Interorganizational Networks under Leadership Arindam Biswas

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Abstract - Interorganizational networks are difficult to manage. It is well known that managing interorganizational networks is an inherently difficult task and by no means an easy option. Researchers of business alliances estimate that more than 50% of alliances fail, and Researchers have identified time and time again how collaboration often succumbs to problems and conflict. Networks are difficult to manage because they are complex. Researchers suggest that failures and the difficulty in managing interorganizational sets arise due to their managerial complexity and the dynamic and ambiguous nature of collaborations. Although they are inherently difficult to manage, networks are popular mechanisms of interorganizational governance. This popularity can be attributed to today's complex world, which demands an organizational form of not only individuation and dispersed power but also unification. Moreover, problems nowadays are wicked, neither easily definable nor decomposable. Problems themselves are ill-defined, generating ambiguous situations, and they require complex solutions. Despite the rising popularity of networks and their inherent challenges, however, network management and leadership is an understudied field. This lack of research is even more surprising when considering that interorganizational networks often fail due to poor management and that leadership is often suggested to be a central factor for network success. That interorganizational network management demands more research requires little justification: Interorganizational network management is in search of its paradigm, and until it develops one, network management will continue to have its shortcomings and, hence, networks will continue to fail. This research-paper wants to map out the field of study of interorganizational networks and, in particular, that of network leadership. It does so by focusing on the inherent paradoxical nature of networks and how it affects network management. Networks fail and are difficult to manage because of the difficulties due to inherent paradoxes implied by networks, in particular the need to be simultaneously united and diverse. Here we look at how networks manage inherent tensions.

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1 Introduction:

 \mathbf{F} irst, we define what we mean by network. Then we review research on networks, dividing it into four themes: structural characteristics and formation, performance, and evolution, management. Focusing on this last theme, we first highlight the complexities and tensions inherent to network management and then use paradox and power to understand the field of network leadership. We show how the unity/diversity paradox is inherent to networks and how its sustenance generates power for the network, which ultimately leads to network effectiveness. Drawing from our and others' research, we suggest leadership activities important to sustain the paradox and propose that just as networks will tend to become an increasingly important management issue in the 21st century, so will their leadership.

2 INTERORGANIZATIONAL NETWORKS: DEFINITIONS AND APPROACHES

Defining Interorganizational Networks

Prior to any reference to networks, it is imperative to define specifically what is meant by the term network, given people's huge proclivity to use that word in all aspects of academic discourse as well as in life. As Powell and Smith-Doerr pointed out, organization studies use network to refer to both an analytic perspective and a logic of organizing. Network as an analytic perspective emphasizes the relational aspects of actors and uses the term as a metaphor for conceptualizing and understanding social reality.

This use of the term is exemplified by—but not limited to—the social network analysis methodology and supports the idea that actors may be best conceptualized as embedded in a network of social relations. This use of the term has been applied to all kinds of actors—individuals, organizations, and groups of either.

As logic of organizing, networks have been contrasted to traditional forms of markets and hierarchies. These latter two forms have been the main conflicting images of governance modes—the means to govern the relationships between the different organizations. The market governs relationships automatically; the hierarchy does so by authority. Here, we use network as a concrete interorganizational governance mode—as a set of organizations relating to each other in a specific way.

Summarized Comparison Among Different Interorganizational Governance Modes				
Key Features	Market	Hierarchy	Network	
Normative basis	Contracts and property rights	Employment relationships	Complementarity and mutual adjustment	
Means of communication	Prices	Routines	Relational	
Conflict resolution mechanisms	Resort to courts	Administrative fiat	Reciprocity and reputation	
Commitment among organizations	Low	Medium—high	Medium—high	
Dependence between organizations	Independent	Dependent	Interdependent	

Table 1: Hierarchies and Networks

SOURCE: Based on Powell, 1990.

The market has a first stage that consists of a competitive interaction between actors (buyers and sellers, in general terms) who bargain over opportunities over exchange of resources. In the second stage, actors agree over the bargaining and exchange the agreed resources. The market governance mode relies on contracts and property rights to function, and its principal means of communication is price. The resolution mechanism of conflicts between organizations in this mode is to resort to legal courts, and the commitment between parties tends to be low. Organizations are assumed to be totally independent actors.

