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NETWORK POWER IN COLLABORATIVE PLANNING

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ABSTRACT

This article makes a case that collaborative planning is becoming more important, in great part, because it can result in network power. Network power is particularly critical in contemporary conditions where traditionally powerful players are unable to accomplish their objectives alone. Consensus building and other forms of collaborative planning are increasingly in use today as ways of achieving policy results in an era distinguished by rapid change, social and political fragmentation, global interdependence, and conflicting values. The article makes the case that network power can be thought of as a flow that can be partially guided by planners and others, but it is a form of power in which participants all share. It comes into being most effectively, but also paradoxically, when three conditions govern the relationship of agents in a collaborative network: diversity, interdependence, and authentic dialogue (DIAD). When these conditions are met, the participants in the network can develop adaptive innovations that were not apparent or even open to them as individual agents. Like a complex adaptive system, the DIAD network as a whole is more capable of learning and adaptation in the face of fragmentation and rapid change than a set of disconnected agents. Shared meanings emerge from the dialogue and participants can develop identities that link them together. As a result, they are enabled to act both independently and cooperatively for mutual benefit without central direction. Planners have many roles in such networks, as designers and supporters of dialogues creating and maintaining linkages, as direct participants in them, as technical analysts informing them, as facilitators and mediators and as nodes connecting various smaller networks. Planning education needs to incorporate new subject matter to better prepare planners for these roles.

NETWORK POWER IN COLLABORATIVE PLANNING

Power is everywhere and nowhere: it is in mass production, in financial flows, in lifestyles, in the hospital, in the school, in television, in images, in messages, in technologies... our identity is no longer defined by what we do but by what we are...Such is the central question to which political thought and action must respond...The fundamental matter is not seizing power, but to recreate society, to invent politics anew, to avoid the blind conflict between open markets and closed communities, to overcome the breaking down of societies where the distance increases between the included and the excluded, those in and those out.

— Alain Touraine as translated by Castells (Castells, 1997, p. 309)

Rethinking Power for the Informational Age

Power is an elusive concept. When people use the term, they typically assume others know what they mean. When they try to define it, it becomes clear there is no agreement on even the most generic definition. Nowhere has dealing with the concept of power been more challenging than in the field of planning. It is a commonplace assumption that whatever power is, planners do not have it. Planning as a professional activity, particularly in the U.S., is typically thought to be subject to power and not part of it. Though a few planning theorists argue otherwise, saying that what planners do is part and parcel of what constitutes power in a society (Forester, 1989; Hoch, 1994; Throgmorton, 1996; Bryson and Crosby, 1993), overall as a field we have not systematically made this case. The predominant view in many circles is still that planning is either the handmaiden of power (Weiss, 1987; Harvey, 1989) or the dupe or even victim of power (Altshuler, 1965; Flyvbjerg, 1998).¹ Most often, those who write about planning ignore power all together as if it did not matter, or more ominously, as if it mattered so much that they dared not even raise the question.

Recently the issue of power has moved more to the fore in planning thought, in part, because of the growth of collaborative planning and consensus building. These sets of practices involve a variety of stakeholders in long-term, face-to-face discussions to produce plans and

policies on controversial public issues.² When we speak about our research and practice in consensus building to academic audiences, some dubious listeners always ask us how such efforts can make any real difference, given that power is unequally distributed and some stakeholders have fewer resources and less influence outside the dialogue than others do. Is this just a more elaborate form of co-optation? How can talking among a group make any real difference when the material sources of power, like money, formal authority, or the access to force, remain and when the group represents only a small subset of the players?³

This skepticism is largely based on a view of power as the ability of one player, organization, or class to make another person or group do something they would otherwise not do (Galbraith, 1983). While we do not disagree that this ability is a form of power and is relevant to planning practice, we also find it to be a limiting framework for contemporary times. All too often the powerful player gets acquiescence, but not results, or even results contrary to his intentions. The world is too complex, too rapidly changing, and too full of ambiguities for this sort of mechanical power to produce consistently what the player wanted or to produce sustainable results.

The purpose of this article is to develop theory about the phenomenon of network power in planning, the conditions under which it comes into being, and its consequences. This effort is inspired by our attempts to understand the emergence, growing popularity, and impact of many types of collaboration today, from consensus building for resource management or controversial public investment, to university community partnerships for community development, to competitive businesses working together. It is also motivated by our observation that planners and others who assist policy making processes typically do not recognize the power they do have nor the ways they can play significant parts in producing valued outcomes for society.

Our proposal for how power and collaboration are linked grows out of our research and practice, particularly in consensus building, but also in community development and other practices of cooperative deliberation and action. In some of these cases, where beforehand there was only paralysis, we have seen results that other methods of planning and deciding had not been able to achieve.⁴ These ideas grow out of literature both on collaboration and on rational choice theory, and they build on the conceptual work of one of the authors (Booher,

1974) in his analysis of public participation in planning. We offer brief examples to illustrate the argument, though we do not claim to prove its truth. What we offer is a way of understanding a phenomenon we are witnessing in practice. What we hope is that these ideas will help generate discussion about power and planning.

The Angst of Planners

Planners in the U.S. always seem to be complaining because they feel powerless.⁵ They cannot make political leaders act on their analyses (Vasu, 1979). They often have to work for agencies or clients they do not agree with, and sometimes feel they have to choose between their integrity and their livelihood (Howe, 1994; Howe, 1980). They want to do comprehensive planning in the public interest, but more often they work piecemeal on whatever their agency does — housing, community development or transportation. They are frustrated by the lack of opportunity to link these together and the inability to get at the sources of the problems instead of merely the symptoms. Planners in the U.S. are not featured in the news. They do not make big salaries. They are not the subjects of prime time television series, nor even interviewed on national television. They are practically invisible.

