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2004, Vol. 29, No. 1, 28–49.

SYSTEMS OF EXCHANGE

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We develop a classification scheme of systems of exchange using concepts from network analysis, economics, and cultural sociology. This classification illustrates that the "free market" is but one possible type of economy and that other types are not best understood as imperfections. This classification helps to distinguish analytically among qualitatively different types of exchange arrangements and suggests bases from which to develop theories about the organization of markets and exchange systems of various types.

Thirty years ago, organization theorists focused largely on the internal organization of firms and other bureaucratic structures. In recent years, however, they have turned increasingly toward trying to understand the economic context within which firms operate. Prompted especially by the development of networked markets in Asia, organization scholars have recognized that market organization, not only firm organization, is a crucial factor in explaining the activities and character of firms and other economic actors.

When organization analysts turned toward the examination of markets, the prevailing conceptualization of a market came from economics. Being a parsimonious construct, the economic idea of a market failed the needs of many empirically oriented organization analysts, particularly those rooted in anthropological and sociological traditions. Subsequently, in a flurry of writings, scholars promoted alternative ways of conceptualizing market organization. Two sets of ideas about the nature of markets emerged. One conceptualizes markets as structures of social relations and focuses on the organization of market roles into status hierarchies and networks (e.g., Baker, 1984, 1990; Burt, 1983, 1992; Palmer, 1983; Podolny, 1993). The other conceptualizes markets as cultural arenas or focuses on markets as constructed social worlds (e.g., Abolafia, 1997; DiMaggio, 1994; Fligstein, 1996; Zelizer, 1988).

These conceptualizations are not antithetical, but they do emerge out of and are associated with different intellectual traditions and research methodologies. Hence, there has been relatively little discussion or theory building between these scholarly groups. Our intent in this article is to merge selective elements of these conceptualizations in a way that offers new understandings to all approaches. To achieve this, we develop a classification scheme that differentiates systems of exchange on the basis of actors' logics of action and the structure of social relations between actors. The result is a *system typology* (Layder, 1998) that facilitates the codification of exchange and provides the basis for subsequent analysis, prediction, and explanation.

We do three things here. First, we briefly review current conceptualizations of market organization. Second, we suggest a classification of systems of exchange using key insights from these conceptualizations, each of which captures elements of exchange in some settings. We use the term *systems of exchange* to distinguish some types of organized exchange from the price-based market assumed in the traditional economic approach. "System" suggests that elements of each type of exchange arena are stable, loosely coupled, and interdependent arrangements that combine to produce a dis-

We presented earlier versions of this paper at the American Sociological Association meetings and at the Economic Sociology Colloquium, Wharton School of Business, University of Pennsylvania. We thank George Boyne, Paula England, Sy Goldstone, Mauro Guillén, Gary Hamilton, Richard Swedberg, and Richard Whipp for their comments on the manuscript, and the *AMR* reviewers for their helpful critiques.

tinctive social and economic "world" (Scott, 1998: 91). The "market" is but one form of exchange arena found in society. We argue that there may be qualitatively distinct types of socially organized exchange that support substantively different orientations to economic action and, hence, culturally different trading arenas. We illustrate this classification scheme with empirical examples, and, finally, we suggest how this conceptualization provides a promising basis for economic and organization theory development and empirical analysis.

ECONOMIC CONCEPTS OF THE MARKET

As economic historian Douglass North has noted, "It is a peculiar fact that the literature on economics . . . contains so little discussion of the central institution that underlies neo-classical economics—the market" (1977: 710). Classical economic theorists conceptualized markets as concrete places, but their focus was on understanding economic production and price setting, not exchange. Consequently, they failed to develop a theoretically useful conceptualization of empirical markets.[1] The economic concept of the market became increasingly abstract following the *Methodenstreit* or "Battle of Methods" at the close of the nineteenth century (Swedberg, 1994). Substantive historical and social approaches to economics were rejected in favor of mathematical models of market behavior. The demands of mathematics favored minimalist assumptions about market characteristics.

The "perfect market" became a hypothetical ideal wherein conditions for exchange provide the greatest good for the greatest number (Pareto optimality). For neoclassical economists, a perfect market is not an empirical reality but, rather, a series of assumptions: a sufficiently large number of firms so that no one makes more than a negligible contribution to output, homogeneous commodities such that a consumer does not prefer one seller's commodities over another's, independent and dispersed actors, and complete knowledge of all offers to buy and sell (Stigler, 1968). As Demsetz comments, "Markets [now] became empirically empty conceptualizations of the forums in which exchange costlessly took place" (1982: 6).

Modern economists view the market as a price-setting mechanism and have left its workings implied rather than explicitly discussed (see Barber, 1977; Coase, 1988; Rangan, 2000; and Stigler, 1968; for discussions of this point).[2] Although economists recognize that "real" markets do not conform to the hypothesized ideal, they find it a useful fiction and a basis against which to compare both empirical and logically derived instances of markets. Deviations from the ideal are conceptualized as *imperfections* and social relations between economic actors as *friction*.

Institutional economists, who examine both historical and contemporary market settings, have broadened this concept of the market substantially and "relaxed" each of the stringent assumptions of the model—for example, by assuming information asymmetry or quality differences in products. For the most part, though, institutional economists have preserved the central assumption of individual rational interest as the basis for economic action.

However, institutional economist Oliver Williamson (1975, 1985) has examined the role of authoritative social relations as part of a markets and hierarchy debate, discerning those conditions under which transaction costs are less—for example, the asocial market or the social relations of the firm—for any given economic situation. Thus, social forms of governance, such as relational contracting (or bilateral governance), are rational responses to specific transaction characteristics, such as recurrent exchanges involving some asset specificity.

Economists have also drawn on game theory to explore more realistically issues of interdependence between actors. Games such as the

[1] Swedberg (1994) recognizes the contribution of Marshall, who saw the market as an empirical phenomenon in its own right. According to Swedberg, Marshall (writing in the 1910s through 1920s) believed that the following five factors were important in understanding markets: space, time, formal regulation, informal regulation, and the familiarity between buyer and seller. Thus, Marshall regarded markets as either "particular" or "general" (Marshall, 1919) where in a particular market a social bond exists between the buyer and the seller that makes the transaction easier, but where in a general market the transaction is anonymous.

[2] There has been discussion of *alternatives* to the market in the economics field of industrial organization. Authors of such work have typically concentrated on transaction costs in exchange and discussed inter alia joint ventures (e.g., Berg & Friedman, 1978), vertical integration (Blois, 1972), and cooperative agreements (Mariti & Smiley, 1983).

prisoners' dilemma illustrate that "the interdependence between different people's welfare may make the pursuit of individual interests produce inferior results for all" (Sen, 1982: 6), such as circumstances where cooperation would be rational and might evolve given some social structure (Axelrod, 1984). Game theorists clearly demonstrate the importance of reputation, history, and social relations generally in establishing efficient market exchanges under certain conditions, but their use of experimental and logic-based research methodologies cannot easily translate into an understanding of how these factors shape actual market relations outside the experimental setting.

