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Collaboration Processes: Inside the Black Box

Articles on Collaborative Public Management

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Social science research contains a wealth of knowledge for people seeking to understand collaboration processes. The authors argue that public managers should look inside the "black box" of collaboration processes. Inside, they will find a complex construct of five variable dimensions: governance, administration, organizational autonomy, mutuality, and norms. Public managers must know these five dimensions and manage them intentionally in order to collaborate effectively.

Collaboration is the act or process of "shared creation" or discovery. [It] involves the creation of new value by doing something new or different.

[It] is transforming in the sense that you don't leave the same way you came in. There's some sort of change. You give up part of yourself. Something new has to be created. Something happens differently because of the process.

Collaboration is when everybody brings something to the table (expertise, money, ability to grant permission). They put it on the table, take their hands off and then the team creates from there.

—Comments from public agency directors

lthough skeptics believe that relatively little collaboration happens in the real world, practicing managers, such as the public agency directors just quoted, know collaboration when they see it. One reason for the skepticism about collaboration is its transient qualities and the demands it places on participating actors. An AmeriCorps program director in Michigan, for example, summarized managers' uneasiness about collaboration: "Collaboration is like cottage cheese. It occasionally smells bad and separates easily" (Thomson and Perry 1998, 409). Yet collaboration is becoming an imperative for public managers. Devolution, rapid technological change, scarce resources, and rising organizational interdependencies are driving increasing levels of collaboration.

The roots of collaboration are buried deep in American life and public administration. When placed within the context of an American public ethos, collaboration can be understood as a process that is rooted in two competing political traditions: classic liberalism and civic republicanism (Perry and Thomson 2004). Classic liberalism, with its emphasis on private interest, views collaboration as a process that aggregates private preferences into collective choices through self-interested bargaining. Organizations enter into collaborative agreements to achieve their own goals, negotiating among competing interests and brokering coalitions among competing value systems, expectations, and self-interested motivations. Civic republicanism, on the other hand, with its emphasis on a commitment to something larger than the individual (whether that be a neighborhood or the state), views collaboration as an integrative process that treats differences as the basis for deliberation in order to arrive at "mutual understanding, a collective will, trust and sympathy [and the] implementation of shared preferences" (March and Olsen 1989, 126).

Public managers often find themselves pulled between these two competing views of collaboration, and the literature on collaboration tends to mirror this tension. Huxham (1996), for example, argues that a necessary requirement for successful collaboration is the self-interest motive—each organization must be able to justify its involvement in a collaboration first by how it furthers the organization's goals. Bardach agrees: "Collaboration," he writes, "should be valued only if it produces better organizational performance or lower costs than can be had without it" (1998, 17). These and other collaboration scholars (Gray 1989, 2000; Huxham 1996; Huxham and Vangen 2005)—as well as precursor literatures on interorganizational relations (Ring and Van de Ven 1994) and organizational behavior (Hellriegel, Slocum, and Woodman 1986)—strongly support an integrative view of collaboration 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" (Gray 1989, 5).

These literatures—outside traditional public administration research—provide insight into the complex nature of collaborative processes. We believe an important piece of the collaboration puzzle is lost by failing to explore the multidisciplinary literature on collaboration, as this broader scan yields valuable insights about what public managers need to know in order to "do" collaboration. In their review of collaboration research, Wood and Gray (1991) frame the discussion in terms of an antecedent-process-outcome model (figure 1).2 The "doing" of collaboration—the process component—is, in Wood and Gray's terminology, a "black box." They argue that the interactive process of collaboration is least understood. We agree.

Our thesis in this article is twofold: First, we believe that the research about collaboration, much of it

emanating from outside public administration,³ is quite useful for illuminating valuable knowledge for public managers. Second, before we can manage collaboration, we need to know what it is. We argue that collaboration is not an either/or: When public managers look inside the black box of collaboration processes, they find a complex construct consisting of five variable dimensions. Public managers must know these five dimensions and manage them intentionally in order to collaborate effectively.

Inside the Black Box: What Is Collaboration?

A process framework for collaboration suggests that collaboration occurs over time as organizations interact formally and informally through repetitive sequences of negotiation, development of commitments, and execution of those commitments. Scholars

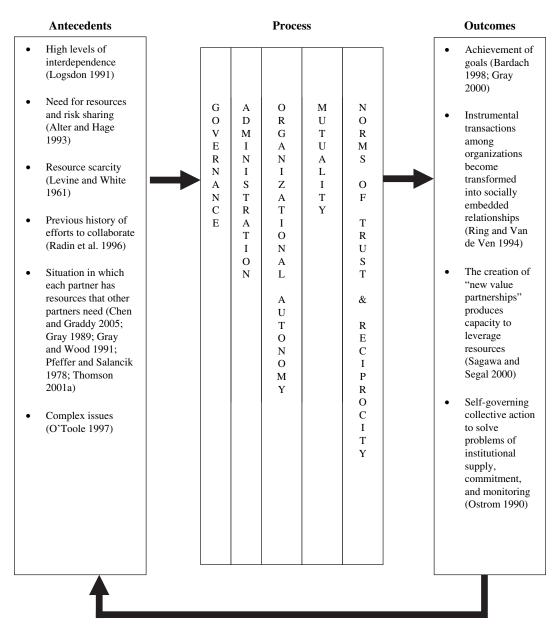


Figure 1 The Antecedent-Process-Outcome Framework Source: Adapted from Wood and Gray (1991).

