Changes in the Theory of Interorganizational Relations in Marketing: Toward a Network Paradigm

Ravi S. Achrol
The George Washington University

The marketing environment in the 21st century promises to be knowledge rich and very turbulent. The classic, vertically integrated, multidivisional organization, so successful in the 20th century, is unlikely to survive in such an environment. The evidence indicates it will be replaced by new forms of network organization consisting of large numbers of functionally specialized firms tied together in cooperative exchange relationships. This article explores the characteristics of four types of network organization that may represent prototypes of the dominant organizations of the next century. These include the internal market network, the vertical market network, the intermarket network, and the opportunity network. The economic rationale and the types of coordination and control mechanisms driving network organizations are very distinct from those studied under the current exchange or dyadic paradigm. This article analyses the kinds of changes involved in key variables and their meanings in moving from a dyadic view of exchange to a network view.

It is an honor to have been asked to write the inaugural article in the "Marketing in the 21st Century" series, an exciting innovation David Cravens has created for the *Journal of the Academy of Marketing Science*. It is an honor I doubt I deserve, and it certainly made me no more sanguine to learn that my feeble efforts to gaze into the future would receive the scrutiny of commentaries by such renowned scholars as Charles Snow and Orville Walker, Jr. The reassuring thought is that their vision will compensate for my prognostic inadequacies.

In the risky business of futuristics, it is safest to start with what we already know. In the accompanying article, Charles Snow, one of the pioneers in studying network organizational concepts, describes this era as the age of the network. In marketing, the term most often used in describing the emerging environment is *relationship marketing* (the special issue of the *Journal of the Academy of Marketing Science*, Fall 1995, on the subject is surely destined to become a classic). A key premise of this article is that there is a fundamental, even inalienable, nexus between network and relationship concepts and processes. I would go as far as saying one cannot exist over a significant period of time without the other. Let us briefly consider the genesis of the two.

Networks have risen to prominence due to industrial restructuring. Large-scale downsizing, vertical disaggregation and outsourcing, and elimination of layers of management have gutted the mighty multidivisional organizations of the 20th century. Replacing them are leaner, more flexible firms focused on a core technology and process, laced in a network of strategic alliances and partnerships with suppliers, distributors, and competitors. The magnitude of the socioeconomic change that network organization portends may be as great as the Industrial

Journal of the Academy of Marketing Science.
Volume 25, No. 1, pages 56-71.

Revolution. The Industrial Revolution was wrought with the technologies and principles of the large-scale division of labor. The current revolution is a giant step forward from principles of specialization and large-scale division of labor to specialization and division of *business functions* (Achrol 1991).

Networks were born amid market turbulence, but so was relationship marketing. Faced with an increasingly dynamic and uncertain customer environment, firms quickly realized that customer retention was more critical and less costly than customer creation. Although questions remain about what exactly relationship marketing is (e.g., Bagozzi 1995; Peterson 1995; Sheth and Parvatiyar 1995; Weitz and Jap 1995), the term does capture a key shift in the value systems and philosophical orientation characterizing the new marketing theories. Relationship marketing emphasizes that customer satisfaction is a necessary but not sufficient goal of marketing activity; rather, the goal should be to develop a lasting relationship based on a structure of long-term benefits and mutual affinity between buyer and seller. In the process, we have come to highlight a new repertoire of variables and processes such as trust, commitment, social norms, and so on—exactly the same set of variables characterizing network relationships.

However, relationship theory is essentially a dyadic theory (Dwyer, Schurr, and Oh 1987; Peterson 1995) and could fit quite comfortably into the current exchange paradigm in marketing. It is important to recognize that although relational exchange is a very personal relationship, the long-term character of the relationship is defined and shaped by a larger institutional framework than the dyadic relationship itself. Dyadic exchange implies that planning, adaptations, and dispute resolution are accomplished through bargaining and negotiation. But the process of bargaining and negotiation is at least minimally adversarial and not always conducive to developing relational norms. Over a period of time, there are inevitable situations where trust and goodwill are endangered in bilateral negotiations.

For relationships to work over the long term, they must be embedded in a network of relationships that collectively define and administer the norms by which dyadic relationships are conducted. Macneil (1978) observes that the more relational an exchange becomes, the more it takes on the properties of "a minisociety with a vast array of norms beyond those centered on the exchange and its immediate processes."

Contributions to network theory in marketing are increasing in the literature (e.g., Achrol 1991; Achrol, Reve, and Stern 1983; Anderson, Hakansson, and Johanson 1994; Gadde and Mattson 1987; Hakansson and Snehota 1995; Iacobucci and Hopkins 1992; Webster 1992). If the theoretical and methodological devices of network analysis are going to advance our understanding of this new and complex marketing environment in truly meaningful ways, it is important to take stock of what exactly we mean by networks and how the concepts of relationship marketing as applied to networks differ from the concepts applied to conventional exchange theory in a dyadic context. Obvious overlaps in semantics can easily carry over into content if we are not conscientious about the differences in transition from dyadic to network thinking. In that event, a large part of the discipline's potential to contribute in this promising field of research will succumb to the old-wine-in-new-bottle syndrome, and network theory will become, as Nohria (1992) puts it, "another tired metaphor" (p. 3).

This article will seek to accomplish the following. It will make a brief analysis of the forces driving environmental change in the business world. The goal is to establish why network forms are likely to be a dominant organizational concept in the coming decades. This article then focuses on identifying the different forms of network organization that can be distinguished on conceptual and practical criteria. Finally, this article examines the sociopolitical variables and processes that distinguish network from dyadic exchange.

EVOLUTION OF THE NETWORK ORGANIZATION

Schotter (1981) argues that to understand any economic institution, we must infer the evolutionary problem that must have existed for the institution to have developed: "Every evolutionary economic problem requires a social institution to solve it" (p. 2). Consequently, it may be useful to briefly review a few historical events, even at the risk of some redundancy.

Following the Industrial Revolution, three forms of business organization had emerged as the dominant type in their time (Chandler 1962, 1977). The vertically integrated *functional* organization was the dominant organizational form in the late 19th and early 20th centuries, when the most successful firms were high-volume, standardized, low-cost, production-oriented businesses. The classic example is Ford and the Model T. The market environment of the time was relatively stable, and markets were characterized by low purchasing power and simple preferences. Following World War I and the example set by Alfred Sloan at General Motors, the *multidivisional* form of organization began to replace the functional form. The multidivisional form allowed organizations to be more market and product oriented and was much better suited to an affluent market characterized by a variety of tastes and preferences. But as market preferences and product technologies became even more complex and subject to frequent change, the multidivisional form began to show weaknesses in cross-functional coordination. In the 1960s and 1970s, the *matrix* form of organization, with its emphasis on lateral relationships and dual lines of responsibility and authority, became the vogue in organization design. Typically, the effort was to align more closely the marketing groups with the scientific and engineering functions. Classic examples of matrix structures were TRW and Matsushita.

In the 1980s, attention began to focus on a "new" organizational form—the *network* organization (Powell 1990). With the rise of Japanese global enterprise, it became increasingly apparent that many of their success factors were external to the firm—that is, *transorganizational* in nature. If network organizations are going to proliferate and become the dominant type on the emerging economic landscape, they must exhibit unique features that are particularly well adapted to the new environmental exigencies.

Environments are being disturbed by an increasing pace of technological change, fueled by an explosion in the growth and availability of knowledge. The proliferation of technological and managerial know-how is dismantling economic and political boundaries and slowly but surely moving the world toward a borderless marketplace. The impact of technological change is intensified in global environments that are densely interconnected and interdependent.

The conventional organizational wisdom for dealing with external uncertainty is buffering via vertical integration (Pfeffer and Salancik 1978, p. 115; Thompson 1967; Williamson 1975). However, vertical integration in dynamic environments suffers from critical inefficiencies due to suboptimization. In dynamic environments, organizational efficiency is defined in terms of a firm's speed and agility in processing information—from detection of market signals to transformation into delivered satisfactions. Hence any advantages of vertical control are eroded by the costs of attendant inflexibility and inertia.

Not only do hierarchy and buffering mechanisms create unacceptable levels of organizational inertia for turbulent environments, but they are likely to prove hopelessly inadequate in the knowledge-rich environments of the future. In postindustrial society, knowledge and information are replacing capital and energy as the primary wealth-creating assets (Bell 1973). However, the fund of knowledge available to society and the flow of day-to-day information resulting from vastly more efficient data collection and dissemination technologies are growing at a geometrically accelerating pace.

Society and organizations deal with more and more knowledge by more task specialization. One solution is to create specialized subunits for environmental scanning and data management. These subunits selectively interface line functions with the technology and databases—in effect, serving to buffer the organization from information overload (Huber 1984). Organizationally, more specialization means more coordinating problems and tends to result in more levels of structure and hierarchy.

The matrix form of organization has been unable to resolve the coordination problems posed by today's environments. Theorists have suggested other solutions, but they present serious practical difficulties. Duncan (1976) points to the basic contradiction in organizational structures best suited to innovation versus efficient implementation. He suggests that organizations transform their structure from an organic one during the innovation phase to a mechanistic one for implementation. Unfortunately, successful structures create powerful inertia (Hannan and Freeman 1984), and change is seldom possible without a motivating crisis or cathartic interventions (e.g., via takeovers).