The academy mostly feeds the planner angst. A recent example is Flyvbjerg's account of how the leaders in the city of Aalborg willfully ignored the rational analyses of planners for the sake of politics (Flyvbjerg, 1998). This account is just the latest in a long tradition, especially in the U.S. Banfield made the same case in the 1950s in his classic *Political Influence*, where he explained the strategy of Chicago's powerful Mayor Richard Daley, who accumulated political capital by getting projects funded for powerful players. Daley did not have a vision of a good city other than a place where a lot was getting done. He used the planners to support and legitimize what he had already decided to do (Banfield, 1961).⁶ Altshuler, in his classic study of comprehensive planning, argued that planners simply could not serve the public interest because this could only be accomplished through political means, which he said were contrary to the planner's professional skills and norms (Altshuler, 1965). This argument was to help dash many aspirations of the profession, which had at the time no real answer for Altshuler.⁷

The planning academy instead largely bought into the policy analysis model of planning

with its emphasis on quantitative and economic analysis involving, not the engaged, comprehensive planner dealing with community values, but the rational, neutral analyst working for the client. The advocacy/organizing model of planner as representative of the poor was an extension of this, as it too was built on the idea of planner as expert working for a client. A whole generation of armchair planning theorists in the sixties and seventies spent their time hypothesizing and prescribing what planning should be like if it were done properly, most often in the rational analytic mode. In this model, a planner was not really supposed to be concerned about power. A planner who accepted this model in practice would despair of getting past politics and power to get people to do the right thing.

Even more dismal could be the work of the political economists whose accounts of planning emphasized the power and importance of capital in shaping the world in which planners operate. Weiss, for example, made the case that planners in the 1950s and 1960s had served as enablers of development and responded, above all, to the interests of developers and the business community (Weiss, 1987). David Harvey contended that planning education was devoted to encouraging balanced approaches to all values so that planning as a field could maintain the capitalist structure against the dangers of over or under accumulation (Harvey, 1989). The political economists are persuasive, and their large-scale social analyses seem to us, in the main, fair and on target. It typically assumes, however, that powerful elites will inevitably dominate, if not determine, the outcomes and it assumes away the power of individual agency of professionals or other players. All too often this literature leaps to the conclusion, or even builds on the assumption, that the forces of capital have far more capacity to effect desired outcomes and actions than we believe they do in reality.

In the last decade or two, the planning academy has begun to move away from the idea that analysts can design programs to achieve desired outcomes to the idea that planners have to work with the market. Many planning theorists have turned away from the primarily normative and hypothetical exercises of the previous generation and have begun to study actual planning practice (Innes, 1995). One of the pioneers in this work, John Forester, observed planners in the San Francisco City Planning Department and showed us that planners were exercising power everyday through their communications with planning commissioners, citizens, developers, and others (Forester, 1989). These communications were empowering or

disempowering to the listener, depending on how they were done. Planners had the power to organize attention and get people to focus on some issues and away from others. Planning scholars also studied other aspects of communication (Healey, 1993; Schon, 1983; Sager, 1994) often relating it directly to power. The political economists began a debate with the communicative theorists, which may result in some useful mutual learning and share two ways of thinking about power.⁸ Other theorists and researchers began to focus on collaborative methods and consensus building as a mode of planning and policy making (Healey, 1997; Innes & Booher, 1999a; Kolb & Associates, 1994; Innes, 1996; Innes, et al., 1994; Susskind & Cruikshank, 1987). They found that these could be creative and effective processes in which planners played substantial roles. Communicative planning became a focus for planning theory, but for the most part, ignored the issue of power (Mandelbaum, 1996; Sager 1994).

We intend this paper to play a part in the discourse that the field requires in order to develop a realistic sense of the power planners can have in shaping policy and places. They are far from powerless, we argue, but their power is not in a form they have typically recognized. They help to shape the flow of power, to mobilize it, and to focus it. They are a part of it, but not in control. But then, no one today is in control.

The Informational Age as a Context for Network Power

We have entered an era which Castells has labeled the “informational age” or the “network society” (Castells, 1996). He makes the case that:

A technological revolution, centered around information technologies, is reshaping, at an accelerated pace, the material basis of society. Economies around the world have become globally interdependent, introducing a new form of relationship between economy, state, and society.... Capitalism itself has undergone a process of profound restructuring characterized by greater flexibility in management, decentralization, and networking of firms both internally and in their relationships to other firms. (Castells, 1996, p. 1)

This, he says, has resulted in accentuation of uneven development, separating the rich from the poor. The new interactive communication system globally integrates the production and

distribution of words, sounds and images of our culture, and customizes them to the tastes, identities, and moods of individuals (Castells, 1996, p. 2). One of the major consequences of such technological and economic changes is social turmoil and change. He notes that:

Social movements tend to be fragmented, localistic, single-issue oriented and ephemeral.... In a world of uncontrolled, confusing change, people tend to re-group around primary identities, religious, ethnic, territorial and national.... In a world of global flows of wealth, power, and images, the search for identity, collective or individual, ascribed or constructed, becomes the fundamental source of social meaning.... In this condition of structural schizophrenia between function and meaning, patterns of social communication become increasingly under stress...social groups and individuals become alienated from each other...social fragmentation spreads and identities become more specific and increasingly difficult to share (Castells, 1996, p. 3).

Castells argues that these changes amount to a revolution, a dramatic change in the nature of both society and the self. This emergent global economy is driven by and depends upon the flows of information. Those who are successful in the knowledge-based, fast evolving societies are those who keep their feelers out constantly, learning and adapting. The added value of the most successful companies is in the ways they process or provide information or offer smarter products and services that take advantage of information technology. The new society is one where virtually nothing is a given any more, where it is no longer obvious who are ones' friends and allies and who are not, and where little is shared in values and ideology. Castells terms it the 'informational society' because it is organized around information generation, processing and transmission, and these are its fundamental sources of power and productivity.