have described the collaboration process in terms of a continuum of stages. For example, Gray's (1989) three-phase framework involves problem setting, direction setting, and implementation, and Himmelman's (1996) view of the collaboration process sees it as a continuum of strategies that range from bettering the community to transforming it through "empowerment collaboration."

Ring and Van de Ven (1994) provide a particularly useful framework for thinking about the process of collaboration (figure 2). They conceive of the process as iterative and cyclical rather than linear. Using this logic, if organizations that are engaged in collaboration can negotiate minimal, congruent expectations regarding their collective action, then they will commit to an initial course of action. If the collective action is executed in a reciprocal fashion, then participating organizations will continue or expand their mutual commitments. If these commitments are not implemented in a reciprocal fashion, then participants will initiate corrective measures either through renegotiation or by reducing their commitments. The extent to which organizations exercise their voice or exit often depends on the extent to which they have an aggregative or an integrative perspective on collaboration. As figure 2 suggests,

collaboration implies a cyclical process of renegotiation.

A process-oriented definition of collaboration, then, must take into account the nonlinear and emergent nature of collaboration, suggesting that collaboration evolves as parties interact over time. Findings from game theory support a process-oriented perspective on collaboration (Axelrod 1984, 1997; Ostrom 1990, 1998). Experimental and field research confirms that "individuals temporarily caught in a social-dilemma structure are likely to invest resources to innovate and change the structure itself in order to improve joint outcomes . . . [Learning occurs through a] continuous trial-and-error process until a rule system is evolved that participants consider yields substantial net benefits" (Ostrom 1998, 8).

Ring and Van de Ven's (1994) process framework implies that in order for collaboration to evolve, the integrative elements manifest in personal relationships, psychological contracts, and informal understandings and commitments need to supplant the aggregative elements manifest in formal organizational roles and legal contracts. Finding the right balance between integration and aggregation—not relying on formal institutional structures such as memoranda of

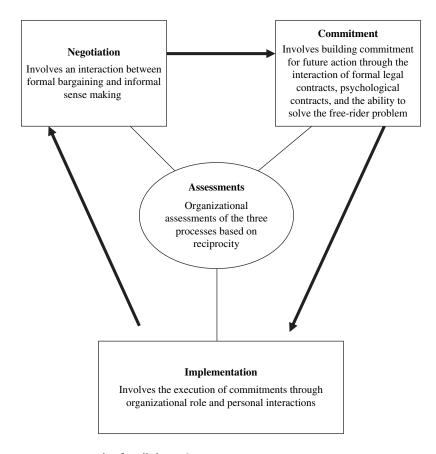


Figure 2 A Process Framework of Collaboration Source: Adapted from Ring and Van de Ven (1994).

agreement and standard operating procedures—may be the key to sustaining collaboration over time.

Defining Collaboration

Using Ring and Van de Ven's (1994) process to frame our understanding of collaboration, we employ a definition of collaboration developed by Thomson (2001a) as a starting point for our analysis:

Collaboration is a process in which autonomous actors interact through formal and informal negotiation, jointly creating rules and structures governing their relationships and ways to act or decide on the issues that brought them together; it is a process involving shared norms and mutually beneficial interactions.4

This definition suggests a higher-order level of collective action than cooperation or coordination. Although the extensive literature on collaboration is without agreement on terms—drawing as it does from a wide variety of perspectives, including interorganizational relations (Alexander 1995; Ring and Van de Ven 1994; Warren et al. 1975), networks (Alter and Hage 1993; O'Toole 1997; O'Toole, Meier, and Nicholson-Crotty 2005; Powell 1990), and the logic of collective action (Olson 1971; Ostrom 1990)—most scholars would agree that cooperation and collaboration differ in terms of their depth of interaction, integration, commitment, and complexity, with cooperation falling at the low end of the continuum and collaboration at the high end (Alter and Hage 1993; Himmelman 1996; Mattessich and Monsey 1992).

In her groundbreaking book on collaboration, Collaborating: Finding Common Ground for Multiparty Problems, Gray points out that although both cooperation and coordination may occur as part of the early process of collaboration, collaboration represents a longer-term integrated process "through which parties who see different aspects of a problem . . . constructively explore their differences . . . search for solutions that go beyond their own limited vision of what is possible" (1989, 5) and implement those solutions jointly. In her interviews with public agency directors between 1995 and 2000, Thomson (2001a) found that, in contrast to the ease with which they described cooperation, agency directors frequently used metaphors to describe collaboration, such as "stepping into other people's shoes," "the combination of hydrogen and oxygen atoms to form water," and "combining yellow and green circles to form a larger blue circle."