MARKETS AS SOCIAL STRUCTURES

Challenges to the economic conceptualization of markets and economic action developed in the 1980s as organization theorists and other social scientists became interested in the empirical analysis of economic action. The conceptualization of markets as social structures, developed in a seminal article by Mark Granovetter (1985), moved discussion away from the neoclassical idea of the market as a logical abstraction ("the sum of all buyers and sellers"). Rather, scholars increasingly argued that there are *markets*, historically developed and varied institutions that both shape and constitute exchange relations. Social relations and institutions in the marketplace are not merely imperfections, rational strategic devices, or a contextual factor, as traditional economists assume. Rather, the market is *constituted* by concrete social relations and is not simply a collection of rational individuals.

Granovetter's article revived Polanyi's (1957) idea that economic action is embedded in social relations of various types.[3] This approach, primarily developed through mathematical network analysis of real market settings, was established in the 1980s in White's (1981), Burt's (1982), and Baker's (1984) research. Each researcher analyzed the network structure of empirical markets to demonstrate the significance of actor connections in influencing market behavior of various types. For instance, White (1981) argued against the idea that market actors are autonomous and unaware of each other. He demonstrated that markets are composed of "tangible cliques," where each producer watches the others and responds to fellow producers' actions rather than to the behavior of consumers. This structural approach to markets continues to be an active research trajectory (cf. Baker, Faulkner, & Fisher, 1998; Burt, 1992).

MARKETS AS CULTURAL ARENAS

Theorists of the social structural approach to markets show the importance of relationship structure in some, but not all, market settings. They have been criticized, however, for failing to take seriously the idea that values, beliefs, or culture is central in understanding markets (Abolafia, 1997; DiMaggio, 1990; Zelizer, 1988). This leaves them to assume, logically, that it is the structure of ties, not the content of ties, that makes a difference in outcomes.[4] Nor do they take up the idea that various cultures can produce, inform, and sustain different types of structures. Proponents of the structural approach recognize the potential significance of the interrelations of actors but neglect the possibility of varying cultures or logics of action in which actors may be embedded.

DiMaggio explicitly addresses this shortcoming in claiming "categories of economic action are culturally variable and socially constructed" and in demonstrating that culture does "more than mediate structural or material influences. Culture cannot merely reflect structural positions or material conditions for a 'cultural effect' to be claimed" (1994: 28).

DiMaggio and Zukin (1990) identify three ways in which culture can affect economic behavior: (1) by influencing how actors define their inter-

[3] In fact, Polanyi (1971) argued for substantively different types of economic action, each of which could be found in all societies: *reciprocity*, exchange on the basis of goodwill or obligation; *redistribution*, the movement of goods or services to a "center" and then outward (e.g., taxation); and *exchange*, transactions in the market proper. The social structural school has used the idea of embeddedness, but without seriously considering the type of market in which embedded ties take place.

[4] Uzzi (1997) takes a preliminary step toward the analysis of the content of ties in networks with his recognition of "arm's length" and "embedded" ties in New York's apparel industry. His analysis concentrates on the concept of structural embeddedness rather than cognitive, cultural, or political forms.

ests (*constitutive effects*), (2) by constraining their efforts on their own behalf (*regulatory effects*), or (3) by shaping either a group's capacity to mobilize or its goals in mobilizing. A simple version of this may be that actors have two "frames" for action, embodying individual and "other-regarding" sentiments, respectively, depending on the situation (see also Etzioni, 1988; Harsanyi, 1955; and Sen, 1982).

Friedland and Alford (1991) suggest that, for each of several domains (family, polity, economy), there is a fundamental "logic of action," which implies a range of goals, strategies, and bases of evaluation. Accordingly, the logic of the marketplace emphasizes utilitarian reasoning, efficiency, and means-end calculation from the standpoint of the individual, whereas the logic of the family emphasizes mutual support and a collective orientation. For DiMaggio (1994), culture may represent a finite set of context-dependent orientations and a set of rules for switching among them.

Actors, therefore, may have different understandings of "rationality" at different times, depending on their situation, the social structures of the exchange settings, and the social structure's cultural context. In other words, preferences are socially formed and institutionally shaped by the specific context (Douglas & Isherwood, 1979). This is important, because what "rational" action *means* in practice can vary across different types of exchange arenas—that is, "rationality is itself a culturally variable concept" (DiMaggio, 1994: 48).

SYSTEMS OF EXCHANGE

The three conceptualizations that we have briefly characterized—the economic, the social structural, and the cultural—each make important contributions to our understanding of exchange organization and action. They are not, however, as so often assumed, necessarily oppositional. We take a core element of each to construct a *systems of exchange* classification scheme. We use this terminology, and not *market*, because we want to suggest that the market as conceived by traditional economic approaches is but one, albeit important, type of exchange system. Other types, we argue, are neither corruptions nor imperfections of a market but, rather, may be qualitatively different arenas for exchange that constitute socially different economic systems. Various "exchange arenas" exist in the global and domestic economy and are not necessarily vestiges of premodern or ethnic enclave exchange systems destined to develop at some future moment into a "proper" market, although different types of exchange dominate in some periods and in some locales.

Systems of exchange—like business systems (Whitley, 1992), or a Taylorist production system (Taylor, 1911)—are composed of elements related synergistically in economic processes of a discernible type. While elements can be examined independently as units of analysis (e.g., division of labor, compensation system, authority structure), they are organized in ways distinctive to each system, and they include an interpretive schema that explains and justifies arrangements. Therefore, system elements are more than the sum of constituent parts and have complementarities among them.

Moreover, there are likely to be important commonalities between micro and macro units of analysis within the same system of exchange. For example, economic individualism is weak at both the level of individual actors and firms in Japanese society. Individual and firm identity formation take place in group settings (Gerlach, 1992; Kondo, 1990). Groups shape economic orientations and strategy in important ways at both levels of analysis, as well as social organization.

We use the term *exchange* to refer to a "voluntary agreement involving the offer of any sort of present, continuing, or future utility in exchange for utilities of any sort offered in return" and that may involve money, goods, or services (Weber, 1978: 72–73). Exchange is one of four basic economic activities, the others being saving, consumption, and production, which, in practice, may be combined (e.g., home purchasing can involve consumption and saving, simultaneously). Each form of economic action may be subject to organizing, rationalizing, and institutionalizing.

CLASSIFICATION AND TYPES IN ECONOMIC SOCIOLOGY AND ORGANIZATION ANALYSIS

Classification is an intellectual strategy for developing theoretically meaningful categories or types of observed phenomena. Types and typologies, as distillations of empirical observa-

tions, are useful in comparative analysis, hypothesis formation, and causal explanation (Martindale, 1981). Layder (1998) notes that typological analysis facilitates systematic and ordered questioning across phenomena ("How and why is this similar/different?"), which has the effect of generating codes, categories, and concepts that, in turn, stimulate further conceptual analysis. Moreover, it encourages theoretical elaboration through "chains of reasoning" by suggesting connections among emergent concepts: "Overall, the development of typologies can clarify thinking, suggest lines of explanation and give direction to the theoretical imagination" (Layder, 1998: 74). Typology building is particularly helpful, Layder argues, in the "zigzagging back and forth between theoretical ideas, data collection and analysis" (1998: 77)—that is, the dialectical interplay between emergent theorizing based on the gathering of data and the use of extant theory.

Classification schemes such as typologies make useful distinctions among complex examples of phenomena and, by simplifying and codifying, turn our attention to critical factors frequently found together in empirical situations. For example, in recent years organization analysts, noting the importance of knowledge in a postindustrial economy, have developed classification schemes and typologies that distinguish among knowledge types (Hargadon & Fanelli, 2002; Spender, 1996). Our intent is similar: to construct theoretically meaningful typifications of exchange systems by extracting crucial factors that seem common to a number of economic settings. We abstract from these cases in order to build simple, but not oversimple, types that can be used in theory formation and empirical analysis.