The nature of the new society has profound implications for the phenomenon of power. Castells shows that power is no longer concentrated in institutions, organizations, or even symbolic controllers such as the church or media (Castells, 1997). Instead, power is diffused throughout global networks of wealth, information, and images. Power does not disappear. It still shapes society. But the old forms are fading away because they are increasingly ineffective for the

interests that hold them. *“The new power lies in the codes of information and in the images of representation around which societies organize their institutions, and people build their lives and decide their behavior. The sites of this power are people's minds”*

1997, p. 359). Whoever wins the battle of people's minds will rule because rigid apparatuses will not be a match, in any reasonable timespan, for the minds mobilized around the power of flexible, alternative networks (Castells, 1997, p. 360). Constant change in information flows means values are constantly changing. As a result, the search for identity and meaning for individuals, groups and communities becomes a central and continuing task.

Even the most ancient and traditional form of power, armed combat led by a military hierarchy, has been changed by the informational society. Sheer brute force and chain-of-command style organization is increasingly less crucial to military success while networks and multi-user communication play an ever-growing role. Researchers at RAND, in a study for the U.S. Secretary of Defense (Arquilla & Ronfeldt, 1997), found that the information age favors and strengthens network forms of organization, while making life difficult for hierarchical forms. The rise of network forms of organization — particularly all-channel networks in which every node can communicate with every other node — is one of the single most important effects of the information revolution for all realms. According to the authors (p. 5), whoever masters the network form stands to gain major advantages in the new epoch. Military thinkers in the United States are actively using models of self-organizing networks to develop new strategies and tactics for the battlefield (Mitchell, 1998).

Likewise, leaders in business and management have for years applied a similar insight in the organization and operation of the firm (Kotter, 1985; Schrage, 1990; Moore, 1996; Davis & Meyer, 1998; Brown & Eisenhardt, 1998). An eminent management analyst has documented how increasingly ineffective traditional forms of power such as authority, wealth, force, or even simple persuasion have become (Kotter, 1985). According to Kotter, the prevalence of diversity and interdependence among groups and individuals within firms has rendered the old view of centralized, rational economic decision making obsolete. What is emerging instead is an adaptable organization based upon teams engaged in dialogue, collaboration, and the development of shared meaning across the organization (Schrage, 1990; Huberman, 1998; Stacey, 1998). This form of planning and decision making is made more important because of the rapid change described by

Castells. As Xerox's John Seely Brown has observed, conversation enables us to rapidly build shared contexts. If the world isn't changing very much, then the shared context you had a year ago can be evoked easily. But to interpret rapidly changing phenomena or act effectively in a radical changing environment, you have to be able to rapidly create new, shared contexts (Schrage, 1990, p. 83).

A parallel collaborative, communicative process is occurring across firms within various industrial sectors where new forms of collaboration are emerging. Saxenian has documented the flexible linkages and personal and professional networks that permitted Silicon Valley to grow the most successful and innovative high technology industry in the world and to prosper across more than four decades (Saxenian, 1994). Another book entitled *Blur: The Speed of Change in the Connected Economy* (Davis & Meyer, 1998) argues that familiar distinctions no longer obtain between products and services, buyers and sellers, structure and process, owning and using, or knowing and learning. Things one cannot see or touch, like customer service and reputation, are more valuable than tangible assets. Business practices are, as a result, undergoing radical change. A company like Netscape or Adobe might give away its product to get people to subscribe to the services or simply read the attached advertising, so they can get information about users in order to build the business. Thus, buyer and seller somehow keep constantly trading places. There is an exchange — a new kind of collaboration taking place — that involves much more than money and material products.

The Network Power Concept

Nothing under Heaven is as soft and yielding as water.

Yet for attacking the hard and strong, nothing can compare with it.

The weak overcomes the strong. The soft overcomes the hard.

Everyone knows this, but none have the ability to practice it.

— Lao Tzu (Lao Tzu, 1995, p. 78)

In the informational age, we contend, network power is what works most effectively. Network power is collective among many linked players. Network power emerges from communication and collaboration among individuals, agencies, and businesses in a society.

Network power emerges as diverse participants in a network focus on a common task and develop shared meanings and common heuristics for action. It grows as these players identify and build on their interdependencies to create new potential. In the process, innovations and novel responses to environmental stresses can emerge. These innovations, in turn, make possible adaptive change and constructive action of the whole.

The concept of network power builds on the connectionist model of neural networks developed by cognitive scientists. A connectionist network, like the neural network of the brain, is composed of individual agents connected together with information exchange links with no central or top-down control over information flow or individual behavior. Actions take place in a limited physical space, around a common resource, or within particular localized social and political contexts. Information in a connectionist network is distributed rather than centralized and much of it is in the form of shared heuristics or encoded responses used by the agents. These agents do not have global information and they do not have infinite computational power. Finally, connectionist networks are self-organizing systems capable of adapting to environmental stress or change and evolving to greater levels of performance without central guidance (Epstein, 1999; Epstein & Axtell, 1996; Cilliers, 1997).

Power in a connectionist network is not a weapon that an individual can hold and use at will, nor is it the result of an unequal relationship between players, where one can force another to do something. It is a notion that makes sense if we think of the world as a complex adaptive system, within which individuals work and communicate and learn, rather than as a machine that we can manage and control with the right knowledge.⁹ Thinking of power this way requires us to set aside some of our familiar notions. In the informational age, even the most powerful agents are limited by other agents. Lao Tzu's paradoxical concept of power as soft and yielding like water may help us to understand that network power can be significant while appearing not to be.