One public manager's comments help to summarize the distinction. "It's indicative," he pointed out,

... that we ... think of [collaboration] as a residual of cooperation and coordination. It's not coordination, it's not cooperation. Cooperation involves reciprocities, exchange of resources (not necessarily symmetrical). Cooperation for a mutual goal moves this to collaboration. The whole is greater than the sum of its parts. It may be achieving individual ends, but there's an additional outcome that is shared (though not mutually exclusive) separate from the individual ends. (Thomson 2001b)

A thesis of this article is that in order to arrive at that "additional outcome that is shared [and] separate from individual ends," public managers need to understand the multidimensional nature of collaboration.

A Multidimensional Model of Collaboration

The achievement of shared outcomes implies synergistic processes rather than stepwise movement from one phase to another (Brinkerhoff 2002; Huxham and Vangen 2005; Thomson 2001a). In their review of numerous cases studies over many years, for example, Huxham and Vangen (2005) describe five fundamental characteristics of collaborative situations, each of which implies a messy, contradictory, dynamic process that is defined by multiple view points and unintended outcomes. Other scholars identify different elements of collaboration. For example, Roberts and Bradley (1991) argue that the principal elements of collaboration are a transmutational purpose, explicit and voluntary membership, organization, an interactive process, and a temporal property. For Gray (1989), collaboration involves interdependence, dealing constructively with differences to arrive at solutions, joint ownership of decisions, and collective responsibility that recognizes collaboration is an emergent process.

Thomson (2001a) builds on this earlier research by systematically reviewing and analyzing a wide variety of definitions of collaboration found in the multidisciplinary research. She concludes that the essence of collaboration processes can be distilled into five key dimensions.⁵ These dimensions, though distinct variables, are interdependent in the sense that movement from one dimension to another does not necessarily occur sequentially. Instead, the dimensions are part of a larger covariance model in which variation across each dimension is influenced by variation in the others. Movement along the five dimensions depends on a wide variety of factors, including but not limited to internal relationships (Bardach 1998; Huxham and Vangen 2005; Ospina and Sag-Carranza 2005; Sink 1996; Williams 2002) and external factors such as antecedent conditions (Gray and Wood 1991), uncertainty, ambiguity, shifting membership, and multiple accountabilities (Huxham and Vangen 2000; Ospina and Sag-Carranza 2005). The dimensions vary from low to high, but the complexity and uncertainty of the process suggests that linking inputs to outputs is

difficult, and we are unable, at this juncture, to specify an optimal level for all five dimensions. Rather than insisting on reaching the highest levels on all five dimensions, the challenge for public managers and partners in collaboration is to seek a balance among the dimensions through mutual accommodation and incentives for renegotiation.

This perspective is consistent with the empirical research. Among the 422 collaborations that Thomson and Miller (2002) studied, for example, they found wide variations on the five dimensions. Although the average collaboration in the sample exhibited relatively high levels of joint decision making, administration, mutuality, and trust and fairly low levels of tension between individual and collective interests, achieving exceptionally high levels of collaboration proved difficult; moving substantially above the average seldom occurred. Ostrom's research on selfgovernance of common pool resources suggests that instead of presuming that optimal institutional solutions can be designed easily and imposed at a low cost by external authorities, "getting the institutions right is a difficult, time-consuming, conflict-ridden process" (1990, 14).

A collective action perspective, such as Ostrom uses, is a particularly useful way to think about the process of collaboration. Movement along the five dimensions occurs as partners try to solve the collective action problem of changing a situation "from one in which appropriators act independently to one in which they adopt coordinated strategies to obtain higher joint benefits or reduce their joint harm" (Ostrom 1990, 39). These five key dimensions are critical pieces of the puzzle, and public managers and their partners in collaboration need to balance them in order to solve this collective action problem.

Five Key Dimensions of Collaboration

Of the five dimensions summarized in figure 1, two are structural dimensions (governing and administering), two are dimensions of social capital (mutuality and norms), and one is an agency dimension (organizational autonomy). We believe that public managers would benefit from a systematic and careful analysis

of the process by which partners interact by focusing on these five key dimensions that together signify collaborative action.

Partners who seek to collaborate must understand

govern their behavior and relationships; they also need to create structures for reaching agreement on collaborative activities and goals through shared power arrangements. These ideas are at the heart of collaboration and encompass both the negotiation and commitment processes depicted in figure 2. The literature on collaboration describes governance variously as participative decision making (McCaffrey, Faerman, and Hart 1995; Wood and Gray 1991); shared power arrangements (Clift et al. 1995; Crosby and Bryson 2005), and problem solving (Hellriegel, Slocum, and Woodman 1986).