There are several useful typologies of economic organization. For instance, Ouchi (1980) develops Williamson's transaction cost approach in outlining the "clan" form of economic association, a third mechanism for mediating transactions, in addition to markets and hierarchies. In clans, socialized actors eschew opportunism and achieve efficiency under conditions of high performance ambiguity in a manner not possible for markets or bureaucracies. The clan operates under norms of reciprocity and legitimate authority, but the common values and beliefs of actors create goal congruence and a harmony of interests. These are communicated through the implicit rules of tradition.

Powell's (1990) work on networks also offers an alternative to the market-hierarchy dichotomy. Powell distinguishes the network as a form of economic organization with a complementary and relational basis for action between interdependent actors, such as small biotechnology development firms allying with large, well-funded pharmaceutical companies able to test and develop promising drugs.

Boisot and Child (1988) extend these frameworks in their analysis of the transaction governance structures associated with the informational aspect of transacting. They develop a two-by-two typology around the extent to which information is diffused/undiffused and codified/uncodified. Markets and bureaucracies share the impersonality of codified information, differing in the degree to which that information is shared. Ouchi's clans reflect a situation where information is diffused but the lack of codification requires personal, nonhierarchical relationships in transactions. From this typology a fourth structure is apparent, which Boisot and Child identify as *fiefs*. Fiefs emerge when the information is both uncodified and undiffused. Here, personal relationships are hierarchically coordinated.

While the above authors distinguish markets from other forms of economic organization, Swedberg (1994) offers two types of markets as social structures. Building on Weber, his central argument is that markets are arenas for competition for exchange, and he is interested in how competition among a large number of actors (buyers and sellers) becomes exchange among a few. Swedberg elaborates his argument by considering the social structures of ideal types of (1) historical markets and (2) modern capitalist markets, as competition becomes exchange.

The typologies of Ouchi, Powell, Boisot and Child, and Swedberg provide useful ideas about various elements of economic activity and economic organization, and each has been a helpful conceptual apparatus for researchers. Ouchi's and Powell's models posited theretofore unexamined and insufficiently theorized economic structures of relation (clans, networks) and stimulated the examination of conditions under which each would arise. Boisot and Child hypothesized a setting in which the character of relations would shape and reflect the character

of information among actors, critical for theorizing the economics of information. Swedberg posited a possible relationship between number of traders and the character of relations among them.

We likewise contribute an economic classification scheme—one that aims to fuse elements of the economic, social structural, and cultural approaches to market organization. Researchers' attempts to make sense of very different patterns of economic organization and practice in the global economy, and policy makers' attempts to construct meaningful multilateral trading regulations, motivate our attempt to construct an intellectual base point for classifying and then explaining differences. We combine insights from each of the three dominant approaches to economic understanding—economic, cultural, and structural—to show how different rational orientations toward action, and different structures of relations, *combine* to produce *qualitatively different* systems of exchange.

We believe that this schema will give theoretical foundation to those studying "varieties of capitalism" and economic relations between differently organized economies. Our intention is to generate hypothetical "worlds of exchange" or "model economies" sufficiently complex to stimulate insights about connections among various elements internal to the types, and comparison between the types. Our paper bears some resemblance to the work of Douglas and Isherwood (1979), who typologized different social structural environments for saving in their work on the anthropology of consumption. These authors contrast the extent to which the imposition of group values curtails individual autonomy, and the degree to which individuals' transactions are restricted or "insulated."

SYSTEMS OF EXCHANGE: RATIONALITY AND SOCIAL RELATIONS

We posit qualitatively different types of exchange systems that vary along two dimensions (Figure 1). Each dimension is a critical component of exchange between actors and is identified by both classical (Parsons, 1968; Weber, 1978) and modern theorists (e.g., Frank, 1987; Kahneman, Knetsch, & Thaler, 1986; Mansbridge, 1990) as a variable component of economic action. The first dimension distinguishes between two approaches to action, instrumental rationality and substantive rationality, and speaks to the actor's strategic orientation

FIGURE 1
Systems of Exchange

Basis of action	Structure of social relations: Universalistic (act toward all the same)	Structure of social relations: Particularistic (act toward outsiders differently)
Instrumental rationality (means calculus)	***Price system***	***Associative system***
Substantive rationality (calculus in relation to an end)	***Moral system***	***Communal system***

("What are my interests?")—a distinction proposed by Max Weber (1978). The second distinguishes between two orientations toward other people, universalism and particularism, and is concerned with how the actor understands his or her obligations to the other party in an exchange ("How do I treat my exchange partner?").

Weber and Parsons, writing in the early decades of the twentieth century, were concerned with trying to understand the development of the world order of industrial capitalism, and they did so in part by looking at the character of non-Western societies such as India and China, which did not develop capitalism indigenously. They noted that these and other non-Western cultures typically did not contain the instrumental rationality or belief in individualism that tends to characterize Euro-American societies (although this is variable even in the West, as game theorists suggest; see Marwell & Ames, 1981). They saw these differences rooted in social orders structured on different principles of action and social relations.

The development, in the twenty-first century, of a global economic system and awareness that economies and societies vary substantially *even when industrialized* suggests that differences may be systemic and that they are not differences of degree destined to disappear over time as they "converge" (Biggart & Guillén, 1999). In the literature on comparative capitalism, scholars argue that there are important bases on which economic and social orders continue to vary among societies, but, we argue here, they vary *within* societies as well. Earlier concerns about the foundations of economic organization as structured on differences in rationality and individualism continue to be suggestive bases for understanding differences.

Rationality

Instrumental rationality is "determined by expectations as to the behavior of objects in the environment and of other human beings; these expectations are 'conditions' or 'means' for the attainment of the actor's own rationally pursued and calculated ends" (Weber, 1978: 24). An action is instrumentally rational when someone attempts to consider all possible means to an end and weighs the alternative means in a decision-making calculus, often in a quantitative analysis or accounting (Weber, 1978). Actors may take into account the relative importance of various ends, the means needed to achieve them, and the consequences that may come from pursuing alternative means (Kalberg, 1980).

Actors are often concerned with cost minimization, profit maximization, and other forms of efficiency. Modern capital accounting, formal legal procedures, and bureaucratic rules are instrumentally rational insofar as they enable calculability and procedural consistency, and all were associated with the development of market capitalism in Europe (Carruthers & Espeland, 1991). No *particular* goal is necessarily implied when people act in an instrumentally rational way; rather, goals may be weighed as alternatives. When economists assume a rational orientation, they typically refer to instrumental rationality, which they regard as a universal orientation, although recent research shows this to be a highly variable orientation (Frank, 1987; Kahneman et al., 1986).