This idea of network power is consistent with Giddens's perspective which contends that there are three types of power: the power of action; the power of ideas, modes and methods; and the power of deep structure (Giddens, 1984; Bryson and Crosby, 1992). Network power depends on the flow of ideas through networks and on the power of action by each of the agents within networks. While the emergence of network power does not affect

deep structure in the short term, we share with Giddens the idea that agents enact structure within constraints and agency gradually can change structure. The networked patterns of action in an informational society with the rapid communication and change that are the norm today suggest that change of deep structure may occur more quickly in contemporary times than at other points in history. The idea of network power is, we believe, consistent with a number of other approaches to power in the literature (Blau, 1964; Galbraith, 1983; Fisher, 1983). These recognize that power is both enabled and limited by an interactive process among individuals, interests, or nations.

Clearly many other types of power exist, such as power associated with personality, property, or degree of organization, as John Galbraith has argued (Galbraith, 1983). These are all important as part of the environment within which collaboration and network power must be understood. Many forms of power come into play in the design and implementation of collaboration. The traditional ways of thinking about power are not, however, very useful in understanding the overall dynamics of collaboration.

Thus, the essence of network power is the ability to improve the choices available to the participants as a result of collectively developed innovative ideas. We have described elsewhere how innovative options for a group of competing interests can emerge through a process of collective intellectual bricolage and role-playing (Innes and Booher, 1999a). Similarly, we contend here that other forms of communicative collaboration can create new options that would not have been open to agents working alone. In turn, then, the power of the network enables the participants to implement these strategies independently and cooperatively and adapt them as conditions. They can do all this without the need for central direction. The choices available to individuals through participating in network collaborations can be wider and often more attractive than what can be gained through more traditional power struggles or maneuvering. This is the most important explanation for why powerful players participate in such activity.

Network power is not a new phenomenon. On the contrary, it proliferates in nature (Kauffman, 1995; Holland, 1998). In social settings, network power has probably always existed, though it has not been labeled as such or extensively documented and very often the conditions for it to be truly effective were not in place.¹⁰ The emergence of the informational

age has, we argue, created a context for the emergence of network power to an increasingly important degree and, accordingly, this form of power is increasingly part of planning practice.

The Conditions Enabling Network Power

We recommend that you should try to get what it is feasible for you to get, holding in view the real sentiments of us both; since you know as well as we do that right, as the world goes, is only in question between equals in power, while the strong do what they can and the weak suffer what they must.

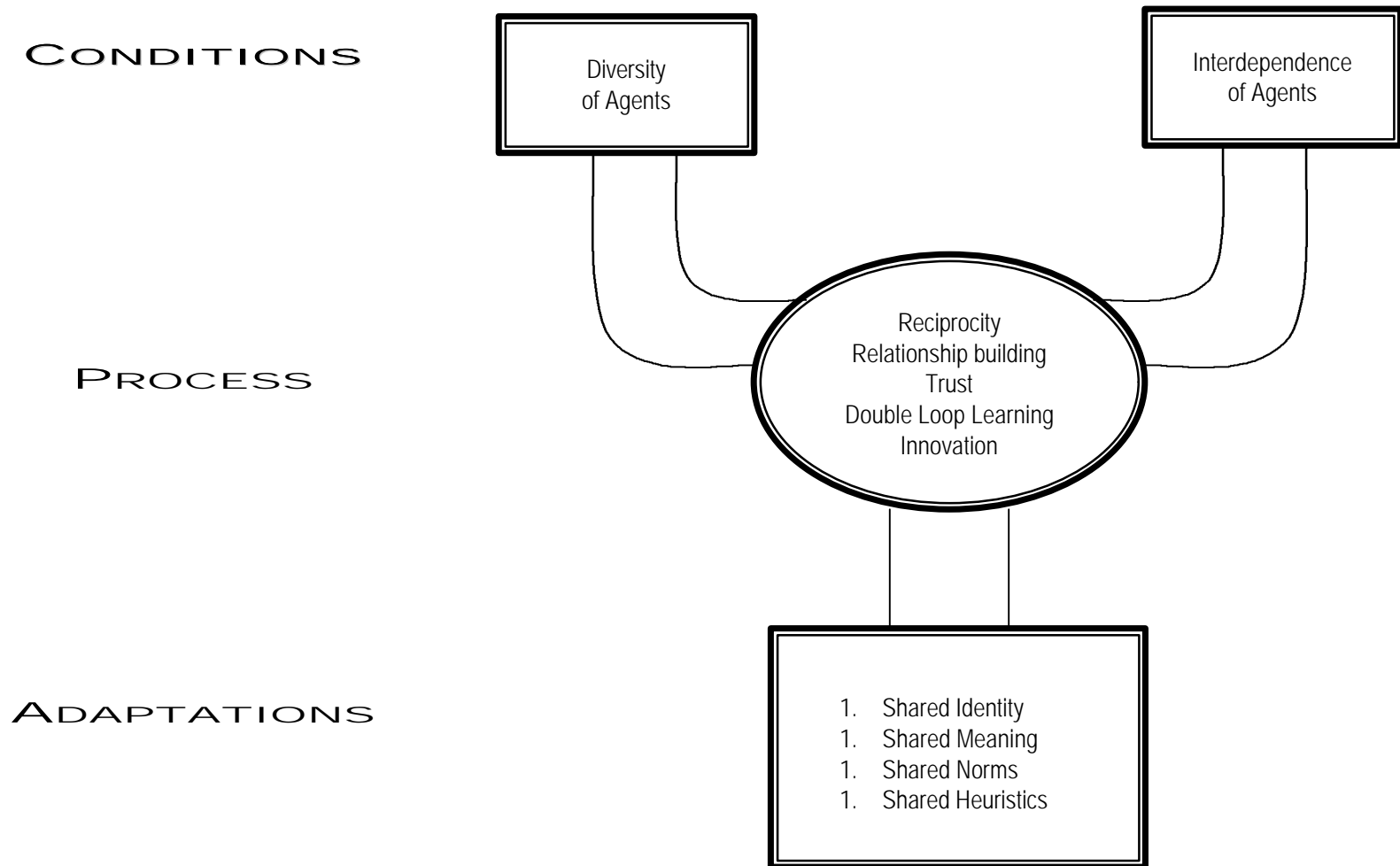
— Athenians to the Melians (Thucydides, 1952, p. 505)