Hedberg, Nystrom, and Starbuck (1976) advance the concept of the *experimenting* or self-designing organization, characterized by almost continuous change in its structure, processes, domains, and goals. Such an organization is likely to be highly flexible, maximizing its adaptability to environmental contingencies. But there is a basic dilemma in choosing between the degree of a firm's adaptation to its environment and its adaptability. Weick (1977) argues that adaptation precludes adaptability, and organizations that maximize current good fit sacrifice resources that would enable them to adapt to different situations in the future, and vice versa.

Another concept proposed is that of the *collateral organization* (Huber 1984; Zand 1974). A collateral organization is a supplemental organization, such as a task force designing a major innovation, whose members also participate in the regular organization. Huber proposes that the experimenting organization will in fact be the main organization in the future, and the collateral one will be responsible for implementing its solutions. Huber acknowledges it is uncertain how well members will cope with their divergent roles.

The history of organization suggests that dual lines of responsibility (e.g., in matrix organizations), the interface between functional areas (e.g., between R&D and production), or the mixture of two organizational cultures (e.g., in a merger or joint venture) cannot be accomplished without wasteful friction, suboptimization, and inertia. Over the long run, the inherent conflicts become dysfunctional, or the dual identities are simply absorbed into one. More and more it appears that the solution for maximizing the business functions that call for unique organizational structures, unique operating environments, or unique people cultures is to disaggregate the firm into its various entities. Functions typically encompassed within a single organization, such as product design and development, manufacturing, and distribution, will be performed in independent organizations brought together and held in temporary alignment by a variety of market and interorganizational mechanisms (Miles and Snow 1984).

Firms closer to product technology are better positioned to develop technological solutions to problems. Firms closer to process technology are better positioned to provide the most efficient manufacturing. With computer-integrated manufacturing, it no longer requires large production runs to manufacture cost efficiently. Firms closer to the customer are better positioned to understand customer problems and viable solutions. Marketing firms will become integrators in the future rather than inventors or producers of technologies.

Drucker (1988) envisages the typical business 20 years hence as far more likely to resemble a hospital, a university, or a symphony orchestra—organizations that neither managers nor scholars pay much attention to today: "Like them, the typical business will be knowledge based, an organization composed largely of specialists who direct and discipline their own performance through organized feedback from colleagues, customers, and headquarters."

It is increasingly apparent that the giant, vertically integrated, multidivisional firm, so successful in the 20th century, is likely to be the dinosaur of the 21st century. Replacing it are smaller, more focused, vertically disaggregated firms. The vertically disaggregated network firm is able to generate the highest levels of performance in its individual functional units while maintaining maximum flexibility for the system as a whole. The individual units are organized to maximize their fit with their own *knowledge environments*, environments that pose special knowledge processing pressures of their own.

Are all network relationships the same, or are there identifiable patterns of organization emerging that distinguish one type of network from another? How can network organizations be classified, what are their salient features, and what is their core economic rationale? The next section attempts to answer some of these questions.

DEFINING NETWORK ORGANIZATIONS

The term *network* is used to describe a very wide variety of phenomena, ranging from national economic systems, such as Japan's regional industrial clusters (e.g., Silicon Valley and the computer electronics industry) and multinational corporations, on the one hand, to small entrepreneurial firms, service organizations, professional and career networks, electronic data and communication systems, and social networks (e.g., dating services), on the other. The popularity in usage is of course a mixed blessing: it makes the subject matter worthy of greater scholarly attention but encourages conceptual ambiguity and the risk of premature obsolescence due to overuse.

Unfortunately, like every boundary definition problem in the social sciences, there are no easy solutions to the definition problem. All organizations are internal networks, and all organizations participate in external exchange networks. Every organization embodies an internal network of authority, functions, communications, and exchanges. Every organization must exchange with a network of external actors to acquire resources and legitimacy necessary for survival and growth. Then what differentiates a network organization from a network of organizations or relationships?

The position adopted in this article argues that the mere presence of a network of ties is not a distinguishing feature of the network organization (Baker 1992, p. 399). Rather, the quality of the relationships and the shared values that govern them differentiate and define the boundaries of the network organization. The relationships are characterized by nonhierarchical, long-term commitments; multiple roles and responsibilities; mutuality; and affiliational sentiments (Gerlach 1992, p. 4). Thus a network organization can be defined as follows: a *network organization* is distinguished from a simple network of exchange linkages by the density, multiplexity, and reciprocity of ties and a shared value system defining *membership* roles and responsibilities.

This definition is broad enough to encompass a variety of organizational forms. In fact, at least four types of organizational networks demonstrating such dense ties and affiliational cultures can be distinguished on theoretical and practical grounds. These include internal market networks, vertical market networks, intermarket networks, and opportunity networks. Although each is a distinguishable form of structure and likely to find an environmental niche or industry where it is more adapted than the others, and although there is no evolutionary path along which the forms have evolved, there is at least some basis to argue that the four are arranged along a continuum of sorts, with progressively "purer" network forms being represented as we go from internal- to vertical- to intermarket- to opportunity-type structures.

Internal Market Networks

In 1965, Jay Forrester wrote an article called "A New Corporate Design," in which he envisaged a new organization designed around replacing the superior-subordinate relationship with more constitutional and democratic forms of control, where there are no internal monopolies, there is complete freedom of task association, each team or even an individual is a profit center, compensation is strictly performance based, and everyone is linked together by an electronic data-processing system with freedom of access to information. These are startling concepts for the '60s. For many, they are startling concepts for the '90s. Nonetheless, in a growing number of companies, they represent the basis of a radical transformation of organizational design and structure into what has been variously called a "circular organization" (Ackoff 1989), an "open corporation" (Wagner 1991), an "internal network" (Miles and Snow 1993; Snow, Miles, and Coleman 1992) and an "internal market" (Ackoff 1993; Halal, Geranmayeh, and Pourdehnad 1993). We adopt the term *internal market network* and define it as a firm organized into internal enterprise units that operate as independent profit centers buying from, selling to, or investing in other internal and external units as best serves their needs and on market-determined terms of trade, but subject to firm policy.

The key idea in an internal market network is to eliminate hierarchical relationships within the boundaries of the conventional "firm" as far as possible, replacing them with direct exchange networks among organizational units mediated by some type of marketlike processes. To achieve this, all organizational units, reduced to their smallest common denominator, are organized as profit centers. This concept includes all line and staff units, even the office of the chief executive, but might exclude units that produce proprietary products and technology. Profit centers have the freedom to buy any product or service they need from any internal or external source they choose, but they also have to compete to sell their own outputs in markets both internal and external to the firm. Of course, there will be situations in which internal units are constrained from buying or selling externally in the larger interest of the organization, but such units are compensated by the executive office for the loss of revenue or profit they suffer as a consequence (Ackoff 1993).

The internal market network is not a laissez-faire marketplace but an alliance among intrapreneurs. Key to its effectiveness is a collaborative culture in which technologies, skills, and individuals can move freely among units and be organized rapidly around problems and solutions.

Consequently, the entire atmosphere within the firm linking its parts together must reflect a marketing environment. Internal units are customers of another unit's outputs exactly as external customers are, and each unit in turn is a marketer of its services just as external suppliers are. The internal market network is a system of reciprocal customer relationships that often would be illegal if organized across a market interface.

Most of the current internal network applications have tended to employ rather aggregate functions and divisions as profit centers. General Motors has reorganized its rigid and inefficient component manufacturing units into eight internal market units. Each is expected to be an expert in an area related to an automotive system and be able to sell its products on the open market. Thus AC-Rochester not only supplies various GM divisions, but it also sells to Mitsubishi in Japan, Daewoo in Korea, and Opel in Europe (Snow et al. 1992). In contrast, Asea Brown Boveri, one of the foremost practitioners of internal network principles at the global level, employs a far greater degree of decentralization. Its 50 or so worldwide businesses are divided into 1,200 companies, which are divided into 4,500 profit centers with an average of 50 employees (Taylor 1991).

As internal market organizations evolve, a fundamental dilemma they will be confronted with is the rationale for continuing to retain a particular unit under corporate ownership. In other words, if a firm's internal units are so successful both internally and externally that they have become viable, independent entities, what justification is there for not spinning them off at market value? As Halal et al. (1993) put it, "How do these 'collections of small enterprises' differ from an ordinary market economy? Why should they remain together at all? In short, what truly is a corporation?" (p. 3).

Ackoff (1993) attacks the question bluntly: "The only justification for a corporation that consists of units operating as business units, is the value that the *corporation adds to them*" (emphasis added). In this sense, internal network organizations must conceive of their boundaries and competitive advantage. In today's market environment, a major resource the corporation adds to a unit is knowledge, skill, and expertise. Information and knowledge are replacing capital and energy as the primary wealth-creating assets (Bell 1973). Walter Wriston asserted that the value of Citicorp's information was greater than the value of its capital assets (Haeckel 1990). To the extent corporate ownership permits the ready movement of skills and knowledge across unit boundaries (without raising the bogey of leakage of proprietary secrets), the internal market network allows for the rapid organization of skills and personnel around particular problem areas and applications.

