Toward a Comprehensive Theory of Collaboration

Article *in* The Journal of Applied Behavioral Science · June 1991

DOI: 10.1177/0021886391272001

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Collaborative Alliances: Moving From Practice to Theory

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The Journal of Applied Behavioral Science *presents two special issues on collaborative alliances that examine the contributions and limits of existing theories for explaining collaboration, and that clarify and expand our understanding of this phenomenon. In this introduction, the following major theoretical perspectives are applied to explain collaboration and collaborative alliances: resource dependence theory; corporate social performance/institutional economics theory; strategic management/social ecology theory; microeconomics theory; institutional/negotiated order theory; and political theory. The nine case research articles in the two special issues analyze a wide variety of collaborative alliances and provide unique insights. The articles' contributions, the levels of analysis they focus on, and the ways they address three broad issues of collaborative alliances—preconditions, process, and outcomes—are discussed. No single theoretical perspective provides an adequate foundation for a general theory of collaboration, but the articles point the way to the construction of such a theory.*

The formation of collaborative alliances among organizations is touted as a significant strategy that organizations can use to cope with the turbulence and complexity of their environments. Indeed, many organizations appear to be following this strategy in at least some of their environmental relationships. Concurrently, academic interest in interorganizational relationships—particularly collaborative ones—is rising. Collaboration shows promise for solving organizational and societal problems, provides

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JOURNAL OF APPLIED BEHAVIORAL SCIENCE, Vol. 27 No. 1, March 1991 3-22

some extraordinarily intriguing research settings, and is sufficiently underdeveloped as a field of study to inspire creative conceptual contributions.

These two special issues of the *Journal of Applied Behavioral Science* (Vol. 27, Nos. 1 and 2), which build on both case research and theoretical analysis, are designed to move beyond pragmatic descriptions to a deeper, more systematic understanding of the theoretical issues involved in forming and maintaining collaborative alliances.

Collaboration is defined by Gray (1989, p. 5) as "a process through which parties who see different aspects of a problem can constructively explore their differences and search for solutions that go beyond their own limited vision of what is possible." Based on this definition, a *collaborative alliance* can be described as an interorganizational effort to address problems too complex and too protracted to be resolved by unilateral organizational action. Collaboration refers to the process; collaborative alliances are the forms. Together these concepts provide a foundation for moving toward answering the questions of why, how, and with what consequences organizations participate in multiparty problem solving.

Examples of collaborative alliances are plentiful. Collaboration in the form of joint ventures among businesses is increasingly being used to promote technology transfer, to support new technology development, and to boost competitiveness in global markets. Firms in some industries engage in collaborative self-regulation as a way of controlling undesirable practices without governmental intervention. Public-private partnerships are formed to tackle pressing urban problems, such as ineffective educational systems, hard-core unemployment, drug abuse, housing stock deterioration, and regional economic decline, as well as widespread social problems such as poverty and illegal drug use. Workers collaborate among themselves and with others to purchase and operate the failing organizations that employ them. Affected and interested parties attempt to negotiate collaborative solutions to complex environmental disputes. At the international level, multinational alliances are established to deal with transborder issues such as global pollution, fair trade practices, and the use of global resources such as airspace and the sea. Some collaborative alliances, such as trade associations, peak associations, and "umbrella" social service agencies such as United Way provide ways of strategically solving certain collective problems of similar organizations. Other examples of collaborative alliances include regulatory negotiation processes, gain-sharing and participatory management programs, purchasing cooperatives, issues networks, and intergovernmental coordination efforts.

Whatever the specific form of collaboration, many organizations are finding it advantageous and often necessary to find partners with whom to work toward mutually desirable ends.

THE CONTRIBUTIONS OF PRELIMINARY CASE RESEARCH

The preponderance of research on collaborative alliances to date has been based on case studies. Case research has made specific theoretical contributions toward identifying the following:

- the need for alliances (Brooks, Liebman, & Schelling, 1984; Gray, 1985)
- the steps involved in creating alliances (Gricar & Brown, 1981; McCann, 1983; Susskind & Madigan, 1984)
- the potential of collaboration for ameliorating the negative consequences of difficult problems (Gricar & Baratta, 1983; Hanlon & Williams, 1982; Logsdon, 1989; Taber, Walsh, & Cook, 1979)
- factors related to the success of partnerships in promoting innovation (Austrom & Patterson, 1989; Dimancescu & Botkin, 1986; Hallisey, Sanabria, & Salter, 1987)
- factors related to the success of partnerships in resolving disputes (Bingham, 1986; Carpenter & Kennedy, 1988; Gray & Hay, 1986).