For network power to emerge in a significant way, we contend, three basic conditions must be in place. The first is that the agents in the network (stakeholders, agencies, citizens) should be diverse in a way that is consistent with the full range of interests and knowledge relevant to the issues at hand. This would include, for example, diversity of values, resources, experience, and information. It might also include diversity of race, gender, geographic roots, and other factors depending on the task. The second condition is that agents be in a situation where their ability to fulfill their interests depends on each others' actions *and* where they recognize this interdependence. This interdependence involves each player having something to offer that others want and something they themselves want from the others. The third condition is authentic dialogue. The communication flowing through the network must be both accurate and trusted by participants to allow full advantage to be taken of the agents' diversity and interdependence. In particular, it is critical that the participants in the network engage in a form of discourse where all are empowered and informed and where sincerity, legitimacy and accuracy of what people say can be judged (Innes and Booher, 1999a; Innes and Booher, 1999b). We use the acronym DIAD to designate collaborative networks where these conditions are present.¹¹ (See Figure 1).

If we think of a collaborative network as an organic system, diversity is the source of raw material as it brings together ideas, values, interests and knowledge into a new fabric. Interdependence among the participants is the source of energy as it brings agents together and holds them in this system. Authentic dialogue is the genetic code, providing structure within

Figure 1

DIAD Network Dynamic



which agents can process their diversity and interdependence. Network power is the resulting life force of patterned action, learning, adaptation, and reproduction. We offer this analogy because we and others have argued that a new biological metaphor is needed for the informational age to replace the mechanical metaphor we have used for so long to understand human organization as well as nature (Innes and Booher, 1999c; Petzinger, 1999). We have also argued that complex adaptive systems theory is a useful model to frame the study of collaborative planning (Innes and Booher, 1999c).¹²

Self-interest and rational choice drive network power. People do not participate in collaborative efforts because they are selfless altruists or because they are searching for the common good. Participants are involved because they have become aware that their interests are dependent in some way on the actions of others and there is a kind of reciprocity among them. Otherwise, they would pursue their interests outside the collaborative process. They hope to achieve something together that they cannot achieve alone. Frequently collaborations start because players all have incentives to change the status quo or head off anticipated change (Gruber, 1994). In many cases, participants make a rational, self-interested decision to include a wide range of interests in their negotiations to assure they get the knowledge, support and legitimacy they need for a successful outcome (Innes et al., 1994). It is this diversity of interests that provides the opportunity for creative solutions to satisfy different concerns and helps assure that strategies are robust and feasible. Moreover, this diversity provides a wide range of resources, information, personalities, experiences, and points of view that become the materials for innovation and learning. A sense of authenticity of the communication is essential for players to make self-interested, rational decisions about participating in discussion or cooperating in action.

Diversity

Diversity is a hallmark of the informational age. The wide range of life experiences, interests, values, knowledge, and resources in society is a challenge for planning and producing agreements. But in a social system, as in a biological one, it is the diversity in the environment that permits innovation. The various elements of the environment interact and adaptively change as a result of the interactions. Diversity provides the building blocks for a network to create new conditions and solutions.

Participants in diverse networks who engage in authentic dialogue can jointly construct and agree upon a way of seeing the problem instead of speaking in different languages within different frames of reference.¹³ They can develop agreement on the problem's technical characteristics and political, economic, or social dimensions, and its implications for them individually and as a group. Participants start with diverse views of the world and of the problems they face. As they try to understand the problem and each other's interests, they develop a more nuanced and complex understanding of the problems from various perspectives. Because they each bring to the dialogue their identities as stakeholders or agency representatives in the process of discussing a problem — for example, management of a water resource — they can begin to develop shared and complementary identities — such as users and producers of a supply of water. They can develop agreed-on meanings for such concepts as biodiversity or adequacy of water flows. This comes of building a shared understanding of the larger system and of how each plays a part in it. Participants in such dialogue can come to recognize they are part of a community of interest with a common fate based upon the behavior of other participants in the network. If they achieve such shared meaning, they acquire a new power to act and accomplish, whether through joint or individual action. They have created a sort of community with common purpose and heuristics to guide future action.¹⁴ They are no longer isolated players working at cross purposes without even a clear idea of what makes sense for themselves, much less for the resource on which they depend. They can move on to develop ways to address the problem that they could not do individually, given their narrower perspectives or resources or the assumption that they have to operate alone.

Habermas argues, in a parallel way, that to achieve communicative rationality a diverse set of interests must participate in the dialogue. Each brings not only his interest but also his praxis, experience and knowledge. Through a face-to-face dialogical process, an approach can emerge that not only represents practical rationality, but also an emancipatory one.¹⁵ Such a dialogue among diverse stakeholders is more likely to produce practical results and is more likely to see beyond the accepted rationalizations in a society and the assumptions that interfere with insights. The international society of professional mediators and facilitators has, on the basis of experience with thousands of disputes, reached a similar conclusion and recommends including all key stakeholders in an issue during mediation processes (Society of Professionals in Dispute Resolution, 1997).