When a corporation feels that a particular knowledge area is no longer critical to its competitive strategy or that it can no longer maintain an edge in a knowledge area because of available personnel or a change in technology, there is likely to be little justification in retaining that unit under corporate ownership. Indeed, with the accelerating pace of growth in knowledge and new technologies, maintaining a knowledge advantage within a corporate hierarchy is becoming increasingly difficult. Corporations organized around the internal market network concept must be able to do a better job of maintaining their knowledge assets, failing which they will find themselves evolving into vertical market networks as they spin off more and more of their units.

Vertical Market Networks (Marketing Channel Networks)

The traditional view of a vertical market network corresponds to the industry-specific "channel" of suppliers and distributors organized vertically around the classic manufacturing firm. Many authors still conceive of networks primarily in this sense (Snow et al. 1992). However, increasingly, at the heart of the vertical network is a focal organization that performs very few manufacturing functions and is often referred to as an "integrator"—that is, the firm that organizes the network and coordinates all upstream supplier firms and downstream distributor firms. Early forms include the so-called hollow corporations: Casio, Nike, Liz Claiborne, Galoob Toys, Emerson Radio, and Schwinn Bicycles. Often, the integrator is a firm specializing in the marketing function, and the alliance firms are highly specialized resource centers in some aspect of product or production technology related to an industry. But in technologically driven industries, an integrator may well be a technology specialist. Sun Microsystems has subcontracted chip manufacturing, distribution, and service functions to focus its energies on designing advanced computers (Halal 1993).

Theoretically, the organizing hub of the network will be located at the functional level representing the critical contingencies faced by a given market. A vertical market network is the *organization set* (Aldrich and Whetten 1981) comprising the vertical exchange relations of a *focal organization*, be it a manufacturing firm, a marketing firm, a technology firm, or a reseller firm. Thus a vertical market network can be defined as the *organization set* of direct supply or distribution relationships organized around a focal organization best positioned to monitor and cope with the critical contingencies faced by the network participants in a particular market.

The vertical market network is not a strategic alliance; it is a functional alliance. Its product-market position is based on the unique efficiencies and flexibility derived from a quasi-organizational division of function among alliance partners. The whole purpose of "functional outsourcing" is served only if product and production criteria are enhanced to specialist levels of performance. Like the downstream focal partner is a true marketing specialist, with its primary response function tied to movements in the consumer markets, the upstream partners are true product and production specialists, with primary response functions tied to their respective technologies.

Many firms specializing in product technology, engineering, or manufacturing have emerged. Possibly the best-known firm specializing in advanced genetic engineering research is Genentech. To produce and market its products, Genentech has forged a network of strategic alliances with firms such as Corning. Likewise, Alza is a small, entrepreneurial R&D firm specializing in developing advanced drug delivery systems and has linked up with firms such as Ciga-Geigy for production and marketing (Doz 1988). But many manufacturing relationships are very complicated ones involving customers and their competitors, relationships that would have been unthinkable just a couple decades ago. Altera and Weitek are small Silicon Valley technology firms specializing in designing state of the art programmable logic devices and math-intensive chips, respectively. Neither has any chip production facilities of its own. Texas Instruments and Cypress do Altera's manufacturing. Likewise, Weitek uses a number of domestic and Japanese manufacturers for its chips, one of which is Hewlett-Packard (HP). But the manufacturing agreement permits Weitek to sell the chips manufactured by HP to other customers, including competitors of HP (see Case 1990).

Although dealing with multiple customers enhances the stability and knowledge base of the system, it also makes it more difficult for the system to retain the properties of a network organization, that is, the dense ties and open relationships that shape the relational norms and make the system work as a superorganization. In other words, there is a limit to how far one can go in creating a network bound together by its mutual interests and interdependencies and at the same time spread the risks and dependencies of its members among a variety of sources. Clearly, this is the internal contradiction of the vertical market network and determines the trade-off between how much flexibility is designed into the system versus how close the system norms and cohesiveness are to be.

One solution to this network paradox is provided by the Japanese-style intermarket networks or *keiretsu*. Such a system creates financial, managerial, and marketing interdependencies among its member firms but retain some element of flexibility for its members by incorporating a wide variety of potential customer organizations operating in many different industries, among whom participants can spread their dependencies.

Intermarket or Concentric Networks

The intermarket network is largely a phenomenon of the Japanese and Korean economies—that is, the well-known *keiretsu* and *chaebol* "enterprise groups" representing alliances among firms operating in a variety of unrelated industries. Although by no means a single type of structure, the typical enterprise group is organized around one or more major financial institutions in the financial market, a general trading company (*sogo shosha*) in the primary goods market, and manufacturing firms from a wide cross-section of industry. An intermarket network is defined as institutionalized affiliations among firms operating in different industries and the firms linked in vertical exchange relationships with them, characterized by dense interconnections in resource sharing, strategic decision making, culture and identity, and periodic patterns of collective action (Gerlach 1992, p. 3).

The financial firms, which tend to include a commercial bank, insurance company, and other financial institutions, represent the chief sources of stable, long-term debt and equity capital for other member companies. The trading companies handle all kinds of domestic and international transactions for the members, including supplying and marketing raw materials and finished goods, handling negotiations, extending trade credit, hedging exchange risks, and integrating complex projects (Gerlach 1992, p. 21). These trading companies are increasingly also functioning as marketing arms of the network. Finally, there are the numerous manufacturing companies in virtually all important industries, ranging from heavy industry to light consumer goods. The manufacturing affiliates have large vertical clusters of subcontractors, distributors, and satellite companies, and they are often involved in technology alliances with competitors. Toshiba, for example, has about 200 companies in a direct exchange relationship with it and another 600 "grandchild companies" below them (Gerlach 1992).

The glue that binds the entire network together is an elaborate pattern of interdependence and reciprocity. The amount of equity that a commercial bank holds in a member company is directly proportional to the loan, fee, and other business it does with the member. The manufacturing companies also maintain equity cross-holdings in the banks and place their own and employee deposits or accounts with them. Likewise, manufacturing companies buy raw materials from the trading company in direct proportion to the amount of finished goods the trading company sells.

Over and above the patterns of resource sharing, strategic decision making, and periodic collective action, a key characteristic of the intermarket network is its dense interconnections of culture and identity. At the heart of its social structure is a layered system of intercorporate executive councils, interlocking boards of directors, and exchange of personnel that serve as means and a forum for managers at different levels to interact. The important feature of the boards and councils of Japanese *keiretsu* is that they function less as formal mechanisms of control over individual companies and more as an informal fora for sharing ideas and exchanging information. As one Japanese executive noted, "Not that much is discussed at the board meeting. It is after the meeting that we talk about various things" (Gerlach 1992, p. 133).

If the *keiretsu* networks were slow to evolve in a particular area, it was in relation to the role and reorganization of its *sogo shosha*. Traditionally, the trading companies concentrated on undifferentiated products and were oriented to suppliers rather than consumers. But as world markets became more complex and dynamic, and as *keiretsu* companies turned more and more to technology and product leadership strategies in the marketplace, the *sogo shosha* should have transformed into marketing companies for the network, and they, rather than the financial companies, should have emerged as the focal hub of the network. As an executive of Sumitomo Corporation observed:

Ultimately, the sogo shosha should become a sort of multinational corporation with its subsidiaries and affiliates operating in widely diversified industries throughout the world. It should play the role of a satellite: gathering, relaying and transmitting necessary information on economic and human activities, as well as money, goods and resources." (Gerlach 1992, p. 141)

The concept of such a network organized around and coordinated by a marketing epicenter is significantly different in concept, orientation, and structure from the intermarket network and may be described as an opportunity network.

Opportunity Networks

The concept of an opportunity network corresponds more or less to Emerson's (1972) concept of an "opportunity structure." It represents a form of association much closer to a market than to a hierarchy. Indeed, it is similar in concept to the venerable market mechanisms of modern economies, the stock and commodity exchanges. Opportunity networks are in the early stages of evolution, and present-day examples have to be seen in this light. Early forms of the opportunity network have been discussed by Miles and Snow (1993), who describe the form as a "dynamic network," and Achrol (1991), who refers to it as a "marketing exchange company." The opportunity network is defined as a set of firms specializing in various products, technologies, or services that assemble, disassemble, and reassemble in temporary alignments around particular projects or problems. The firms are organized around a central information and exchange company that serves as a marketing arm, brokerage, and clearinghouse and regulates network behaviors.

At the heart of an opportunity network is a marketing organization specializing in collecting and disseminating market information, negotiating, coordinating projects for customers and suppliers, and regulating product standards and exchange behaviors for the network of participating companies. Its environmental scanning and adaptive mechanisms are oriented to and driven by consumers and markets. The quality of its market information network represents its primary source of coordinating power.

The strategic core of the company is a worldwide network of marketing offices and information centers connected together by satellite and a computerized information system. The marketing offices operate like semi-autonomous brokerage firms dealing among themselves like a computerized stock exchange. At one end, consumer needs and inquiries, market intelligence, and economic trends are monitored and fed into the system. The information is instantly processed by expert software and relayed to all relevant or potential users. At the other end of the system, the marketing company is hooked into a worldwide directory of suppliers of products with all relevant information on product specification, custom design possibilities, prices, existing inventory and locations, production time, terms of trade, and so on. Existing and potential matches between customer needs and suppliers are sorted by system software and instantly relayed to marketing offices to negotiate into transactions. The negotiations could be conducted in a matter of hours by linking together online, customer, network marketing offices, staff specialists (e.g., financial or design staff), and suppliers of products or technology. The transaction can be completed and simultaneously spliced into the supplier's or the network company's distribution and delivery systems.