Substantive rationality is oriented toward *values*—for example, environmentalism or social welfare. As Jon Elster puts it, "Substantive rationality is guided by its consequences" (2000: 23) or ends, whereas instrumental rationality is guided by means. Substantive rationality can, like instrumental rationality, be calculating and employ reason, but a substantive or ethical good (e.g., greening the economy, redistributing income, caring for employees) is at its base. Substantively rational action is rational in the sense that action is predictable and not capricious, but it need not follow the procedural rigor of instrumental rationality, and actors often feel morally or emotionally bound to pursue the substantive goal (e.g., fight poverty), even if they are not successful in achieving the end. The probability of success is not critical to substantive rationality, whereas it is always part of the calculus of instrumental rationality.[5]

[5] Both instrumental and value rationality can be at the basis of the pursuit of public or private ends. Public groups—for example, publicly held firms or business associations—can pursue their ends instrumentally (e.g., in a profit-maximizing way) or in a way that is oriented toward collectively held values (e.g., in a way that sustains "fair" prices). Perhaps more obvious, private individuals and groups can also pursue economic ends in either an instrumentally or substantively rational way. It is not the public or private nature of the economic actor that determines the type of rationality.

Political and religious organizations may obviously be substantively rational with their orientation toward particular goals, but economic organizations such as cooperative food markets and socially responsible investment funds are rationally oriented toward substantive purposes.[6] While analytically distinct, in practice, instrumental and substantive rationalities are often combined in some way. Instrumentally rational techniques may be raised to the plane of values when practitioners view them as the only "morally" or "politically" correct way to make choices or to conduct activities. Similarly, those attempting to achieve some moral or ethical goal may choose to use procedurally rational techniques as the best way to reach their substantive ends. Substantive rationality operates in the economy not as an alternative to economic motives but as a *type* of economic motive, one that jointly optimizes values and outcomes, whereas instrumental rationality is motivated by the optimization of ends.

In allowing for two types of rationality, we intend to account more fully for the varied and socially constructed logics that inform economic action—a key assumption of those who see markets as cultural worlds. The empirical record suggests that instrumental rationality is but one possible form of rationality and that cultural differences render some populations of firms and people, and some societies, more able to act in the instrumentally rational way demanded by capitalism as practiced in the United States (e.g., see Shweder & Miller, 1991). Nonetheless, despite the variability of types of rationality, we agree with a central economic tenet—the idea that exchange behavior is rational, or at least intendedly so, whatever type of rationality may inform it.[7]

[6] Weber called these orientations to action *zweckrational* (rational orientation to discrete individual ends) and *wertrational* (rational orientation to an absolute value).

[7] Beckert (1996) recently identified two deviations from rational economic action: irrational behavior with or without regret. Irrational behavior with regret violates the predictions of economic theory insofar as an actor behaves irrationally. However, once the consequences of economic irrationality become clear, the actor regrets the action. In Beckert's words, the actor displays "intentional rationality." Alternatively, irrational behavior without regret represents a conscious deviation from economic rationality in that an actor holds convictions about just or appropriate behavior and lets decisions be guided by these normative standards (Beckert, 1996). The latter case is consistent with Weber's notion of substantive rationality.

Social Relations

The systems of exchange schema's second dimension reflects the structure of social relations in a system of exchange, which may be as small as an ethnic enclave or as large as a supranational regional economy.

In recent years, many scholars have adopted the Polanyian idea that economic relations are embedded in society, usually by mathematically and diagrammatically examining the network structure of relations (Burt, 1988; Granovetter, 1985; Polanyi, 1957; Uzzi, 1997). Structural embeddedness, however, leaves open the question of the *character* and *culture* of social relations in which economic actors are embedded together.

Although the nature of social relations can vary dramatically, Parsons (1968) proposed the simple dualism of universalism and particularism as two fundamentally different orientations toward others in society (see also Hamilton, 1978, for an application of this idea to economic behavior). Before they can act in reference to others, people must decide whether to judge a person by general criteria or criteria unique to that person. In political settings, universalism is expressed as individualism—the right of every person to be treated equally—and in economic settings, universalistic relations are those in which actors, either individuals or corporate actors, treat, in principle, all exchange partners the same: "For instance, the duties of honesty and fair treatment are held to apply to business dealings with everyone, not only with one's relatives and personal friends" (Parsons, 1968: 550).

Equal treatment can be either because of indifference or because a higher principle (e.g., corporate regulations, law, universal ethical code) regulates social relations and demands that all receive the same treatment before the law or principle. For example, the U.S. Foreign Corrupt Practices Act prohibits U.S. citizens from engaging in bribery, even in countries where it is customary, and insider trading laws prohibit the private sharing of corporate information.

The existence of a universalistic orientation does not mean that actors have an *asocial* orientation but, rather, that exchanges are conducted at arm's length, or that social relations

between parties are subordinated to a suprarelational standard, such as equal treatment. Even arm's length trades are social insofar as they take into account the actions of others and depend on social routines and conventions in order to execute exchanges.

In settings where a particularistic orientation exists, the nature of the parties' relation to each other is taken into account when parties conduct exchange. Particularistic societies demand that actors orient themselves preferentially to those within the structure of relations in which they are embedded—for example, a family, professional association, ethnic group, class, or caste—and treat those outside their group affiliation differently (Parsons, 1951). Examples include the requirement that one favor family members in Chinese societies, or that partners favor one another in a joint venture. Ties are "strong" in the sense that social identities make a claim on the actors (even though they may not know each other well, or at all). Under particularistic circumstances, "social capital" can become important as a way of facilitating exchange (Coleman, 1988).[8]

The two dimensions yield a fourfold table (Table 1), with each entry representing a *qualitatively different system of exchange*. Each of these system types is a theoretical construct like any model, including the economic model of a "perfect market," and no empirical exchange setting is represented by the hypothetical system types we posit. However, scholars have noted that universalism and instrumentalism were historically linked in the West and that particularism and substantive rationality represent the historical roots of East Asian capitalism (Orrù, Biggart, & Hamilton, 1997), and we provide examples throughout to show the ways in which the classification system makes meaningful distinctions between varieties of exchange arenas.

We believe that elaborating the elements of four different systems of exchange provides more realistic conceptualizations than a single market model, while allowing reasonable parsimony in theorizing. The test of a classification scheme, like all theoretical models, is its usefulness in aiding understanding—not its empirical validity.

FOUR DIFFERENT SYSTEMS OF EXCHANGE

The two dimensions yield four systems of exchange (Figure 1). Each system assumes a characteristic *economic logic* that supports a typical type of economic actor, orientation to action, and relationship between actors (Table 1). We assume that economic actors can either be a single person or a corporate actor (e.g., firm) in each system. For example, in the United States, economic independence is the dominant orientation for both individuals and firms (and at the firm level—and in some cases individual level—this is sustained by regulation), while in Scandinavian economies individuals and firms are oriented toward corporatism, a system that includes elements of social welfare and group organization. Two different economic logics are reflected in the exchange systems of each society, and the logics operate at multiple levels.

Each element (Table 1) of the types is part of a conceptually whole model economic system. The elements are therefore not units of analysis but, rather, assumed components of a hypothetical system. Each element can be treated as a hypothesis or as a basis for variation seeking with a "real" economic setting (as the assumption of a neoclassical market is used as a basis for identifying "imperfections," or whose individual assumptions may be "relaxed").

Price System of Exchange

The price-based exchange arena approximates the "free" market depicted by neoclassical economists and is best exemplified by auction markets, such as equity markets or other settings where strangers compete primarily on price (or quality as a proxy for price). Actors enter into price-based markets assuming that other actors, both sellers and competing buyers, are driven to get the lowest possible price for a desired good. In the purest examples, actions are motivated by self-interest and unaffected by social or moral considerations beyond the self-interested morality of "greed is good."