The most fundamental contribution of case research has been its identification of the vast array of settings in which collaborative alliances are being undertaken. In addition, case research has heightened our awareness of the complex and often messy problems that confront organizations, as well as the inability of single organizations to "fix" intransigent problems that affect many organizations concurrently. Additionally, by using cases, researchers have been able to understand the historical evolution of collaborative alliances. Case research has also enhanced our understanding of the complexities involved in developing and sustaining collaborative alliances. In sum, case studies of collaboration have highlighted the theoretical and practical importance of the topic, identified areas for research, and raised critical questions for theoretical debate and further empirical investigation.

Extant case research has identified three issues that are particularly important for additional theorizing. First, what are the preconditions that give rise to collaborative alliances? That is, which factors (e.g., motivations of individual organizations or environmental stimulants) cause organizations to participate in some form of collaboration? Second, what exactly is collaboration, and how does it occur? That is, what is the process by which stakeholders interact to accomplish their objectives? Third, what are the expected outcomes when organizations collaborate? Are some special results impossible to achieve through other types of action? Similarly, what constitutes successful collaboration? Are specific outcomes associated with the success or failure of a collaborative alliance?

Our primary objective for these special issues is to provide new insights into collaborative alliances by testing, challenging, expanding, or replacing existing theories. The articles in these special issues of *JABS* were explicitly selected because they advance our theoretical understanding of collaboration and collaborative alliances. An important criterion used to select manuscripts for publication was that each work had to make a provocative contribution to an emerging general theory of interorganizational collaboration. We looked for papers that (a) demonstrated the contributions of existing theories in new collaborative settings, (b) provided critical reviews of the limits of existing organizational theories to explain collaboration, and/or (c) pushed the theoretical frontier to provide clarity and depth of understanding or inspired new perspectives.

Because of space limitations, the nine articles selected for publication are dispersed across two issues of *JABS*. The assignment of articles to Part 1 or Part 2 was arbitrary;

in this introductory article, and in our introduction to Part 2 of the special issues, we treat them as a set.

In the remainder of this overview, we survey the theoretical perspectives that have been applied to research on collaborative alliances. For each of these theories we indicate the organization-specific questions that the theory has attempted to answer and identify domain-level questions that the theory must address if it is to advance our theoretical understanding of collaboration. Following this, we preview all nine articles in the two special issues and show how the various theoretical perspectives are represented among them.

In our introduction to Part 2 of the special issues, after briefly reviewing the overview perspective of this article, we move toward a general theory of collaboration by identifying several core theoretical questions that cut across the nine articles. Finally, we attempt to answer some of these questions by combining the various theoretical perspectives to arrive at a more comprehensive explanation of collaboration and collaborative alliances.

THEORETICAL PERSPECTIVES

Limitations of Existing Theories

Despite the growing use of collaborative alliances in a wide variety of settings, much of the organizational literature still treats the individual organization as the centerpiece of theorizing. In this regard, we believe organizational theory is lagging behind practice. Scholars certainly know—and often recite—that organizations operate within increasingly complex networks of relationships, yet organizational theories tend to ignore or grossly underplay the interdependencies associated with these relationships and to exaggerate the extent of discretion that can be exercised by any single organization. We have several well-developed theories of the firm, for example, but comparatively little theory that addresses interfirm behavior and relationships, firm-stakeholder relations, or the firm's role in multiparty social problem solving. A few recent exceptions include Oliver's (1991) explanations of the constraints on organizational action; Miner, Amburgey, and Stearn's (1990) study of the impacts of interorganizational alliances on the partners and contextual environments in which the alliances operate; Wood's (1991a) revision of the corporate social performance model to better accommodate stakeholder interests in firms' performance; and Gray's (1989) work detailing various types of collaborative alliances.

The Need to Reorient Theory for Domain-Level Analysis

We are *not* suggesting that existing theories are useless for understanding collaborative alliances. We do believe, however, that for organization theory to explain collaborative organizational forms, the focus of theorizing must shift from the individual organization to the interorganizational domain—that is, the configuration of organizations linked to a particular problem (Emery & Trist, 1965; Trist, 1983). As the focus of

theorizing shifts, so must the critical questions that theorists should ask; the salient questions at the interorganizational level are different from those at the level of a single organization. The articles in these special issues each analyze a critical aspect of organizing at this domain—or interorganizational—level. In doing so, they draw on and extend a variety of existing theoretical frameworks.