Each of these terms implies (1) a lack of authoritative structure or hierarchical division of labor (Huxham 1996); (2) an awareness that participants are not only directly responsible for reaching an agreement but must also impose decisions on themselves (Gray 1989); (3) a willingness to accept that all participants have legitimate interests, such that outcomes "reflect group consensus, not coalitional or power politics" (McCaffrey, Faerman, and Hart 1995, 612); and (4) an understanding that this kind of governance emphasizes openness in information sharing, respect for others' opinions, and potentially lengthy negotiations to reach agreement (Thomson 2001a). Reaching agreements that are compatible with all interests does not mean groupthink. As one public manager put it, collaboration does not mean everyone has to agree on the best possible solution; it only means that they have to be willing to support the decision once it is made (Thomson 2001a).

When parties come together to collaborate, they make choices that govern a variety of collective action problems implicit in joint decision makinghow to collectively develop sets of working rules to determine who will be eligible to make decisions, which actions will be allowed or constrained, what information needs to be provided, and how costs

When collaborative partners

are unwilling to monitor their

own adherence to the agreed-

upon rules, the ability to build

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and joint decision making is

unlikely.

and benefits will be distributed (Ostrom 1990). The key to the success of these choices rests in participants' willingness to monitor themselves and each other and to impose credible sanctions on noncompliant partners. When collaborative partners are unwilling to monitor their own adherence to the agreed-upon rules, the ability to build cred-

ible commitment is lost, and joint decision making is unlikely. For Ostrom (1998), a reputation for trustworthiness is one of three core factors (the other two are trust and reciprocity) that increases the likelihood of collective action. Closely related to the process of building credible commitment is the value of face-to-face communication (Mattessich and Monsey 1992; Ostrom 1998) and the creation of an

how to *jointly* make decisions about the rules that will

"ethic of collaboration" (Radin et al. 1996), which allows partners to give each other the benefit of the doubt while they build the reputations needed for joint decision making.

As a process, then, governance in collaboration is not static, nor is there one universal way to go about creating what Bardach (1998) calls "jointness." Warren (1967) conceives of general consensus as a process of arriving at an equilibrium in which contest and conflict among partners still occurs, but only at the margins and within a larger framework of agreement on the appropriateness of jointly determined rules that ensure a collaborative environment. To arrive at this kind of equilibrium, public managers need to understand the shared responsibility that accompanies this form of governance when they engage in collaboration (Himmelman 1996; Pasquero 1991).

In his study of a Canadian initiative to develop national environmental policy, for example, Pasquero (1991) found that when people and organizations were able to demonstrate a deeper appreciation for the interconnected nature of the problems of environmental pollution, they were more likely to collaborate. Instead of blaming particular partners (especially polluters), Pasquero found that the stakeholders he studied began to adopt collective responsibility for the problems they faced. This allowed them to focus directly on addressing the problem rather than on assigning individual responsibility. A shared vision and commitment to a supraorganizational goal allowed them to move toward problem solving rather than problem blaming.

The Process of Collaborative Administration: The Administration Dimension

Collaborations are not self-administering enterprises. Organizations collaborate because they intend to achieve a particular purpose. To achieve the purpose that brought the organizations to the table in the first place, some kind of administrative structure must exist that moves from governance to action. This reality is hardly new to public managers! In her interviews with public managers, Thomson (2001a) found administration to be a critical dimension of collaboration. When asked about their best and worst experiences with collaboration, the agency directors interviewed repeatedly identified the presence (or absence) of clear roles and responsibilities, the capacity to set boundaries, the presence of concrete achievable goals, and good communication as the key characteristics of their experiences.

The implementation of collaboration is complex, not only because participation is voluntary and actors are autonomous (Gray 2000; Huxham 1996) but also because traditional coordination mechanisms such as

hierarchy, standardization, and routinization are less feasible across units than within them, and communication among partners is based more on interdependent relationships than on contractual agreements (Huxham and Vangen 2005; O'Toole 1996; Powell 1990). The potential to withdraw from the relationship may be particularly high if collaborations are unable to achieve short-term success (Thomson 1999) as a result of collaborative inertia (Huxham 1996).

The key administrative functions identified in the top-down management literature—functions such as coordination, clarity of roles and responsibilities, and monitoring mechanisms—are also stressed in the collaboration research (Bardach 1998; Mattessich and Monsey 1992; Ring and Van de Ven 1994), but they take on new meaning in light of the more symmetrical (at least in theory) and horizontal relationships found in collaborations. Pressman and Wildavsky's (1984) classic recommendation to simplify the implementation chain of action does not work for getting things done in collaboration given the interdependence (and thus increased complexity) that characterizes partner relationships.