This market type is the intellectual and political basis for Anglo-American–style economies. There is a presumption that economic order will

[8] Portes and Sensenbrenner (1993) recognize that social capital may facilitate both instrumental and substantive (what they term *principled*) action. They introduce *value introjection* as a source of social capital, which "emphasize[s] the moral character of economic transactions that are guided by value imperatives" (Portes & Sensenbrenner, 1993: 1323).

TABLE 1
Systems of Exchange: Actors and Action

System Elements	Price System	Associative System	Moral System	Communal System
Organization of exchange	Auction market	Horizontal and vertical networks	Morally regulated exchange	Collegial association; kin or ethnic group
Allocative principle	Spot price	Long-term price	Closest to value; fair price	Preferential, tiered pricing
Orientation to action	Individual gain	Mutual gain	Principled	Relational
Normative actor	Autonomous individual/firm	Individual or corporate actor in network	Ethically committed individual/firm	Group member
Mutual expectation	Self-interest	Reciprocity	Subordination to ethical standard	Subordination to group norms
Breach of system norms	Social relations	Autonomous self-interest	Disregard of ethical principle	Disloyalty
System regulation	Self-regulation or regulation of "playing field"	Social ties	Organization of committed actors; third-party certifiers	Community; collegial order

emerge from the independent and selfish acts of autonomous individuals seeking their own gain—the "invisible hand" envisaged by Adam Smith (1976). This market type emerged out of the institutional history of Western Europe, where crucial underlying conditions developed—notably, individualism, democratic government, and decentralized private spheres (Biggart & Hamilton, 1992; Carruthers, 1996; Hirschman, 1977; Polanyi, 1957).

Empirical research on markets shows that auctions, usually described as the "purest" price-driven markets, are, in fact, mixed types. Charles Smith's study of commodity auctions (1989) shows that fresh fish, antique, and livestock auctions operate according to agreed-on rules of participation. Similarly, Mitchel Abolafia's (1997) study of financial markets in the United States shows the variability of this type. Abolafia found that the bond market, where actors typically do not see each other, resembles, in important ways, the ideal type but that the stock and commodities exchanges are strongly influenced by both social relations and conventions.

The utilitarian assumption underlying price-driven markets is that the greatest good for the greatest number will be obtained when actors, either individuals or firms as fictive individuals, are autonomous. Regulators, such as the Securities and Exchange Commission in the United States and the Competition Commission in the United Kingdom, exist to prevent actors from forming economically significant social ties in the marketplace. Social relations, such as nepotism and insider trading, are against the logic of impersonality fundamental to the market, and they threaten the efficient movement of goods and people according to principles of supply and demand.

Associative System of Exchange

Associations or alliances between economic actors, often firms, are "voluntary arrangements involving durable exchange, sharing, or co-development of new products and technologies" (Gulati, 1995: 619). Economic alliances can reduce costs for the allies (Hennart, 1988), involve skill sharing (Hamel, 1991; Kogut, 1988), or improve the parties' strategic positioning (Kogut, 1988). Strategic alliances between multinational enterprises and government-sponsored business consortia are examples of exchange based on durable associations between actors. Actors in economic alliances assume that, over the long run, mutual support and reciprocity—not autonomous self-interest—will result in the best economic outcome for the parties. Associative exchange, like the price system of exchange, is oriented toward instrumental rationality and profit maximization, but actors work in concert with one or more partners in pursuit of economic ends.

Western scholars became aware of the importance of associative exchange with the development of Asian economies—for example, Gerlach's study (1992) of Japanese business groups and Redding's work (1990) on Chinese capitalism. The typology developed in Boisot and Child's (1988) critique and extension of transaction cost economics rests, in part, on that theory's inability to conceptualize particularistic economic relations typical of Chinese societies.

Asian societies never developed the institutional conditions, such as unbridled individualism, and the legal systems that underlay property rights and contracts—that support markets of autonomous individuals. Rather, Asian markets assume relations or networks exist between economic actors, although the character and obligational basis of network relations varies substantially (Orrù et al., 1997). Actors in business networks compete based on price but not as individuals; rather, they compete as partners or allies in competition with other actors who may also be organized into networks or partnerships.

Vertical networks like Korean *chaebol*, including Samsung (Biggart, 1998), and Japanese "independent groups," such as Toyota Motor Company, are examples of vertical networks where powerful economic actors control networks of smaller firms (Gerlach, 1992). Horizontal networks tend to link independent actors, including individuals, households, and firms, into mutually beneficial business arrangements. Often, horizontal networks are based on a common social identity, such as ethnicity (Hamilton, 1997) or religion (Uzzi, 1997), or they may organize the independent actors who are members of an industrial sector (Piore & Sabel, 1984; Saxanian, 1994). In some instances, alliances based on ethnic or cultural ties are mixed types and shade into what we call *communal exchanges*, where social relations have a value that shapes the economic relationship.

While price-based and associative systems of exchange are consistent with instrumental rationality, two further systems of exchange—moral and communal systems—are not. We disagree with Beckert's (1996) view that actors in modern societies do not willingly transcend economic interests in order to act in accordance with normatively held convictions. Beckert argues, "This cannot be expected in modern societies because of the institutionalization of instrumental behavior orientation and systemic mechanisms that discourage deviations from instrumental rationality in market contexts" (1996: 818).

Beckert and many others accept what is often now a truism based on a partial reading of Polanyi. Polanyi holds that "all economic systems known to us up to the end of feudalism in Western Europe were organized on the principles of reciprocity or redistribution, or householding, or some combination of the three" (1957: 54–55). These systems were not based on the principle of gain but, rather, "custom and law, magic and religion." Polanyi argues that it was only with the advent of the "market pattern" that an instrumental orientation came to dominate both economy and society.

Polanyi further argues, however, and we agree, that all forms of economic action can and often do coexist, or are combined, in all societies (Smelser & Swedberg, 1994). Indeed, by *assuming* the predominance and pervasiveness of an instrumental rationality, researchers may overlook forms of rational economic action other than instrumental rationality in the relations of economic actors, whether they are individuals, firms, or industries. There is ample evidence that modern actors use substantive rather than instrumental rationality in some transactions and that these are not merely imperfections, residual categories, or transitional institutions.

Moral System of Exchange

Moral exchange arenas[9] have, at their base, a belief in a substantive good or value, such as distributive justice (Shanahan & Tuma, 1994), environmentalism (Berger, 1994), or religious beliefs (Biggart, 1989; Wuthnow, 1994). Even repugnant values, such as a belief in ethnic superiority, can shape exchange. Actors are rational but only insofar as their actions are oriented toward putting in place a value or as their substantively rational actions are bound by a moral code. Morally informed economic behaviors are found in exchanges between large companies in the global economy, as well as between individuals within a local community.

Recent examples of the institutionalization of moral-based exchange systems are voluntary corporate codes of conduct that regulate labor standards in international trade. Reported exploitation of third world workers by such companies as Nike and Disney led to the establishment of an international standard on social accountability—SA8000—under which companies' employment and working practices are audited by independent assessors (Crowe, 1998). Adherents to the codes agree, among other standards, not to employ children under 15 years of age, not to use forced labor, and to pay enough for basic needs and not merely the legal minimum. Large retailers adhering to the standards agree to purchase only from manufacturers that subscribe to SA8000 and not those that sell at the lowest price. Tsogas (1998) reports that a European retailer, C&A, set up an independent subsidiary to monitor subcontractors against the company's code of conduct and stopped business with nineteen suppliers during an eighteen-month period following code breaches.