In contrast, interorganizational relationships in hierarchical governance modes are based on employment relationships, and the main communicative means is routine. The conflict resolution mechanism used is administrative fiat (i.e., orders given by those holding authority), and the commitment among parties tends to be medium or high. With hierarchical governance modes, organizations are clearly dependent on each other.

According to Powell, the third interorganizational mode, the network, is often thought of as a flat organizational form, which implies the idea of relations based on cooperation. Using his own key features to describe hierarchies and markets, Powell described networks as governance modes that use reciprocity and reputation as their main conflict resolution mechanism. The means of communication between organizations is relational, and the commitment between parties is medium-high. The network mode implies complementarily and mutual adjustment between organizations which are interdependent. The following table summarizes the characteristics of the three governance modes.

In practice, when organizations interact they rarely do so uniquely and purely in one of these three modes. Different governance modes do, in fact, simultaneously govern the relationships among a given set of organizations (Lowndes & Skelcher). Three organizations may, in fact, relate to each other primarily through a network governance mode such as mutual adjustment, with high interdependencies and relational interaction as the main communication channels and all actors having high commitment organizations' themselves: among these interrelationships also may include features characteristic of other governance modes such as incorporating contracts into the relationships and delegating authority to one of the parties.

Building on Powell and other authors, the definition of interorganizational network we use in this work is a set of resource-interdependent organizations with autonomous decision-making mechanisms that negotiate and mutually adjust to each other and where relationships between organizations are continual, but finite, in time.

3 DIFFERENT TYPES OF INTERORGANIZATIONAL NETWORKS

Despite the previously stated definition of network, different types exist. Some networks may try to achieve common aims, while others may simply share information. Some may be formalized into specific structures, whereas others may be informal. Unfortunately, at present a commonly accepted typology of interorganizational arrangements is painfully lacking in the literature.

Knoke and Kuklinski tell us that relations are the building blocks of networks and, thus, networks may vary according to the form and the content of the relations between actors. Regarding form, networks may be based on informal and formal relations and may be more or less centralized.

On the other hand, the content of the relations is determined by the type of interaction between actors. In this sense, extending Alter and Hage's population-ecology-grounded typology, networks can exchange, coordinate, cooperate, and collaborate. Exchange networks only exchange information, and concerted-action networks coordinate and take into account other organizations. Cooperating organizations have joint productions only to achieve their own mission, while collaborative networks jointly produce to achieve a common aim.

4 SUBFIELDS OF INTERORGANIZATIONAL NETWORK RESEARCH

Faulkner and de Rond divided research on interorganizational networks into formation and structure, process, and management. We suggest a fourth area of study which has recently emerged and is rapidly gaining attention: network performance. Research so far has tended to concentrate on network formation and structures. In fact, most theories coming from the economic discipline such as strategic management (market power) theory, transaction cost, resource-based view, agency theory, and game theory are best suited to explain network formation and static network configurations. Theories approaching interorganizational networks rooted in organization studies, except for resource dependence theory, are, in general, more behavior friendly. The

interorganizational relations field has been one of the most relevant predecessors of present-day interorganizational network management. Organizational learning has also contributed to our understanding of network management (Doz), as has the structurationist perspective, which is the basis of the renowned work of Kickert, Klijn, and Koppenjan on policy networks. Network theory (or social network analysis), on the other hand, is quite dynamically oriented, but it is best suited to explain variance rather than process.

The research streams that best address network management, however, are the public and policy networks (Agranoff & McGuire; Kickert, Klijn, & Koppenjan) and public-private partnerships (PPPs) fields (European Commission) grounded mainly in political science but also in economics and sociology. From within organization studies, the collaboration management literature (Gray, Huxham & Vangen) and the business alliance and network literature1 (Gulati) are the most relevant to network management.

5 NETWORK RATIONALE: FORMATION AND STRUCTURE

We agree with Ebers and many other authors that, at present, more is known regarding the factors influencing the emergence of networks than regarding their management, evaluation, and dynamics. Research has sought explanations for network formation and structure at an actor levels how actors' motivations lead them to network formation. Explanations to network formation have also been sought from contingent factors perceptive, such as pre-existing actor relationships and institutional and societal contexts in which networks are embedded.