We have identified six major theoretical perspectives that appear to have significant possibilities for explaining collaboration and collaborative alliances:

- resource dependence theory
- corporate social performance theory/institutional economics theory
- strategic management theory/social ecology theory
- microeconomics theory
- institutional theory/negotiated order theory
- political theory.

Table 1 shows how the key research questions shift within each theoretical approach when the perspective changes from the level of a single organization to a domain level.

Resource Dependence Theory

This relatively powerful theory of individual organizational behavior shows considerable promise for explaining some domain-level phenomena. For resource dependence theory, a key question from the perspective of the individual firm is, How can we achieve stability and reduce uncertainty with respect to the environment without increasing our dependency on other organizations? The focus is on minimizing interorganizational dependencies and preserving the organization's autonomy while recognizing that interorganizational relationships are necessary to acquire resources. As one shifts to the domain level, key questions become, What are the circumstances in which stakeholders will adopt collaborative alliances? and What are the patterns of interdependencies that result from resource exchanges? The focus changes from a single organization's resource configuration to the overall allocation of resources in the interorganizational field, among all players in the domain. If resource dependence theory can accommodate such domain-level questions, it may prove useful for explaining how and why organizations act to protect a commons, or to enhance collective interests, when their immediate self-interests appear to align more closely with noncollective behavior.

Corporate Social Performance Theory/ Institutional Economics Theory

Theories of corporate social performance (e.g., Carroll, 1979; Preston & Post, 1975; Wartick & Cochran, 1985; Wood, 1991a, 1991b) and stakeholder theory (Freeman, 1984) hold promise for capturing the complexities of relationships within collaborative alliances. Despite early attention to broad questions of institution-level responsibility (e.g., Davis, 1973), however, these approaches so far have faltered in this task because (a) they tend to view the corporation as the center of a network of stakeholder

TABLE 1

Research Questions at the Organization and Domain Levels

Theoretical Perspective	*Organization-Level Questions*	*Domain-Level Questions*
Resource dependence	How can environmental uncertainty be reduced without increasing dependence?	When do stakeholders adopt collaborative alliances?
Corporate social performance/institutional economics	How does a firm control and respond to its stakeholder network?	What is the role of business as a social institution?
	What is the firm's role in solving social problems and issues?	How are responsibilities for solving social problems allocated among actors?
Strategic management/social ecology	How can firms reduce threats and capitalize on opportunities within their environment?	How do partners in an alliance regulate their behaviors so that collective gains are achieved?
Microeconomics	How can an organization achieve efficiency in its transactions with other organizations?	How can collectivities overcome impediments to efficiency in their transactions?
Institutional/negotiated order	Why do organizations adopt certain structural configurations?	How do alliances interact with institutional environments?
	How do organizations achieve legitimacy with institutional actors?	Are alliances shaped by institutional environments or vice versa?
Political	Who has access to power and resources that affect the organization?	Who has access to power and resources that affect the domain?
	Who does and does not benefit from the distribution of power and resources that affect the organization?	Who does and does not benefit from the distribution of power and resources within the domain?

relationships—rather than as one participant among many—and (b) they do not yet chart or account for all the relationships among a firm's stakeholders, but focus instead on bilateral firm-stakeholder connections. Currently, key organization-level questions include, How does a firm control and respond to its own stakeholder network to achieve organizational goals and social legitimacy? and What is the firm's role and responsibility in solving social problems and issues?

At the domain level, corporate social performance theory asks, What role should business play as a social institution? and How are the responsibilities for solving social problems and issues allocated among actors, such as corporations, government agencies, nonprofit organizations, and others? Institutional economics (Bromley, 1989; Livingston, 1987; Quiggin, 1988; Söderbaum, 1987; Whalen, 1987) offers a related but much broader approach by permitting domain-level questions such as, How are social and institutional legitimacy defined and achieved? and How do collaborative alliances mediate between the interests of their participant organizations and those of the larger environment?

Strategic Management Theory/ Social Ecology Theory

Strategic management theory is also organization centered, for it depicts a focal organization charting independent courses of action to gain competitive advantage (e.g., Hofer & Schendel, 1978; Porter, 1980). A key question that these theorists try to answer is, How can organizations reduce threats and capitalize on opportunities in their environment? Not only is the focal organization the center of theoretical attention, but it is also viewed as the principal actor, the one whose interests are most important and whose decisions and actions carry the most weight.