Yet as public managers know all too well, decentralized administrative structures still require a central position for coordinating communication, organizing and disseminating information, and keeping partners alert to the jointly determined rules that govern their relationships—what Freitag and Winkler describe as "social coordination" (2001, 68). In her case study of the Barani Area Development Project in Pakistan, for example, Brinkerhoff (2002) found that this multilevel partnership (which included government departments, nongovernmental organizations, and local communities) proved relatively successful because the trust building among participants and the political will to work together in new ways was augmented by administrative will in the use of bureaucratic mechanisms that helped to maximize some degree of predictability.

Most scholars of collaboration agree, however, that the key to getting things done in a collaborative setting rests in finding the right combination of administrative capacity (through coordination and elements of hierarchy) and social capacity to build relationships. In their study of business and nonprofit collaboration, for example, Sagawa and Segal (2000) suggest that coordinating roles need to be augmented by "relationship managers" whose specific task is to manage and build interorganizational relationships, not just make sure collaboration requirements are being met. Williams (2002) also makes a strong case for the importance of boundary spanners—individuals who have the skill to build and manage interpersonal relationships. In his examination of

boundary spanners operating in several different policy domains in the United Kingdom, Williams found that particular boundary-spanning skills enhanced the likelihood of collaboration. These skills include the ability to build and sustain effective interpersonal relationships among partners, the ability to play an "honest broker role" (117) among contested power structures, and the ability to manage interdependency—a skill that is developed especially through "accumulated 'on-the-job' interorganizational experience" (119).

This perspective suggests that partners in collaboration play different administrative roles. The leadermanager distinction of traditional public management, for example, whereby leaders set and managers implement particular agendas (Rainey 2003), appears less relevant as the same participants in collaboration simultaneously set and implement agendas. Different partners, then, lead and manage by playing different roles (e.g., convener, advocate, technical assistance provider, facilitator, funder), each of which is necessary for the collaboration as a whole to achieve its goals (Himmelman 1996). Drawing on findings from a study of the National Rural Development Council, however, Radin suggests that boundary-spanning responsibilities may not rest in a single individual playing a single role but instead are "integral to [any] manager's competencies" (1996, 159). Whether partners in collaboration play distinctive roles or whether they begin to develop competency in multiple roles, one of the principal administrative dilemmas for leaders and managers in collaboration is managing the inherent tension between self-interests and collective interests.

The Process of Reconciling Individual and Collective Interests: The Autonomy Dimension

A defining dimension of collaboration that captures both the potential dynamism and the frustration that is implicit in collaborative endeavors is the reality that partners share a dual identity: They maintain their own distinct identities and organizational authority separate from (though simultaneously with) the collaborative identity. This reality creates an intrinsic tension between self-interest—achieving individual organizational missions and maintaining an identity that is distinct from the collaborative—and a collective interest—achieving collaboration goals and maintaining accountability to collaborative partners and their stakeholders (Bardach 1998; Tschirhart, Christensen, and Perry 2005; Van de Ven, Emmett, and Koenig 1975; Wood and Gray 1991). Huxham refers to this tension as the autonomy-accountability dilemma and concludes that because "collaboration is voluntary, partners generally need to justify their involvement in it in terms of its contribution to their own aims" (1996, 15) or refrain from collaborating altogether.

This dimension is especially problematic because collaborations typically form around intractable problems that partners cannot solve on their own (Finn 1996; Gray 1989; Huxham 1996; Pasquero 1991). Partners need each other if such problems are to be adequately addressed, yet their own missions (which may or may not be directly related to the particular problem collaboration forms to address) can create a difficult choice. One partner in a collaboration addressing homelessness described it well when he said,

Tension exists because of [our funders]. You have to prove you are meeting [your organization's] mission. In the case of the Center [we collaborate on], ministry is the mission of our church. [The other organization's] mission wasn't about ministry at all but about meeting the needs of the homeless. [The question is] how do we keep our identity as a church? Because of your constituency, your resource base, you have to watch out for your [own] identity. (Thomson 2001a, 88)

When collaboration's goals conflict with the autonomous goals of individual partner organizations, identities are at stake. Unless the particular problem is of sufficient urgency to all partners, it is likely that individual missions will trump collaboration missions.

The autonomy dimension contrasts shared control with individual control (Wood and Gray 1991). The aggregative elements in collaboration suggest that partners protect their own identities in collaboration by maintaining individual control. Shared control, on the other hand, involves partners' willingness to share information, not only about their own organizations' operations but also about what they can and cannot offer the collaboration. This willingness to share information for the good of partners (even at the risk of compromising a particular organization's autonomy) is the distinguishing characteristic of collaboration for Himmelman (1996). For Gray (1989) and Wood and Gray (1991), sharing information in collaboration needs to be seen in terms of increasing partners' understanding of the problem they are jointly seeking to address.