Organizations may form or join a network to directly increase their efficiency and effectiveness. Businesses and perhaps nonprofits and public organizations in some cases may increase their efficiency and effectiveness by building networks that bind competitors into allies, generate economies of scale, and improve access to complementary resources. Reduction of uncertainties and risk, as well as enhancing one's legitimacy, also induce to network formation.

In the public and nonprofits sectors, problem-solving effectiveness is another catalyst of network formation, since the problems dealt with are often

complex and overwhelm a single organization. In addition, in these sectors, an important motive for building and joining networks is to build power. Organizations get together to build their overall power and to ultimately improve their effectiveness. If two organizations are dependent on a more powerful third one, the two weaker ones may join to counterbalance the stronger organization.

Contingent preconditions also induce network formation. At the institutional level, research has pointed out how legal, cultural, sectorial, and regional conditions impact the likelihood of network formation. Relational contingences such as social ties and interdependencies have also been found to induce network formation.

Another popular aspect of networks, researched aplenty, is when and why networks take on one specific structural design, rather than others. Hence, this area of the literature looks not only at why networks are formed, but also at why they are formed as they are in line with the typological discussion mentioned earlier. Scholars studying this usually look at a network's actors (or membership in formal networks), relations including resources and activities; and the overall coordination mechanisms (such as how the unit that coordinates the network is and how decisions among members are made) and its objectives, when it has any. Although one may not have a specific interest in why the network formed or what structural characteristics it possesses, both of these issues play an important role in the management of the network. Understanding why the organizations come together, what decision-making mechanisms the networks use, and what membership requirements they apply are important issues that will come up in different network leadership activities.

6 EVALUATING NETWORKS: SUCCESS, PERFORMANCE, AND ADDED VALUE

A disputed and developing arena on interorganizational networks is network performance, success, evaluation, and added value, despite that operationalizing these is a multidimensional and complex enterprise. This aspect is important to network management since leadership must

contribute to network success. Success and performance, however, can be evaluated at different levels, using different criteria, and in reference to different actors.

First, taking a member organization as the point of reference, a network must be efficient, that is, the payoff for all actors pertaining to the network must be superior to going it alone. This is a necessary, though not sufficient, condition for a successful alliance (Jarrillo). Second, a network can also be evaluated with respect to its external stakeholders rather than its members. Evaluating networks at this broader level is relevant in public, nonprofit, and cross-sector networks. A third, intermediate level at which to evaluate networks is neither by its surrounding at large nor its members, but relative to itself. In fact, Gray's review on collaboration outcomes focuses at this level. She identifies five different conceptual perspectives that assess the collaboration depending on the degree of problem resolution, trust generation, creation of sharedmeaning, increased relational density, and power redistribution.

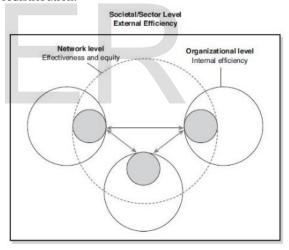


Figure 1 Network Evaluative Criteria and Levels of Analysis

Networks also may be evaluated with respect to process, in addition to their outcomes. Ring and Van de Ven identify equity as a second criterion used to evaluate networks. Networks must be not only internally efficient, from a participant actor's point of view, but also fair. The concept of equity implies fair dealings based on reciprocity.

7 NETWORK PROCESS

The leadership of the network may vary with time, according to the moment in which the network finds itself. There are, however, different ways to conceptualize the moments a network goes through. Van de Ven and Poole identify four types of process theories: linear-sequential, teleological (repetitive circular), evolutionary (driven by environment), and dialectical. With regards to research in network process, it is the first two which have been most popular: the linear-sequential among public-private partnership (PPP) scholars and the teleological-circular within the alliance literature.

Despite the differing terminology, linear-sequential process theories are roughly composed of an emergence, evolution, and dissolution stage. In the evolution stage, actors start the "housekeeping" and "learning" as the network starts functioning, implementation takes place, and the relationship solidifies. The actors then recognize failures or changes within the network, which either produce changes to the network's agreements and functioning or may, ultimately, terminate it (Kanter).