Such types of global opportunity networks have yet to evolve. However, two types of prototype organizations appear to be evolving toward this form of network. One is the collection of direct marketing companies that use various media such as dedicated TV channels, the Internet, and 800 number phone lines to market a wide variety of consumer products and novelties. But the closest to the concept of a global information company today is probably the Japanese-type general trading company or *sogo shosha.*

Opportunity networks will continue to evolve with the concept of electronic markets (Malone, Yates, and Benjamin 1989). Electronic marketing systems evolved from the single-source sales channels set up by companies such as Baxter-Travenol Hospital Supply, McKesson, Inland Steel, and Digital Equipment Corporation. However, the trend is firmly away from single-source to industry-wide channels. United Airlines was forced to open up its single-source flight-booking system Apollo when American Airlines introduced Sabre, which lists flights from other airlines. For some companies, market making is their principal business—for example, Inventory Locator Service in aircraft parts, MEMA/Transnet in auto parts, TELCOT in cotton, and so on (see Malone et al. 1989). Similar systems linked directly to ultimate consumers also have developed (e.g., Citibank's Comp-U-Card and Comp-U-Store networks).

The definitions and descriptions developed in this article can serve as a general framework for understanding the types of organizational innovations emerging in the business world and where they might be headed. Important questions about the economic rationale and strategic weaknesses of network organizations are beyond the scope of this article. Here, I focus on tracing the path between current interorganizational concepts and emerging network forms. Toward this end, I look next at the kinds of variables that are likely to be salient in understanding network organizations and how their meanings differ, often in subtle ways, from the meanings ascribed to them under the dyadic or exchange paradigm.

THE POLITICAL ECONOMY OF NETWORKS

The political economy framework, as developed by Benson (1975), was specifically aimed at explaining network-level phenomena. It was applied to dyadic analysis in marketing with the assumption that more complex relationships can be modeled as a sequence or system of dyadic exchanges (Achrol et al. 1983; Bagozzi 1978; Stern and Reve 1980). There is an increasing sense that the network of relationships in which particular exchanges are embedded have properties that are greater than the sum of its parts and outcomes that cannot be explained by studying its parts alone. Granovetter (1992, p. 33) distinguishes between the relational or dyadic level of "embeddedness" and the structural or network level, cautioning that it is important to keep the distinction in mind because structural analysis can easily slip into dyadic reductionism (Anderson et al. 1994). He levels this criticism: "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*" (Granovetter 1992, p. 34).

In the following sections, I examine how certain variables are highlighted by the network perspective while others fade into the background and how the network perspective imposes substantive and subtle distinctions in the meaning ascribed to the salient variables, as contrasted with the dyadic perspective. For the purposes of discussion, I will use the conventional vertical marketing channel as the reference network. First, I examine certain prominent concepts in the political economy tradition, such as power and dependence, and in the following section examine certain newer concepts that are essential to network systems, including trust and the so-called social norms of governance.

Power in Networks

Two important lessons about the nature and use of interorganizational power emerge from a network view of organization. The first deals with the kinds of power that are compatible with network relationships, and the second deals with the manner in which power is exercised.

In the dyadic-exchange paradigm, power-dependence is viewed as an interfirm organizing mechanism, as the means by which control and coordination are extended beyond firm boundaries to maximize the efficiency and effectiveness of interorganizational exchange systems (Stern and El-Ansary 1992). The power to coordinate is the prerogative of dominant firms over dependent firms: whether it is employed to maximize system outputs or opportunistically, in the exchange tradition, the power-dependence relationship is basically a manipulative one.

Marketing channel leaders have long used various reward and coercive powers (offering or withholding favorable location, delivery, payments, marketing allowances, and discounts) and legitimate authority (contractual or market power based) to cajole and coerce cooperation among channel members. But these kinds of power bases are not conducive to the evolution of a network organization. Indeed, restraint in the use of power by one exchange party over another is one of the social norms of governance (Kaufmann and Dant 1992; Macneil 1981). Macneil (1981) observes that the more relational an exchange becomes, the less likely the parties will exercise legitimate or coercive power. Cook and Emerson (1978) found some evidence that power use varies inversely with commitment (a key element of social norms) in exchange networks.

The kinds of power that are compatible with network relations have less to do with authority and traditional carrot-and-stick approaches to coordination. The kinds of power consistent with interorganizational influence in networks build social bonds and close relationships, that is, expert, reputational, and referent types of power.

It is well known, however, that expert power once expended is often lost. For example, having done the groundwork in establishing a new franchisee firm and training its personnel and management, the expertise is transferred to the subject. It has been observed that once franchisees become more experienced, they attribute their success to their own efforts rather than to the efforts of the franchiser (Knight 1986). Hence expertise is something that has to be constantly regenerated, promoted, and communicated. It calls for an ongoing program of innovation, training, and communication, in which channel members participate on a regular basis and through which system innovations and efficiencies are recognized. The effective management of "expertise" calls for a continuous program of comparative marketing research in which competitive gains, market positioning, effect of innovations, and customer satisfaction measures are systematically monitored and the results shared with and publicized among network members.

Likewise, reputational and referent power are often elusive qualities to capture. What is it that makes people identify and relate strongly with one organization and not another? Organizational identification is the degree to which a member's self-concept contains the same attributes he or she believes define what is distinctive, central, and enduring about the organization (Albert and Whetten 1985; Dutton, Dukerich, and Harquail 1994). Members feel proud to be identified with organizations that are seen in a positive light by outsiders and believed to possess socially valued attributes (Cialdini et al. 1976). In this direction, channel leaders attempt to establish distinctive images as innovation, customer service, or market share leaders. They also pursue social and public images, such as through environment-friendly or multicultural images and minority development programs.

Although valuable, such programs are limited in their durability. Competitive ups and downs make it difficult to maintain an infallible image in any area of operations—witness the fluctuating fortunes of IBM, Sears, General Motors, General Electric, and so on. Social images are likely to have marginal effects when all competitors pursue some form of favorable market or public image. Any given set of organizational attributes is unlikely to conform with the values and self-concepts of all its members.

From the perspective of network organizations, what appears to be the powerful source of network reputation and member identification is a sense of family, belonging, and security that the network has been able to cultivate among its members. For example, the concept of lifetime employment is a crucial element in the commitment and social culture of Japanese organizations. Likewise, the stability of relationships and solidarity among member firms of the *keiretsu* is a critical element of their reputational power. In times of crisis, member firms can expect assistance in the form of finances, management, technology, sales orders, deferred payments, or whatever else it takes to turn the firm around.

Another important element in the development of strong reputational cultures is the feeling of belongingness. Members feel and believe they are equal partners in determining the future and fortunes of the network. Firms in Japanese *keiretsu* are linked through a variety of intercorporate executive councils that serve as fora not for exercising hierarchical control but for interaction and socialization among managers from different levels of the companies involved (Gerlach 1992, p. 104). The much-publicized Presidents' Council of the Japanese *keiretsu* "is less a command center to determine the policies and practices of individual companies than a forum for discussion of matters of mutual concern. . . . The atmosphere is one of camaraderie rather than a formal meeting with a defined agenda" (Gerlach 1992, p. 107). This highlights the second important lesson about power in networks, that is, how power is employed. The kind of question likely to be important in networks is not where power resides but how it is kept in check and balance.

Power is an essential characteristic of a social organization and an inevitable instrument for interorganizational coordination. Japan's *keiretsu* exhibit well-defined power elites, and the commanding positions occupied by key financial, manufacturing, and trading companies in the strategic groups are well known. However, power is seldom exercised by fiat and almost always by behind-the-scenes maneuvering and consensus. Gerlach (1992, p. 111) recounts the rather cautious and hesitant manner in which a president of a member company of the Mitsui *keiretsu* was eased from office despite a long-running scandal involving him.

People rise to authority in the networks based on proven managerial skill and a motivating vision shared by the constituents of the system. In this regard, seniority plays a much more important role in Japanese organizations than in the United States, where competition and fast-tracking tend to be the norm. Power in networks is a subtle force. It is exercised via processes of socialization, peer review, and consensus, not executive fiat. Seniority and tradition lend themselves better to such a system than competition. But the larger question remains of how one develops a culture of mutuality and solidarity so necessary to a system of decentralized power, where committees of member firms can be expected to act in the interest of the common good of the entire network. At the heart of networks with strong reputational and referent characteristics is usually an intricate system of cross-investments and interdependencies creating a solid web of interorganizational commitment.

Commitment and Interdependence in Networks

There are two important components of commitment, the attitudinal and the instrumental (Gundlach, Achrol, and Mentzer 1995). Commitment is most often seen as an attitudinal construct described in terms of affective commitment, psychological attachment, identification, affiliation, and value congruence (Allen and Meyer 1990; O'Reilly and Chatman 1986). This type of commitment represents "a partisan, affective attachment to the goals and values of an organization, to one's role in relation to the goals and values, and to the organization for its own sake, *apart from its purely instrumental worth*" (Buchanan 1974, p. 533, emphasis added).

