Can Network Theory Illuminate Interagency Collaboration?

Eugene Bardach
Graduate School of Public Policy
University of California at Berkeley

Can Network Theory Illuminate Interagency Collaboration?

Eugene Bardach

A social scientific theory is a tool. Like any tool, the best way to know its potential and its limitations is to try to do something useful with it. In this paper I approach “network theory” in this spirit -- although “network-related thinking,” rather than “theory,” might be a more accurate characterization of its concepts and empirical findings at this stage of its academic development. I attempt to use it to illuminate phenomena involved in interagency collaboration.

Interagency collaboration

For the past several years I have been studying the development of interagency collaboration among governmental and other organizations involved in implementing public policies. For reasons which are mostly obvious and therefore require no discussion here, collaborative work among agencies has appeared to be a potential source of productivity improvements. Many agency managers, legislators, and citizens have often supposed that performance could increase and costs decrease were agencies to learn to collaborate better. I share this supposition, and I have approached my study of collaboration with these broad productivity concerns uppermost.

By the time I turned to the network literature I had already conducted an extensive review of the literature on interagency collaboration and had interviewed some 150 individuals involved in collaborative efforts in welfare-to-work, children and family services, environmental management, fire prevention, and other policy areas. My plan was to spend an intensive several weeks with the network literature to see what sort of light it could shed on the exceedingly complex phenomena I had been learning about.

I decided to focus on human services phenomena in particular. This seemed a promising strategy partly because advocates and practitioners often use “network” and certain related metaphors to describe aspects of their work, e.g.:

-- A single “client” may receive service from one or more agencies in a “network of providers,” linked by expectations of giving or receiving referrals, joint ventures, professional norms, and the like.

-- Advocates for broader and deeper services integration sometimes refer to their loose political coalition as a “network,” e.g., the Solano [County, California] Children’s Network.¹ Such networks are typically made up largely of service providers from public and nonprofit agencies, many of whom also double as leaders of advocacy groups. These “networks” perform

---

a very complex mixture of advocacy, which is directed towards outsiders, and service and resource planning, which involves them in negotiations among themselves.

Academics also write about human services provider “networks,” and there is even some interest in the possibility of using “network” as conceptual building block for a “transorganizational” theory that will help us gain a better intellectual purchase on services integration activities.² One can also find an occasional self-defined “network” study of political coalitions in the human services areas.³

Closely related to the network metaphor are metaphors having to do with service systems whose pieces work poorly in isolation but might work better if somehow linked. Human services, particularly those for children, families, and youth are often said to be “fragmented” and to benefit from “integration.”⁴

Four types of networks

One conclusion I came to very quickly was that if “network” was to prove conceptually useful, I would need to differentiate four types of networks. One type is a “provider network,” mentioned above. A second is what I call a “contributors network.” This links individuals and agencies that are in a position to provide financial and political contributions of various kinds -- budgets, permission to operate in new domains, dispensations from certain accountability requirements, for instance -- to make a collaborative effort work. Because rationally-based trust can facilitate the workings of both the provider and the contributions network, I also refer to a

---


“reputation network” that conveys information about the trustworthiness of individuals in both types of networks. Finally, the fourth type of network combines planning, external political advocacy, and internal negotiating functions; I shall discuss this as a “constitution-building” network.

“Network” Defined

Network theory provides many different definitions -- often implicit and ambiguous -- of “network.” My own definition of “network” is this: a set of self-organizing working relationships among actors such that any relationship has the potential both to elicit action and to communicate information in an efficient manner. This definition aims to convey the idea that the potency of a network lies in its fusion of two capacities, the capacity to organize working relationships and the capacity to transmit information efficiently. This definition leaves open the questions of exactly what work is to be done and how exactly the efficient communicating is carried out. These questions are best treated as empirical rather than definitional, and the answers to them vary considerably.

I would emphasize that my definition of “network” applies not to people but to roles. This means that more than one network could connect the same set of individuals. For instance, I spoke above of a “provider network” and a “constitution-building network,” but in many communities these will be made up of the same individuals or agencies, give or take a few.

Role relationships may be considered, for theoretical purposes, primarily in terms of either structure or function. My own preference, however, is to begin with a functional conception -- self-organizing relationships that can speed communications and facilitate working relationships -- and leave structural features to be filled in by a combination of human intentionality and the contingencies of resource availability. This approach stands in contrast to the structural definitions that seem to be favored in the networks literature, which talk of “links” or “ties” or “interdependencies.”

I should note here that what I think of as “the network theory literature” is not at all neatly bounded. One of the great barriers to offering a fair appraisal of network theory is that


not all of the scholars who I regard as having produced relevant studies think of themselves contributing to any such body of theory. However, if I find these works cited in discussions by other scholars of what they take to be network theory, I take this as a warrant to include these works in my discussion as well. A second barrier to offering a fair appraisal of network concepts is that various scholarly explications may not be doing justice to their potential. I try to overcome this barrier in some places by offering speculative ideas of my own about the conceptual directions network theory might usefully take.

Provider Networks

It would not be unusual for a community of, say, a half million population, to have well over 100 public and nonprofit organizations potentially available to provide some services beyond simple cash or in-kind assistance to troubled individuals or families. Because each one specializes to some degree -- typically by the type of service offered, by the type of clientele served, or by virtue of its access to certain funding sources -- there are potentially many sources of synergy in having these specialists cooperate in some way. Collocation, for instance, can reduce the time and money costs of access for clients receiving services from a number of providers. Single intake forms and eligibility determinations can reduce delays in receiving services as well as minimize the burdens borne by clients in managing paperwork. Joint staffings by specialists from different disciplines or professions can serve as a check against too-narrow treatment plans or multiple plans that work at cross-purposes. Continuity of care can be increased if agencies have negotiated standing agreements about referral practices and, in some cases, financing arrangements. Inappropriate referrals can be minimized if providers know something about the nature of the services offered by one another.

What might a network of relatively productive relationships within such a population of agencies look like? I read the literature to suggest that it would facilitate both market-like exchange and professional collaboration; it would not be limited by formal roles or by hierarchy; and it would be able to take advantage of what Weick and Roberts call “collective mind,” especially at the operating level. It is possible that it would be of large scope and relatively centralized; but, contrary to the literature, I do not think its productive value would stem from the virtues of redundancy. I take these several matters up in turn.