Figure 2



Interdependence

Interdependence based upon self-interest and reciprocity among diverse participants fuels network power. Participants must each have something others want and each must have something others can offer them. This exchange may involve one agent having authority or resources and another, perhaps weaker agent in conventional terms, having legitimacy or many supporters. One agent may have first-hand knowledge of the issues, whereas another conventionally more powerful agent suffers the worst impacts from the problem. Interdependence means that each agent needs something from the others. Reciprocity exists when agents realize they can gain and create new opportunities by sharing what each uniquely can provide and when they can expect the other players to provide their contribution. Once participants recognize the reciprocal nature of their relationship, they can come to understand or even cultivate their interdependence. Reciprocity is, thus, the basis of trust. The existence of trust and reciprocity means agents will have reason to continue to work together. Interdependence and reciprocity in this sense provide the energy that holds a collaborative network together.

The concept of rational choice is important to understanding interdependence in collaborative processes because self-interest and the recognition that the cooperation of others is the means to achieve a desirable outcome are the motivating factors for agents (Downs, 1957; Olson, 1965; Arrow, 1963; Buchanan and Tullock, 1967). William H. Riker describes rational choice:

“Given social situations within certain kinds of decision-making institutions and in which exist two alternative courses of action with differing outcomes in money or power or success, some participants will choose the alternative leading to the larger payoff. Such a choice is rational behavior and it will be accepted as definitive while the behavior of participants who do not so choose will not necessarily be so accepted” (Riker, 1962 p. 23).

Rational choice is always about means, not ends. The term rational is never applied to an agent’s ends, but only to his means. This follows from the definition of rational as efficient, i.e., maximizing output for a given input, or minimizing input for a given output (Downs, 1957, p.5; Arrow, 1963). Indeed, as Kenneth Arrow has shown, the choice is never between just two alternative strategies because, if there is more than one, there is the possibility for an infinite number of means to reach a rational choice (Arrow, 1963).¹⁶ A prominent business theorist has suggested that this search for economizing action strategies is a fundamental propensity of nature as well as rational man (Frederick, 1995).

From a rational choice perspective, an individual constantly searches for more efficient means to achieve her ends. Where cooperation can lead to more efficient means, then cooperation becomes the more rational strategy. But this requires some degree of certainty in the cooperation. Each agent must have a sense that the other agents’ self-interest also requires her continued cooperation. Ostrom has shown empirically that building conditions of reciprocity, reputation, and trust can help to overcome strong temptations for individuals to work only toward their short term self-interest. (Ostrom, 1998).

Axelrod has also shown that strategies based upon reciprocity and cooperation can be very robust (Axelrod, 1984; Bendor and Swistak, 1997; Axelrod, 1997). Using the game of the prisoner dilemma, he shows that players involved in repeated games with each other will choose to cooperate rather than minimize their own risk by turning in the other player, because a cooperative strategy produces more benefits over time than an uncooperative one. In repeated games, a pattern develops where each player discovers this independently and then voluntarily cooperates with the other. Axelrod’s analysis also shows that for cooperation to be a beneficial strategy requires three conditions: the existence of reciprocity; sufficient stake in the outcomes for both players so the

reciprocity can be stable; and knowledge the game will continue. Whether the players initially trust each other is less important than the existence of these conditions. Also important to long term stability of cooperative modes is the ability of agents to monitor conduct by others, so that defections can be punished and the incentive to participate does not evaporate (Ostrom, 1990). Once cooperation is established in a system, uncooperative strategies or co-optation (Selznick, 1966) cannot easily supplant the pattern.

Authentic Dialogue

Few of these benefits of diversity and interdependence can occur without authentic dialogue among the agents — that is, without dialogue that allows all agents to speak openly and in an informed way about their interests and understandings and assures that all are listened to and taken seriously by the others. Without this kind of dialogue, meanings will not become truly shared nor will identification develop with a common system or community. Without such dialogue, opportunities for reciprocity will be missed, important information about the problem will not surface, and creative solutions are far less likely to emerge (Johnson and Johnson, 1997). This is a similar principle to connectionist and neural networks, which require information flows between the agents of the network to carry on their activities effectively. The structure of these information flows must be suitable to the needs of the network (Cilliers, 1998). In the case of collaborative planning networks, the information flow must allow the agents to fully utilize the diversity of the network if they are to create innovative choices. This flow is necessary for the survival of the collaborative network and for the emergence of interdependence and reciprocity of shared norms and heuristics. Availability of feedback about the behavior of the other agents in the network is also necessary to maintain interdependence. Agents must be confident that the other agents are not defecting and that they could detect defections if they occurred.

Our research and practice in consensus building, the practice of mediators and facilitators doing dispute resolution (Society of Professionals in Dispute Resolution, 1997), and the work of Habermas (1981) and others who write about dialogue (e.g., Fox and Miller, 1996) all converge on four key conditions for authentic dialogue. In authentic dialogue of the ideal form, participants speak with sincerity, legitimacy, accuracy and comprehensibility. Moreover, they can evaluate each other's statements in these terms. Skilled facilitators in dispute resolution and consensus building

can create conditions for such dialogue, and participants who get to know each other over time can develop these conditions with or without such facilitators if they understand their importance.