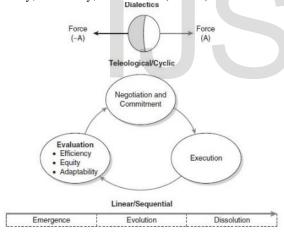


Figure 2 Network Process Theories

Teleological process theories complement linearsequential process theories in that they propose cyclical micro processes that represent the iterative interactions and dynamism present in all the linear stages. A cyclical approach consists of reiterative sequences of negotiation and commitment where actors bargain and agree to rules execution, and evaluation. As new situations are encountered and problems arise, the actors enter the negotiation stage again and will modify only those aspects perceived as problematic while retaining the other previously reached commitments in order to reach the negotiated goal (Telos is end in ancient Greek, hence the term). Learning occurs throughout the cycle.

Another type of process theory is dialectics. With a dialectic process approach, alliances are conceived as continually moving between opposing forces such as unity and diversity, control and autonomy, construction and destruction, and cooperation and confrontation. Figure 2 illustrates the three main network process theories.

8 NETWORK MANAGEMENT

Network management as used here encompasses different themes and areas of study. Using Agranoff and McGuire's and Huxham and Vangen's work, network management may be decomposed into leadership activities, power, trust, structure, membership, objectives, decision making, and accountability. Hereon, we first highlight the inherent complexities of network management and then focus on leadership attending, in particular, to power issues.

9 COMPLEXITY AND AMBIGUITY OF NETWORK MANAGEMENT

As we mentioned, networks are difficult due to their complexity and ambiguity. For example, insights about the factors that influence network formation, and the reasons why organizations decide to collaborate on or enter a coalition, point to the complexity of network management, with its intense resource consumption and inherent difficulties. Together, the variety of factors associated with network formation cited in the literature suggests that the resulting networks are the repository of a diverse and often contradictory set of expectations, aspirations, and goals. Ambiguity and complexity point toward tension in network management, as multiple, diverse goals must be advanced.

The relationship between common goals and the definition of success in a collaboration points to another source of tension: Studies suggest that members of collaborations may hold diverse views about how to measure success (Provan & Milward. Coalition members often define successful coalitions in multiple ways, from achieving the goal or creating lasting networks and attaining longevity to gaining or acquiring such resources as recognition from the

target, community support, new consciousness of issues, or new skills. This divergence in a context that requires convergence represents yet another source of tension.

The literature offers sufficient evidence on complexity as the source for dynamic tensions and contradictions and points to the paradoxical nature of networks and their management. For example, we know that collaborative efforts often arise to solve complex problems in dynamic social environments. Such problems involve uncertainty regarding not only the solution but also the definition of the itself (Koppenian & problem Klijn), collaborative efforts set up to address them are usually complex themselves. We also know that complexity affects network features such as membership and size. For example, membership structure is ambiguous and dynamic, given the different linkages among actors inside and outside the partnership. Ambiguity in membership stems from the fact that the same persons may represent different organizations in different arenas, and the role a person may be representing at a given moment may be unclear. Furthermore, members may not have clarity about who is executing a given activity at the moment: the network itself, one of its member, or even an individual acting independently from the network.

A lack of consensus exists around the effective number of organizations required for successful collaboration in a network. Kanter suggested that as many people as possible should be involved to bridge interpersonal and interorganizational differences in structures, processes, and skills. In contrast, others conclude that complexity must be kept low and, hence, membership numbers limited, and that strong trust relations may be maintained only with a limited number of actors.

The contradictory findings about trust in network relations represent yet another example of the existence of paradox in networks. Some argue that trust develops through personal and informal relations that later become formal and role based, an argument that follows traditional bureaucratic organization theory. In contrast, others suggest just the opposite causal logic in network relationship formation: Relationships are based first on roles, formal contracts, and agreements around network formation, which then turns into resilient trust as the network institutionalizes, giving way to personal relations, psychological contracts, and informal

agreements and understandings that strengthen the networks over time and facilitate collaboration.