The creative tension between individual and collective interests is a recurring theme in much of the case research on collaboration. In her study of how California's Silicon Valley business community and public officials jointly responded to traffic congestion, for example, Logsdon (1991) found that reconciling private interests with collective interests became possible only when partners began to understand the problem in terms of the high stakes of not engaging in a shared solution. Selsky (1991), on the other hand, in his study of 12 collaborative projects

involving 148 small nonprofit organizations in the Philadelphia area, found that by mobilizing the managers of these organizations around the exchange of resources, a "more developed organizational community" was created. He implies that collaboration among these agencies resulted in a transformation of the community in which these organizations reside.

In general, though, reconciling individual interests with collective interests is often too difficult for many collaborative endeavors, as evidenced by the common conclusion of collaboration scholars that although "greater collaboration is not a very new idea in public administration, it has never fulfilled its promising potential" (Vigoda-Gadot 2003, 147). In the words of Huxham and Vangen, "In the fifteen years that we have been researching collaboration we have seen no evidence to shift our 'don't do it unless you have to'—or unless the stakes are really worth pursuing—position" (2005, 42). Forging commonalities out of differences, however, can yield highly satisfying results, and this is also a recurring theme in the literature on collaboration.

The Process of Forging Mutually Beneficial Relationships: The Mutuality Dimension

Although information sharing is necessary for collabo-

ration, it is not sufficient for it to thrive. Without mutual benefits, information sharing will not lead to collaboration. Mutuality has its roots in interdependence. Organizations that collaborate must experience mutually beneficial interdependencies based either on differing interests—what Powell (1990) calls "com-

plementarities"—or on shared interests, which are usually based on homogeneity or an appreciation and passion for issues that go beyond an individual organization's mission—such as the moral imperative of environmental degradation or a humanitarian crisis. Complementarity describes a situation in which "parties to a network agree to forego the right to pursue their own interests at the expense of others" and accommodation serves as the modus operandi of interaction (Powell 1990, 303). It occurs when one party has unique resources (skills, expertise, or money) that another party needs or could benefit from (and vice versa). Such exchange relationships are well documented in interorganizational relations (Levine and White 1961; Warren et al. 1975; Van de Ven, Emmett, and Koenig 1975) and supported by resource dependence theory (Pfeffer 1997; Pfeffer and Salancik 1978).

Mutuality provides a foundation for forging common views out of differences (Cropper 1996; Gray 1989;

Wood and Gray 1991). "Collaboration," write Wood and Gray, "can occur as long as stakeholders can satisfy one another's differing interests without loss to themselves" (1991, 161). In their study of Los Angeles County's Family Preservation Program, for example, Chen and Graddy found that the most important variable in explaining collaboration outcomes was the organizations' need to "acquire resources from other organizations that they need and do not have but are critical for their continuing functioning" (2005, 17). For organizational behavior scholars, mutuality in collaboration is seen as a win-win problem-solving technique that addresses the conflicts inherent in differing interests (Hellriegel, Slocum, and Woodman 1986). The more consensus partners can forge out of differences based on each other's needs, the greater the likelihood they will be able to collaborate.

In contrast to negotiation, which begins with differences, other scholars begin with shared interests, jointly identifying commonalities among organizations such as similarity of mission, commitment to similar target populations, or professional orientation and culture (Lax and Sebenius 1986). In her study of collaborations in national service, Thomson (1999) found that commitment to similar target populations proved to be one of the most important factors in holding collaborations together. In one case, the

power of this commitment was so great that when the promised funding did not come through, partner organizations "forked out [their own] money" (37), at a cost of \$20,000, to keep the collaboration going. This kind of commitment is unlikely without the presence of the final defining dimension of collaboration:

norms of reciprocity and trust.

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The Process of Building Social Capital Norms: The Trust and Reciprocity Dimension

Reciprocity can be conceptualized in two different ways: one that is short term and contingent, and one that is long term and rooted in a sociological understanding of obligation (Axelrod 1984; Ostrom 1990; Powell 1990). In collaboration, individual partners often demonstrate a willingness to interact collaboratively only if other partners demonstrate the same willingness. This "I will if you will" mentality (tit-fortat reciprocity) is based on the perceived degree of obligation, such that partners are willing to bear initial disproportional costs because they expect their partners will equalize the distribution of costs and benefits over time out of a sense of duty—what Ring and Van de Ven (1994) call "fair dealing." Axelrod (1984, 1997), Ostrom (1990, 1998), and Powell (1990) all identify reciprocity as a key factor in

successful collective action. Axelrod (1984), for example, found that tit-for-tat reciprocity in prisoner's dilemmas games, when accompanied by repeated interaction, can lead to collective action, and Ostrom (1998) concludes that evidence from laboratory experiments shows that a large proportion of the population in these experiments believes that others will reciprocate, making collective action possible. These findings, however, do not conform to Olson's (1971) prediction that whenever participation in collective action is voluntary, the members whose marginal costs exceed the marginal benefits of participating will stop contributing before a group optimum is reached.

