "economics is all about how people make choices; sociology is all about how they don't have any choices to make" (1960:233) and in Ernest Phelps Brown's description of the "sociologists' approach to pay determination" as deriving from the assumption that people act in "certain ways because to do so is customary, or an obligation, or the 'natural thing to do,' or right and proper, or just and fair" (1977:17).

But the apparent contrast between under- and oversocialized views, masks an irony of great theoretical importance: *Both share a conception of action and decision carried out by atomized actors*. In the undersocialized account, atomization results from narrow utilitarian pursuit of self-interest; in the oversocialized one, from the fact that behavioral patterns have been internalized and are thus affected only peripherally by ongoing social relations. That the internalized rules of behavior are social in origin does not differentiate this argument decisively from a utilitarian one, in

which the source of utility functions is left open, allowing room for behavior guided entirely by consensually determined norms and values, as in the oversocialized view.⁷ Under- and oversocialized resolutions of the problem of order thus merge in their atomization of actors from immediate social context. This ironic merger is already visible in Hobbes's *Leviathan*, in which the unfortunate denizens of the state of nature, overwhelmed by the disorder consequent to their atomization, cheerfully surrender all their rights to an authoritarian power and subsequently behave in a docile and honorable manner; by the artifice of a social contract, they lurch directly from an undersocialized to an oversocialized state.

This convergence of under- and oversocialized views helps explain why those modern economists who do attempt to take account of social influences typically represent them in an oversocialized manner. In the theory of segmented labor markets, for example, Michael Piore (1975) has argued that members of each labor market segment have different styles of decision making and that the making of decisions by rational choice, custom, or command in upper-primary, lower-primary, and secondary labor markets, respectively, corresponds to the origins of workers in middle-, working-, and lower-class subcultures. Similarly, Samuel Bowles and Herbert Gintis (1976), in their account of the consequences of American education, argue that different social classes display different cognitive processes because of differences in the education provided to each. Those destined for lower-level jobs are trained to be dependable followers of rules, while those who will be channeled into elite positions attend "elite four-year colleges" that "emphasize social relationships conformable with the higher levels in the production hierarchy. . . . As they 'master' one type of behavioral regulation they are either allowed to progress to the next or are channeled into the corresponding level in the hierarchy of production" (132).

But these oversocialized conceptions of how society influences individual behavior are rather mechanical: once we know individuals' social class or labor-market sector, everything else in behavior is automatic, because they are so well socialized. Social influence is seen here as an external force that, like the Deists' God, sets things in motion and has no further effects, a force that insinuates itself into the minds and bodies of individuals (as in the movie *Invasion of the Body Snatchers*), altering their way of making decisions. Once we know in just what way one has been affected, ongoing social relations and structures are irrelevant. Social influence is all contained inside an individual's head, so in actual decision situations he or she can be as atomized as any *homo economicus*, but with different rules for decisions. More sophisticated (and thus less oversocialized) analyses of cultural influences (e.g., Fine and Kleinman 1979; Cole 1979, Ch. 1) make it clear that culture is not a once-and-for-all influence but an ongoing process, continuously constructed and reconstructed during interaction. It not only shapes its members, but also is shaped by them, in part for their own strategic reasons.

Even when economists do take social relationships seriously, as do

such diverse figures as Harvey Leibenstein (1976) and Gary Becker (1976), they invariably abstract away from the history of relations and their position with respect to other relations. The interpersonal ties they describe are stylized, average, and "typical"; devoid of specific content, history, or structural location. Actors' behavior results from their named role positions and role sets; thus we have arguments about how workers and supervisors, husbands and wives, criminals and law enforcers will interact with one another, but these relations are not assumed to have individualized content beyond that given by the obligations and interests inherent in the named roles. This procedure is exactly what structural sociologists have criticized in Parsonian sociology, the relegation of the *specifics* of individual relations to a minor role in the overall conceptual scheme, epiphenomenal in comparison with enduring structures of normative role prescriptions deriving from ultimate value orientations.

A fruitful analysis of any human action—including economic action, my subject here—requires us to avoid the atomization implicit in the theoretical extremes of under- and oversocialized views. Actors do not behave or decide as atoms outside a social context, nor do they adhere slavishly to a script written for them by the particular intersection of sociocultural categories they happen to occupy. Their attempts at purposive action are instead embedded in concrete, ongoing systems of social relations.

3. EMBEDDEDNESS AND ITS EFFECTS ON ECONOMIC ACTION

3.1 The Concepts and the Agenda

I distinguish three levels of economic phenomena to be explained. The first is individual economic action, for which I take Max Weber's definition ([1921] 1968:339):

Contrary to an unsuitable usage, we shall not consider every instrumental action as economic. Thus, praying for a spiritual good is not an economic act, even though it may have a definite purpose according to some religious doctrine. We also shall not include every economizing activity, neither intellectual economizing in concept formation nor an esthetic "economy of means." . . . We shall speak of economic action only if the satisfaction of a need depends, in the actor's judgment, upon some relatively *scarce* resources and a *limited* number of possible actions, and if this state of affairs evokes specific reactions. Decisive for such rational action is, of course, the fact that this scarcity is *subjectively* presumed and that action is oriented to it.

Weber goes on to note that "needs . . . may be of any conceivable kind, ranging from food to religious edification, if there is a scarcity of goods and services in relation to demand." This is similar to economist Lionel Robbins's classic definition of economics as "the science which studies

human behavior as a relationship between ends and scarce means which have alternative uses" ([1932] 1984:15), differing only in Weber's insistence on the importance of the actor's subjective orientation to the means-end situation.⁸

Having adopted this broad definition of economic action, I could then logically go on to discuss a wide range of subjects, including those that constitute recent incursions by economists into domains previously studied only by sociologists—for example, marriage, divorce, crime, and the allocation of time. Instead I confine my attention to examples that are "economic" in the usual sense of having to do with the provision of goods and services, what we might call the "hard core" of economics. I do so mainly for a polemical reason: Even if successful in showing that typically sociological subjects are vitally affected by their embeddedness in webs of social relations, I would at best only restore the *status quo ante bellum*, the intellectual situation before economists began applying their concepts to the sociological realm. I mean to engage in a more radical critique than this, to argue that neoclassical arguments have difficulties even in their most familiar terrain. A successful demonstration of this assertion would carry over *a fortiori* to the more peripheral subjects of recent "economic imperialism."

I also want to explain patterns *beyond* the actions of individuals, what I call "economic outcomes" and "economic institutions." Examples of "outcomes" would be the formation of stable prices for a commodity or of wage differentials between certain classes of workers. So these "outcomes" are *regular patterns* of individual action. What we call "institutions" are different from these outcomes in that they typically involve larger complexes of action and take on a sense that this is how things *should* be done. Institutions also convey, as is well captured in the sociology of knowledge literature, an impression of solidity, what the Germans call "massive facticity"; that is, they become reified, experienced as external and objective aspects of the world rather than as the products of social construction that they really are (see, e.g., Berger and Luckmann 1966).