Organizations recognize the value of having members who are spontaneously motivated to go beyond prescribed roles and perform above and beyond the call of duty. Exchange relationships predicated on no more than the material benefits of the exchange are likely to require more costly and sophisticated control systems and are likely to suffer from higher turnover (O'Reilly and Chatman 1986). On the other hand, when the parties share goals, values, and an affective attachment, they can be expected to act instinctively for the benefit of one another.

How do networks generate affective commitment? Part of the answer was discussed earlier while discussing reputational power. People develop affective commitment for organizations they feel they belong to, which provide them assistance and support during difficult times, offer long-term security of returns and employment, and in whose future and fortunes they feel they actively participate in determining.

An important mechanism for developing attitudinal commitment is through interlocking managements. The concept of interlocking directorates has been studied a long time in the United States (e.g., Pfeffer and Salancik 1978). But the approach of the Japanese *keiretsu* offers some interesting contrasts (Gerlach 1992). In the United States, interlocking directorates are a form of control accomplished via part-time directorships. In contrast, in the *keiretsu*, executives are appointed from one firm to another on a full-time basis, with the object of fostering stronger and genuine personal relationships. Second, more than 90 percent of the boards of directors of large Japanese companies are composed of full-time executives of the firm, thus reflecting the interests of management rather than those of external shareholders (Bacon and Brown 1978). This reflects the importance of socialization and informal processes in the structure and operation of the network organization.

Some marketing channels have employed limited amounts of managerial exchange. For example, each of Hardee's top 60 executives is required to spend a week every year behind the counter of one of the company's restaurants, and many firms have established advisory boards of wholesalers and retailers (Stern and El-Ansary 1992, pp. 302-304). However, such programs are designed to make senior executives more sensitive to the operating characteristics of their channel members, and the quality of commitment involved in these arrangements is minimal compared to what it takes to fashion a network organization.

U.S. antitrust law does place special restrictions on how far companies can go in establishing vertical interlocks, but many legal opportunities have not been explored. For example, instead of merely selecting and training financially sound applicants as suppliers or distributors and sending them off to become independent entrepreneurs, a channel leader could offer partnerships (including financial assistance) to its own employees or their relatives. That is the kind of relational system Bennetton established for its supply and production networks. It establishes a network of firms that are sensitive to and committed to common goals, values, and operating cultures.

But attitudinal commitment alone is a precarious quantity. Becker (1960) argues that commitments not supported by what he calls "side bets" lack staying power, crumbling in the face of opposition or just fading away. A side bet means that the committed party stakes something of value to it on consistent future behavior. Such side bets have been variously described as pledges, credible commitments, and idiosyncratic investments and refer to the allocation of resources that become specific or dedicated to a relationship (Anderson and Weitz 1992; Williamson 1985).

Once again, the Japanese *keiretsu* provide a classic example of how systems of reciprocal side bets can be created to yield interdependent and committed networks. The most obvious source of interdependence in marketing channels is through the products and services that are exchanged between suppliers and resellers. But interdependencies based on product or service exchanges among firms engaged in vertical exchange may not represent an adequate basis for strong member commitments because they also carry the seeds of conflict. In contrast, Japanese *keiretsu* create webs of financial interdependencies via loans and direct equity investments between member firms. Between 23.3 percent and 42.8 percent of the borrowed capital of *keiretsu* firms is from within the network, and between 28 percent and 63.9 percent of the equity capital from a company's top 10 shareholders is held by other members of the network (Gerlach 1992, pp. 122, 126).

Interorganizational systems in the United States have not encouraged mutual commitment through cross-holding equity and debt capital in one another or in distribution and supply companies set up to service the network. It is important to remember that such interlocked network systems are useful to the extent that they promote economic efficiency, coordination, and product or service quality, without the bureaucracy of corporate ownership while maintaining the market responsiveness of decentralized, entrepreneurial companies. Hence interdependencies and cross-investments can be taken to the extreme, breeding inertia and inefficiency and being subject to antitrust challenges (as has happened in the wholly owned diagnostic and laboratory networks set up by physician groups in the health care industry).

It is also important to remember that what is different about the intricate interdependence structure of the network is that it serves not so much as a control and coordination mechanism but rather as the glue that holds the network in a remarkably stable, cohesive, and mutually oriented economic system. For example, cross-investing in equity among *keiretsu* companies does not make a whole lot of "rational" economic sense because it amounts to self-canceling paper transactions. Often these investments are made with borrowed capital, and as one Mitsui executive asked, "What's the use of owning two or three hundred shares in related companies? If we had the money, we would put it to better use in equipment or something else" (*Oriental Economist* March 1961).

However, cross-holdings in *keiretsu* networks are not as important economically as they are in shaping the qualitative relationship between members, serving, as Japanese like to say, to "keep each other warm" (Gerlach 1992, p. 76). Interdependence defines the social fabric of the network organization more than it defines its hierarchy. In that sense, interdependence is important only to the extent it leads to attitudinal commitment among member firms. The commitment in turn provides the foundation for the development of social norms of governance (Macneil 1980). These variables and processes are discussed next.

THE SOCIOLOGY OF NETWORKS

Under the exchange paradigm, the focus was on the instrumental processes—how to maximize cooperation and minimize conflict. The variables highlighted were cooperation (often seen in terms of contractual obligations), conflict (defined in terms of disagreement over goals, domains, and functions), and opportunism (self-interest seeking with guile, assumed to be a fundamental problem in exchange). In contrast, the network paradigm focuses on the relational—how to develop mutually reinforcing, long-term relationships.

Traditional thinking focused on how to prevent disintegration or how to cajole cooperation out of inherently apathetic or opportunistic partners, the implicit assumption being that the dominant forces in a relationship are destructive forces. Relational cultures, on the other hand, are based on the assumption that exchange is an inherently constructive relationship, but it has to be constructively nurtured. Network cultures emphasize strong "loyalty" processes along vertical relations and strong "dialogue" processes along horizontal relations. The key variables here are trust and social norms of behavior (Kaufmann and Stern 1988; Macneil 1980; Morgan and Hunt 1994).

Trust

According to Granovetter (1985), mutual trust in a relationship reduces the development of opportunistic intentions and thus may eliminate the need for structural mechanisms of control. A firm's trust in its network partners is the belief that the partners will, without the exercise of influence or control, strive for outcomes that are beneficial for all member firms (cf. Driscoll 1978). The level of trust in a network is indicated by each member's confidence in its partners' sincerity, reliability, loyalty, and willingness to refrain from opportunistic behavior. Trust has been shown to be a determinant of critical factors related to performance—such as more open exchanges of relevant ideas and feelings, greater clarification of goals and problems, more extensive search for alternative courses of action, greater satisfaction with efforts, and greater motivation to implement decisions (Zand 1972).

Trust in exchange relationships may yet turn out to be the most intractable of constructs we have dealt with in interorganizational research in marketing. Many business decisions that may have the outward look of trust—that is, few details are negotiated or contractually spelled out—may be nothing more than (1) calculated risks or (2) judgments based on a party's reputation or history. On the one hand, our intuitive understanding of trust is that it has a large dose of a *leap of faith* in it somewhere. On the other hand, we often qualify our discussion of trust with the caveat "trust does not mean blind trust." In fact, the following three caveats identify the three component dimensions of trust, and we would be well advised to understand the interrelationships among these dimensions before we charge into studying the determinants and consequences of trust in exchange relationships.

1. Risk: the willingness to become vulnerable
2. A leap of faith
3. A self-regulating verification system

Trust implies some degree of uncertainty of outcome and involves relinquishing some influence and control. Consequently, risking and faith are intimately related dimensions (Lundstedt 1966). The two imply a willingness to become vulnerable and interact in a dynamic, mutually reinforcing spiral (Golembiewski and McConkie 1975, p. 141). The two variables offer alternate process models for initiating close relationships under different circumstances.

Under one model, faith comes first. If conditions of mutual faith can be established, risk-taking behavior tends to follow (Lillibridge and Lundstedt 1967). The strategy is to develop a rapport and a supportive climate building toward shared norms. The emphasis is on stressing similarities in business philosophy (e.g., customer orientation), professionalism, corporate cultures, social values, and so on. Alternatively, the second model portrays the act of risk taking as signaling a desire to trust and as the opening gambit in initiating a trusting relationship (Swinth 1967). Activities that tend to encourage or trigger risk-taking initiatives include (1) getting down to business early, (2) building an early sense of the balance of benefits over costs, and (3) being directed by a charismatic leader (Golembiewski and McConkie 1975). In general, a risk-taking strategy is likely to have a greater impact, be emotionally arousing, and require less time and patience than faith building. However, faith building runs fewer risks of precipitating participants into situations for which they may not be ready (Golembiewski and McConkie 1975).

In an ongoing exchange relationship, trust is reinforced by the manner in which interfirm interactions are organized and conducted. Satisfactory conflict resolution will increase mutual trust and reinforce each member's commitment and confidence that mutually satisfying outcomes will continue to be obtained through the network (Thorelli 1986). Trust is facilitated if member interactions are among persons of relatively equal status rather than between unequals. Further, trust building is greatly enhanced if interactions are perceived as nonevaluative, spontaneous rather than planned, empathic rather than neutral, and suggestive rather than directive (Gibb 1961). In other words, trust is reinforced by a problem-solving approach to network relations rather than one oriented toward control.