Such theories may perpetuate an illusion of control that organizations and their managers actually do not and cannot exercise. Furthermore, this illusion may obscure real possibilities for progress toward meeting organizational and collective goals. Strategic management theory has virtually no room for a theory of collective action that explains or even acknowledges the variety of collaborative alliances that exist, nor does it offer any way to account for commons-protective behaviors, power sharing, or other phenomena found in collaborations.

Some efforts to redirect strategic management to an interorganizational level have been made (Astley, 1984; Astley & Brahn, 1989; Astley & Fombrun, 1983; Fombrun, 1986). These works, however, shift the perspective from strategic management to social ecology, and emphasize the benefits of collective strategy for situations in which organizations face collective problems. At the domain level, a key question should be, How do participants in a collaborative alliance regulate their self-serving behaviors so that collective gains are achieved?

Microeconomics Theory

Applications of microeconomics theory to organizations (particularly in the forms of transaction costs theory and agency theory) offer another theoretical perspective that can inform interorganizational dynamics. The key question at the organization level

is, How can an individual organization achieve efficiency in its transactions with other organizations? Although economic theorists (e.g., Coase, 1952; Williamson, 1975, 1985, 1991) attempt to explain interorganizational behavior on this basis, they tend to view such relationships as bilateral rather than multilateral in nature. That is, the focus is on achieving efficiency within each of an organization's relationships with other organizations, without considering the dynamics of those external organizations' relationships among themselves or the overall efficiency of the social system within which the organizations operate.

From a domain perspective, the questions shift to concerns about the efficiency of an overall set of transactions (e.g., examining the possibility of free rider effects in collective activity or the preservation of common resources [Hardin, 1968; Olson, 1965]). Domain-level questions focus on the efficiency of the collaborative alliance as an organizational form, and include, How can organizational collectivities overcome free rider effects and other impediments to efficiency in their transactions? Questions considering the relationships between the collaborative alliance and other facets of the problem domain should also be asked, such as, How does the collaborative alliance affect the overall efficiency of resource use within the entire interorganizational network included in the problem domain?

Institutional Theory/Negotiated Order Theory

The central premise of institutional theory is that organizations seek to achieve legitimacy from institutional actors by structurally adjusting to institutional influences. They may do this by complying with institutional directives, by copying others' responses to institutions, or by conforming to institutional norms and rituals (DiMaggio & Powell, 1983). Thus institutional theory provides answers to organization-level questions such as, Why do organizations adopt certain structural configurations? and How do organizations achieve legitimacy with institutional actors?

When the focus is shifted to a domain level, legitimacy and the processes for granting it can be viewed as characteristics of the social system. Appropriate questions for this level are, How do collaborative alliances interact with institutional environments? and Are alliances shaped by institutional environments in similar fashion to the ways that single organizations are, or can alliances influence institutional environments?

A slightly different application of institutional theory builds on negotiated order theory and is readily adaptable to collaborative alliances. The key question for these circumstances is, What are the patterns of institutionalized thought structures that link parties in a domain, and how are those patterns developed, sustained, and changed? Negotiated order theory thus focuses on the symbolic and perceptual aspects of interorganizational relationships, particularly on the evolution of shared understandings among stakeholders of the domain's structures and processes, limits and possibilities.

Political Theory

Unlike other theories, political theory, which focuses on private interests and conflict, has been applied at several levels of analysis. It has been used to explain intra-

organizational relations (Benson, 1975), societal-level dynamics (Dahl, 1967, 1982; Wildavsky, 1979), and international relations (Keohane, 1984; Strange, 1988). It is inherently a relational theory for which key questions include, Who has access to power and resources? and Who does and does not benefit from various distributions of power and resources? Although one can ask these questions at the organizational level, for our purposes the relevant issues are the power dynamics and the distribution of benefits within a network of stakeholders (whether these are organizations or nation-states) in a problem domain.

With the exception of institutional economics theory, social ecology theory, and political theory, these theories have been applied primarily or exclusively at the organizational level of analysis, with a single organization serving as the theoretical focal point. Yet, overall, these theories can offer important insights into collaborative alliances – as long as the focus of the theorists shifts from focal organization dynamics to the dynamics of the interorganizational domain. Refocusing these theories onto domain-level interactions introduces new questions for which the answers provide a preliminary foundation for an emerging theory of collaboration. We return to this theme after we discuss each article individually.