This social-constructionist perspective is rarely applied to *economic* institutions but is highly relevant there. Examples of economic institutions include entire systems of economic organization, such as capitalism, and—at less macro levels—the way particular organizations, industries, or professions are constituted and carry out their affairs.

Before sketching how one can use the idea of embeddedness to explain economic action, outcomes, and institutions, I must say more about that idea. "Embeddedness" refers to the fact that economic action and outcomes, like all social action and outcomes, are affected by actors' dyadic (pairwise) relations *and* by the structure of the overall network of relations. As a shorthand, I will refer to these as the *relational* and the *structural* aspects of embeddedness. The structural aspect is especially crucial to keep in mind because it is easy to slip into "dyadic atomization," a type of reductionism. Thus when such economists as Harvey Leibenstein (1976) and Gary Becker (1976, 1981) treat dyadic activity as structured

by the norms and interests entailed in the roles of husband and wife or employer and supervisor, this treatment of social relations has the paradoxical effect of preserving atomized decision making even when decisions are seen to involve more than one individual: Because the analyzed pair of individuals is abstracted out of social context, it is atomized in its behavior from that of other actors and from the history of its own relations. *Atomization has not been eliminated, merely transferred to the dyadic level of analysis.* Note here the use of an oversocialized conception—that of actors behaving exclusively in accord with their prescribed roles—to implement an atomized, undersocialized view.

It is also important to avoid what might be called “temporal reductionism”: treating relations and structures of relations as if they had no history that shapes the present situation. In ongoing relations, human beings do not start fresh each day, but carry the baggage of previous interactions into each new one. Built into human cognitive equipment is a remarkable capacity, depressingly little studied, to file away the details and especially the emotional tone of past relations for long periods of time, so that even when one has not had dealings with a certain person for many years, a re-activation of the relationship does not start from scratch but from some set of previously attained common understandings and feelings.

Structures of relations also result from processes over time and can rarely be understood except as accretions of these processes. Thus talking about strikes in factories with large numbers of rural and “guest workers,” such as those at German automobile plants, Sabel (1982) notes that

strikes by peasant workers . . . usually remain episodes, isolated from the rest of the life of the factory and further isolating the peasant workers themselves from other workers. Still, . . . they bring some few peasant workers into contact with the outside society in the person of a union militant, a sympathetic native worker, or a representative of management. . . . To the extent that some of these contacts endure, they can shape the course of later conflict (136).

By tracing out such relations, Sabel is able to make a new interpretation of the turbulent industrial relations in 1970s Italy (Ch. 4). A good cross-sectional account might note the importance of these contacts as liaisons between the two groups but would be unable to contribute to any general argument about the circumstances under which such a structure arose. Without such an account, analysts slip into cultural or functionalist explanations, both of which usually make their appearance when historical dynamics have been neglected.

3.2 The Effects of Embeddedness on Individual Economic Action and on Economic Outcomes

Relational embeddedness typically has quite direct effects on individual economic action. How a worker and supervisor interact is determined not only by the meaning of these categories in a technical division of labor,

but also by the kind of personal relationship they have, which is determined largely by a history of interactions. This is partially captured by economists' use of interdependent utility functions, where the utility of another becomes an argument of your own utility function; in plainer language, their welfare becomes part of your own. But this does not really capture the fact that our behavior toward others depends on a structure of mutual expectations that has become a constitutive part of the relationship.

Not only particular relations may affect your behavior, but also the aggregated impact of all such relations. The mere *fact* of attachment to others may modify economic action. Thus you may want to stay in a certain firm despite economic advantages available elsewhere because you are attached to so many fellow workers. And the noneconomic value of such attachments partly explains the tendency of employers to recruit from among those they know, even in the absence of purely economic advantages to doing so.

Structural embeddedness typically has more subtle and less direct effects on economic action. A worker can more easily maintain a good relationship with a supervisor who has good relations with most other workers as well. If the supervisor is at odds with the others, and especially if those others are friendly with *one another*, they will be able to make life very difficult for the one worker who is close to the supervisor; pressures will be strong to edge away from this closeness. If the other workers do not form a cohesive group, such pressures can be mounted only with difficulty.

In saying this I draw on the principle that to the extent that a dyad's mutual contacts are connected to one another, there is more efficient information spread about what members of the pair are doing, and thus better ability to shape that behavior. Such cohesive groups are better not only at spreading information, but also at generating normative, symbolic, and cultural structures that affect our behavior. Thus, in this situation of what has been called “high network density,” a worker may have absorbed from the group a set of behavioral principles—norms, if you like—that would make a close relationship with the supervisor literally unthinkable.

While utility functions may be able to handle the case where people care about the welfare of others, they do not seem well suited for interpreting behavior that becomes part and parcel of a longstanding relationship, nor for handling structural effects of the sort I describe here. I argue that utility functions cannot be stretched much beyond the dyadic setting because the technical difficulties implied by the embeddedness of dyadic relations in complex networks of relations would be insuperable. This is not because networks of relations cannot be modeled technically, but because the machinery of utility functions was designed for a different purpose, and the adjustments required for *them* to accommodate networks of interdependent utilities, not to mention structural effects on normative and symbolic structures, would be not only technically difficult, but clumsy and inefficient.

Structural embeddedness also affects the behavior of individuals by its impact on what information is available when decisions are made. Thus whether you leave your job depends not only on your social attachments, but also on whether information on alternative opportunities comes to you. Whether you buy a certain brand of soap can be determined in part by the structure of your social network and the information and influences that reach you through it (Katz and Lazarsfeld 1955). Whether workers believe that their wages are fair depends on how they construct their comparison group—a matter that depends not only on their position in a technical division of labor, but also in noneconomically determined social networks that cut across workplaces (Gartrell 1982).

The economic action of individuals may at times accumulate in ways that result in larger outcomes or what we call "institutions." Whether this occurs, and what shape the outcomes or institutions take when it does, is strongly channeled by the structure of relations in which the actions are embedded. A simple example is the attainment of equilibrium price, which is not an institutional matter in the sense of taking on a normative aspect (except in situations where ideas of "just price" become important), but which does result from an aggregation of individual actions that is only poorly specified in the usual comparative static treatment. In the usual formulation, markets become more competitive and prices more stable as the number of traders increases (e.g., Arrow and Hahn 1971). But Baker (1984) found, in his empirical study of floor trading of stock options, that price volatility increased strongly with the size of the trading group. This occurs because as group size increases, the number of trading relations that the average trader can sustain does not. Thus in a larger group it is harder to know about all trades; information flow is reduced by the size and resulting fragmentation of the trading network, and convergence to a single equilibrium price becomes problematic. The imperfect movement of information that causes this results from fundamental cognitive limitations of human actors in conjunction with the necessary embeddedness of trading in networks of social relations.