The emphasis on repeated interactions in the game theory literature underscores the longer-term view of obligation based on the social and cultural tenets that form the basis of social interaction in society and give reciprocal exchanges meaning (Powell 1990). Furthermore, over time, as collaboration partners learn what works and what does not work, "highly rationalized myths" may develop that gain both intrinsic and instrumental legitimacy and then form the basis of reciprocal exchange (Meyer and Rowan 1977), such as individual partner roles that are perceived as critical to the collaboration itself. Here, a reputation for trustworthiness proves critical to any collaborative enterprise, as Ostrom (1998) demonstrates in her comprehensive review of the literature on collective action.

Closely related to reciprocity, then, is the second facet of norms—trust—which can be defined as a common belief among a group of individuals that another group (1) will make "good-faith efforts to behave in accordance with any commitments both explicit and implicit," (2) will "be honest in whatever negotiations preceded such commitments," and (3) will "not take excessive advantage of another even when the opportunity is available" (Cummings and Bromiley 1996, 303). Trust is a central component of collaboration because it reduces complexity and transaction costs more quickly than other forms of organization (Chiles and McMackin 1996; Ostrom 1998; Smith 1995).

Bardach (1998) identifies trust as a key element in one of two dimensions of interagency collaborative capacity, and the findings of Huxham and Vangen's (2005) extensive action research on collaboration lead them to conclude that trust is a critical component of collaboration, but trust building takes an inordinate amount of time and nurturing. In her study of 422 collaborations, Thomson (2001a) found evidence to support Huxham and Vangen's conclusion. As one AmeriCorps director put it,

Collaboration can't be rushed. [It is] very energy intensive. You have to be willing to invest inordinate amounts of time at low productivity to establish relationships and trust building. Organizations don't initially start with a cost-benefit analysis. They start with a kind of idealism. Then, as they start to accomplish things, they realize that they're going to have to pay a cost. When organizations are willing to make the costs that is when you have moved to collaboration. (Thomson 2001a, 93)

For Ostrom (1998), collective action depends on three key core relationships—reciprocity, trust, and reputation. As collaborative partners interact and build reputations for trustworthy behavior over time, they may find themselves moving away from the more contingent "I will if you will" reciprocity to longer-term commitments based on institutionalized "psychological contracts" (Ring and Van de Ven 1994). When personal relationships supplement formal organizational role relationships, psychological contracts substitute for legal contracts, and formal organizational agreements mirror informal understandings and commitments, interorganizational relationships may be sustained over time (Ring and Van de Ven 1994).

Conclusion

"There is a fine line," write Huxham and MacDonald, "between gaining the benefits of collaborating and making the situation worse" (1992, 50). Given the complexity of collaboration, public managers may find themselves overwhelmed by the dynamism that collaborations can create or the inertia that often transpires as partners seek to achieve collective goals. Public managers who understand the variable and complex nature of the five dimensions that compose the black box of collaboration processes are better prepared to engage in collaborative activities than those who focus merely on achieving individual goals through collaboration.

The five collaboration process dimensions we have presented provide one systematic approach to collaboration that public managers can use in their daily experiences with collaboration partners. One lesson can be taken away from this review: Don't collaborate unless you are willing to thoughtfully consider and educate yourself about the nature of the process involved. Collaborating for collaboration's sake or to achieve only individual goals is likely to result in failure given the complexity of the collaboration process. This is largely because collaboration is costly.

The most costly resources of collaboration are not money but time and energy, neither of which can be induced. Huxham (1996) distinguishes between two sorts of time that anyone who has collaborated will recognize: actual time (e.g., achieving mutual understanding, building credible commitments and goodwill, and negotiating bases for action and coordination) and lapsed time (coping with accountability issues

and other organizational priorities outside the collaboration). The amount of actual and lapsed time that is demanded of collaboration partners can be demotivating, particularly when partners do not recognize or budget time as one of the principal resources of collaboration (Huxham 1996). Public managers must take this time element seriously if the benefits of collaboration are to be realized. How they do so depends on their capacity to work with partners to negotiate an equilibrium among the five dimensions that will allow them to achieve small gains in the short term, which will, over time, allow them to develop the trust and negotiated agreements necessary to realize longer-term benefits.

Stone's (2000) case study of Washington County's Welfare-to-Work Partnership illustrates how the five dimensions of collaboration can interconnect over time. The partnership, which originated in response to the Personal Responsibility and Work Opportunity Reconciliation Act of 1996, was generously supported with planning and implementation grants from the McKnight Foundation. Stone reports that members of the collaboration were initially highly competitive because they perceived the partnership as a threat to their autonomy. In the absence of prior interactions, partners had no foundation for trusting other partners. The partnership began to coalesce as small collective successes built interpersonal trust among partners. Increases in trust decreased the constraining effects of organizational autonomy. Increasing trust, in turn, triggered an expansion of common interestsmutuality—that stimulated increased commitments to new governance initiatives and administrative support.