In sum, the relevance of complexity and tension in recurrent themes in the literature on network management such as ambiguous membership, multiple aims and success criteria, and contradictory research findings on key themes such as membership size or relationships and trust highlight that interorganizational networks imply certain inherent paradoxes that network leadership must address.

10 Leadership of interorganizational networks

According to Chrislip and Larson, collaborative contexts require different types of leadership and management than traditional intraorganizational contexts due to the boundary-crossing nature of organizational, collaborations (sector, evaporative boundaries), the lack of formal authority and hierarchy, and the blurriness of strategies. Leadership in collaborative contexts must be necessarily different, focusing largely on process, and has similarities to facilitative, transformative, and servant leadership that is, to inspire commitment and action, to lead as peer problem solver, to build broadbased involvement, and to sustain hope and participation.

The role of leadership in generating and maintaining effective interorganizational collaboration has also been understudied; indeed many provokingly question if networks really are managed at all. Leadership in networks, however, seems of utmost importance.

Defining leadership in general is already a disputed terrain. For example, Heifetz and Laurie stated that getting people to do adaptive work is the mark of leadership, while Rainey defined leadership as the capacity of someone to direct and energize the willingness of people in social units to take action and achieve goals by drawing on legitimate authority. On our part, we follow Huxham and Vangen in defining leadership in more general terms as "mechanisms things happen that make collaboration". Such a definition of leadership, "mechanisms that make things happen collaboration," obviously goes against authors that draw marked lines between management tasks and leadership. We believe this distinction is far less useful in interorganizational networks given the

shared-power setting and the inherently adaptive challenges they imply, which strongly reduce

technical tasks that may be dealt with via managerial expertise and authority.

Traditional leadership studies based on trait, style, contingencies, and transformational approaches presume the existence of a leader and a follower and specified goals. The latter do not usually apply to networks, since authority and goals are usually a disputed terrain. If intraorganizational leadership involves a leader and a follower, interorganizational leadership hardly does so indeed, Heifetz and Laurie argued that most interesting leadership happens without anyone experiencing being a leader and no one experiencing being a follower.

Here, we focus on activities and actions that make things happen rather than on individuals. We do not draw a hard distinction between management and leadership and see leadership as a collective phenomenon. Our approach is a relational approach to leadership. Compared to other relational leadership streams, it is similar to what Hunt and Dodge called systems-based and collective leadership but not to either social network analysis leadership or the leader-member exchange (LMX) perspective (see Hunt and Dodge for a review of relational approaches to leadership).

The systems-based and collective perspectives to leadership look, just as we do, at the overall dynamics of the group which allow it to perform. These perspectives are processual, and the collective perspective, in particular, does not give any individual a specific relevance. The social network analysis leadership perspective looks at the position of the leader in its environment, or network, and prescribes that strong leaders are those with most and best relations. Leader-member exchange leadership, on the other hand, conceptualizes leadership as a sum of transactions between the leader and its followers. In this view, leaders in groups maintain their position through a series of tacit exchange agreements with their followers. Only the leader-member perspective distinguishes between management and leadership, and both the social network analysis and leadermember approaches emphasize a leader and are not processual.

The leadership of networks we describe later, however, differs from these relational leadership approaches since systems-based and collective perspectives have only been applied to organizations

not networks of organizations and the LMX and social network analysis perspectives refer to leadership in networks. Network leadership may refer to two very different things. First, it may refer to the leadership of an organization embedded in a network that is, leadership in networks. Network leadership, however, can also refer to leadership of the network, not that of a single organization within the network. Here, rather than leadership in networks, we are interested in leadership of networks, which refers to how networks, as a whole, are led.

11 THE FOCUS OF LEADING NETWORKS

Leadership of networks, as we understand it, does not focus on individuals. Rather, it focuses on activities and actions that make things happen. Additionally, it does not draw a hard distinction between management and leadership and sees leadership as a collective phenomenon. Moreover, we see network leadership as primarily dealing with generating unity among the network members while preserving their diversity.

Diversity and unity of the network are both necessary for network effectiveness, but diversity often undermines unity by generating conflict and, hence, disunity. Successful networks are simultaneously united and diverse. This tension is always present in that the potential for diversity turning into disunity is always there: Unity and diversity conform to a management paradox in that they imply equally necessary opposing forces that generate a tension.