THEORETICAL CONTRIBUTIONS OF THE ARTICLES IN THE SPECIAL ISSUES

The nine articles in these two issues analyze a wide variety of collaborative alliances. Most of the articles have in common a reliance on case research as their empirical core. The others discuss generic types of alliances rather than specific cases. Although some overlap occurs among the theoretical perspectives included (nine articles represent six theories), each article provides unique insights into collaborative alliances. In this section, we review the contributions of each article to the special issues and comment briefly on the levels of analysis at which the articles are aimed. In our overview to Part 2 of the special issues, we show how the articles contribute to the theoretical development of a general model of collaboration and collaborative alliances.

Overview of the Individual Articles

The first article, "Interests and Interdependence in the Formation of Social Problem-Solving Collaborations" by Jeanne M. Logsdon, presents a model of critical preconditions for the formation of collaborative alliances. Different patterns of evolution toward collaboration are presented and illustrated by two cases: an effort to improve regional transportation in the Silicon Valley, and an effort to develop comprehensive regulations for underground storage tanks.

Jean Pasquero's article, "Supraorganizational Collaboration: The Canadian Environmental Experiment," describes a fascinating experiment at the national policy level to promote sustainable development in Canada. The initiation of collaborative roundtables to address environmental issues illustrates collaboration at the local, regional, and societal levels to promote a societal-level public policy. Drawing on institutional

economics, Pasquero builds a case for understanding the macropolitical forces that affect collaborative alliances.

In contrast to Pasquero's societal-level view, Frances Westley and Harrie Vredenburg describe an unusual collaboration among just a few stakeholders to address an environmental issue. In "Strategic Bridging: The Collaboration Between Environmentalists and Business in the Marketing of Green Products" they delineate the unique characteristics of bridging organizations and distinguish bridging organizations from other forms of collaborative alliances.

"Lessons in Community Development: An Activist Approach to Stimulating Interorganizational Collaboration" by John W. Selsky examines the extent to which collaboration enabled a group of social service agencies to develop the collective capacity to reduce the environmental turbulence experienced by the individual agencies. Using a social ecology perspective, Selsky identifies three levels of capacity building and presents guidelines for change agents who want to increase the collective capacity of an interorganizational federation.

Craig S. Fleisher also looks at federations, but his approach differs from Selsky's by providing a microeconomic analysis of the interactions among agents and principals within interorganizational federations. His article, "Using an Agency-Based Approach to Analyze Collaborative Federated Interorganizational Relationships," outlines the different bases for inefficiencies in the management of three types of federations.

In "The Use of Negotiated Order Theory as a Tool for the Analysis and Development of an Interorganizational Field," Maria L. Nathan and Ian I. Mitroff discuss an ongoing collaboration among organizations concerned about product tampering. By mapping the extent to which these organizations share a common understanding or "negotiated order" about their relationships to one another, the authors demonstrate the level of development of the interorganizational field. Such mapping provides a powerful tool for increasing the level of awareness among the stakeholders of their interdependence, thereby enhancing the possibility of collaboration.

"The Context of Interorganizational Collaboration in the Garment Industry: An Institutional Perspective" by Mark P. Sharfman, Barbara Gray, and Aimin Yan reveals the competitive and institutional forces that drive and impede the formation and sustainability of collaborative alliances. Presenting the case of a collaborative training project organized by local garment manufacturers, a vocational school, local development corporations, and government funding agencies, they show how the alliance adapted to changes in the competitive and institutional forces impinging on it.

"Stakeholder Collaboration and Innovation: A Study of Public Policy Innovation at the State Level," by Nancy C. Roberts and Raymond Trevor Bradley, analyzes a collaborative alliance formed at the state level to generate recommendations for changes in educational policy. The article questions whether this group of stakeholders achieved collaboration and whether collaboration for public policy generation can produce innovative outcomes.

Vicki L. Golich, author of "A Multilateral Negotiations Challenge: International Management of the Communications Commons," articulates the possibility of inter-

national collaboration among nation-states to manage a common property resource – specifically, the airways for international communication. She provides a realistic appraisal of the competing legal principles and political interests that create a context within which such collaboration might emerge.

Levels of Analysis

Each of these articles shifts the level of analysis from the individual organization to that of the multiparty collaborative alliance. Differences occur among them, however, in the sociological levels that they address and, thus, in their applicability to particular types of interorganizational domains.