The third critical dimension of trust is the conditional role played by self-regulation or verification processes. Ronald Reagan was fond of quoting the Russian proverb "trust, but verify." However, any kind of direct monitoring of one another's behaviors is the antithesis of trust, defeats its very purpose, and would surely undermine it over time. What is needed instead is a transparent system in which there is open and routine access to all information (including performance information) about all members in the network. The system must be self-regulating rather than run by authority. It is in this area of self-regulation that some of the oldest trading communities and cultures were most advanced. These communities evolved a culture and a set of norms (including social sanctions) by which its members were expected to live or risk being ostracized. Many of these businesses were so closely knit that it was practically impossible to survive as an independent. What are these cultural or social norms?

Social Norms

The social norms of exchange may be defined as patterns of accepted and expected sentiments and behavior shared by members of an exchange system, having the force of social obligation or pressure (Birenbaum and Sagarin 1976; Jackson 1966). Five such norms purported to underlie relational governance have been discussed in the literature—solidarity, mutuality, flexibility, role integrity, and harmonization of conflict (Boyle et al. 1991; Heide and John 1992; Kaufmann and Dant 1992; Kaufmann and Stern 1988; Macneil 1980; Noordewier, John, and Nevin 1990). A sixth norm, restraint of power, was discussed earlier in this article. However, there is considerable vagueness and overlap associated with these concepts at this time.

Before exploring the meaning of the five social norms of exchange and what their implications are for managing interorganizational networks, it is important to take note of the last part of the definition of social norms advanced earlier. Like trust, social norms cannot be created and maintained merely by good intentions and good faith. As Williams (1960) put it, "Probably the best index of an institutional norm is the occurrence of severe penalties for violation. Such penalties are truly institutional, however, only if supported by an effective consensus of the society."

It is also important to recognize that there is some tension between the notion of norms as a voluntary, shared value system and the notion of sanctions for nonconforming behavior. As with trust, the key is a self-regulating mechanism that makes the norms operate with the force of social obligation rather than hierarchical control. That means (1) that social sanctions be primarily in the form of denial of special privileges, roles, and status and (2) that mechanisms institutionalized to meet out social sanctions in a network must have the character of a peer process.

Next, let us briefly consider the positive face of social norms with the idea of distinguishing their network meanings from those often ascribed to them within the exchange framework.

Solidarity. Solidarity refers to the sense of unity among members of the network. It is the "common conscience," a norm of stability, preservation, and sometimes sacrifice (Macneil 1980). Unity and fellowship arise when common responsibilities and interests dominate an exchange relationship. Thus the same mechanisms for creating interdependence and commitment (cross-investments, participation via multitiered committees, joint projects, etc.) are important in facilitating solidarity. Macneil notes that when the interests of each party become the interests of the other parties, unity may occur in spite of high conflict or little "love lost." However, if solidarity is to operate as an effective social norm, it should be driven by positive values and affect rather than by necessity. In this sense, solidarity is better developed by emphasizing common responsibilities and fellowship.

The Japanese *keiretsu* regularly employ joint industrial projects involving a number of member firms as a means for establishing a framework within which group interaction can occur and for building a coherent identity for the group. Gerlach (1992, p. 150) observes that the symbolic role of these projects often appears to be more important than their immediate economic interests. Exchange-oriented marketing channels were slow to adopt joint innovation programs with suppliers and resellers for developing and testing new products, procedures, and marketing strategies.

Solidarity is also an externally driven norm that is fortified by being directed against external groups (competitors or regulators). Traditional marketing channel systems could have done much to develop solidarity by adopting a communication program that highlights the achievement of its members in the areas of common responsibilities, emphasizing competitor-oriented research, goals, and strategies.

Mutuality. Two important elements underlie the norm of mutuality: (1) acting in the interest of the mutual good and (2) equitable sharing of future benefits and burdens.

Participants engage in exchange because they envision the creation of an exchange surplus. In long-term exchange relationships, the flow of benefits, burdens, and each party's contributions are subject to evolution and circumstances, and hence the performance of each individual transaction is not clearly specified or monitored, and the rules for the equitable sharing of benefits cannot be precisely determined in advance. This interpretation has led to the definition of the norm of mutuality as the extent to which contractual monitoring of individual transactions is tempered by trust (Kaufmann and Dant 1992).

However, as was noted in the previous section, trust works best not when it is blind but when it is self-regulating. Members of exchange networks characterized by strong norms of mutuality can be trusted to operate in the best interests of the network without direct supervision and control.

In the computer age, it is feasible to install systems that can record and disseminate performance data for all network members at various levels of aggregation. Federal Express was the first U.S. service company to win the Malcolm Baldridge Award, largely due to its pioneering efforts to measure delivery of quality service and make that information available to all its employees. Through a satellite broadcast each morning, more than 70,000 U.S.-based employees of Federal Express learn how the company did in the previous 24 hours, including information about where problems arose and what corrective measures were taken (Senge 1993).

Another important feature of mutuality in exchange is that the parties focus on the benefits derived from the ongoing relationship as a whole rather than from each transaction. Members who see long-term potential, stability, and regularity of benefits are more inclined to sacrifice short-term gains in favor of network goals. Network organizations can enhance mutuality by rewarding long-term membership through stocks or options in new companies; by linking tenure to career advancement, education, and opportunities for ownership of supplier or distributor companies; or by making appointments to prestigious councils.

Flexibility. Closely allied to the norm of mutuality is the norm of flexibility. Because the terms of long-term exchange are necessarily incomplete due to bounded rationality, limited information, and uncertainty about the future state of the environment, network relationships presuppose smooth adaptations of practices, policies, roles, and functions over time (Boyle et al. 1991; Macneil 1980). Flexibility is defined as the bilateral expectation that the substance and terms of exchange are subject to good-faith modification and adaptation if environmental changes so require (Heide and John 1992).

It follows that there are two requirements for flexibility to operate as a mutually driven social norm guiding member behaviors. The first is that members see modifications as good-faith adaptations. Second, they must visualize the significance of the environmental changes motivating the adaptations. Network organizations can do a lot to create an atmosphere of flexibility by sharing research and analysis of the environment with its members and by ensuring that its members are given every opportunity to participate and share in the benefits of changes or adaptations proposed.

Role integrity. In the exchange paradigm, the role of parties is seen as guided by self-interest, the terms of the agreement, and the rules of property and the law. In long-term relationships, however, the roles themselves are "multiplex," taking on intricate linkages between internal rules, social customs, and future expectations and spanning a range of obligations (Macneil 1980, pp. 65-66). Consequently, the maintenance and enhancement of each other's role integrity become an important norm. This concept has been operationalized as the extent to which exchange roles are seen as complex and extending beyond transactions (Kaufmann and Dant 1992).

In network relationships, role integrity has another vital meaning—that is, recognizing and protecting the domain of members from internal competition or acquisition. *Domain* is meant as the identity, markets, customers, technology, functions, and other normal responsibilities that define a member's role and significance as an independent entity as well as a member of the network. One of the most divisive problems in marketing channels occurs when channel leaders knowingly or unwittingly create internal competition within the network and thus threaten the integrity of the member firms. This can happen through oversaturating markets, operating multiple channels where customer segments are not well defined or the different types of outlets are not adequately separated by products and services, or retaining large accounts and lucrative segments for direct company sales. Many franchisers are known to use independent franchisees to expand rapidly and, once established, force out many independents and turn to company-owned outlets. Clearly, this is not conducive to cultivating the norm of role integrity that is essential to maintaining related social norms of trust, solidarity, mutuality, and flexibility.

Harmonization of conflict. In the transactional paradigm, conflict is resolved through hierarchical mechanisms or external means such as litigation. In contrast, in network relationships there is the presumption that if the relationship is to endure, mutual sentiments must exist for harmonizing conflicts. Harmony is sought via informal means and social interaction. Thus the norm of harmonization of conflict might be best defined as a spirit of mutual accommodation. The overarching culture and sentiments of solidarity and mutuality are important in resolving conflicts rather than the formal institutions and procedures. To the extent possible, what formal procedures do exist should be peer-level processes rather than hierarchical ones.

A spirit of mutual accommodation is nurtured by creating a strong social climate that extends beyond the need for business interaction. The Japanese *keiretsu* go to extreme lengths to develop and maintain such a social environment. Services provided by the Sanwa group include facilitating marriages, discount sales of merchandise, tennis and baseball tournaments, study groups, and art classes. In short, the networks "take care of virtually all needs in food, clothing and housing as well as in health, medical care, travel, insurance, consumer credit, leisure, and recreation" for close to a million employees and their families (*Oriental Economist* September 1982).

CONCLUSION

The current marketing paradigm has been variously described as the exchange, transactional, or dyadic paradigm in which the two-party relationship is the fundamental subject matter to be explained. In today's increasingly complex and turbulent markets, the successful organizations are no longer the huge, vertically integrated firms. In their place are emerging leaner, more specialized organizations that are part of a large network of close-knit alliances and partnerships with other organizations specializing in related technologies and functions. These large interorganizational groups are more than the sum of their dyadic parts and are often referred to as network organizations.