Here we rely again on the general principle that fragmentation of network structure will reduce the homogeneity of behavior, a principle that applies to the formation of norms as well as to uniformities with less normative content, such as the gravitation to a particular price. The principle is purely structural, and does not in itself predict which prices different group fragments will approach. Similarly, social psychological studies show that cohesive groups are in agreement on norms, without being able to explain by cohesion alone which norms are developed (cf. Festinger, Schachter, and Back 1948; Seashore 1954).

More generally, market prices are often affected by the fact that trade is carried out not in spot markets but between traders of long acquaintance. Anthropologists report that peasant and tribal markets are typically clientelized—that is, buyers and sellers have long-term continuing relations. This typically leads to sticky prices, as buyers and sellers are unresponsive to price inducements to trade with unfamiliar partners. This

stickiness, and the result that adjustments must then be made in quantities so the market is not cleared, is not only important in tribal and peasant settings; macroeconomist Arthur Okun in his book *Prices and Quantities* (1981) argued for a similar impact in modern markets, where most trades are carried out not in auction markets but in what he called "customer markets" with continuing relationships.

Another example of the impact of embeddedness on prices comes from labor markets and involves the "skill differential": the extent of pay differences between skilled and unskilled blue-collar workers. Economist Melvin Reder (1955) wanted to explain why it typically diminishes in times of economic boom. Standard theory suggests that a surge in aggregate demand would increase the demand for skilled and unskilled workers alike, bidding up wages for both. Reder suggested that what happens instead is that rather than raise skilled workers' wages, employers promote workers from the next-to-highest skill level. Pursued vigorously, this strategy leaves a shortage in this next-to-highest level, which is met by substitution from the group below, and so on. When finally a shortage appears in the lowest skill category, and no new labor is available from outside the work force, the wages there must be bid up in relation to higher grades, reducing the skill differential.

I suggest a generalization of this interesting argument: any set of jobs where chains of substitutions of this sort are possible may have wage differentials compressed in this way. How do we identify such sets? Reder's argument suggests a simple progression from skilled down to unskilled. But I argue that in practice, which workers appear available to employers for upgrading into a particular type of job actually depends heavily on the history and structure of communications networks of the employers and workers in this job. Purely technical considerations are unlikely to be primary, since the question is not whether a worker can perform work previously done, but how adaptable he or she would be to a different, more complex set of tasks. We know that when making hiring decisions, employers rely on personal contacts even to assess a worker's previous productivity (Granovetter 1974); it seems all the more likely that they would do so where the productivity question is inherently more ambiguous.

This implies that where networks of contacts cross firm boundaries rather than being contained within firms, wage differentials might be especially widely affected. Whether such interfirm links exist depends in part on the previous mobility history of current workers, since one's pool of work contacts results directly from these histories. This in turn determines how widespread such effects will be. Thus the embeddedness of economic action may be structured in such a way as to blunt and contain individual actions, so they never do accumulate into larger outcomes—as, for example, when all networks are contained within firms—or may amplify and concatenate such actions, as where networks cross the boundaries of individual firms.

4. EMBEDDEDNESS AND ITS EFFECTS ON TRUST AND MALFEASANCE

4.1 The Problem of Trust and Malfeasance

A central theme in economic sociology is the necessity of trust and trustworthy behavior for the normal functioning of economic action and institutions. Because of this centrality, and because it further illustrates and amplifies my argument, I pause in the general discussion of explanatory strategy to treat the embeddedness of trust and malfeasance in economic life.

As McPherson observes, "any transaction in which the performance of the two parties is separated by time involves an element of trust" (1984:74). But the tendency in economics to treat individuals as atomized self-seekers permits no reasonable account of how trust could develop, and encourages instead various intellectual devices that skirt the issue with mixtures of over- and undersocialized assumptions. In classical philosophy and economics, one such set of arguments asserts that the need for trust is obviated by institutions that structure incentives so as to make the cost of malfeasance prohibitively high. Hobbes's *Leviathan* was the earliest systematic effort of this kind, where the institutional structure is that of autocratic authority. Classical liberalism and its derivatives, classical and neoclassical economics, decisively reject this solution to the problem of trust, adopting instead several implicit and complementary assumptions. One is a quite different argument about how institutions structure incentives: that truly competitive markets render force or fraud unavailing. Competition determines terms of trade that individual traders, as price takers, cannot manipulate. If traders encounter complex or difficult relationships characterized by mistrust or malfeasance, they can simply move on to the legion of others willing to do business on market terms. The force of competition will sweep the unscrupulous from the market. The details of traders' social relations thus become frictional matters. (For a version of this argument see Williamson 1975:27.)

Whether it is autocratic authority or the whip of competition that makes malfeasance too costly to engage in, the argument is similarly undersocialized in assuming that one deals fairly with others only to the extent one's self-interest dictates it. Such unadorned appeal to self-interest to explain the absence of force and fraud has never been entirely persuasive. In the classical period it was supplemented by postulating the existence of a general standard of moral behavior such as the principle John Locke derived from natural law, that "reason" teaches men not to harm one another or to appropriate property beyond what they can usefully develop: what Parsons calls the doctrine of the "natural identity of interests," the "device by which it has been possible for utilitarian thought . . . for two hundred years to evade the Hobbesian problem" (1937:97). Closely allied to this is the divergence in treatment between the "passions" and the "interests" (Hirschman 1977) in which economic motivations came

to be assumed the province of calm, rational, and benevolent behavior. This distinction had the effect of watering down Hobbes's problem of order by arguing that certain human motivations, economic ones in particular, kept other less-controllable ones at bay. This implies that one's economic interest is pursued only by comparatively gentlemanly means. Hobbes's inquiry as to why those who pursue their own interest do not use force and fraud, since nothing in the meaning of self-interest excludes this, is finessed by this assumption.

These conceptions do not rely on self-interest but argue in effect that individuals act morally whatever the incentives. Because this moral action is asserted in so unconditional a way, the argument has a rather oversocialized quality. In fact, we see here a striking example of how under- and oversocialized conceptions complement one another: atomized actors in competitive markets are imagined to have so thoroughly internalized certain normative standards of behavior in economic transactions as to eliminate malfeasance.