The time required to find this equilibrium among the five dimensions, however, underscores the reality that collaborations are inherently fragile systems. They are fragile because, as Wood and Gray argue, although they "may make environments more predictable in some respects, they also cause new dependencies to be created, thus increasing environmental complexity and turbulence" while decreasing partners' control over their environment (1991, 158). Zucker (1988), Stone (2000), and Ring Van de Ven (1994) agree. The resolution of social dilemmas can be fragile, writes Zucker, because self-interest, a tendency toward disorganization, and partial institutionalization all conspire against it. Ring and Van de Ven conclude that the "seeds for disintegration of relationships are contained within the very governance structures, safeguards, and processes that lead to their formation and growth" (1994, 108). Public managers would do well to appreciate the fragility of many collaborative relationships—especially new and immature ones—as a result of the autonomy and competing accountabilities that participants bring to collaborative endeavors.

By simulating different scenarios in which players have a choice between working together or defecting from the game, Axelrod (1997) demonstrates how the advantages of acting in one's own self-interest in the short run conflicts with the achievement of success in the long run by working together. Public managers who understand that this tension will always exist in collaborative endeavors (the essence of the organizational autonomy dimension) will be more likely to appreciate and take seriously what Axelrod describes as "the deep consequences of the fundamental processes involved in dealing with this tension" (1997, 6).

Greater awareness of the organizational autonomy dimension will give managers a more realistic perspective of what it takes to manage the paradoxical environments that are modeled on game theory simulations but are indicative of the realities of collaboration (Ospina and Sag-Carranza 2005; Tschirhart, Christensen, and Perry 2005). In examining the paradox between branding (characterized as a competitive process) and collaboration (characterized by cooperative activities), Tschirhart, Christensen, and Perry suggest managers may use several strategies to address the inherent tensions produced by this paradox. These include acceptance (living with the contradictions of the paradox), confrontation (confronting the paradox by mitigating negative effects or developing ways to manage tensions), and transcendence (reframing meanings to achieve shared and independent goals). Repeated interaction helps managers weigh the costs and benefits of pursuing one or another of these strategies. We believe that public managers, if they enter collaborations with their eyes open, will be more likely to appreciate, reflect on, and support the relationships that are so critical to collaboration efforts.

Like the ideal of civic republicanism, collaboration represents an ideal to which we aspire but sometimes fall short of achieving. Despite the reality that collaboration is hard to do, we are encouraged that when collaboration partners experience something new being created, they engage in repeated interactions with one another, allowing trial-and-error learning to occur. Ostrom (1998) argues that our evolutionary heritage has "hard-wired us" to learn norms of reciprocity and trust, so that over time, institutional change is possible. Public managers need to budget the time necessary to negotiate with collaboration partners across the five dimensionsgoverning, administering, paying attention to the tension between self-interests and collective interests, forging mutually beneficial relationships, and building reciprocal and trusting relationships—to allow for trial-and-error learning and the building of credible commitments.

The process of collaboration involves movement along the five dimensions as partners renegotiate a new equilibrium that reinforces the learning achieved at a previous equilibrium. "Because individuals are boundedly rational," writes Ostrom, "they do not calculate a complete set of strategies for every situation they face" (1998, 9). Each situation demands a different equilibrium among the five key dimensions to achieve an optimal mix for the partners in that context. Time, respect for the fragility of the process, and close attention to the five dimensions cannot ensure positive collaboration outcomes, but these actions will increase the likelihood that this will occur.

It may be that the focus on antecedents and enhancing collaborative performance in much of the public management literature—at the expense of wrestling with the process itself—means that we are missing an important piece of the puzzle. Developing a more systematic approach to the process of collaboration by focusing on the five defining dimensions presented here increases the likelihood that public managers will be able to manage the intrinsic challenges of collaboration. For scholars, a more systematic attention to understanding the process of collaboration will further the public value of this emerging field of study.

Notes

- 1. Bardach argues that "substantial public value is being lost to insufficient collaboration" because political pluralism tends to create institutional and political pressures that "push for differentiation rather than integration [where] the basis for differentiation is typically political rather than technical" (1998, 11).
- 2. Wood and Gray (1991) use the antecedentprocess-outcome framework to review the literature on collaboration. The literature abounds with antecedents. Because we are focused here on the process of collaboration, we have provided only a small sampling in figure 1.
- 3. Space limitations prevent us from citing what has become a large public administration literature. One of the most comprehensive contributions is Agranoff and McGuire (2003).
- 4. This definition of collaboration is strongly influenced by Wood and Gray's (1991) definition. Thomson expands on Wood and Gray's definition by (1) incorporating key phrases and words from a much broader review of the literature, (2) using commonalities among multiple theoretical perspectives, (3) expanding the governance and administration aspects of collaboration, and (4) identifying distinctive key dimensions of collaboration tested empirically using a higher-order confirmatory factor analysis model (Thomson 2001a).
- 5. For a description of the analysis of the collaboration literature from which these five dimensions are

derived, see Thomson (2001a), especially tables 5.1-5.3.

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