Dialogues must be genuinely face to face and take place over time if participants are to assess each other's sincerity. They must get to know each other sufficiently to make such assessments. Thus, an authentic dialogue takes time to develop and requires both formal and informal interactions. Participants must feel comfortable and safe in expressing their honest views and feelings. They cannot feel pressured to conceal them because those hidden views hamper the development of genuine reciprocity and robust collaboration. Individuals must be able to pursue their interests without disguising them if collaboration is to work (Arrow, 1963). Dialogues and individuals within them must also be fully and equally informed about the issues and the problems if they are to effectively assess their own interests and the accuracy of others' statements and if they are to be able to reach some shared and durable understandings. Joint fact finding, often used in consensus building, is an important component of the exercise. Innes's earlier research has demonstrated that agreement on the accuracy of statistics and indicators, for example, can be an essential part of achieving agreement on controversial policy (de Neufville, 1975). Third, statements participants make must be comprehensible to each other. In facilitated processes, comprehensibility across diverse agents is typically achieved as they, or the facilitator, place statements in the context of their experience, engage in role playing and story telling (Innes and Booher, 1999a), or question the speakers about the meaning and implications of what they say. Finally, for authentic discourse, speakers must have legitimacy to say what they do. That is, they must have expertise, experience or some other basis for their statements and the other participants in the discourse must be able to inquire about that legitimacy.

It is crucial during a dialogue that participants be able to suspend judgment and share the meaning being presented by another participant without necessarily accepting it if they are to be able to uncover the rationalizations and get beyond the conventional ideas that may be hindering a solution. Thus, participants can both uncover the intellectual content of a rigidly held assumption while defusing the emotional content that accompanies it (Bohm, 1992; Innes and Booher, 1999a). David Bohm calls this a "vision of dialogue," and it is equally important in scientific discourse as in planning discourse. He says about scientific discourse:

“We can see that we all have these assumptions, and we look at all the assumptions. I’m looking at your assumptions and my assumptions. They’re all suspended. I’m not deciding they are right or wrong. Or, if I think I prefer mine, well, that’s OK. But still I’m looking at the meaning of what you say. And therefore we are sharing a common meaning. Then, if somebody else comes up with another assumption we all listen to that; we share that meaning. Now that would be the ‘vision of dialogue’” (Bohm, 1992, p. 205).

Building shared meaning requires players not just to say their pieces, but also to listen. Facilitators teach listening skills, and Habermas implies they are part of the conditions for communicative rationality and authentic dialogue. Listening can make deliberative space for both the groups that are marginalized by the dominant dialogue in a society or issue area and for individuals marginalized within the dialogue of their own group. Listening is an important aspect of reflexivity and essential to seeking understanding (Bickford, 1996). Listening productively means that one maintains one’s own perspective as background while focusing on the situation and opinions of another. The point is not to add up the voices and seek the lowest common denominator, but to hear and maintain divergent perspectives in relation to each other. This is a crucial part of the effort to build diversity. Awareness of the dissonance can also clarify the nature of conflicts that often may not be what they seem at first. Stakeholders may, for example, take different positions on what strategy to take to clean up an estuary or on how urgent it is to do so. But as they come to recognize each has valid reasons for differing concerns, they may recognize, for example, that the conflict is more over timing or who pays than over whether the estuary should be cleaned up. Such a new problem frame for the conflict may allow new solutions to be developed. A group in which members recognize and accept divergent perspectives can take joint action on some things, while at the same time committing themselves to continuing to explore and address differences. It is this continuing search for ways to overcome or build on difference that gives a network its innovation power and generates a potentially infinite range of choices.

In this context, we can see persuasion in a different light. While persuasion is part of collaboration and building shared meaning, it is not, as is often assumed, about having the power to get everyone to buy into one’s own version of the world or into one’s own answer (Conger, 1998).

Instead it is about working collaboratively to develop one's contribution and find the place for it in the total picture. Effective persuasion in this sense requires listening to and understanding what others are contributing, as well as paying attention to the emerging meanings the group is creating. One can imagine the discussion as being like a group jointly painting a canvas. They use language as a painter uses his medium — to evoke images, impressions, memories, and thoughts and to help others connect emotionally to what they are saying.¹⁷ Language is not simply a means to exchange information nor a set of tools to use for an argument. Language is a medium for working together, creating relationships and understanding (Schrage, 1990). Persuasion is about relevance and fitting ideas together in a way that works collectively.