In neoclassical economics, both institutional and normative assumptions about force and fraud remained very much in the background until two related developments during the past twenty years stimulated a resurgence of interest in such problems. One was increased attention to the micro-level details of imperfectly competitive markets, peopled by small numbers of traders with sunk costs and "specific human capital" investments. In such settings the alleged discipline of competitive markets cannot be called on to mitigate deceit. The other was the wave of interest in the economics of information, which included a realization of the difficulties that arise when information is asymmetric. The informational basis of trust was already apparent to Simmel, who, taking "confidence" as "evidently . . . one of the most important synthetic forces within society," pointed out that it is "intermediate between knowledge and ignorance about a man. The person who knows completely need not trust; while the person who knows nothing can, on no rational grounds, afford even confidence" ([1923], 1950:318). Asymmetric information was first of special interest in insurance markets, where the insured faces a problem of "moral hazard": insurance reduces the motivation to avoid the danger insured against; but insurers cannot know, without large search costs, whether claims result from this kind of negligence. More generally, any complex contingent contract that specifies obligations of each party as depending on what has occurred faces difficulties when the parties differ in their knowledge of the relevant information, as is often the case (Williamson 1975:31-37).

In modern economic literature I see two fundamental answers to the classical problem of how it can be that daily economic life is not riddled with mistrust and malfeasance, and these two link closely to the classical under- and oversocialized accounts. The modern undersocialized account, like the classical one, sees malfeasance as averted because clever institutional arrangements make it too costly to engage in. But rather than attributing this structuring of incentives to the state or to the force of

competition, these accounts, found in the "new institutional economics," often interpret arrangements previously supposed to have no economic function, as having "evolved" to discourage wrongdoing. The main such arrangements are elaborate explicit and implicit contracts (Okun 1981), including deferred compensation plans and mandatory retirement, seen to reduce the incentives for "shirking" on the job or absconding with proprietary secrets (Lazear 1979; Pakes and Nitzan 1982), and authority structures that deflect opportunism by making potentially divisive decisions by fiat (Williamson 1975), an updated version of the Hobbesian argument. Sociologists have stressed the use of various institutional devices such as insurance, neutral intermediaries with fiduciary responsibility, professionals whose sole function is to monitor business relations, rating services, and the like, that make possible transactions where individuals have no personal connections to exchange partners and would otherwise avoid the transaction altogether (Zucker 1986; Shapiro 1984). To say, as do Zucker and Shapiro, that such devices produce "trust" seems to me to stretch the word too far, where it applies to all situations where individuals are willing to enter a transaction. I would rather specialize the word to refer to circumstances where one enters a transaction believing that transaction partners will behave properly for reasons that transcend pure self-interest. Where no such expectation can be held we have returned to the Hobbesian situation, and any rational individual would be motivated to develop clever ways to evade the institutional arrangements that mean to structure incentives in ways to avoid malfeasance. It is then hard to imagine that everyday economic life would not be poisoned by ever more ingenious and subtle attempts at deceit.

Some economists have recognized that institutional arrangements and the way they structure incentives could not alone stem force and fraud. After discussing implicit contract arguments that he interprets as stemming distrust, Arthur Okun concedes that while such arrangements may help, they cannot eliminate distrust, which is "a pervasive fact of economic life that extends far beyond the career labor market. Enormous resource costs could be saved in a perfectly honest and open world that would permit do-it-yourself cash registers and communal lawn mowers" (1981:86). Such awareness leads economists to consider the role of morality in economic life. McPherson, for example, dryly describes the "neutral" position on whether self-interest motivates action with no influence from moral standards as being tantamount to supposing "that it is just as natural to help an old lady across the street as to shove her in an alley and take her purse" (1984:72) and observes that the "self-interest hypothesis looks false as a general explanation of behavior. There are too many subtle opportunities to cheat and too few police officers, to make it plausible that the only effective motives supporting moral behavior are the prospects of financial or criminal penalties for immorality" (77). In a study that emphasizes how the structure of incentives determines the presence or absence of political corruption, Rose Ackerman nevertheless begins with the disclaimer that "the widespread delegation of authority to agents in

large organizations presupposes that most economic actors are unwilling to milk their positions to the limits of possibility. . . . the continuing operation of familiar institutions would be inexplicable in the absence of widespread personal commitments to honesty and democratic ideals" (1978:5).

Indeed, economists have come to argue, as Okun has implied, that morality is economically valuable, that "the moral character of a society's population is a valuable economic resource" (McPherson 1984:76). Arrow observes that trust "is an important lubricant of a social system. It is extremely efficient; it saves a lot of trouble to have a fair degree of reliance on other people's word" (1974:23). How then does moral behavior arise? Appeal is sometimes made to a "generalized morality." Thus Arrow suggests that societies "in their evolution have developed implicit agreements to certain kinds of regard for others, agreements which are essential to the survival of the society or at least contribute greatly to the efficiency of its working" (1974:26; see also Akerlof 1983 on the origins of honesty).

Now one can hardly doubt the existence of some such generalized morality; without it, you would be afraid to give the gas station attendant a twenty-dollar bill when you bought five dollars' worth of gas. But this conception, in common with the Lockean "natural identity of interests" and the idea of economic action as a gentle, civilized activity, has the oversocialized characteristic of calling on a generalized, automatic response, even though moral action in economic life is hardly automatic or universal (as is well known by gas stations that demand exact change after dark).

Consider a case where "generalized morality" appears to be at work: the patron who, against all economic rationality, leaves a tip in a roadside restaurant far from home. This example has the character of a throwaway line in an introductory economics course because of three characteristics that make it atypical: (1) the transactors are previously unacquainted; (2) they are unlikely to transact again; and (3) information about the transaction is unlikely to reach others they will transact with in the future. Only in such situations can the absence of force or fraud mainly be explained by generalized morality; even then, one might wonder how effective such morality would be if costs of moral action were large.

4.2 The Embeddedness Approach to Trust and Malfeasance

I begin an embeddedness approach to problems of trust and malfeasance in economic life at the individual-level question of when individual economic actors will trust one another and act in trustworthy ways. I see three reasons why individuals might act in economic transactions as they are supposed to. One is because it is in their (social or economic) interest to do so. Another is that they believe it is morally right. These are, of course, the two reasons called on by the under- and oversocialized accounts, respectively; I would be a fool to ignore them, simply for having argued they cannot be the whole story. A third reason is that the actors

see doing so as a part of the regularized expectations that characterize their personal relation with their transaction partner. In making an embeddedness argument about trust and malfeasance, I want to stress the importance of this third mechanism, neglected in under- and over-socialized accounts; but it is also crucial to see that institutional arrangements and moral principles, which certainly do play an important role, are themselves embedded in social structure in systematic and predictable ways; that is, such arrangements and principles are also socially constructed, rather than being *alternatives* to a social constructionist account.

I want also to avoid two extremes typical of this discussion: the pessimistic assumption about human nature implicit in the question "how is it that all transactions are not carried out by force and fraud?" and the Panglossian functionalism that searches indefatigably for some mechanism, be it institutional arrangements or generalized morality, to explain why order is indeed sustained, and in so doing overstates the extent of that order. The embeddedness position does not solve "the problem of order," but rather subsumes it to the more general question of under what social structural circumstances one may expect to see trust and trustworthy behavior or mistrust and malfeasance. Such a formulation makes more sense given what we know about economic life: that distrust, opportunism, and disorder are neither absent nor ubiquitous.