The true benefits of a network organization are obtained only when one recognizes the unique managerial and economic benefits that emerge when the network is conceived of as a minisociety of interdependent, reciprocal exchange relationships characterized by restraint of power, commitment, trust, solidarity, mutuality, flexibility, role integrity, and harmonization of conflict. These variables and processes are relatively new concepts to researchers in marketing and represent a system of exchange governance quite foreign to managers in the United States.

This article has sought to clarify what we mean by network organizations. It has identified four archetype networks that possess characteristics of a superorganization. The internal market network is a conventional firm that has largely eliminated internal hierarchical control and dismantled its external boundaries, freeing its units to buy from and sell to any elements in its task environment. The vertical market network is the conventional marketing channel that has dissagregated the classic manufacturing firm at its core into functionally specialized partners and reconstituted itself around an integrator that might be a technology, marketing, or distribution specialist. The intermarket network is a grand social and economic alliance among financial, manufacturing, and trading companies, spanning a wide cross-section of industrial and consumer industries. The opportunity network is a looser network of suppliers organized around a global information and brokerage resource center that functions to search for and match unique customer needs with custom solutions in a rapid and efficient manner.

Although recognizing the structure and operating features of network organizations is important, equally important is understanding the processes that are essential to their functioning and maintenance. In this area, the greatest change in moving from dyadic concepts to network concepts is likely to occur. This change is not only in the form of new applications, such as trust or social norms, but also in the basic meaning ascribed to these terms, as well as old, familiar ones, such as power and dependence. This article examined what it means to talk about power and dependence along with restraint of power, trust, and social norms of governance in a network context.

Network theory and research open up a vast new area for scholarly research and speculation. This article is only a small inquiry into its innumerable possibilities and angles. In the accompanying article, Snow hints at advanced network firms he calls "cellular" organizations. The evolution of network theory and methods of analysis have a long way to go. Salancik (1995) titled a recent essay thus—"Wanted: A Good Network Theory of Organization." We have yet to see theory and concepts emerge that are unequivocally network-level phenomena. But if we can untangle what are rightfully network-level concepts from their current dyadic interpretations, meaningful progress will have been made.

It is also not clear how far or fast the network phenomenon will progress in Western cultures. Network forms of organization have developed most extensively in the so-called collectivist social and economic cultures of the Far East. Their evolution in Western economies is slow and subject to many qualifications. Hamilton and Biggart (1988) argue that the evidence rejects a cultural explanation for the evolution of network organization in Japan, Korea, and Taiwan (although I must admit that their arguments seem less than compelling to me). Although patterns can be discerned in the network direction in the United States, it is too early to say how successful they will prove in the competitive, individualistic cultures of the West.

In his commentary, Orville Walker, Jr. highlights some of the limitations and internal contradictions of network organization. In discussing new organizational and philosophical concepts, it is difficult not to get a little giddy with a dose of idealism. Walker's cautionary analysis is a very welcome counterbalance. The exciting thing is that U.S. industry has shown a remarkable ability to adopt whatever economic, social, or cultural innovations it takes to remain competitive in the marketplace. Can U.S. firms commit to and develop norm-based modes of exchange? I have no doubt they can if they want to. But it is unlikely they will want to badly enough. It seems unlikely that *keiretsu*-type intermarket networks will become prevalent in the United States. Perhaps Western culture will more readily adapt to internal market networks or opportunity networks. But it seems inevitable that any company that is going to be a significant player in dynamic global markets is going to be actively networked in one form or another. A paradigm shift looms tall on the marketing horizon.

REFERENCES

Achrol, Ravi S. 1991. "Evolution of the Marketing Organization: New Forms for Dynamic Environments." *Journal of Marketing* 55 (October): 77-93.

———, Torger Reve, and Louis W. Stern. 1983. "The Environment of Marketing Channel Dyads: A Framework for Comparative Analysis." *Journal of Marketing* 47 (Fall): 55-67.

Ackoff, Russell L. 1989. "The Circular Organization: An Update." *The Academy of Management Executive* 3 (February): 11-16.

———. 1993. "Corporate Perestroika." In *Internal Markets*. Eds. William E. Halal, Ali Geranmayeh, and John Pourdehnad. New York: John Wiley, 15-26.

Albert, Stuart and David A. Whetten. 1985. "Organizational Identity." In *Research in Organizational Behavior*, Vol. 7. Eds. L. L. Cummings and Barry M. Staw. Greenwich, CT: JAI, 263-295.

Aldrich, Howard E. and D. Whetten. 1981. "Organization Sets, Action Sets, and Networks: Making the Most of Simplicity." In *Handbook of Organizational Design*, Vol. 1. Eds. P. Nystrom and W. Starbuck. New York: Oxford University Press, 385-408.

Allen, N. J. and J. P. Meyer. 1990. "The Measurement and Antecedents of Affective, Continuance, and Normative Commitment to the Organization." *Journal of Occupational Psychology* 63 (March): 1-18.

Anderson, Erin and Barton Weitz. 1992. "The Use of Pledges to Build and Sustain Commitment in Distribution Channels." *Journal of Marketing Research* 29 (February): 18-34.

Anderson, James C., Hakan Hakansson, and Jan Johanson. 1994. "Dyadic Business Relationships Within a Business Network Context." *Journal of Marketing* 58 (October): 1-15.

Bacon, Jeremy and James K. Brown. 1978. *The Board of Directors: Perspectives and Practices in Nine Countries*. New York: Conference Board.

Bagozzi, Richard P. 1978. "Marketing as Exchange: A Theory of Transactions in the Marketplace." *American Behavioral Scientist* 21 (March/April): 535-556.

———. 1995. "Reflections on Relationship Marketing in Consumer Markets." *Journal of the Academy of Marketing Science* 23 (Fall): 272-277.

Baker, Wayne E. 1992. "The Network Organization in Theory and Practice." In *Networks and Organizations: Structure, Form and Action*. Eds. Nitin Nohria and Robert G. Eccles. Boston: Harvard Business School Press, 397-429.

Becker, Howard S. 1960. "Notes on the Concept of Commitment." *American Journal of Sociology* 6 (July): 32-40.

Bell, Daniel. 1973. *The Coming of Post Industrial Society*. New York: Basic Books.

Benson, J. Kenneth. 1975. "The Interorganizational Network as a Political Economy." *Administrative Science Quarterly* 20 (June): 376-396.

Birenbaum, Arnold and Edward Sagarin. 1976. *Norms and Human Behavior*. New York: Praeger.

Boyle, Brett, F. Robert Dwyer, Robert A. Robicheaux, and James T. Simpson. 1991. "On Influence Strategies in Marketing Channels." Working paper, University of Cincinnati.

Buchanan, Bruce, II. 1974. "Building Organizational Commitment: The Socialization of Managers in Work Organizations." *Administrative Science Quarterly* 19 (December): 533-546.

Case, John. 1990. "Intimate Relations." *INC. 12 (August): 64-72.*

Chandler, Alfred D. 1962. *Strategy and Structure*. Cambridge: MIT Press.

———. 1977. *The Visible Hand: The Managerial Revolution in American Business*. Cambridge, MA: Harvard University Press.

Cialdini, Robert B., Richard J. Borden, Avril Thorne, Marcus R. Walker, Stephen Freeman, and Lloyd R. Sloan. 1976. "Basking in Reflected Glory: Three (Football) Field Studies." *Journal of Personality and Social Psychology* 34 (September): 366-375.

Cook, Karen S. and Richard M. Emerson. 1978. "Power, Equity and Commitment in Exchange Networks." *American Sociological Review* 43 (October): 721-739.

Doz, Yves L. 1988. "Technology Partnerships Between Larger and Smaller Firms: Some Critical Issues." In *Cooperative Strategies in International Business*. Eds. F. J. Contractor and P. Lorange. Lexington, KY: Lexington Books, 317-338.

Driscoll, J. W. 1978. "Trust and Participation in Organizational Decision Making as Predictors of Satisfaction." *Academy of Management Journal* 21 (March): 44-56.

Drucker, Peter F. 1988. "The Coming of the New Organization." *Harvard Business Review* 66 (January-February): 45-53.

Duncan, R. B. 1976. "The Ambidextrous Organization: Designing Dual Structures for Innovation." In *The Management of Organizational Design*, Vol. 1. Eds. R. H. Kilman, L. R. Pondy, and D. P. Slevin. New York: Elsevier.

Dutton, Jane E., Janet M. Dukerich, and Celia V. Harquail. 1994. "Organizational Images and Member Identification." *Administrative Science Quarterly* 39 (June): 239-263.

Dwyer, F. Robert, Paul H. Schurr, and Sejo Oh. 1987. "Developing Buyer-Seller Relationships." *Journal of Marketing* 51 (April): 11-27.

Emerson, Richard M. 1972. "Exchange Theory, Part I: A Psychological Basis for Social Exchange." In *Sociological Theories in Progress*. Eds. J. Berger, M. Zelditch, and B. Anderson. Boston: Houghton Mifflin, 58-87.

Forrester, Jay W. 1965. "A New Corporate Design." *Industrial Management Review* 7 (Fall): 5-17.

Gadde, L. E. and I. G. Mattson. 1987. "Stability and Change in Network Relationships." *International Journal of Research in Marketing* 4 (1): 29-41.

Gerlach, Michael L. 1992. *Alliance Capitalism*. Berkeley: University of California Press.

Gibb, J. R. 1961. "Defensive Communication." *Journal of Communication* 11: 141-148.