The paradox of unity/diversity essentially deals with the tension between the self and the collective. Paraphrasing Smith and Berg, a network often needs [organizations] who are different to fulfill its primary task. This means that differences must be brought into the [network] and then integrated in a way that provides unity while preserving difference. Difference alone is enough to provide a platform for conflict, but the need to unify in light of difference makes it almost inevitable that conflict will occur. . . . Under these circumstances, the very fact that organizations contribute differences makes it possible for the group to be effective, yet these same differences threaten the network's capacity to function.

In other words, the potential for collaborative advantage depends on the ability of each partner to bring different resources. This needed diversity is,

however, a function of differences in organizational purpose, which produces inherent tensions for collaboration.

Coalitions that are too unified resemble organizations and fail to achieve the essence of the coalition. Diversity slows progress toward goals, however, since it takes time to generate adjustments such as trust and familiarity.

The unity versus diversity tension may occur along different dimensions, according to Mizrahi and Rosenthal. It may occur with goals either too broad thus, misleading participants and being difficult to apply or too narrow to attract members. The expected outcome, in particular when successes are achieved and benefits must be shared, is another dimension along which the unity-diversity tension manifests itself. The tension may occur as well along the power dimension, where unity generates power for the network but may be difficult to achieve due to power differences among members.

In sum, the unity/diversity paradox is inherent to networks, which must be diverse to have an added value with respect to hierarchies but united to allow for concerted action of any kind, unlike markets. Leadership is about avoiding diversity and unity to undermine each other by respectively generating disunity and similarity. In order for a network to be effective, then, a network has to be diverse, be united, and, most importantly, avoid diversity turning into disunity.

12 LEADERSHIP ACTIVITIES

Some agreement seems to exist on the type of activities but unfortunately, not on the terminology that must be carried out to manage collaboration. Drawing primarily on Agranoff and McGuire and Huxham and Vangen, the different types of activities deal with actors and resources, interaction and structure, and the interior of the network and external environment of the network.

Facilitating aims at interaction among participants and is important, since interaction of diverse organizational members must be aided in order to avoid disunity and to build unity. It refers to managing the inevitable inequalities regarding participants and motivating participation by network

members. Facilitation is making peace among members, supporting member involvement, and

communicating to and with members. A major component, if not the core, of facilitation is facilitating decision making in the diverse networks, since these processes must be open and inclusive in order to avoid the "exit" of the autonomous member organizations. This is so because networks are made up of autonomous organizations that, when dissatisfied, are without an option to voice their dissatisfaction and are free to exit (or abandon) the network. An inclusive and open process, however, must be facilitated in order to avoid disunity due to power imbalances and disputes arising around, for example, benefit distribution.

Framing deals with network structuring. It aims at influencing institutions including rules and values and perceptions. Framing is about creating infrastructures for the collaboration and includes influencing rules, values, perceptions, and processes. If adequately done, by setting the operating structure, it allows for an interaction among diverse entities that does not turn into disunity but rather unifies. Framing deals with setting up the organizational procedures and is important in managing the unity/diversity paradox because it sets the platform for interaction. Common meaning making is an important part of framing, in which unity emerges by setting engagement rules, common norms, and a shared identity and vision. All in all, framing is an important unifying activity. Partners need a shared sense of correlated fate to function.

Activating deals with supporting actors who want to become members and with attracting needed partners. Activating plays an important role in managing the network, since it allows for the selecting and attracting of members who are diverse along specific organizational dimensions but are united around the network's metagoal, identity and experiences, and values. Activating is enhanced when the network has legitimacy in the face of potential members legitimacy that is, in turn, enhanced by the network's success record and its procedural inclusiveness. The possibility to meet other organizations and share experiences also attracts potential members to the network.

Mobilizing deals with capturing the necessary resources and support for the network. Mobilizing essentially builds network power such as external legitimacy, knowledge, and access from the network's domain.