That trustworthy behavior may be a regularized part of a personal relationship reflects one of the typically direct effects of relational embeddedness and explains the widespread preference of all economic actors to deal with those they have dealt with before. Our information about such partners is cheap, richly detailed, and probably accurate. The fact of a continuing relation offers incentive to be trustworthy so as to encourage future transactions. But continuing economic relations become overlaid with social content that, apart from economic self-interest, carries strong expectations of trust and abstention from opportunism. That is, I may deal fairly with you not only because it is in my interest, or because I have assimilated your interest to my own (the approach of interdependent utility functions), but because we have been close for so long that we expect this of one another, and I would be mortified and distressed to have cheated you *even if you did not find out* (though all the more so if you did).

That continuing relations make behavior predictable and close off some of the fears that create difficulties among strangers is most obvious in intimate relations. Consider why individuals in burning theaters panic and stampede to the door, leading to desperate results. Roger Brown (1965) has pointed out that far from being the prototypically irrational behavior long assumed by analysts of collective action, this reflects the exigencies of an n-person Prisoners' Dilemma: each stampeder acts rationally given the absence of assurance that anyone else will exit calmly, even though all would be better off if everyone did (Ch. 14). But in the burning houses featured on the eleven-o'clock news we never do hear that everyone stampeded out and that family members trampled one another.

In the family, there is no Prisoners' Dilemma because each is committed to act on behalf of the welfare of the others and is correspondingly confident that the others can be counted on to act selflessly. (If the bank robbers in the Prisoners' Dilemma story were Bonnie and Clyde, could we not expect the famous paradox to be transcended?)

In business relations of long standing, the degree of confidence must be more variable than within families; but Prisoners' Dilemmas are nevertheless often obviated by the strength of personal relations, and this strength is a property not of the transactors but of their concrete relations. Standard economic analysis neglects the identity and past relations of individual transactors, but rational individuals know better, relying on their knowledge of these relations. They are less interested in *general* reputations than in whether a particular other may be expected to deal honestly with *them*, which they infer from their own past dealings with the other. One sees this pattern even in situations that appear, at first glance, to approximate the classic haggling of a competitive market, as in the Moroccan bazaar analyzed by Geertz (1979).

But my account thus far is too rosy, neglecting that the trust engendered by personal relations presents, by its very existence, enhanced opportunity for malfeasance. In personal relations it is common knowledge that, as the old song tells us, "you always hurt the one you love"; that a person's trust in you makes that person far more vulnerable than a stranger. In the Prisoners' Dilemma, knowledge that one's co-conspirator is certain to deny the crime presents all the more rational motive to confess, and personal relations that abrogate this dilemma may be less symmetrical than is believed by the party to be deceived. This elementary fact of social life is the bread and butter of "confidence" rackets that simulate personal relationships, sometimes for long periods, for concealed purposes. Certain business crimes, such as embezzling, are simply impossible for those who have not built up relationships of trust that permit the opportunity to manipulate accounts. The greater the trust, the more the potential gain from malfeasance. That such instances are infrequent is a tribute to the force of personal relations; that they do occur shows the limits of this force.

Correspondingly, in her random sample of 526 investigations taken from the files of the Securities and Exchange Commission over the period 1948-1972, Shapiro "found the degree of intimacy of prior victim-offender relationships surprising. There are indeed more cases in the sample in which at least some of the victims and offenders were acquainted . . . than those in which they were strangers. . . . This . . . conflicts with stereotypes of white-collar crime in which a chasm of interpersonal distance, disembodied transactions, cover-up techniques, middlemen, records, papers, documents and computerization are thought to permanently separate victim and offender" (1984:35).

Whether I cheat my friend depends then, in part, on the nature of my relation with him. It also depends on the structure of incentives and on those moral principles I apply to the situation, and both of these are

affected by this relation. To the extent it is important to me socially or economically, I have incentive to avoid cheating; and to the extent my friend and I discuss and influence one another on moral principles, the relationship may affect such principles. But incentives and moral principles are also determined by *structural* embeddedness, the structure of relations in which my relation with my friend is located. My mortification at cheating a friend of long standing may be substantial even when undiscovered. It may increase when the friend becomes aware of it. But it may become even more unbearable when our mutual friends uncover the deceit and tell one another. Whether they do so will depend on the structure of the network of relations—roughly speaking, on the extent to which the mutual friends of the dyad in question are connected to one another. When these connections are many, what is called “high network density,” the news will spread quickly; when they are isolated from one another, much less so. So we can expect greater pressure against such cheating in the denser network; such pressures are an important part of incentives and relate directly to economic and social costs of developing a bad reputation. But the pressure against cheating arises not only because of direct sanctions that group members would apply to me, but also because cohesive groups are more efficient than those with sparse relational networks at generating normative, symbolic, or cultural structures that affect our behavior. Thus, in such a group, it may never even occur to me to cheat my friend since I have absorbed a set of standards from the group that literally makes it unthinkable, at least in the group setting. It is a commonplace from studies of intergroup relations, however, that the most scrupulously adhered to norms within a well-defined group may be considered irrelevant when dealing with those outside its pale. This situational aspect of normative influences on behavior results from the structural embeddedness of social action.

Striking levels of both trustworthy behavior and malfeasance, then, may result from structures of personal relations. In the functionalist style of the new institutional economics (see section 5), Ben-Porath emphasizes the positive side, noting that “continuity of relationships can generate behavior on the part of shrewd, self-seeking, or even unscrupulous individuals that could otherwise be interpreted as foolish or purely altruistic. Valuable diamonds change hands on the diamond exchange, and the deals are sealed by a handshake” (1980:6). But this takes into account only relational, not structural, embeddedness. This transaction is surely possible in part because it is not atomized from other transactions but embedded in a close-knit community of diamond merchants who monitor one another’s behavior closely and generate clearly defined standards of behavior easily policed by the quick spread of information about instances of malfeasance. The temptations posed by this level of trust are considerable, however, and the existence of *separate* cohesive groups may bound the reach of trust and moral action. Thus the diamond trade has also been the scene of numerous well-publicized “insider” thefts and of the notorious “CBS murders” in New York in 1982.⁹