Socially responsible investment funds only purchase and sell shares of firms that have committed to moral values of various sorts, including prohibitions on animal testing, support for union labor, vendor standards, and absence of genetically modified organisms in their products. For example, the New Alternatives Fund (NALFX) invests in companies pursuing alternative energy sources, and the Meyers Pride Value Fund (MYPVV) buys stock in companies with progressive policies toward gays and lesbians. These funds are committed to trading in stocks of companies in order to achieve the best return consistent with an underlying value.

The demand for socially responsible trading has spawned watchdog organizations—"third-party certifiers"—that are arbiters of adherence to standards used to produce goods and services

[9] All of the exchange types that we describe have moral dimensions, to be sure, but substantive rationality places *values* as the primary orientating factor of action, whereas instrumental rationality places primacy on rational *methods* from which a moral good (e.g., utilitarianism) might emerge. There is also a tradition of moral critique of the market, known as *the moral economy*. See Lie (1997) for an overview of this discussion.

claiming to maintain a moral position. One example is the development of organizations that certify sustainably harvested trees—that is, lumber that has been removed from forests in which the health of the forest ecosystem is maintained, including not only tree revitalization but wildlife and watershed protection. At least four third-party certifiers are active globally—two in the United States (Scientific Certification and Smart Wood), and two in the United Kingdom (SCG and Woodmark). Major retailers and manufacturers, including Home Depot and Smith and Hawken, have agreed only to trade in certified green wood.

Local currency systems are often moral exchange arenas. In the United Kingdom, Local Exchange Trading Systems (LETS), where buyers and sellers trade goods and services in local units without coins or notes and with no interest payable on debts, are reported to contribute positively to social cohesion and the redistribution of income (Williams, 1996). LETS members interested in redistribution buy from poorer groups and use positive discrimination when charging those less well off (Lang, 1994). LETS systems combine elements of a moral exchange system in their concern for social welfare, but because they favor traders within the LETS, they also have elements of the fourth type—the communal system of exchange.

Exchange arenas based on moral precepts were common in the premodern Western world, where religious values permeated all spheres of life, including the economic. Value-based ideas such as a "just" price, which considered the moral worth of the actors and the products or services, were commonplace in the Middle Ages (de Roover, 1974). The "Quaker ethic" demanded Quaker retailers sell goods to all at a fixed price, rather than haggle, which was the prevailing practice. "The Quakers' insistence on selling a particular item at the same price to all customers, regardless of their social class, was based on their religious assertion that the seed of God existed in all people" (Kent, 1983: 18–19).[10] Ethics of conviction and responsibility are not surprising in a world where religious ideas colored social action of all types, including exchange.

Morality continues to find a place in contemporary economic life, however, with prohibitions or restrictions on the sale of sex, adults as slaves, children for adoption, child labor, votes, political influence, some animals for consumption, and human biological parts—what Walzer (1983) calls *blocked exchanges*. Even where exchange is permitted, the environmental movement and other political movements that espouse values have made important inroads to limit the price-based exchange of goods in many settings, and to create support for morally circumscribed exchange.

A moral orientation can be found today in the Islamic banking community, which must accommodate the Koran's proscription against interest payments. Islamic banks provide products that do not involve investment in conventional (i.e., Western) financial services, because charging interest is seen as usury. Islamic law also bans investment in alcohol, tobacco, gambling, pornography, and pork products.

Islamic banking is a relatively recent phenomenon, with banks emerging in Saudi Arabia and the United Arab Emirates in the mid 1970s (Tran, 2002). It has expanded rapidly, with Islamic banks now estimated to serve about 1.2 billion Muslims and to manage $180 billion (BBC, 2002). Most recently, an international Islamic financial market (IIFM) was set up in Bahrain to deal with products that comply with Sharia law. A small number of Western banks have also begun offering services compliant with Islamic law, and it has been suggested that the ethical credentials of Islamic financial products may hold a wider appeal (Tran, 2002).

Communal System of Exchange

When exchange occurs between parties characterized by particularistic relations—for example, relations of kinship, ethnic ties, or common membership in a social order—the nature of that relationship may color the exchange. The substantive basis of the relationship—filial piety, consanguinity, and collegiality—will influence the terms of exchange, including whether or not the exchange takes place and the price set. Although communal and associative relations are both based on particularism—treating some

[10] A "just" price can be altered to reflect the wealth of the buyer—for example, a higher price for the wealthy—whereas a "fixed" price is given to all. Both are reflections of ethical principles. While haggling is the price-setting mechanism of auction markets today, it is interesting that fixed prices have come to dominate most retail exchange.

partners with special consideration—"the former always entail a sense of belonging together, while the latter have to do with rational agreement, typically involving interests" (Swedberg, 1998: 33).

Communal relations are those in which actors share identity in a community or have some basis for a shared bond. Communal exchange can take place between those who share a tie such as friendship, common alumni affiliation, or professional or regional identity that tends to support an "ingroup/outgroup" orientation (Schluchter, 1981; Weber, 1978)—what Ouchi (1980) and Boisot and Child (1988) refer to as *clan*. Members of the group are treated preferentially, while outsiders are less well treated or are rejected entirely as exchange partners. The bases on which exchange takes place are often dictated by the customary rules of participation and distribution established by the group. These rules or distributional bases are rooted in the substantive rationality that forms the basis for the relations between the parties (e.g., equity relations between colleagues, favorable terms for senior members of a family, loyalty to the nation).

Some contemporary religious groups attempt to maximize exchanges with fellow members, helping to bolster the economic vitality of the community. Criminal brotherhoods such as the Sicilian Mafia, Chinese Triads, and Russian Mafiyas fiercely regulate the terms and conditions of exchange and distinguish between insiders and outsiders. In Russia the Mafiya is distorting attempts to establish a price-based market (Castells, 1998), and it is establishing network links with other criminal groups.

In many instances, communal exchange is exchange in kind, or barter—for example, the exchange of personnel or professional services. In fact, the U.S. government is attempting to define as fraud the medical profession's practice of "professional courtesy" in situations where "doctors treat other doctors and their families for free, or provide discounted services by forgiving their colleagues' insurance co-payments" (Jeffrey, 1999: B4).

Communal and associative relations, while analytically distinct, are often combined in practice. If associative relations between, for example, strategic allies endure over time, affective relations will often begin to alter the instrumental bases of the initial relationship (Weber, 1978). Alternatively, communal relations such as kinship and alumni ties can be "used" as the basis for forming associative economic relations, as Biggart (1989) notes was common in direct selling.

In a similar vein, Das and Teng (2002) have recently drawn on social exchange theory to consider how alliance constellations such as R&D consortia may be controlled through the encouragement of generalized reciprocity. In their terms, alliance constellations develop a *cooperative macroculture* and social sanctions to guard against instrumental self-interest.

One of the best-documented "alternative" exchange systems is the Mondragon Co-operative Corporation (MCC), an excellent example of an exchange system built on both communal and associative foundations. MCC is the corporate umbrella for cooperative enterprises that have grown in the Basque region of northern Spain, where, according to Cooke and Morgan, "the potential of associative action is nowhere more apparent" (1998: 174).