Facilitating markets and professional collaboration

It is easy to see how a set of individual service providers who have a similar kind of professional training, identity, or orientation but work for different agencies could constitute a “network” in my sense of that term. They would know one another, trust one another (to the degree appropriate), and know how to tap one another’s expertise and other capacities. They would meet one another at various conferences and committee meetings, many would find themselves working together on common cases or projects; and a professional gossip network would provide timely updates about competencies, workloads, and the like. But what can we say about the provider agencies that employ such professionals? In what sense might we think of them as a “network”?

---

Compared to their operating largely independently and with little attention to one another, a well-working provider agency network might improve their aggregate productivity by:

-- intermittently reallocating tasks to more effective and efficient specialists, located in specialized organizational structures.

-- enabling specialists to work together in individual cases in such a way as to reconcile conflicting service plans, stimulate more creative problem-solving, and view service recipients (whether individuals, family groups, or communities) in a holistic way.

-- eliminating non-optimal duplication. Also, they would seek to achieve economies of scale where possible.

But how would a network function that could do such things? What would be its means of self-organization? I shall discuss one such mechanism below, in the section on “collective mind.” First, however, I want to discuss the role of financial incentives and of agency budgets.

Networks and markets. In a normal commercial marketplace, these sources of improved productivity would be tapped by (1) smart managers in each of the participating organizations, guided in part by (2) the price mechanism. Smart managers could figure out ways to improve services and decrease costs, and financial incentives would exist for them to act on their understanding. In the largely public and nonprofit world of the human services, it generally is more relevant to think about avoiding the financial disincentives to productivity and then trying to help the interagency professional network manage itself in an appropriately productive way. Whether it would be possible to create positive budgetary incentives to optimal self-organization is less certain, though putting service vouchers in the hands of consumers would be an idea worth trying.

One school of network theory, it should be noted, would rule such an idea out almost by definition. I wish to take this opportunity to explain at least some of its errors. According to Yale sociologist Walter W. Powell, markets and networks could hardly be more different:

In market transactions the benefits to be exchanged are clearly specified, no trust is required, and agreements are bolstered by the power of legal sanction. Network forms of exchange, however, entail indefinite, sequential transactions within the context of a general pattern of interaction. Sanctions are typically normative rather than legal. The value of the goods to be exchanged in markets are much more important than the relationship itself; when relations do matter, they are frequently defined as if they were commodities...

---

8 One particularly troubling form of non-optimal redundancy is the need for service recipients to provide the same information time and again, and for intake workers to record the information in some data base. On the other hand, some duplication and redundancy are socially very useful and should be protected. See below, p....

...In markets the standard strategy is to drive the hardest possible bargain in the immediate exchange. In networks, the preferred option is often one of creating indebtedness and reliance over the long haul. Each approach thus devalues the other: prosperous market traders would be viewed as petty and untrustworthy shysters in networks, while successful participants in networks who carried those practices into competitive markets would be viewed as naive and foolish.10

Powell’s high-contrast rendering of the generic differences between networks and markets is quite misleading, however. Although his conceptions of “markets” and “networks” are largely definitional, and because in some ultimate sense there is no quarreling with definitions, if we adhere to reasonable common-sense definitions of these terms, Powell is simply mistaken empirically: most markets do not work as Powell says they do, and only a subset of “networks” look like Powell’s “networks.” At the heart of the matter is the quality of the working relationships that one might expect in networks and in markets. Contrary to Powell, the more “competitive” a market in the conventional sense of that term -- that is, the more atomistic and accessible -- the more the terms of exchange are imposed on the parties by impersonal forces, and the less hard bargaining actually occurs. Competition among sellers and, independently, among buyers reduces the conflict between any particular seller and any particular buyer. You needn’t spend all your time in Nordstrom’s, famed for its customer service, to know that most markets can actually be rather friendly places.

Networks, on the other hand, as I have defined them at least, can be full of strain and unpleasantness, e.g., networks among academic scientists working in a quasi-cooperative and quasi-competitive mode on the same research problem. Many of the interagency task forces I studied which were involved in smoothing out operating relationships among provider agencies had begun their work warily and only gradually worked their way into a level of mutual comfort among the participants.

According to the Powell view of markets and networks, network relationships ought to be better able than markets to facilitate the sort of collaboration that might would tend to improve service quality. Even in Powell’s terms, however, this is not necessarily the case. We cannot ignore the fact that public and nonprofit human services do not always attend as much to the needs and interests of their clients as they do to the needs and interests of their own staff. A comfortable “network” relationship a la Powell just might permit the staff to slack off in a way that a more conflictual relationship might discourage. Conversely, when clients are able to choose among competitive providers, the normal pressures to deliver either better services or lower charges could have a beneficial effect -- although taking advantage of these pressures would of course depend on the energy and astuteness of the client or whatever individuals act as agents on the client’s behalf. Even when those agents are in effect legislative or executive branch overseers who use the political process to direct public funds towards one or another agency (whether public sector or nonprofit), these competitive pressures may still come into play.11

11 Limited numbers and political pressures often dampen such pressures, however. See Eugene Bardach, Improving Productivity in JOBS Programs (New York: Manpower Demonstration
Even within market-like competitive relationships there is often ample room for “voice” to connect the parties.\textsuperscript{12} Conceivably Powell or others might argue that the use of voice is by definition a network-like activity; but my own definition of “network” does not entail this, nor should a reasonable definition of market activity exclude it. Powell’s leading examples of network relationships among construction contractors and subcontractors in Massachusetts, the regional textile network in Germany, and the clusters of small manufacturers in Northern Italy support my point. These businesses were brought together, and continued to work together, because of market-driven expectations of financial gain.

But it is also likely, as Powell would appreciate, that this system of financial relationships is improved by an overlay of network relationships in which personal relationships among various subsets of the participants play an important role. The quality of their relationships, the terms on which they continue to work together in a mutually satisfying way, involve quite a lot of “voice” and “loyalty.” This is no small matter. Relationships promising mutual advantage often permit great variation in the details that differentially allocate benefits among the participants. “Voice” and “loyalty” can speed negotiations over these points and generate ideas for future joint projects.