Now I move beyond the level of individual action to inquire how embeddedness leads to outcomes and institutions relevant to trust and malfeasance. The first observation is that force and fraud are most efficiently pursued by teams, and the structure of these teams requires a level of internal trust—“honor among thieves”—that typically follows preexisting lines of relationship. Elaborate schemes for kickbacks and bid rigging, for example, can hardly be executed by individuals working alone, and when such activity is exposed it is often remarkable that it could have been kept secret given the large numbers of people involved. Law-enforcement efforts consist of finding an entry point to the network of malfeasance, an individual whose confession implicates others who will, in snowball-sample fashion, “finger” still others until the entire picture is fitted together. Because malefactors are intuitively aware of this, they often attempt to structure a network of malfeasance in as decoupled a way as possible. Thus, in the massive OPM leasing fraud, parts of the patterns of fraudulent activity were perceived by investment bankers, banks, insurance companies, pension funds, equity participants, auditors, accountants, lawyers, and employees. But “each of these specialist organizations concentrated on a set of narrow concerns. . . . Because of this division of responsibility, information about OPM was diffused among a number of actors. . . . Few professionals were in a position to piece all the evidence together; no one saw the big picture” (Gandossy 1985:10). The two principals of the company, who were instrumental in organizing the fraud, did their best to maintain this fragmentation and to inhibit communication among these parties.¹⁰

Illegal activities can take on an aura of normality among those engaged in them, through cultural and linguistic techniques of “neutralization” (cf. Sykes and Matza 1957) that are more likely to develop the more dense the network of malfeasance. In the OPM case, such obviously illegal techniques as pledging the same collateral for several loans came to be designated by such neutral-sounding terms as “double discounts” in the company’s central group (Gandossy 1985), and Hirsch (1986) notes the evolution of metaphors describing unfriendly takeovers, which redefined what was initially considered malfeasance as acceptable, even heroic, behavior. Such social structurally mediated use of symbols must help explain why even the most elaborate and blatant schemes of political corruption take on the solidity of established institutions, so that those public officials finally brought to account for their actions invariably defend themselves by explaining that they only participated in the system as they found it, as if it could not have been otherwise.

How widely force, fraud, and consequent disorder spread depends very much on how the network of social relations is structured. Hobbes exaggerated the extent of disorder likely in his atomized state of nature where, in the absence of sustained social relations, one could expect only desultory dyadic conflicts. More extended and large-scale disorder results from coalitions of combatants, impossible without prior relations. We do not speak of “war” unless actors have arranged themselves into two

"sides" as the end result of various coalitions. This occurs only if there are insufficient crosscutting ties held by actors with enough links to both main potential groups of combatants to have a strong interest in forestalling conflict. This principle carries over to the business world, where conflicts are tame unless each side can escalate by calling on substantial numbers of allies in other firms, as happens in attempts to implement or block takeovers.

Thus frauds as well as legitimate business enterprises attempt to tap into existing networks in the hope of wide diffusion, more difficult if attempted through impersonal channels. In her study of SEC investigations, Shapiro (1984) reports that in only 39% of the offenses where victim data were available were all victims strangers to one another.

More frequently, offenses touch victim populations containing groups of associates or portions of various social networks. The sample contains cases with victim pools composed of members of particular church congregations or ethnic associations, officers at several military bases, members of political or social clubs or recreational associations, members of a professional athletic team, a textbook editor and a network of social science professors, members of investment clubs, and networks of political conservatives (36).

Some such networks are brought into the fraud by the use of "bird dogs," enthusiastic investors who are aware of the fraud and convince others to invest; the use of celebrities or community leaders, usually innocent of the fraudulent nature of the scheme, is common as an incentive for others to participate (Shapiro 1984:36-37).

Also relevant to this discussion is the general literature on how groups promote their own private interests at the expense of some putative larger general interest. Whether this is seen as malfeasance depends on one's differential valuation of interests. Adam Smith's denunciation of traders who engaged in price fixing even at social occasions was motivated by his sense that the outcomes given by competitive markets had some quality of natural law about them that should not be disrupted. This baseline of a freely competitive, atomized, impersonal market leads one to see group activities in pursuit of private interests as malfeasance against the common weal. Colander (1984) comments that not only "does the invisible hand guide people toward activities beneficial to society, it also has an underside; individuals following their own self-interest continually attempt to see that the invisible hand does not work" (2). When groups mobilize to gain the support of government on behalf of their interests, analysts of laissez-faire persuasion are particularly outraged, and a recent stream of literature denounces such efforts as "rent-seeking" (see the symposium reported in Colander 1984). In a more balanced treatment, but one similar in spirit to the rent-seeking literature, Mancur Olson (1982) argues that the economic growth of nations is inhibited mainly by what he calls "distributional coalitions" that try to divert productive resources from their most productive use to their own private benefit (see the critique in Tilly 1984). All such arguments use a baseline that cannot exist

in the world as we know it, one that assumes there is something unnatural and remediable about the pursuit of self-interest through group structures rather than by isolated individuals. Only when the structure of connections by which groups of individuals actually function, and the way such efforts concatenate into larger efforts or fail to connect with other groups and thereby die out, is taken as the natural starting point for analysis, can we expect to understand outcomes at the societal level.

5. THE SOCIAL CONSTRUCTION OF ECONOMIC INSTITUTIONS AND THE PITFALLS OF FUNCTIONALISM AND CULTURALISM

More so than for individual economic action or economic outcomes, the arguments about how economic institutions originate are sufficiently complex that it would not be useful to sketch them here. But I will make some comments about my general explanatory strategy. I will be arguing that economic institutions are socially constructed, they result from actions taken by socially situated individuals embedded in networks of personal relations with noneconomic as well as economic aims. An adequate understanding of why institutions look as they do requires detailed attention to this process of construction.

Little economic work on the explanation of institutions does this. As in many branches of economics, the emphasis is not on dynamics but on the comparative statics of equilibrium states. But without dynamic argument, we have the ironic outcome that the discipline most devoted to methodological individualism finds itself with no ready way to explain institutions as the outgrowth of individual action and so must resort to accounts that derive them from gross features of the environment. There are two main such accounts: the culturalist and the functionalist positions.

The culturalist position does not derive at all from economic logic, but rather says that some economic outcome or institution has turned out as it has because the group that produced it has some set of cultural beliefs or traits that predisposes it to the observed behavior. Those characterized by a "Protestant ethic" will work harder and produce more successful firms or other outcomes; those with a culture oriented toward cooperation in a hierarchical setting where individuals are subordinated to the society will develop smoothly functioning industrial enterprises (as is claimed for Japan; see, among others, Ouchi 1981). Particular organizations are said to have distinct cultures that resist merger or at least put obstacles in its way.

If groups really did behave in ways so closely determined by their cultures, it would indeed not be necessary to pay attention to the evolution of institutions over time; there would be little such evolution so long as the culture remained stable. But to assume so thorough a domination of action by cultural "principles" is to fall into the oversocialized mode of argument I have criticized here, not to mention that such an argument

hovers uncomfortably close to circularity, since the causal tie between cultural beliefs and observed patterns is usually inferred from behavior rather than shown explicitly.

Functionalist accounts cause economists less discomfort, though they are no more distant from circularity than are culturalist ones. This is because the "problems" that observed institutions are said to have originated in order to solve are *economic* problems: hence one can call the explanatory activity "efficiency analysis."