MCC creates a central governance structure for the cooperatives, but there is a balance between central control and local initiative of independent cooperatives. All of the co-ops sign a Contract of Association, which includes a clause on intragroup relations:

> The Associated Co-operatives will respect the principle of intergroup loyalty and mutual assistance when formulating future plans concerning production, selection of personnel, the establishment of business links between co-operatives, where to place orders, and other facets of their business by which other co-operatives associated with the [credit co-operative] Caja Laboral could be made to benefit, without affecting the interest autonomy of the Co-operative itself (as quoted in Campbell, Keen, Norman, & Oakshott, 1977: 60).

While the Contract of Association requires that co-ops not compete with an existing member of the group, each is free to buy and sell its products where it chooses, and there is no obligation to source from other members of the group. MCC believes this would lead to a protectionist ethos, with higher costs and lower quality (Cooke & Morgan, 1998).

The organizational form for the regional exchange system is clearly associative but, just as clearly, is rooted in communal social relations. Those who have studied the Mondragon economic system note that it is embedded in his-

tory, geography, community identity, and Basque ethnic solidarity (Bradley & Gelb, 1983; Campbell et al., 1977; Kasmir, 1996; Thomas & Logan, 1982; Whyte & Whyte, 1988).

LOGICS OF EXCHANGE

These four systems represent qualitatively different orientations toward economic exchange using theoretical dimensions derived from research and observation about the constitution of economic action in Western and non-Western economies. Each system of exchange we extrapolated constitutes a hypothetical world peopled by different economic actors differentially motivated to trade. In each system the logic of exchange varies qualitatively, as do assumptions about those with whom one should trade, along with the norms of exchange. One would expect the structure of trading, including the presence and structure of networks, to differ dramatically in each system of exchange.

For example, in an exchange arena based on price—a market—actors assume that those they meet are driven by self-interest and that price, not social relations or private beliefs, will determine offers to buy and sell. When actors in a market do not act in this way—for example, by favoring others or exercising nonprice considerations—they breach the norms of the market. In extreme cases they may be sanctioned for collusion, insider trading, or price discrimination. The breach of this norm has been at the root of investment scandals in the United States in the early twenty-first century.

In an exchange arena based on moral precepts, parties to exchange may also be strangers. However, a substantive value, not only price, is a determining factor in the exchange of goods. Goods are traded when they meet standards for their production or use, and any additional costs for meeting those standards are borne by the exchanging parties. The price is a fair or just price, not necessarily the lowest possible price for a like good or service. In recent years a number of "fair trade" organizations have sprung up. These are either traders or certifiers (such as the Fair Trade Foundation in the United Kingdom) that guarantee that the local producers of goods or produce—for example, coffee, sugar, bananas, cotton—receive a fair amount from the subsequent sale of their wares.

In contrast to price- and morality-based exchange arenas, in associative and communal exchange systems, social relations are *expected* to play a role in trading. Actors who fail to take account of the social relations between exchange partners breach exchange system norms. The classification system suggests that appropriate trading partners in one system may be prohibited in another; insider trading is normative in business groups, strategic alliances, and family networks. *Failing* to favor friends and allies breaches norms.

Each of these systems logically results in very different structures of economic organization. In its purest type a price-driven system would lead to an auction market, where social relations had no influence on bidding and ultimate prices. In an alliance exchange system, depending on the nature of the alliances, stable bilateral or multilateral relations, including horizontal and vertical networks, would be expected to develop over time. Price competition would exist in this system, but between trading alliances, not among individual actors or firms.

Exchange systems based on moral precepts might look like an auction market with strangers entering into exchanges. However, instead of distribution being determined only by price, trading in some valued good would be determined by some measure of compliance with the ethical base of the system, regulated perhaps by self-policing or arbitrated by a third party outside the exchange. Third-party certifiers have developed in a number of industries to perform this function.

Communal exchange takes place within the bounds of the group according to shared norms, whether based on religious precepts, sworn loyalty, nationality, professional norms, or blood ties. Exchange with outsiders might take place, but only under different terms, if at all. One might anticipate that group authorities, such as elders, professional leaders, or collegial bodies, might regulate communal exchanges. The American Medical Association, for example, establishes collegial norms for relations among members who often refer cases to one another.

Clearly, the types represent not only different probable organized structures of economic action and differently motivated actors but also very different cultural worlds. Logically, the instrumental and individualistic economic culture of a price-driven system is antithetical to value-

based exchange between strategic partners in an associative exchange.

Real systems of exchange, including those we used as illustrations, as opposed to those described by our analytic construct, are mixed types. Historical examples would be expected to have elements of more than one type. For example, as we suggested, Asian business groups often combine elements of communal and associative exchange, with Japanese groups better described as having associative exchange with elements of communalism (Gerlach, 1992), and Chinese family networks having more influence from communal elements such as kinship (Hamilton, 1997). Western market societies based on a belief in the importance of price-driven exchange nonetheless impose restrictions on pollution and other environmentally damaging action and, hence, incorporate moral elements and, increasingly, alliances.

DISCUSSION AND CONCLUSION

In the systems of exchange classification we follow Layder's call for "structural or system typologies" over and above "action or behavioural typologies"—the latter concerned primarily with subjective meaning, lived experience, motivations, and attitudes. "The importance of system or structural typologies is that they concern themselves with depicting the settings and contexts of behaviour and thus provide the necessary requirements for more inclusive and powerful explanations of social life" (Layder, 1998: 74). Further, "The use of system typologies has the effect of broadening the scope of analysis by attending to wider aspects of social organization and social relations" (Layder, 1998: 75)—that is, the context in which subjectivity is experienced and enacted.

We argue here for the value of a systems of exchange classification scheme—a "thought-model which combines ideas and evidence into an analytic construct" (Martindale, 1981: 54). We intend for this scheme to provide an intellectual basis for the analysis of exchange relations; this classification neither oversimplifies by reducing all exchange to variations of a single model nor treats all systems of exchange as historically unique occurrences. As Tiryakian notes, "The methodological functions and significance of a typological classification are basically twofold: *codification* and *prediction*" (1968: 178).

In a few instances below we appropriate the observations of organization researchers to show how they fit within the typology to suggest that the classification offers a way to connect work not previously connected. We believe that this offers the possibility of generating new theoretical insights and accumulating in new ways our understandings about firms and markets, without making unrealistic assumptions about the character of exchange relations or the rationality of actors.

Conceptual Clarity

Mutual neglect by economists, theorists of economic networks, and the culture of economic organization proceeds, in part, from different questions of interest, but also from different conceptualizations of what constitutes a market. For Stigler (1968) the market is a set of conditions, while for Abolafia (1997) it is a moral community. The typology offers a useful model that draws lines around different but related forms of exchange behavior and organization, and it short circuits futile debates about what "really" constitutes a market. To further confidence in the model, we can treat each element as a hypothesis subject to confirmation, revision, or refutation.

Conceptual Complexity

Each exchange system type represents a social world with hypothesized elements that are mutually consistent and presuppose internally coherent relationships and meanings—what Max Weber referred to as *elective affinities* (Howe, 1978). While each element of a trading system can be treated as a variable, the *connections between elements* may be subject to investigation also. Therefore, the model allows research into the complementarities of market factors (Milgrom & Roberts, 1992) and the possible futility of piecemeal export of select elements into essentially different systems of exchange—for example, newly marketizing nations (Stark & Bruszt, 1998).