Having thus -- I hope -- rehabilitated the idea of markets as a potential source of cooperation and harmony, I would assert that the various “crisis networks” dealing with AIDS, homelessness, and the like, which Agranoff describes in the Dayton, Ohio, area must first be construed as market suppliers and as political coalitions, depending on the analytic purpose at hand.\textsuperscript{13} That the suppliers are in the human services marketplace is irrelevant, as is the fact that they are nonprofits and presumably more altruistic than the average commercial supplier. Irrelevant too is the fact that they occasionally collaborate to divide up the “demand” or to play out a political role. The fact that they are also a “network” is important too, of course, since it is this set of relationships that helps them communicate rapidly, reach agreements with relatively little friction, and coordinate for effective political action. But the driving forces and significant constraints do not originate in their network relations, which, important as they are, are only secondary.

Networks and hierarchies

If Powell errs in supposing markets and networks to be in opposition, he is on solid ground in contrasting networks and hierarchies:

Networks are “lighter on their feet” [than] hierarchies. In network modes of resource allocation, transactions occur neither through discrete exchanges nor by administrative fiat, but through networks of individuals engaged in reciprocal, preferential, mutually supportive actions.

---


Networks are particularly apt for circumstances in which there is a need for efficient, reliable information. The most useful information is rarely that which flows down the formal chain of command in an organization or that which can be inferred from shifting price signals. Rather, it is that which is obtained from someone you have dealt with in the past and found to be reliable...14

My own conception of “network” agrees with Powell’s with respect to the efficiency of communication. And it is clear in the human services collaboratives that I have observed and that have been described in the literature that such communications networks are omnipresent and seemingly efficient. But it is an empirical matter as to just why networks should be more efficient. Powell’s emphasis on reliability is surely part of the story but far from the whole of it. The ability of networks to rely on informal channels is probably more important. These can eliminate time-consuming links in the communications chain that formality would otherwise require. They can also reduce distortions that might otherwise come from sanitizing communications that travel up the hierarchy.15 Informal channels, finally, reduce the vulnerability of planning activities to what Williamson calls “the propensity to manage,” or, more precisely, to over-manage.16 This propensity produces unproductive or counterproductive intrusiveness. And it also opens the door for destructive “political games.”

Donald Chisholm’s work on Bay Area transit systems is often cited as providing confirming evidence of the efficiency of networks and their likely superiority to hierarchical organization by a regional transportation authority.17 Chisholm found many instances of informal coordination among transit agencies, e.g., the agreement between the subway system (BART) and the East Bay bus system (AC Transit) to provide mutual assistance in cross-Bay service in the event of emergencies, and the arrangements between the Golden Gate Bridge Authority and the San Francisco “Muni” concerning signage, bus stops, routing, and a (presumably) socially efficient limitation on competition.

Of course, as the existence of vast numbers of formal organizations suggests, there are limits to the power of informal relations. It was not until the six area transit agencies created a Regional Transit Association that they were able to undertake projects such as developing a joint discount card for the elderly and handicapped, arranging for joint purchase of parts such as air filters and brake drums, and creating joint programs for training maintenance managers and mechanics (Chapter 7). Furthermore, Chisholm reports some possibly indicative examples of failures in coordination that were probably quite harmful to passengers and could have been remedied at little cost, e.g., the reluctance of the San Mateo transit system (SamTrans) to provide service information to Muni.

Means of internal coordination

14 Powell, “Neither Market Nor Hierarchy,” pp. 303, 304.
16 Oliver Williamson, Economic Institutions of Capitalism (Free Press, 1985), p. 149.
17 Chisholm, Coordination Without Hierarchy.
Networks may sometimes undermine existing hierarchies, but may a network not, in its own internal structure, be somewhat centralized and therefore hierarchical? This is basically an empirical question, as my own definition does not preclude this possibility. One line of theoretical reasoning might hold that hierarchy and centralization are great assets for a network whose participants would have it be more effective and efficient. Another line of theoretical reasoning, drawing on the growing literature that favors “involving” workers at all organizational levels and hence flattening hierarchies, would hold the opposite.18

Centralization and hierarchy. A much-cited work that addresses this issue is Christine Alter and Gerald Hage, *Organizations Working Together*. At a theoretical level, they appear to opt for centralization and hierarchy.19 However, their theory is not persuasive and their evidence, according to my interpretation, is more consistent with decentralization and flattening than with the opposite.20

Their empirical base is 158 human service agencies organized into fifteen “networks” in “Fulton County,” Iowa, and “Farnam County,” Illinois. Their theoretical orientation is “technological,” in the sense that the nature of the network’s technical tasks ought to determine the overall structure of the network and the nature of the interpersonal interactions within it. Given this orientation, they attempt to characterize provider networks in terms of global dimensions such as degree of complexity, differentiation, centrality, size, and connectivity. Tasks are assessed in terms of scope, duration, intensity, volume, and uncertainty.21

That the theory is not working may be inferred in part from the fact that Alter and Hage must have recourse to variables outside the theory when they explain why the supposed “networks” perform poorly with respect to two so-called “outcome” measures that they do employ, effectiveness as perceived by service providers and interagency conflict. In regard to children’s protective services, for instance, both counties’ providers perceived substantial “performance gaps” as well as interagency conflict, despite their being “staffed by people who operate within a comprehensive framework, who obviously care about their clients, and who have built and maintained relatively well-coordinated working relationships...” (p. 225). The culprits were differences in professional outlook -- social workers versus police, to oversimplify somewhat -- and the combination of intense public scrutiny and low levels of agency autonomy.

20 Their reliance on jargon and other sorts of social scientific shorthand makes it difficult to follow their theoretical argument -- or perhaps I follow it but disagree with it. In any case, the empirical analysis does not help to clarify the matter; for its shortcomings begin with neglecting to demonstrate that the several networks being analyzed are actually “coordinated” or “integrated.” In the absence of such benchmark information, it is not possible to believe in, or indeed to make much sense of, the welter of correlation and regression coefficients purporting to explain how the supposed coordination occurs. In fact, given the supposed prevalence of breakdowns in the extent and quality of services integration, one must suppose, at the very least, that the degree of coordination across each of the fifteen networks was highly variable.
21 For environmental and “operational process” variables in their causal schema, see their useful figure on p. 103.
In a reprise on health care that could just as well apply, *mutatis mutandis*, to all human service systems, Alter and Hage speak of “the paradox of service delivery” (pp. 181-185). They surmise that “an improved service delivery system” has a “tightly linked structure” and a “capability of allocating resources rationally, of processing clients more efficiently, and of providing...care for increasing numbers....” And yet this supposedly “improved” system also leads to a “loss of local autonomy and the professionalization of the system, which excludes volunteers and community support.” The question is whether the networks observed by Alter and Hage -- if indeed they were networks, as I questioned above -- aggravated or diminished the problems of bureaucratization, or perhaps were simply irrelevant to them. My own guess, following Chisholm, is that they diminished them.