The functionalist strategy characteristic of the new institutional economics, is, like that of culturalist accounts, static rather than dynamic; it is to argue backward from the characteristics of an institution to the reason why it must be present. In *The Economic Theory of Social Institutions*, Andrew Schotter (1981) states this principle in unusually candid form, arguing that to understand any social institution requires that we "infer the evolutionary problem that must have existed for the institution as we see it to have developed. Every evolutionary economic problem requires a social institution to solve it" (2). Such a procedure implicitly assumes a system in equilibrium, since a still-evolving institution might not reveal by inspection what problem it had evolved to solve.¹¹

This reflexive avoidance of dynamics rests in part, of course, on the technical difficulty of explicit dynamic accounts (see, e.g., Baumol 1970), but derives more fundamentally, I believe, from the arbitrariness, within a purely neoclassical economic perspective, of accounts of behavior out of equilibrium, when prices are not known to be stable and therefore reliable sources of information. Dynamic models of economic institutions must typically make assumptions about behavior that require knowledge of social affiliations and noneconomic motives, and there is no guidance from purely economic argument about what these assumptions should be. It is thus more comfortable to avoid what is seen as arbitrary.

The assumption that existing institutions are well matched to economic problems is sometimes grounded in a quasi-Darwinian argument that natural selection should weed out inefficient solutions to those problems (the *locus classicus* of this assertion is Friedman 1953:16-22). Unsolved problems present the possibility of profit to those who can solve them, and under suitable assumptions any opportunity for profit will be taken. Inefficiencies will in effect be arbitrated away, or in a more common phrase, part of the rhetoric of modern economics (see McCloskey 1983), "you will not find dollar bills lying in the street."

But such an argument can be sustained only under rather rigorous competitive conditions that provide appropriate selection pressures (see Nelson and Winter 1982 for a discussion of the requirements for an evolutionist argument in economics). The embeddedness of economic activity in networks of personal relations creates systematic structuring of information flows and of the possibility of establishing new institutions that cannot be captured as simple selection pressures; and the pursuit of noneconomic motives alongside economic ones means that actors do not typically strive to maximize economic efficiency alone, but rather make

trade-offs among their goals. The upshot of all this is that any observed institution may be the product of a mixture of aims implemented by complex networks of actors. Without an understanding of the historical process by which it arose, the institution can easily be misinterpreted.

The pitfalls, Panglossian and others, of functionalist explanations have been catalogued many times (e.g., Merton 1947; Hempel 1965; Nagel 1961; Stinchcombe 1968; Elster 1983), and rigorous accounts have been given of the requirements that must be met for an *explanandum* to be properly explained by reference to problems it is claimed to solve. Rather than recapitulating these accounts I want to suggest some practical questions one must be able to answer about a functionalist explanation before it can be accepted.

1. Is the problem a problem? If the problem a pattern is alleged to solve is in fact no problem at all, the explanation surely fails immediately.
2. Is the solution a solution? Even if the problem is admitted to be genuine, the institution under scrutiny had better really solve it, otherwise the functionalist account would not be persuasive.
3. Do we understand the process by which this solution has arisen? To avoid this question is to assume that all problems that arise are solved, a proposition that hardly anyone would endorse in this bald form. Part of a functional explanation should be to account for why and how the stipulated problem was indeed solved, rather than falling into the class of problems for which solutions are not found. But once we have an account of just how this solution can arise, we will also understand under what circumstances it cannot. In practice, I argue, this means that the solution will *not* arise in all instances where the problem does, but only in some. The explanation of the pattern will require us to know more than just the problem it solves, but also the auxiliary conditions that are required for this solution to emerge.
4. Why this *particular* solution? What is the range of solutions for this problem, and under what circumstances do others arise? Like the answers to question 3, a response to this question distances us from crude functionalist accounts and reduces the distance between a functionalist explanation and one based on historical sequences.

A functionalist explanation that satisfactorily responds to these four questions would pass muster. The reader may suspect already that, by my lights, very few do. Part of the reason for this is that institutions do not typically arise in any simple way as solutions to problems presented by the environment. Rather, ways of doing things begin for reasons that relate to the various purposes of the actors involved and to the structures of relations they are embedded in.

Further, economic institutions may seem well matched to their economic environment precisely because they have modified that environment to *make* it more suitable. Static analysis could not reveal such a

process, but would instead see only the good match and jump to the functionalist conclusion that the institution was created by the environmental characteristics. While there are certainly limits placed by economic environments on how given institutions may be organized, those limits are wider than we typically imagine; and depending on how the institutions are configured initially, there may be several different possible stable configurations. I see the usual situation in effect as a problem in economic dynamics with multiple stable equilibria, a situation in which the historical trajectory of a system determines which equilibrium point will be reached.

Arguments of this kind have been made to good effect for technology. Economic historian Paul David, for example, has shown (1986) how the highly inefficient QWERTY typewriter keyboard became the standard of the industry by the 1890s, despite the existence of many more efficient designs, in which the most frequently typed letters are on the home row. The QWERTY design was developed originally because the first typewriters were built in such a way that the lines you were typing did not come into view until many lines of type later; consequently, key jams could not be detected until many lines consisting of a single letter had already been typed. The QWERTY keyboard minimized such jams, an important feature in this period. Meanwhile, typing schools began to teach this keyboard, so that a cadre of typists who carried this arrangement in their heads became an important consideration for businesses deciding which keyboard to purchase, just as the installed base of QWERTY machines had to be taken into account by those deciding which keyboard to learn. As a result of these feedback effects, QWERTY became established as the technical standard, and was locked in by the large base of existing machines and users. By the 1890s, when this lock-in had occurred, the original rationale for QWERTY had disappeared because each line could be seen as it was typed; but the process could not be, and has not since been, reversed.

This type of argument has been made in full generality by economist Brian Arthur (1989), in a stochastic model of how random events in the early stage of a process can fix an outcome independent of its overall efficiency. In these path-dependent processes, one sees increasing returns to scale because once one of several competing technologies has a temporary lead in the number of users, this lead makes it profitable for various actors to improve it and to modify the environment in ways that facilitate further use. This further use again spurs improvements and reduces the profitability of improving competing but less-adopted technologies. Eventually, less efficient technologies may be locked in by this train of events.

To the extent this is the case, only historical analysis can explain outcomes. If, by contrast, we could assume diminishing returns to adoption of a technology, then

static analysis is sufficient; the outcome is unique, insensitive to the order in which choices are made, and insensitive to small events that occur during the formation of the market. Under increasing returns, however, . . . [m]ultiple outcomes are possible, and to understand how one outcome is selected we

need to follow step by step the process by which small events cumulate to cause the system to gravitate toward that outcome rather than the others (Arthur 1985:12).