The types each invite us to consider the systemic nature of various economies. For example, there have been numerous arguments for the imposition of Western corporate governance standards (European Bank for Reconstruction and Development, 2002) and the eradication of "enterprise network socialism" (Bernstam &

Rabushka, 2000) in Russia. Our framework demonstrates the inherent difficulties of such thinking, since systems of exchange have historically been predicated on very different logics of action and social relations. Empirical research has regularly demonstrated the "path dependence" of such transition processes (Stark, 1996). Oberschall comments, regarding change in China, that

> in the absence of political accountability and with but shallow submission to the discipline of the market, the fixers and wheeler-dealers thrive on corruption that is forever denounced yet will not diminish until the institutions of a market economy are more fully established (1996: 1034).

More recently, research in the Republic of Tatarstan has shown the continuing dependence of former state-owned enterprises on historical ties:

> The post 1992 reform strategy was essentially designed to break up historical ties and to allow the creation of [newly] generated ones along the lines of a free-market "big bang". It appears that too much emphasis on the power of capital relations and market forces to change Russian society and economy has meant that the institutional forces that govern the economy (particularly historical ties) have been ignored (McCann, 2002: 10).

Analysis of Variance

Like all models, including econometric models, ideal types represent a basis for comparing empirical instances of a phenomenon with a baseline. When organization theorists ask how "bureaucratic" a given organization is, implicitly they are comparing it to an ideal-type bureaucracy, seeking to measure its conformity to or variance from a baseline model. The systems of exchange classification allows us to formulate measures of each of the types and then to ask such questions as "How communal or self-interested is exchange between firms with interlocking boards of directors, or in communities with elite social clubs?" (Mizruchi, 1996).

Dynamic Analysis

Ideal types crystallize hypothesized elements of empirical instances and, by their nature, are static constructs. The fourfold schema, however, can be used to hypothesize conditions under which exchange relations will move from one type to another, or to different places on a dimension. For example, Zelizer's (1985) work on the social history of life insurance for children can be restated more generally as "when the value of a material good is reframed as a moral good, it will no longer be subject to exchange based on price," or "relations between firms will move from price-based to associative relations as an industry becomes increasingly concentrated" (Pfeffer & Salancik, 1978).

It might also be possible to conjecture the causal nature of system change. For example, repeated exchanges may breed trust, and market exchange may become associative in character (Zucker, 1986). In contrast, the breakdown of the Japanese keiretsu system, an example of associative exchange, to market exchange based on price has taken place where Japanese auto firms have accepted Western capital. Toyota, which remains wholly Japanese owned, is pursuing a strategy of strengthening its traditional keiretsu relations.

It is possible to identify circumstances where dominant actors have been able to manage shifts in the nature of exchange. Dyer and Nobeoka (2000) describe how Toyota has created and managed knowledge-sharing networks, both in Japan and subsequently in the United States. They show how Toyota has created a strong network identity with rules for participation that motivate members to share valuable knowledge and prevent free-riders. Toyota contributed to its strong network ties in the United States through the promotion of norms of reciprocal knowledge sharing and consulting assistance. In particular, the emergence of trust indicates the transition from low to high embeddedness, where social relations are particularistic and exchange is regulated through norms of reciprocity.

Multilevel Analysis

The model presumes to operate at multiple units of analysis. It supports theorizing about exchange relations at the level of actors' identities, roles, meanings, and actions and at the level of institutional factors, such as structures of control and patterns of organization. For example, *new exchange arenas will draw on actors' existing stocks of resources, knowledge, and organizational experiences and will not be constructed de novo* (Westney, 1987; Romanelli, 1991). We assume in this article that both corpo-

rate and individual actors populate each exchange arena, but this can be subject to research and modification.

Comparative Analysis

The model provides a basis from which to compare two empirical instances of exchange systems and, further, to generate causal explanations for differences between cases (Ragin, 1987; Smelser, 1973). For example, *small firms with inadequate resources are more likely to engage in alliance exchange than larger firms in the same industry* (Powell, Koput, & Smith-Doerr, 1996). Or *non-Western societies without a tradition of individualism are more likely to organize exchange in associative or communal trading arenas than are Anglo-American societies* (Biggart & Guillén, 1999). Or *firms in knowledge-based industries engage in trades with more cognitive complexity than firms in materials-based industries, and therefore are more likely to engage in associative exchange* (Cohen & Fields, 1999).

Consider the lack of convergence in corporate governance. Some have argued that globalization should herald the adoption of a common set of practices, but empirical evidence suggests variety remains. These variations may be explained by examining the nature of social relations and logics of action that inform exchange in differing settings. For example, reference to associative and communal exchange systems explains findings that Japanese banks bolstered struggling firms with which they had close ties during times of financial difficulty (Morck & Nakamura, 1999). More recently, Khanna, Rogan, and Palepu (2002) reported some evidence of de jure convergence, although not to U.S. standards, but virtually no evidence of de facto similarity in corporate governance. These authors conclude that either differences in national systems result in appropriately different governance structures or that globalization effects are not strong enough to overcome local effects.

Our system typology also provides a framework for interpreting the impact of competing logics of action. In an interesting recent study, Gedajlovic and Shapiro (2002) considered the impact of economic and social influences on firm performance in Japan. They show that firm profitability in Japan is influenced both by economic incentives (as per the agency theory of economics) and social context (the redistribution effects of Japanese business relationships). Their findings show that in Japan the redistribution effects are stronger than agency effects, with poorly performing firms benefiting from the transfer of financial resources from more profitable firms. Their research supports others' findings (Lincoln, Gerlach, & Ahmadjian, 1996; Morck & Nakamura, 1999) that Japanese firms support other firms with which they have strong ties, but it goes further in indicating that "traditional norms of mutual assistance (Dore, 1983) and risk reduction (Nakatani, 1984) extend beyond formal networks to Japan's broader enterprise system" (Gedajlovic & Shapiro, 2002: 573). This reflects the importance of engaging with different *systems* of exchange in exploring economic organization and performance.

We believe there are at least two ways in which this typology might address contemporary concerns with market organization and dynamics. First, it offers a way out of debates over what "really" constitutes a market and rationality. Rather than assume that economists are "right" that markets are composed of autonomous and price-seeking actors (Stigler, 1968), or that it is "obvious" that durable exchange settings constitute a social world where norms of participation shape price (Smith, 1989), or that markets are best described as networks (Baker, 1984), the typology would lead us to ask the following: Under what conditions do each of these assumptions hold? In which cases does substantive rationality, not just instrumental rationality, influence economic action? Each of these perspectives has valuable insights, but none, by itself, helps us to understand the variety of exchange settings and their differing logics.

Second, the typology gives us a theoretical entrée into some of the most interesting social and economic issues of the day. For example, debates within the International Monetary Fund about the restructuring of Asian economies were very much about the correctness of a market system versus the associative and communal systems in place. The difficulty of marketizing health care systems in the United States is, in important ways, a reflection of the reluctance of physicians to move from an associative moral system, where professionals control care according to nonprice standards, to a price-driven setting. The recent scandals surrounding accounting standards demonstrate the challenge

of regulating a corporate America that has been encouraged to consider itself as operating in a price system based on individual gain, self-interest, and self-regulation.

Classification and the analysis of types provide a useful starting point for developing conceptual schemas, propositions, theories, and insights about the relationship of social structure and economic action. The classification into types does not in itself suggest the conditions under which each of these systems might emerge, but opens this line of questioning. It does, however, lead us to see that economists, structuralists, and social constructionists all have a contribution to make in understanding exchange relations and economic organization, and that they might all be right.

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