“Collective Mind.” But what is the alternative to centralization and hierarchy as a means of coordinating the network? In a phrase, self-organization. Exactly how this works is a complex matter. For the present purpose, we may take the essence of the idea to be the sort of self-organizing process that Weick and Roberts have recently described as managing the complexities of landing a succession of airplanes on an aircraft carrier.22 The crew of an aircraft carrier is organized to respond rapidly and efficiently, but in a decentralized way, to a rush of contingencies, some of which can cascade into relatively unpredictable and quite dangerous events. Although the plans for carrier landings are very detailed and are intensively rehearsed by those who must execute them, actual operations must allow plenty of slack for adaptation. Crew members and fliers must adjust to unexpected and fast-changing circumstances; and they must adjust to one another’s emergent adjustments. Weick and Roberts call this adaptive capacity a “collective mind” and refer to networks as one of those “newer organizational forms...[that] have more capacity for mind” than do more traditional forms (377).

They are at pains to emphasize the social-psychological aspects of “collective mind” and not just its mechanical capacity to process information. Group performance, they say, depends on individuals interrelating as though they were subject to common, and possibly mutually created, forces; envisaging in a similar way the “social system of joint actions” (363); and subordinating their own “contributions” (actions) to the envisaged system. Group performance also depends on the whole system of contributions, representations, and subordinations working coherently.

How might these concepts apply to interagency collaboration in human services? The cascade of clients being served and in most cases “moved through” a human services delivery network is not as dangerous, of course, though it may often be as beset by contingencies. What would the network’s “collective mind” do to manage this flow effectively and efficiently? Without attempting to be exhaustive, we may say that:

--- the client conceived of as a whole person, and not just a bundle of separable “problems,” would become the central focus of concern and action for the actors in the network. The “representation” of “the client” would be held in common across the several providers, and it would not vary significantly as a function of agency or type of professional.

22 Karl E. Weick and Karlene H. Roberts, “Collective Mind.”
-- the understanding of how the overall system works, including the capacities, strengths, and weaknesses of each agency, its staff, and its funding sources, would be held in common. This would amount to “envisaging in a similar way the social system of joint actions.”

-- agency staff would necessarily attend to the constraints of eligibility, funding, etc., experienced by each of the provider agencies in the network, including their own, but would believe that it was desirable to push against those constraints in the interests of providing better service. The “collective mind” of those who manage and operate the system would treat its bureaucratic dysfunctions as one of those problems to be solved by joint action, and this would lead these individuals to be accommodating to one another to whatever extent was both desirable and possible.

-- because it can be costly to individuals and to organizations to develop and maintain aspects of the collective mind, not everyone in the networked provider organizations would be involved in the way I have described. Although collective mind during landing operations on an aircraft operation must be quite inclusive, it could afford to be much less so in a very efficient human services network. Perhaps only a minority of participants would be collectively engaged with one another in more than a very limited way. However, an efficient network would also facilitate timely and appropriate intervention by the more engaged in the actions of the less engaged -- actions deliberately instigated, perhaps, by the less engaged themselves.

I shall return below, in the discussion on constitution-building networks, in which collective mind also plays a role, to the question of how collective mind is produced.

The question of scope

Consider a set of human services agencies that potentially might work together to provide services to some client population. The largest possible scope for a network among these agencies would have each one working together with every other one. But does larger scope imply greater effectiveness and efficiency in service delivery?

Aldrich and Whetten think so, and Rogers et al., present data on post-rehabilitation employment of mentally ill individuals that support this supposition.23 In a much more extensive test, however, Milward and Provan, elsewhere in this volume, present data that cast doubt on this hypothesis. [check citation details on this] Why might the seemingly common-sensical hypothesis be wrong?

First, because inter-provider service delivery arrangements are, in effect, a substitute for intra-provider arrangements, the absence of linkages between provider A and the rest of the provider set might suggest that provider A had simply done an outstanding job of organizing a variety of services on its own and had special reasons for maintaining its autonomy. An

extremely dedicated provider with a distinctive religious or ideological orientation, for instance, might fit this description.24

Secondly, increasing the number of linkages in a population of providers potentially increases the number of relationships with relatively mediocre as well as with relatively good providers. The embrace of mediocrity can occur for many reasons, including a desire to stay on good terms with powerful or well-connected agencies, a lack of understanding of just what quality is available from other agencies, and a desire to maintain solidarity with sister agencies involved in a larger political struggle. In some cases, a network which eliminated weak or counterproductive providers would be a higher-quality network than a more inclusive one; and a higher proportion of observed linkages in the system, therefore, would represent lower, not higher, quality.

Consider, for instance, a provider network that includes group foster care homes. The “family preservation” philosophy, to which many children’s services agencies now subscribe, holds that it is better for children, families, and the taxpayer, to take all reasonable measures to prevent out-of-home placement. A network in which linkages to foster care homes disintegrated would, in this view, be a better network than one in which they were strong. Similarly, if some homes were much worse than others, the network would improve by weakening linkages with these.

Indeed, it is possible to find at least the possibility of this dynamic in the Milward-Provan data. Of the four communities they studied, Providence had the lowest density of total inter-agency linkages but showed the best results for patients. In Providence a large and powerful central authority exerted cost and quality controls on many of the other providers in the community, and inferentially may have chosen not to contract with some of the providers.25

Redundancy

An alleged strength of networks is that they can, and often do, take advantage of redundancy. Aldrich and Whetten, for instance, write that redundancy helps to “stabilize the overall performance of networks.”26 Their example is that of manpower services (training, placement), for which a redundancy of service providers can ensure that somebody serves the client and that there are “several entry points for clients and multiple sources for obtaining critical services.” I believe this argument is mistaken for several reasons.

It is questionable whether any such services are really “critical,” and whether a little extra investment in search on the part of would-be service recipients would not make for a better

---

24 Of course, quality is to some extent in the eyes of the beholder. In the early 1970’s several halfway houses for heroin abusers in San Francisco refused on philosophical grounds to refer their clients to nearby methadone clinics. Sheldon P. Gans and Gerald T. Horton, Integration of Human Services: The State and Municipal Levels (New York: Praeger, 1975), p. 223.