13 Interaction and structure

Network management implies managing the interactions between actors (the "games" where actors exchange resources and coproduce activities) and the overall network (Kickert, Klijn, & Koppenjan). While distinct, these two levels continually feed back into each other: Games are influenced by the network, rules, membership, relations, and resources and, in turn, influence the network by remodifying the interaction. Framing modifies the structure of the network, and facilitating addresses the interaction. Both activities, however, deal with the interior of the network. In addition, mobilizing and activating deal with the external boundaries and exterior of the network. In activating, actors are recruited or expelled; in mobilizing, resources and allies are looked for from without. This points to a second distinction of network activities that between network and domain.

14 IO NETWORK & IO DOMAIN

Another management distinction that appears among the leadership tasks is whether they are focused at influencing the network itself or the network's immediate environment, or domain. According to Trist, an interorganizational domain is the set of organizations and the issues which bring them together. The domain of an interorganizational network is itself and the related public and private organizations that affect it and that it affects. Different scholars have highlighted the distinction between managing inward and managing outward. Most eminently, Moore, in his famous book, divided public management into managing operations, managing the political environment and, somewhere in between, managing inward and outward, as well as managing the strategy and vision. Although this author referred to a single organization, the inwardoutward distinction is also applicable interorganizational networks. Networks not only interorganizational formal member interaction, but also manage the network's exterior environment, or its domain.

Figure 3 illustrates the activities and how the activities refer to either member interaction or network structure and network or domain.

15 LEADERSHIP & POWER

Sustaining the unity/diversity paradox generates power, which increases the network's effectiveness. The networks sustain the unity/diversity paradox by activating members, facilitating interaction, and framing the structure (procedures, rules, and values). In addition, networks mobilize support. When activating, the network selects and attracts members who share certain experiences, values, and principles, but who are diverse regarding other organizational characteristics. Interaction and open decision making among the diverse members must be facilitated and members united by framing common procedures, rules, and values.

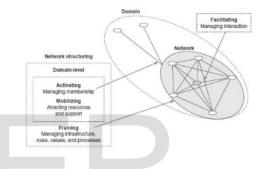


Figure 3 Leadership Activities

The unity and diversity paradox is sustained to build the network power: Unity increases the ability of the network to get action by members, and diverse membership builds the resource base of the network. Without unity, the network cannot use its resources such as access, knowledge, legitimacy, and financial resources. The networks use the power built by sustaining the unity/diversity paradox to achieve their mission.

An additional way of understanding the leadership of networks and yet another conceptualization of power is to look at the power dynamics internal to them: decision making, non decision making, and managing meaning. These three dimensions of power, respectively, regard how decisions are made, the issues around which decisions are discussed and made, and which assumptions of what is right and

wrong are prevalent. Several scholars highlight that the internal power dynamics play a fundamental role in network management and leadership (Crosby & Bryson).

Facilitating is about managing decision making and non decision making, and framing is about generating common meaning making. The facilitation of an open decision-making process hints at several points. First, whereas in intraorganizational settings, management is about decision making, in a network setting, management is about facilitating decision making, in that decisions are made not by the managing unit but by the network members. The managing unit facilitates rather than decides. The idea here is not to reduce uncertainty but instead to cope with it by incorporating openness and inclusiveness as a programmed routine. Second, the managing unit facilitates the process and does not control the outcome. This does not mean that the process is left to freely develop; rather, it prescribes positive manipulation and support routines—routines aimed at supporting decision making rather than making decisions.

Several scholars have highlighted the importance of facilitating decision making in networks. Similarly, managing common meaning making is also known to be important in networks (Koppenjan & Klijn) because in networks, the members' frames of reference are quite different, which makes formalized and rational decision-making rules less effective (Salancik & Pfeffer). Actors in a network have distinct mental frames of reference, which serve as a filter. The frame of reference ascribes, interprets, and makes meaning of the outside reality; it constructs the perceptions of the actors regarding reality. On the basis of these perceptions, actors then make their decisions and act. Actors go through a naming and framing process, which is, basically, meaning making.

Therefore, in order to accomplish joint decision making regarding solutions to social problems, a mutual adjustment of perceptions is essential. This implies that frames of reference must be minimally adjusted. A network, then, has to generate a common culture made of values, norms, customs, and rules. The network culture partially determines what and how games are played that is, how actors interrelate. Scholars dealing with collaboration and conflict resolution reach similar conclusions. According to Gray, different parties to a collaboration or conflict resolution team must "reframe." Refraining offers a minimum of joint meaning making to transform a deadlock to a potentially resolvable problem.