The most microlevel collaboration cited in this set of articles is that described by Westley and Vredenburg, which involves a business and two environmental groups. Collaboration at a local or regional level is addressed in the articles by Selsky, Sharfman et al., and Logsdon. Roberts and Bradley discuss state-level collaboration. Nathan and Mitroff focus on an issue (product tampering) that has national impact but is not yet a national-level policy issue. Fleisher looks at a type of collaborative alliance that could be formed locally, regionally, nationally, or internationally among similar organizations (e.g., federations of social service agencies, sports organizations, and trade associations). Pasquero examines a national-level initiative in Canada that has both local and international implications. Golich adopts the most global analysis in her evaluation of international collaborations to manage common property resources.

We indicate above that a general theory of collaboration must rise above the individual organization to focus on domain-level questions and problems. Given the virtually complete range of sociological levels of analysis represented in these articles, we consider it important to distinguish level of analysis from domain-level phenomenon. A collaboration occurs within a multi-organizational problem domain, which may exist at any sociological level from local to international, or may span more than one level.

Explaining Preconditions, Process, and Outcomes

Above we identify three broad issues essential to understanding collaborative alliances: (a) the preconditions that make a collaboration possible and that motivate stakeholders to participate, (b) the process through which collaboration occurs, and (c) the outcomes of the collaboration. Table 2 presents a matrix of the six theoretical categories mapped against these three critical issues. Each of the articles in the special issues has been placed on this matrix according to our assessment of which issues and which theoretical perspective it best reflects.

Table 2 reveals that although each of the six theories has the potential to contribute to a general theory of collaboration, these theories do not devote equal attention to the three issues of preconditions, process, and outcomes. Below we look more closely at the way each of the three issues is approached by the different theoretical perspectives in the articles.

Preconditions of Collaboration

All six theories appear to say something about the preconditions of collaboration. Eight of the nine articles provide some insight into the stakeholders' motivations or structural conditions that give rise to collaborative alliances.

Using a resource dependence perspective, Logsdon delimits the conditions under which stakeholders elect to form a collaborative alliance. According to her, two factors are necessary to motivate parties to collaborate: high stakes and high interdependence. Logsdon argues that collaboration will not occur unless both conditions are satisfied; however, the stakes for one party need not be the same as those for others.

Other articles also provide insight into the preconditions for collaboration, albeit from different theoretical platforms. Using a political approach, Roberts and Bradley claim that stakeholders are motivated to collaborate by a shared purpose to achieve a common transmutational end (i.e., to produce change). Thus the parties must share at least one common interest. Also using a political approach (albeit at an international level of analysis), Golich characterizes stakeholders as motivated by their need to protect their interests in common resources that may be depleted or confiscated by others. They do share a common interest, however, in having some rules for governing commons use. Thus she argues that linking self-interest with community interest is essential for initiating collaboration.

From Fleisher's microeconomics perspective, collaboration is motivated by the need of individual organizations to maximize efficiency and reduce transaction costs. Principals adopt a federated structure and retain an agent based on an intention to reduce the costs of information and resource exchange among the affiliated principals.

Nathan and Mitroff, using negotiated order theory, see collaboration as fostered by an awareness among stakeholders of the need to achieve a shared understanding of a problem and the need for collective responses to it. They show how collaboration emerges among pockets of stakeholders within a larger problem domain as stakeholders come to appreciate their interdependence.

Sharfman et al., arguing from the standpoint of institutional theory, attribute organizations' motivations to collaborate to two types of environmental forces: competitive and institutional. The configuration of these forces at a given time either enables or inhibits the formation of an alliance. In a somewhat similar vein, albeit at a higher level of analysis, Pasquero uses an institutional economics approach to detail the macrosocial conditions that have created a fertile context for budding Canadian experiments in collaboration to address environmental issues. According to Pasquero, this configuration of societal forces is what makes collaboration possible.

Although Westley and Vredenburg identify several factors that influence stakeholders' willingness to collaborate, the dominant motivation to collaborate for the organizations in their case is rooted in strategic management theory. Both Loblaws Grocery chain and Pollution Probe (an environmental group) saw an opportunity to gain strategic advantage by collaborating (perhaps the same concept as that which Logsdon uses for stakes). Westley and Vredenburg also point out, however, the importance of the degree of organization of the domain as a precondition for collaborating. Their bridging case illustrates collaboration at the action set level (in Nathan

and Mitroff's terms), but not at the domain level. Thus it represents a fragmented negotiated order. Westley and Vredenburg attribute this failure to achieve a domain-level negotiated order to a powerful disincentive: the perceived threat to the preservation of core ideologies. Applying the perspective of Sharfman et al. to this outcome, we might say that the institutional forces restraining collaboration prevailed. Potential participants in the collaborative experiment could not redefine their own sources of legitimacy in a way that would legitimate the collaborative alliance itself.