25 This is not to say that centralization is under all conditions a good thing, of course. See the discussion of Alter and Hage above, pp....

system design than the profusion of manpower programs that operate in many communities.\textsuperscript{27} Indeed, notwithstanding Landau’s conjecture in his pioneering paper on this topic, there are probably very few public sector activities other than emergency-response services for which reliable assurance against utter breakdown is valuable enough to justify large investments in redundant capacity.\textsuperscript{28} However, Bendor has made a sophisticated and compelling case for several virtues besides added reliability: the preservation of options, a source of extra ideas, and a spur to competition. The pertinent question is whether networks are a more promising medium for optimal redundancy than are, say, markets and hierarchies.\textsuperscript{29}

As I remarked above, networks may easily be nested in certain kinds of markets and in hierarchies. Hence, it would not necessarily be evident, were we to observe optimal redundancy in some setting, which type of medium had done most to help it into being. Whatever the merits or demerits of redundancy in the manpower training sector, for instance, one might just as well say that its existence is attributable to the “market” for manpower programs, construed both in economic and political terms, as to any network form of organization. And it is quite clear that managers of profit-seeking firms -- operating in a market, that is -- will often diversify their suppliers so as to ensure the virtues of which Bendor writes.

\textbf{Contributor Networks}

So far we have been looking at network relationships that help service providers exploit latent opportunities to increase productivity through one form or another of collaboration. These opportunities arise primarily because the technical aspects of service delivery interact with the distribution of resources, expertise, and the like across the set of provider agencies and personnel in such a way as to make these possible. However, even when these opportunities exist, and the technical understanding to exploit them also exists, there is no guarantee that the provider community will actually do what is necessary to exploit them. They must contribute effort, funds, and political good will to such an enterprise. Not infrequently they must also “contribute” a willingness to run a variety of political and other risks, particularly the risk of diverting agency attention from activities that traditionally claim high priority and for which the agency is closely monitored by some political environment.

Moreover, if the contributors are to work in a “network” fashion, they must be willing to adjust their own contributions in the light of the contributions they perceive being made by the other potential contributors. On the bright side, this means that the contributions by some might encourage contributions by others. On the darker side, it also means that a fear of free-riders would lead contributors to proceed very cautiously lest they become exploited. In effect, the potential contributors -- providers plus other players who can make funds and other resources available -- must create a “contributor network.” These collective action problems only aggravate a deeper underlying problem, the reluctance of agencies to give up any of their

autonomy, a motivation even stronger than the desire to increase budget, writes James Q. Wilson. How might these problems be solved?

First, the desire for autonomy must sometimes bow before stronger forces. There may, for instance, be a performance constraint: if an agency’s performance falls low enough, its budget, the security of its employees, and even its survival may be in jeopardy. Cooperating with another agency, especially in tight fiscal times, may be one way to increase performance to the required levels.

My interviews suggest that most human services agencies these days feel threatened from a variety of sources, most notably: the increasing scale and difficulty, in many areas, of the problems they are charged to deal with; relatively stagnant budgets; and increasing public demands for better outcomes. Agency managers are more inclined, therefore, to countenance modest erosions of autonomy. In addition, some managers simply believe that collaboration might help their agencies perform their missions better -- so why not try?

Secondly, if an agency’s autonomy is already compromised by its reliance on a single source of funds or a single source of client referrals, it may attempt to reclaim autonomy through diversifying its sources of supply, which would imply finding still other agencies to collaborate with. Similarly, if autonomy is threatened by sheer environmental turbulence, a long-run strategy to reduce risk may entail entering a partnership with one or more other entities, perhaps as a partner and perhaps as a patron vis-a-vis an even weaker and less autonomous agency. A network of mutually threatened and interdependent agencies might, therefore, be a network in which it would be easier to raise contributions for a common project than would be the case were the agencies feeling relatively more secure and less needful of one another.

Thirdly, creative joint problem-solving by the potential network participants might be able to reduce the risks and costs to at least some of the parties. It is not easy to create the atmosphere of mutual trust and support that is needed for such activity, however. Participants need to learn about each others’ professions, agencies, and individual characters. This is extremely time-consuming. As many of my interviewees said, the single most important “lesson” they wished me to publicize about interagency collaboration is that “it takes an immense amount of time.” The delays, and the rigors of the task, can be mitigated to some degree, though, if the planners, negotiators, and problem-solvers come preceded by their reputations, and if these reputations suggest “trustworthiness.”

**Reputational Networks**

Eighty-three percent of 2615 managers surveyed by James Kouzes and Barry Posner valued “honesty” in their superiors more than any other characteristic. From other studies, it appears that this is what superiors value in their subordinates as well. Gossip networks ensure

---

that many individuals, from top managers and legislators down to lower-level technicians who might be assigned to interagency task forces, enter a negotiating process preceded by their reputations. And honesty, and dishonesty, would seem to be characteristics well suited to being gossiped about. If honesty is important to peers in task force or similar settings trying to work out collaborative relationships, then well-developed gossip networks should be of use to them.

Although many of my informants have told me that, when dealing with peers representing potential partner agencies, “trust” is critical to success, I do not think that personal “honesty,” important as it is, is central to what they mean by “trust.” More important to them, I believe, are (1) a commitment to work hard and effectively to promote the bureaucratic and political success of the collaborative venture, and (2) a commitment to try to understand the other partners’ needs and interests, and to take them into account to the extent possible. In the context of the real-life hazards presented by the collaborative process, at least, it would make good sense to be very concerned about these two commitments. Before taking up the question of whether reputational networks can actually communicate efficiently about such commitments, let us look more closely at these hazards.

**Real-life hazards**

The most important is the likelihood of dissimulation. Agency negotiators trying to induce collaborative effort from others will often evoke a norm of disinterested commitment to good works, to benefiting needy individuals or groups, to serving one’s client’s interests, to advancing some conception of social justice or equity (including, for some individuals, protecting taxpayers’ interests). And, because the norm is in fact widely accepted, those from whom cooperation is sought will at least profess such motivations no matter what the truth of the matter. Unfortunately, the truth of the matter is hard to ascertain. It is relatively easy for negotiators to dissimulate. And knowing this, negotiators normally approach their jobs rather warily. The presumption in most bureaucratic settings is that, no matter what one’s own intentions, the intentions of negotiating partners are to protect current autonomy and turf and perhaps even to pursue more.