The work of David and Arthur concerns technologies and technological standards. But I argue that many other economic outcomes and institutions are also locked in by processes that need not be confined to random "small events," but rather can be analyzed as evolving from purposive networks of action mounted by interested actors. And what appear to be "random" events from an economic frame of reference can often be systematically treated in a sociological account. Where institutions are at issue, the technical concept of "lock-in" should be linked to the sociological idea of "institutionalization." Just as the technical developments that never took hold are forgotten or dismissed as technically inferior, institutional alternatives that did not occur are forgotten, and stories are told about how the existing form was inevitable given the environment. A central question for a sociology of economic institutions is under what circumstances such stories might be correct.

Notes

1. That economists came to see this separation was only part of a general process by which intellectuals, government officials, and parts of the general public came to envision economic activity as involving only economic motivation. This is the process that Dumont (1977) calls the "triumph of economic ideology," and Reddy (1984) calls the "rise of market culture." Reddy's account of French textile markets in the eighteenth and nineteenth centuries is particularly illuminating in showing how public officials revised data-collection procedures to conform to their assumption that the textile industry followed market principles, despite ample evidence that workers and owners were still strongly influenced by traditional noneconomic motives. These motives were greatly obscured by the new forms of economic data.
2. In personal correspondence with Richard Swedberg, Samuelson acknowledges that this comment reflected Pareto's influence.
3. It is not literally true, of course, that modern economics neglects noneconomic motives. In principle, any motives can enter as arguments of a utility function. In practice this is avoided because there is no theoretical structure within economics that shows how nonpecuniary motives in such functions are to be analyzed. There are a small number of economic arguments where noneconomic motives figure prominently, such as in the labor-market theory of compensating differentials, which derives from Adam Smith. But the intention of this argument is not at all to give noneconomic motives a central explanatory position, or to analyze their role; it is rather to deny that wages can ever fail to have been set by a competitive market process. Far from leading to detailed analysis of noneconomic motives, this argument usually treats such motives as a residual category that need only be vaguely invoked in cases where there appears no other way to save the hypothesis of efficient markets.
4. The terms "weak" and "strong" embeddedness are a clumsy device. But they seem necessary because the term "embeddedness," which I want to use, was brought into common usage by Karl Polanyi (1947), and given what I think of as the errors and rigidities of Polanyi's argument I must make it clear that my own is rather different. In fact, in what follows, to avoid a clumsy usage,

I will usually omit the adjective "weak" from the expression "embeddedness," and ask the reader to keep in mind the distinction I draw here between my view and the "strong embeddedness position."

5. I would speculate that since Parsons had been thoroughly trained as an economist, and was thus conversant with the classical and neoclassical literature, but had not been as well trained in the utilitarian tradition, he took the philosophical stance he found in economics to have necessarily resulted from its roots in the utilitarian tradition, and thus projected that stance back into that tradition.
6. Thus Ricardo's *Principles* is relentlessly stylized, like much twentieth-century neoclassical writing. The single place where he makes room for the influence of social relations is in his treatment of international trade. Faced with the necessity of explaining how countries might differ in efficiency of production of the same good, impossible if capital and labor were perfectly mobile, as he otherwise assumes, he comments:

Experience shows that the fancied or real insecurity of capital, when not under the immediate control of its owner, together with the natural disinclination which every man has to quit the country of his birth and connexions, and intrust himself with all his habits fixed, to a strange government and new laws, check the emigration of capital. These feelings, which I should be sorry to see weakened, induce most men of property to be satisfied with a low rate of profits in their own country, rather than seek a more advantageous employment for their wealth in foreign nations (1816:136-137).

 It seems clear here that Ricardo allows this exception into his theoretical system because he approves of its consequences; a perfectly competitive market in international trade implies the absence of patriotism or attachments to home, family, and country, the desire for which falls well beyond the orbit of classical liberalism.
7. This implies that the solution offered by Parsons (1937) to the failings he attributed to utilitarian thought is not nearly as radical a break from the position he attacked as he supposed it to be.
8. I take no position on how important subjective orientation is. Modern economics follows Robbins in abstracting away from this, frequently arguing that actors with economic motives act "as if" making a rational calculation, even when no such subjective state can be attributed to them. I will have several occasions to address these issues and will be especially interested in what justifications may be given for this "as if" stance, and under what circumstances it degenerates into a ritualistic affirmation of the universality of neoclassical arguments. For the time being, I simply adopt the general stance that "individual economic action" consists of action oriented to the provision of "needs" as defined by individual actors, in situations of scarcity, without taking any position on the actor's subjective understanding of the economic situation or his degree of calculation. This is a mixture of Weber's and Robbins's stances that will serve for heuristic purposes. Left out of the account for now is the important issue of whether the implication of this stance, that action should be studied in a means-end framework, may not have important limitations.
9. In this case, the owner of a diamond company was defrauding a factoring concern by submitting invoices from fictitious sales. The scheme required cooperation from his accounting personnel, one of whom was approached by investigators and turned state's evidence. The owner then contracted for the murder of the disloyal employee and her assistant; three CBS technicians who came to their aid in the parking garage where the murders took place were also gunned down (Shenon 1984).
10. As Shapiro (1984:84) points out, the strategy of keeping secrets by decoupling

an organization's network structure is generic to all sorts of secrets, as was recognized by Simmel in his discussion of the "secret society."

11. It is interesting to note that the intellectual history of institutional economics in the twentieth century is a replay of that in social anthropology from about 1890 to 1940. Functionalist explanation has been adopted in the new institutional economics in the process of rejecting the explanatory style of the "old" (early twentieth-century) institutionalists who relied on historical accounts of institutions and did not seek to determine what economic functions they served. Structural functional anthropologists of the 1930s and 1940s attacked earlier anthropological accounts grounded in (sometimes rather speculative) history and defended static functional analysis on the ground that one needed to explain any social pattern as part of the coherent social whole, to develop a full and sophisticated understanding of how the social system fit together. Thus Malinowski attacked the notion that some social patterns were "survivals" of earlier periods. "Take any example of 'survival,'" he challenged. "You will find first and foremost that the survival nature of the alleged cultural 'hangover' is due primarily to an incomplete analysis of the facts. . . . The real harm done by this concept was to retard effective fieldwork. Instead of searching for the present-day function of any cultural fact, the observer was merely satisfied in reaching a rigid, self-contained entity" (1944:30-31).

Few current anthropologists would dispute that the functionalism of the 1940s went too far in its disdain for historical accounts and its attempt to display all institutions as part of a coherent whole. As in sociology, wholehearted commitment to structural-functionalism in anthropology did not survive the intellectual (and political) turmoil of the 1960s. It may be that functionalism in institutional economics had as strong a hold as it did in the 1980s on account of its origins in the 1970s, when the political and intellectual climate had cooled again.

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