Collaborative Process

With respect to the process of collaboration, only three of the six theories (as reflected in five articles) offer explanations. Neither resource dependence theory nor microeconomics theory offer process explanations. Logsdon's article reflects the typical contribution of resource dependence theory—that is, it tells us a lot about the preconditions for collaboration and the subsequent distribution of resources and dependencies among the stakeholders as a result of their collaborative exchange—but the resource dependence perspective has little to say about the process of interaction among the parties once the preconditions are met.

Similarly, we are not surprised that microeconomics theory offers no explanation for the collaborative process. This cell of the matrix in Table 2 epitomizes the "black box" typical of economic theories. Structural preconditions are used to predict outcomes, but the processes by which the preconditions lead to outcomes are left implicit in the theory.

Those theories that do provide insights into the process of collaboration adopt a more dynamic, longitudinal look at the phenomenon rather than a cross-sectional one. For example, Sharfman et al. track changes in the alignment of a collaborative alliance with its environment over time. Internal changes in the alliance or external changes in the context lead to misalignment, and thus require adjustments if the alliance is to survive.

Roberts and Bradley delineate several elements that are necessary for a process of collaboration, including the configuration of membership, the organization of decision making, the type of interaction, and its duration. According to these authors, the presence or absence of these process elements determines whether or not collaboration has occurred.

For Pasquero, the process of collaborating involves institutionalizing some form of referent structure (roundtable discussions on environmental issues in the case he reports) and inculcating the principle of shared responsibility among the stakeholders. Because he adopts a societal level of analysis, Pasquero conceptualizes the process in terms of the implementation of policy rather than from the microsociological perspective of individual stakeholder interactions—which characterizes the articles by Nathan and Mitroff and by Westley and Vredenburg. The former propose that mapping the level of negotiated order within a domain serves as a useful means of stimulating collaboration by increasing the stakeholders' collective awareness of their interdependence. The latter focus on process issues that occur once a collaboration is under

TABLE 2

Mapping the Articles by Topic and Theoretical Perspective

Collaborative Issue	*Resource Dependence*	*Corporate Social Performance/ Institutional Economics*	*Strategic Management/ Social Ecology*	*Microeconomics*	*Institutional/ Negotiated Order*	*Political*
Preconditions	Logsdon: High stakes and high interdependence	Pasquero: Confluence of macrosocial conditions	Westley and Vredenburg: Degree of organization of the problem domain and motivation to collaborate	Fleisher: Need to maximize efficiency and reduce transaction costs	Nathan and Mitroff: Need to achieve a shared understanding of and response to a problem	Golich: Need to protect interests in commons resources and need for governance rules
					Sharfman, Gray, and Yan: Need to enhance institutional legitimacy; need for isomorphism with environmental forces	Roberts and Bradley: Shared transmutational purpose

					with environmental forces	
Process	Not addressed well by this theory	Pasquero: Institutionalizing roundtables as mediators between philosophical ideas and practical problem solving; principle of shared responsibility	Not addressed well by this theory	"Black box"	Nathan and Mitroff: map fragmentation of negotiated order Sharfman, Gray, and Yan: Changes in environment or alliance require re-alignment of alliance with environment	Roberts and Bradley: Explicit, voluntary membership; joint decision making; agreed-upon rules; interactive process, temporary structure
Outcomes	Logsdon: Concrete problems were solved because of the collaborative alliance's efforts	Pasquero: Distributed risks and costs of goal attainment	Selsky: Three levels of collective understanding: individual, segmental, and common Westley and Vredenburg: Success depends on enduring links, shared understanding, and longevity of the bridge	Fleisher: Structure of FMO leads to different agency problems and efficiency outcomes	Sharfman, Gray, and Yan: Survival depends on maintaining alignment with environment	Westley and Vredenburg: Need to build constituencies; need for legitimacy Golich: Regime structure determines who benefits Roberts and Bradley: Collaborative alliances for policy innovation can lead to incremental—not radical—change

way, namely, the need for a bridging organization to build constituency support and to maintain legitimacy in its bridging role.