Secondly, there is the problem of binding oneself in the face of future uncertainties. Suppose that Health wishes Housing to collaborate in getting potentially poisonous lead paint removed from residential interior walls, and suppose that Health promises to help staff joint inspection teams. Although Health might be able to deliver on this promise today, what will

---

33 Oliver Williamson rightly narrows the theoretical scope of trustworthiness to not much more than personal integrity. That is, domains where institutional and other safeguards against risk are in place do not require “trust.” “Calculativeness, Trust, and Economic Organization,” *Journal of Law & Economics*, vol. XXXVI (1993), pp. 453-486. My concept of “commitment” is a subset of “integrity” that has meaning in the imperfectly safeguarded world of bureaucratic interaction.

34 This is revealed by a quip I heard in an interview with a high-level human services agency manager in Oregon, where interagency collaboration efforts are relatively well supported by the political elite and by a general culture that favors good-faith bargaining. When I asked how generalizable Oregon’s relative successes might be to other political cultures, she responded, “Oh, it’s not that negotiators don’t have hidden agendas here in Oregon, it’s just that we begin meetings by telling everyone with a hidden agenda to please put it on the table.”
happen when Health runs into budgetary difficulties two or three years from now, discovers that it has more important priorities than lead paint, and threatens to leave Housing holding the bag? And, when each agency claims that it “cannot afford” more than a modest contribution, and expects its partner to put up the difference, why should its claims be believed?

Such issues are not unique to the public sector, of course. But in the private sector, the parties can sign contracts that will be enforced by courts and sheriffs. In the public sector, the enforcement machinery is not as certain, being more political than judicial. And if post-agreement enforcement is expected to be harder, this implies that pre-agreement bargaining will be more suspicious, and that the domain of eventual agreement will tend to be limited by such expectations. It also implies that the trustworthiness of agency leaders and agency negotiators is a more consequential ingredient in the bargaining process -- although it is possible that the objective uncertainty of the current and future political environment might, in some cases, overwhelm even the most trustworthy of personal representations.

Finally, a negotiator recognizes that his or her counterpart will face a political struggle within the agency to sell any agreement reached with the other agencies’ negotiators. Although I have so far been discussing “the agency” as though it were a unified entity, of course it is home to many conflicting points of view and contending factions. The odds are good that the individuals who represent “the agency” in interagency negotiations will have to advocate actions that disturb one or another faction within the home agency, and perhaps an important one (even the boss!).

Reputations

Surely it helps for parties to hear through the grapevine that “X is very committed” or “Y is very turf-conscious.” But it is hard to say exactly how helpful such generalized reputations -- even assuming they are more or less true -- would be in facilitating specific negotiations. Between the general reputation and the specific case a large gap might exist. I have not seen this question explored in the academic literature.35 I will set forth a few thoughts here.

Assume that there are only two parties, A and B, and that each believes, at the outset of the negotiations, that a potential mutually advantageous deal exists. Their only problems are to discover the range of possibilities and to select one from that range.36 Consider what is probably the most common case, that in which A has a good reputation for general commitment to the mission in question and B is trying to ascertain what that might signify for the case at hand. My guess is that, from B’s point of view, it does not signify much. First, B must learn about the nature and magnitude of the pressures to which A is exposed in the case at hand. This is a difficult task, and the results of probing subject to considerable error. Secondly, B must learn whether A’s reputation is built on cases that were at least as difficult for A as the current situation promises to be; for otherwise A’s good reputation is largely irrelevant. This sort of information too may be costly to acquire. If B has a choice between gathering more information

about the basis for A’s good reputation or devising probes to assess A’s commitment in the current situation, a benefit-cost calculus will probably point to the latter strategy in a majority of cases.

This calculus might be reversed, however, if A has a reputation, say, for extreme turf-consciousness. Risk-aversiveness on the part of bureaucratic negotiators would endow such information with more influence than a positive reputation of comparable magnitude. However, given our initial assumptions that a potentially advantageous deal is believed to exist, A’s negative reputation will not necessarily discourage B from beginning exploratory negotiations. They will simply encourage B to probe A’s commitment more aggressively and creatively than B would otherwise have done.

Reputations as hostages

But if individuals’ reputations coming in to negotiations might expedite them very powerfully, their reputations going out might present a livelier possibility. So far I have treated a reputation purely as information. However, we can consider reputation in a different light as well: as a vulnerable hostage whose future well-being will depend on the conduct of its keeper in the present negotiations. The existence of such a hostage might motivate parties to work hard, honor their promises, and pursue programmatic rather than bureaucratic objectives.

The weakness of this as a motivator comes, of course, from the same condition that makes information coming into negotiations very helpful, that is, lack of sufficient specificity. But such a weakness might be cureable: if actors can reasonably assume who future audiences will be for either their own or their partners’ good performances, they can take the trouble to spread the word or promise to spread the word. Oliver Williamson refers to a network created by Toyota of Japan to perform just this function. It links the subcontractors who supply Toyota of Japan. Many of these have dedicated production facilities so heavily to Toyota’s needs that they are vulnerable to extreme exploitation should Toyota decide to exploit them. The absence of negative information in the network is a signal that Toyota is trustworthy, and hence that negotiations can proceed with less friction than there might otherwise be. It was clearly in the interest of Toyota as well its partners for Toyota to create such a network.

Constitution-Building Networks

Commitment to a shared mission is problematic not just because commitment is problematic but also because the idea of a “shared mission” is problematic. Sometimes it is easy

---

38 Although Williamson does not say so, the act of creating it was in itself a demonstration of trustworthiness. In the nature of the case, such a demonstration would have a much quicker impact than the fact that, as time would pass, the network would not be passing along negative information about Toyota. Williamson’s conclusion about the private benefits of investing in the creation of a reputational network is an interesting exception to the conventional hypothesis that such networks (like other forms of “social capital”) are public goods likely to be undersupplied. See Robert D. Putnam, *Making Democracy Work: Civic Traditions in Modern Italy* (Princeton University Press, 1992), p. 170.
enough to state a collaborative mission in very general terms like “help welfare recipients to achieve self-sufficiency” or “preserve families,” but a lot harder when the level of detail is reached that forces decisions about priorities regarding whom to serve, exactly how to do it, whether to short-change long-term in favor of short-term objectives, and so on. Inevitably, how the broad mission will be defined, and how its detailed implications will be drawn out, are questions that can create conflict. The collaborating partners must, in effect, create a constitution, albeit a largely informal one, that promotes and manages constructive conflict and that discourages destructive conflict.