In brief, networks aim at building power, which means building the power and the ability to get action

by members. While the network's diversity provides resources, unity allows the network to get action by members. The management of the network, however, must also take into account internal power dynamics, in particular, decision making, nondecision making, and meaning making. These have an effect on the unity/diversity paradox and, therefore, ultimately affect the leadership of networks.

16 CONCLUSIONS

This research-paper has mapped the field of interorganizational networks and focused on one issue: network leadership. It has done so by approaching network leadership in a very specific way: overall leadership activities carried out by the networks. Moreover, we use the inherent paradox of unity and diversity and power to look at network leadership. Many other studies and approaches to leadership of networks are necessary and possible. For example, how is leadership divided within the network among the different individuals and why? What type of competencies do the network manager and its team have to possess?

Research on areas of studies, in addition to network leadership, is also needed. For example, an important, time-related aspect is the formation of the networks. How does such a foundational imprint affect posterior network management? What are important aspects of path dependence for network management? More research on interorganizational networks is necessary and should be carried out using all of the available empirical and theoretical tools of the trade.

REFERENCES AND RECOMMENDED READING

Papers of particular interest, published within the period of review, have been highlighted as:

- Of special interest.
- Of outstanding interest.
 - Mizrahi, T., & Rosenthal, B. B. (1993).
 Managing dynamic tensions in social change coalitions. In T. Mizrahi, & J. Morrison Community organization and social administration advances, trends, and emerging principles (p. 11-40). New York: The Haworth Press

- 2. Jarrillo, J. C. (1993). Strategic networks: the borderless organization. Oxford: Butterworth-Heinemann. Kanter, R. M. (1994). Collaborative advantage. Harvard Business Review, 72(4), 96-109.
- 3. Faulkner, D., & de Rond, M. (2000). Cooperative strategy: economic, business and organizational issues. Oxford, UK: Oxford University Press.
- 4. Chrislip, D. D., & Larson, C. E. (1994). Collaborative leadership how citizens and civic leaders can make a difference. San Francisco: Jossey-Bass.
- 5. Crosby, B., & Bryson, J. (2005). New leadership for the common good. San Francisco: Jossey-Bass.
- Ebers, M. (1997). The formation of interorganizational networks. Oxford, UK: Oxford University Press.
- 7. Faulkner, D., & de Rond, M. (2000). Cooperative strategy: economic, business and organizational issues. Oxford, UK: Oxford University Press.
- 8. Gray, B. (1985). Conditions facilitating interorganizational collaboration. Human Relations, 38(10), 911-36.
- 9. Gulati, R. (1998). Alliances and networks. Strategic Management Journal, 19(4), 293-317.
- 10. Heifetz, R. A., & Laurie, D. L. (1997). The work of leadership. Harvard Business Review, 75(1), 124-134.
- 11. Hunt, J. G., & Dodge, G.E. (2000). Leadership deja vu all over again. Leadership Quarterly, 11(4), 435-459.
- 12. Kickert, W., Klijn, E.-H., & Koopenjan, J. (1997). Managing complex networks. London: Sage.
- 13. Doz, Y. (1996). The evolution of cooperation in strategic alliances: initial conditions or learning processes? Strategic Management Journal, 17(1), 55-79.

- 14. Knoke, D., & Kuklinski, J. (1991). Network analysis: basic concepts. In G. Thompson, J. Frances, R. Levacic, & J. Mitchell (Eds), Markets, hierarchies and networks: the coordination of social life (p. 173-182). London: Sage Publications.
- 15. Lowndes, V., & Skelcher, C. (1998). The dynamics of multi-organizational partnerships: an analysis of changing modes of governance. Public Administration, 7(6), 313-333.
- 16. Alter, C., & Hage, J. (1993). Organizations working together. Newbury Park, CA: Sage.
- 17. Faulkner, D., & de Rond, M. (2000). Cooperative strategy: economic, business and organizational issues. Oxford, UK: Oxford University Press.
- 18. European Commission. (2003). Guidelines for successful public-private partnerships. Brussels, Belgium: European Com-mission.