Golembiewski, Robert T. and Mark McConkie. 1975. "The Centrality of Interpersonal Trust in Group Processes." In *Theories of Group Processes*. Ed. C. L. Cooper. New York: John Wiley, 131-185.

Granovetter, Mark. 1985. "Economic Action and Social Structure: The Problem of Embeddedness." *American Journal of Sociology* 91 (November): 481-510.

———. 1992. "Problems of Explanation in Economic Sociology." In *Networks and Organizations: Structure, Form and Action*. Eds. Nitin Nohria and Robert G. Eccles. Boston: Harvard Business School Press, 25-56.

Gundlach, Gregory T., Ravi S. Achrol, and John T. Mentzer. 1995. "The Structure of Commitment in Exchange." *Journal of Marketing* 59 (January): 78-92.

Haeckel, Stephan H. 1990. *Business Strategies in an Information Economy* (Report No. 90-119). Cambridge, MA: Marketing Science Institute.

Hakansson, Hakan and Ivan Snehota. 1995. *Developing Relationships in Business Networks*. New York: Routledge & Kegan Paul.

Halal, William E. 1993. "The Transition From Hierarchy to . . . What?" In *Internal Markets*. Eds. William E. Halal, Ali Geranmayeh, and John Pourdehnad. New York: John Wiley, 27-51.

———, Ali Geranmayeh, and John Pourdehnad. 1993. *Internal Markets*. New York: John Wiley.

Hamilton, Gary G. and Nicole W. Biggart. 1988. "Market, Culture, and Authority: A Comparative Analysis of Management and Organization in the Far East." *American Journal of Sociology* 94: S52-S94.

Hannan, Michael T. and John Freeman. 1984. "Structural Inertia and Organizational Change." *American Sociological Review* 49 (April): 149-164.

Hedberg, B., P. C. Nystrom, and W. H. Starbuck. 1976. "Camping on Seesaws: Prescriptions for a Self-Designing Organization." *Administrative Science Quarterly* 21 (March): 41-65.

Heide, Jan B. and George John. 1992. "Do Norms Really Matter?" *Journal of Marketing* 56 (2): 32-44.

Huber, George P. 1984. "The Nature and Design of Post-Industrial Organizations." *Management Science* 30 (August): 928-951.

Iacobucci, Dawn and Nigel Hopkins. 1992. "Modeling Dyadic Interactions and Networks in Marketing." *Journal of Marketing Research* 24 (February): 5-17.

Jackson, Jay. 1966. "A Conceptual and Measurement Model for Norms and Roles." *Pacific Sociological Review* 9 (Spring): 35-47.

Kaufmann, Patrick J. and Rajiv P. Dant. 1992. "The Dimensions of Commercial Exchange." *Marketing Letters* (May): 171-185.

——— and Louis W. Stern. 1988. "Relational Exchange Norms, Perceptions of Unfairness, and Retained Hostility in Commercial Litigation." *Journal of Conflict Resolution* 32 (September): 534-552.

Knight, Russell M. 1986. "Franchising From the Franchisor and Franchisee Points of View." *Journal of Small Business Management* 24 (July): 8-15.

Lillibridge, J. R. and S. Lundstedt. 1967. "Some Initial Evidence for an Interpersonal Risk Theory." *Journal of Psychology* 66: 119-128.

Lundstedt, S. 1966. "Interpersonal Risk Theory." *Journal of Psychology* 62: 3-10.

Macneil, Ian R. 1978. "Contracts: Adjustment of Long-Term Economic Relations Under Classical, Neoclassical, and Relational Contract Law." *Northwestern University Law Review* 72 (January-February): 854-905.

———. 1980. *The New Social Contract: An Inquiry Into Modern Contractual Relations*. New Haven, CT: Yale University Press.

———. 1981. "Economic Analysis of Contractual Relations: Its Shortfalls and the Need for a Rich Classificatory Apparatus." *Northwestern University Law Review* 75 (February): 1018-1063.

Malone, Thomas W., JoAnne Yates, and Robert I. Benjamin. 1989. "The Logic of Electronic Markets." *Harvard Business Review* 67 (May-June): 166-170.

Miles, Raymond E. and Charles C. Snow. 1984. "Fit, Failure and the Hall of Fame." *California Management Review* 26 (Spring): 10-28.

——— and ———. 1993. "Internal Markets and Network Organizations." In *Internal Markets*. Eds. William E. Halal, Ali Geranmayeh, and John Pourdehnad. New York: John Wiley, 67-86.

Morgan, Robert and Shelby D. Hunt. 1994. "The Commitment-Trust Theory of Relationship Marketing." *Journal of Marketing* 58 (July): 20-38.

Nohria, Nitin. 1992. "Is a Network Perspective a Useful Way of Studying Organizations?" In *Networks and Organizations: Structure, Form and Action*. Eds. Nitin Nohria and Robert G. Eccles. Boston: Harvard Business School Press, 1-22.

Noordewier, Thomas G., George John, and John R. Nevin. 1990. "Performance Outcomes of Purchasing Arrangements in Industrial Buyer-Vendor Relationships." *Journal of Marketing* 54 (4): 80-93.

O'Reilly, Charles, III, and Jennifer Chatman. 1986. "Organizational Commitment and Psychological Attachment: The Effects of Compliance, Identification, and Internalization on Prosocial Behavior." *Journal of Applied Psychology* 71 (August): 492-499.

Peterson, Robert A. 1995. "Relationship Marketing and the Consumer." *Journal of the Academy of Marketing Science* 23 (Fall): 278-281.

Pfeffer, Jeffrey and Gerald R. Salancik. 1978. *The External Control of Organizations*. New York: Harper & Row.

Powell, Walter W. 1990. "Neither Market nor Hierarchy: Network Forms of Organization. " In *Research in Organizational Behavior*. Eds. L. L. Cummings and B. M. Staw. Greenwich, CT: JAI, 295-336.

Salancik, Gerald R. 1995. "Wanted: A Good Network Theory of Organization." *Administrative Science Quarterly* 40 (June): 345-349.

Schotter, Andrew. 1981. *The Economic Theory of Social Institutions*. New York: Cambridge University Press.

Senge, Peter M. 1993. "Internal Markets and Learning Organizations." In *Internal Markets*. Eds. William E. Halal, Ali Geranmayeh, and John Pourdehnad. New York: John Wiley, 87-105.

Sheth, Jagdish N. and Atul Parvatiyar. 1995. "Relationship Marketing in Consumer Markets: Antecedents and Consequences." *Journal of the Academy of Marketing Science* 23 (Fall): 255-271.

Snow, Charles C., Raymond E. Miles, and Henry J. Coleman, Jr. 1992. "Managing 21st Century Network Organizations." *Organizational Dynamics* 21 (Winter): 5-20.

Stern, Louis W. and Adel I. El-Ansary. 1992. *Marketing Channels*. Englewood Cliffs, NJ: Prentice Hall.

——— and Torger Reve. 1980. "Distribution Channels as Political Economies: A Framework for Comparative Analysis." *Journal of Marketing* 44 (Summer): 52-64.

Swinth, R. L. 1967. "The Establishment of the Trust Relationship." *Journal of Conflict Resolution* 11: 335-344.

Taylor, William. 1991. "The Logic of Global Business." *Harvard Business Review* 69 (March-April): 90-103.

Thompson, James D. 1967. *Organizations in Action.* New York: McGraw-Hill.

Thorelli, Hans B. 1986. "Networks: Between Markets and Hierarchies." *Strategic Management Journal* 7 (November): 37-51.

Wagner, Harvey. 1991. "The Open Corporation." *California Management Review* 33 (Summer): 46-60.

Webster, Frederick E. 1992. "The Changing Role of Marketing in the Corporation." *Journal of Marketing* 56 (4): 1-17.

Weick, Karl E. 1977. "Re-Punctuating the Problem." In *New Perspectives on Organizational Effectiveness.* Eds. P. S. Goodman and J. M. Pennings. San Francisco: Jossey-Bass, 193-225.

Weitz, Barton A. and Sandy D. Jap. 1995. "Relationship Marketing and Distribution Channels." *Journal of the Academy of Marketing Science* 23 (Fall): 305-320.

Williams, Robin M., Jr. 1960. *American Society.* New York: Knopf.

Williamson, Oliver E. 1975. *Markets and Hierarchies: Analysis and Antitrust Implications.* New York: Free Press.

———. 1985. *The Economic Institutions of Capitalism.* New York: Free Press.

Zand, Dale E. 1972. "Trust and Managerial Problem Solving." *Administrative Science Quarterly* 17 (June): 229-239.

———. 1974. "Collateral Organization: A New Change Strategy." *Journal of Applied Behavioral Science* 10 (January-March): 63-86.

ABOUT THE AUTHOR

Ravi S. Achrol (Ph.D., Northwestern University) is the Global Management Research Professor in the Department of Marketing, School of Business and Public Administration, The George Washington University. Prior to joining the faculty of The George Washington University in 1991, he was on the faculty of the University of Notre Dame. His areas of research interest include interorganization theory and marketing strategy. His articles have appeared in the *Journal of Marketing, Journal of Marketing Research, Social Science Research, Journal of Business Strategy, Journal of Public Policy and Marketing*, and various other publications. He is a member of the editorial review board of the *Journal of Marketing*.