I find in network theory several ideas of potential value for understanding how a good constitution might evolve or fail to evolve. I will group these in two categories: norms and procedures for structuring the choice process; and creating a sense of group solidarity.

The Choice Process

A piece of conventional wisdom among veterans in the process of setting up a service collaborative is: “In an effective collaborative, everybody has something to contribute: special skills and knowledge or authority and influence among a special constituency in the community. Hence, every player should have an equal voice in decisionmaking.”39 This is as much for the sake of political prudence as it is for the sake of a philosophical commitment to democratic inclusiveness. Many of my interviewees have emphasized that excluded interests get angry, force the excluding interests to spend much time and energy making amends, and eventually win their place at the table anyway. What is accepted as inevitable is eventually rationalized as being desirable.

But it is not hard to see why such thoroughgoing egalitarianism might not be desirable at all. As service providers, some agencies in a community are ineffective, costly, or even corrupt. As potential contributors of resources, some will be utterly uncooperative and may wish to disguise their foot-dragging by impeding the momentum of the entire process. As participants in a collective constitution-building process, some will be dogmatic or disloyal. And the sheer number of participants begins, at some relatively low threshold point, to impose a severe drag on forward momentum.

Fritz W. Scharpf and Mathias Mohr have conducted a fascinating exercise simulating social decision making under conditions rather similar to those that would confront a typical set of agency representatives attempting to construct a service collaborative. They conclude that the general good is best served by a decision-making process that (1) permits a core coalition possibly much smaller than the whole set of provider agencies to take the lead in designing the operating system for the collaborative but (2) has this coalition in effect buy the consent of the

---

39 Atelia I. Melaville and Martin J. Blank, *Together We Can: A Guide for Crafting a Profamily System of Education and Human Services* (U.S. Department of Education and U.S. Department of Health and Human Services, 1993), p. 25. As is usually the case with conventional wisdom, a seemingly opposed principle is also invoked. Melaville and Blank, p. 33, list as a “landmine... to avoid:... Waiting to convene a group until everyone is at the table. The enthusiasm of a wisely selected and enthusiastic core group can cool while others are being brought in. Do not waste time!”
provider agencies not included in the coalition.\textsuperscript{40} The logic behind this conclusion is that a relatively small core group can hold down the transaction costs of figuring out what sort of collaboration would make good sense, but that their temptations to self-interested exploitation of the situation are curbed by the necessity to gain consent from the outer ring.

This, at any rate, is their very plausible conclusion about the formal aspects of the process. However, it does not attend to the substantive issue of which types of interests get absorbed into the core coalition and which remain in the outer ring. In the real world of human services collaboratives, one might plausibly worry about whether certain professions will dominate others and, perhaps worse, whether the interests of providers as a class will dominate those of consumers, clients, and beneficiaries. Network theory does suggest that the desire to work with others who are like oneself -- not to mention self-interest and a capacity to sequester power -- might easily transform the Scharpf-Mohr ideal constitution-building network into a clique of social, professional, and political look-alikes who barely tolerate professional ideas and service strategies that are alien to this in-group.\textsuperscript{41} In order to counter this tendency, general norms about inclusiveness and “equal voice” are often supplemented by more particular norms about including clients, customers, consumers and lay people, and ethnic “diversity” among the players who are either “in” or very close to the players in the core coalition.

This does not mean that no back-channel or relatively cliquish sub-networks form to engage in planning activities. Interesting research could be done on what norms arise to justify such departures from inclusiveness. “Equity” and “respectfulness,” for instance, are norms that, in my field work, I have seen used as a substitute for inclusiveness as well as as a complement to it: “We don’t need to include everyone in this meeting so long as people feel we are respecting their interests and treating everybody equitably.”\textsuperscript{42} This is perhaps the same norm as that which Melaville and Blank recommend: giving “every player...an equal voice in decisionmaking.”

Group Solidarity

I discussed above the contributions of collective mind towards the efficient functioning of the provider network. Collective mind is also relevant to the constitution-building process, particularly to the goal of inspiring group effort and loyalty. Just as landing planes on a carrier requires people to interact as though they were subject to common, and mutually created, forces, so too does the process of planning for more services integration.

Heedfulness. Whence comes such mutuality? From a widespread disposition towards mutual “heedfulness,” say Weick and Roberts, and they supply several examples of trouble aboard an aircraft carrier when interrelating occurred less heedfully than was required. But

\begin{itemize}
  \item \textsuperscript{40} Fritz W. Scharpf and Matthias Mohr, “Efficient Self-Coordination in Policy Networks: A Simulation Study,” Discussion Paper 94/1 (Koln, Federal Republic of Germany: Max-Planck-Institut fur Gesellschaftsforschung, April 1994).
  \item \textsuperscript{41} David Knoke, \textit{Political Networks: The Structural Perspective} (New York: Cambridge University Press, 1990), pp. 69-73.
  \item \textsuperscript{42} For reasoning about the importance of equity as a general norm, see Peter Smith Ring and Andrew H. Van de Ven, “Structuring Cooperative Relationships Between Organizations, \textit{Strategic Management Journal}, vol. 13 (1992), pp. 483-498.
\end{itemize}
where does heedfulness come from? Weick and Roberts suggest that one avenue is opened when insiders socialize newcomers and in doing so “reconstruct what they knew but forgot,” provided the socialization that occurs is candid and enriched by vivid war stories. Weick and Roberts elaborate on the power of good stories, related with narrative skill, to “organize know-how, tacit knowledge, nuance, sequence, multiple causation, means-end relations, and consequences...” A good plot is memorable and gives the audience a capacity to “foreshadow” the use of “heed in action...A coherent story of heed is mind writ small. And a repertoire of war stories, which grows larger through the memorable exercise of heed in novel settings, is mind writ large.”