We list these concerns under the political process heading in Table 2 rather than under strategic management because strategic management theory has traditionally borrowed from political theory to address implementation issues (cf. MacMillan, 1978). Overall, an interesting question arises: If we want to construct a comprehensive theory of collaboration, are we limited to only three theoretical perspectives (institutional/negotiated order theory, political theory, and institutional economics) for explicating the process of collaboration? If so, are these approaches sufficient?

Outcomes

Seven of the nine articles provide information on the outcomes of collaboration. But the outcomes they emphasize differ depending on each article's theoretical orientation. Some consider whether problems were solved; some examine whose problems were solved; some question whether shared norms were achieved; some focus on survival of the alliance itself. Furthermore, some provide concrete bases for classifying and measuring collaborative outcomes, whereas others merely note the outcomes without elaborating on them. Selsky provides a conceptual framework for thinking about the types of outcomes (e.g., information, resources, rules, and norms) and the level of organization required to achieve these outcomes. Collectively, the other articles identify several outcome dimensions; however, each focuses on only one or two of these.

Were Problems Solved?

Logdson reports successful problem resolution in the two cases she describes; however, she does not specify the basis for judging success. In the case of Sharfman et al., the immediate problem of developing a training program was solved by the Andersonville Sewing Council, although the long-term problem of ensuring a continuous supply of trained workers was not.

Whose Problems Were Solved?

Roberts and Bradley, in our opinion, focus on which party's definition of the problem prevailed in the policy generation process. The criterion they use to determine success is the innovativeness of the solution generated by the collaboration.

Were Shared Norms Achieved?

In Pasquero's case, the success of the roundtables (in terms of both their survival and their tangible outcomes) depends in part on how well they are able to foster the norm of shared responsibility for sustainable development and environmental protection. In Nathan and Mitroff's case, the success of the collaboration can be measured by the extent to which the parties are able to reach a common understanding of how a product-tampering crisis is to be managed.

Did the Alliance Survive?

Sharfman et al. attribute the success or failure of the Andersonville Sewing Council alliance to its ability to adjust to a new balance of institutional and competitive driving and restraining forces in the environment. Westley and Vredenburg identify endurance of the collaborative mechanism, its success in articulating the problem domain, and internal commitment to the bridging role as key measures of success—criteria that were not met in their case.

Did Survival Occur Through Transformation?

An interesting question not addressed by any of the articles is this: Can a collaborative alliance survive after its initial objective has been met by moving explicitly from focusing on a specific problem (e.g., leaking storage tanks, traffic congestion, a need for training) to focusing on the more general collective interests of players in the organizational field? That is, can a collaborative alliance of one type transform itself into one of another type, and, if so, what are the implications and consequences for participants?

The classic sociological study of the transformation of the YMCA (Zald & Denton, 1963) as well as Bartunek's (1984) study of a religious order suggest that organizations can transform their core objectives so that they can survive. If collaborative alliances are found to have this capacity as well, we should be able to study the process of an alliance's transformation from a temporary to a relatively permanent structure, shifts in the relative importance of the common, domain-level interests of participants versus the organization-level interests of the alliance itself, and shifts in the environmental context over time. Fleisher's analysis of federations as the agents of multiple principals and, paradoxically, as the controllers of certain aspects of those principals' behavior, suggests the tensions between individual and domain-level interests. Golich's article also portrays shifts in these interests as players gain and lose prominence in the field.

CONCLUSION

Based on these cases, none of the theories offers a comprehensive model of collaboration. Some theories—resource dependence, microeconomics, and strategic management—identify specific preconditions for collaboration and use these to predict outcomes, without regard to what might transpire during the life of the collaboration. For other theories—political, institutional economics, institutional, and negotiated order—the paramount concerns are the process of collaboration and the ongoing relationships among the stakeholders and their environment. Furthermore, different theories focus on different kinds of outcomes, whereas a comprehensive theory should be able to account for them all.

Clearly, no single theoretical perspective can serve as the foundation for a general theory of collaboration. In addition to the tendency of many of these theories to focus

on individual organizations rather than on domain dynamics, none of the six theoretical perspectives offers a sufficiently comprehensive analysis of the preconditions, processes, and outcomes of collaboration.

The articles in these special issues move us a considerable distance toward understanding how a general theory of collaboration might be constructed. The various theoretical perspectives they bring to the cases and examples allow us to look inductively across the articles, spotting similarities and differences in the theoretical treatment of the preconditions, processes, and outcomes of collaboration. In our introductory article to Part 2 of the special issues on collaborative alliances, we turn our attention to some of the themes a general theory might address.

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