But what would the “war stories” of human services planners sound like? Based on my relatively limited explorations, I would hypothesize that the archetypical “war story” of a successful working group characterizes the group as a band of service-oriented professionals fighting a bureaucratic and political system that lodges innumerable obstacles in the way of accomplishing humane and socially desirable results. The stories all convey information of a relatively practical nature: what has “flown politically” and what has been “suffocated by turf-protecting bureaucrats,” how this agency’s priorities have shifted over the last few years under the most recent director, and how that agency has been learning to operate under new legal constraints, and so on. The history of past creativity is recounted in the context of particular programs and individuals, and inspires ideas about how creative programming might be done today. Serendipitous and happy conjunctions of ends and means are related, and so remind listeners that ends can sometimes be discovered which take advantage of idiosyncratic resources.

The process of creating a common pool of helpful war stories is not simple, though. Realistically, some agencies, and personalities, have thrown up more obstacles than have others to what at least some participants in the group have come to regard as desirable collaborative goals and service strategies. To what extent can the group’s war stories offer up Profiles in Obstructionism, though? Because the group contains representatives of these obstructionists, and because most experienced agency staff who work in these collaborative settings know that charges of “obstructionism” can fly in all directions quite unpredictably, these are dangerous themes. Collectively-sanctioned war stories avoid them. However, they do seem to circulate in subgroups and are shared discreetly with newcomers and outsiders who may need to know the practical information about who is thought by whom to be blameworthy about what.

“Planning” and its byproducts. Other activities also serve as vehicles for learning the skills of heedful interrelatedness. In most local communities where providers and advocates

---

43 Weick and Roberts, “Collective Mind,” pp. 367-8. This is perhaps the bright side of the personnel turnover problem, which my interviewees mention as one of the biggest problems besetting the development of interorganizational collaboration. (See also Beryl A. Radin, “Rural Development Councils: An Intergovernmental Coordination Experiment,” Publius, vol. 22 (1992), pp.111-127. If X is her agency’s key contact with a constitution-building network, and X leaves six months into the process, either her successor must be chosen with a view to being willing and able to continue or, as often happens, a hole remains for some time. The turnover problem seems to be widespread in nonprofits and to some degree also in public social service agencies, moreso than, say, in educational bureaucracies. The actuality of the turnover problem is aggravated, moreover, by its widespread anticipation, which makes individuals less willing prospectively to undertake the long-term investment in building an effective network.
mobilize to promote some sort of services integration we see a great deal of activity around “planning.” Just what this means is ambiguous as well as highly variable across communities. It often has some sort of nominal production goal, like writing a “plan” or carrying out a “needs assessment.” I put these terms in quotation marks because I want to convey that I am mimicking the usage of others rather than affirming a belief in the logic or rationality that conventional usage often imputes to them. For better as well as for worse, “planning” is often opportunistic, short-sighted, and narrow-minded. In any case, the planning process, whatever it is directed towards, is usually a vehicle for a great deal more than producing a product.

It is also a medium through which collective purposes are articulated and a rhetoric created to express them. Through this medium, norms evolve about who is entitled to participate, about how decisions ought to be made, and about how participants ought to conduct themselves. Furthermore, expectations develop about appropriate or inappropriate deference and power relationships. Along the way the planning process might also create more formal institutions that embody some of these norms and expectations.

**Negotiations.** Negotiations are another medium in which to cultivate heedfulness. Indeed, in some ways it is the most obvious, because it is in the course of negotiations that people are obliged to speak most concretely and, on that account, usually most meaningfully about contributions, the representation of the “joint system,” and what is involved in subordinating some of one’s own, or one’s agency’s, interests to it. One limitation on negotiations as a vehicle, though, is that only a small subset of all the participants in a planning process actually get to do much negotiating directly. Another limitation is that negotiators’ antennae are so attuned to practical matters and to inter-party differences of attitude on specifics that they are likely to miss signals about shared sensibilities and subtle understandings.

**Constitutional Dynamics**

How the informal constitution changes over time is one of the most important and least understood aspects of constitution-building. Does a norm of conflict-avoidance begin the process and gradually yield to norms favoring more engagement? In cases where a designated planning group emerges, is there a success cycle that feeds back between itself and its external

---

45 One medium that seems not to be of much use at all is retreats and other occasions which are mainly for “getting-to-know-you” purposes and is not experienced by participants as a time for accomplishing real work. Edith DeWitt Balbach, “Interagency Collaboration in the Delivery of the California Tobacco Education Program,” PhD Dissertation, Graduate School of Public Policy, University of California, Berkeley, 1994.
environment? If the relevant interests see themselves heading towards a Scharpf-Mohr sort of decision process, might the momentum stall as actors jockey to prevent themselves from being cast into the outer ring? Do face-to-face meetings help when initial affect is positive but hurt when it is negative? What varieties of “cascade” dynamics might occur, e.g., accidentally generating information about players’ mutual weakness which then serves as a collective umbrella to protect further cooperation? Whether researchers can use network theory to address such questions I am not sure. They seem to me very challenging, however, and it would be very much to the credit of network theory if it did prove to be helpful.

**Summing Up**

I began by asking how useful a tool network theory might be in illuminating the process of interagency collaboration. Readers will have to decide for themselves whether my own observations in this paper about interagency collaboration have been illuminating. If they have been, however, to what degree should we credit network theory? Or to put the matter more precisely, might other theories have done as well or better?

This last question is of course very hard to answer. Although all of the ideas discussed in this paper do come from network theory, loosely construed, many of them have even deeper roots in other theoretical perspectives or in “common sense.” Network theory has had a comparative advantage in producing relatively few of them. Without attempting to defend my position in detail, let me point to those ideas that do seem to me to owe a particular debt to network theory:

-- If we view interpersonal networks not as independent of markets and hierarchies but as complements to them (pace Powell), we do gain an important insight into how to make markets and hierarchies work better.

-- I believe the Weick-Roberts ideas of “collective mind” and “heedfulness” both illuminate interagency collaboration and reflect credit on network theory, provided one uses my definition of “network” (see page ...). These ideas are, of course, still much in need of conceptual and empirical refinement.

-- The utility of trust in negotiating relationships is not an idea that derives primarily from network theory. Nor is the idea of reputation-as-information. However, the idea of reputation-as-hostage, and the possibility of priming a reputational network so as to exploit its incentive potential, deserve to be credited to network theory.

Finally, could network theory serve as the source of “transorganizational” concepts that Agranoff and others (see footnote 2) speculate are necessary to advance our understanding of interagency collaboration? The handful of insights and provocative thoughts that I am willing to credit to network theory do not, in my eyes, betoken great possibility. However, we should probably regard the issue as still open for discussion.