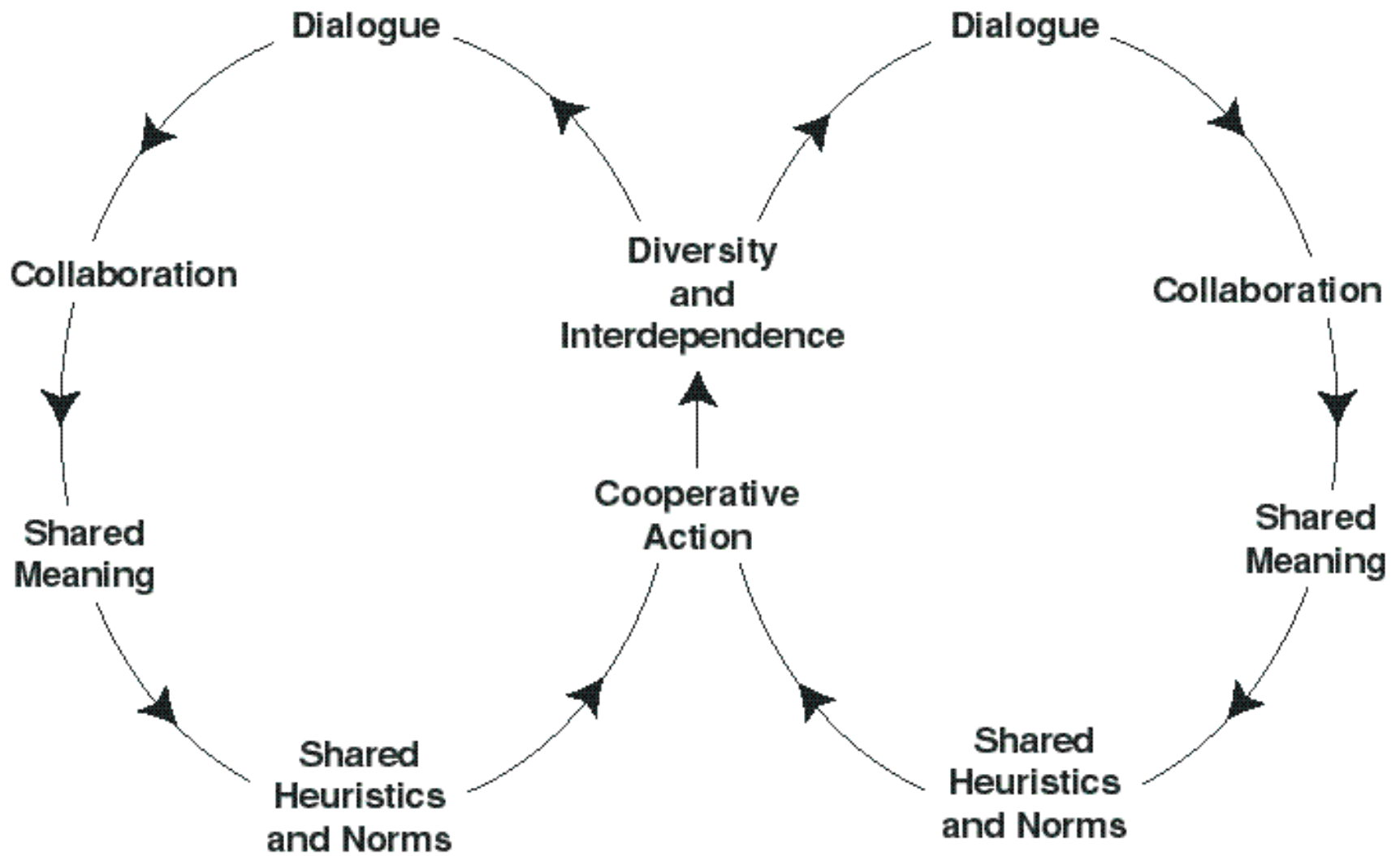
Participants in dialogue may build a sense of shared identity as part of a system or community, and a changed identity of their own in the process. We do not build our identities as isolated individuals, but as people or groups in a context and a community. A lone person on a desert island does not need an identity, but once others arrive, the issue of identity arises. Building identity is done through conversation, as people try out various ways of thinking about themselves and ways of making sense of their experience and the world in which they live. The conversation may be real, with other people, or imagined as we make assumptions about what others would say or how others would see us. We need feedback from others, reassurance or disagreement, to build identities as individuals, groups, or communities. More than at other times in history, as Castells has contended, many people are preoccupied with their identities. People today are less likely to know with what group to identify, what values they want to adopt, or who they want to be because they have so many choices. In authentic dialogue, people get the opportunity to talk with others who are different, but who also share an environment and context. They can find the aspects of identity they share as well as agree on how the identities of each can be articulated and differentiated. In turn, they can learn how they may be interdependent and build new strategies on flexible linkages among themselves.

The Roles of Planners

As we explore the phenomenon of network power, it becomes evident that planners play many key roles in making it possible, participating in it, shaping its form and direction, influencing

Figure 3

NETWORK POWER MODEL



its outcomes, providing the opportunities for it, and helping other agents to create and use it. The network model of power dissolves the dilemma that has made many planners feel trapped in a no-win choice between serving power or challenging it. Planning and policy professionals can instead play key parts in a self-organizing process that brings together agents, enables information to flow, builds trust and reciprocity, represents interests, connects networks, and mobilizes action. They have power of their own as part of this system and as agents who help build the network or relationships and frame how the communication flows. It is not up to them to challenge nor to acquiesce. Instead they provide informational power in shaping the procedures, processes and agendas that may allow network power to emerge (Bryson and Crosby, 1993; Innes and Booher, forthcoming). They play a part in convening stakeholders and in making sure that processes can meet the conditions of network collaboration. They may serve as participants, technical or support staff, facilitators, or advocates in a network. They can be voices, speaking for the values of their profession and able to communicate with others who work on the issues. They are part of the flow of network power, helping to shape how the power works and what it produces.

Planning Education

For planning education to help its graduates to meet these challenges will require significant rethinking of what is taught. Planning students in the U.S. will need to be far more sophisticated about politics and power than they typically are today. Most professional planning programs skim lightly over the political setting of planning, if they deal with it at all. The word 'power' is almost a taboo in some curricula. Students of planning and planners will need to spend more time developing collaboration skills. Learning to work with teams of other planners on projects is not nearly enough. They need to develop skills in meeting management and design, facilitation, mediation, and negotiation for working with many varied interests. They need to learn how to listen and how to communicate in ways that allow others to hear and which enable others to speak for themselves. They need to communicate in authentic rather than formalistic ways, while maintaining their professionalism, and they need to enable others to communicate authentically. They need to develop greater awareness of their own roles in shaping community or public attention, in establishing rules and procedures, setting agendas and framing issues. They need to become more reflective on these efforts so they can use this power in a responsible and ethical way.

Those who are primarily analysts need to learn to work with collaborative groups, providing information organized and designed in a way that makes sense to the group. They need to be willing and able to accept that there is no one best way to do an analysis. They need to be prepared to be quickly and respectfully responsive to others. They also need to learn not to be afraid of conflict nor to avoid it, but rather to work with differences constructively. They need to develop new ways of thinking about leadership in an informational, networked age, when the effective processes are collaborative rather than hierarchical. Most of all, planners and educators need to embrace, rather than shrink from, what is new and experimental. That is what planning is about after all. It is what planning has to be about at the threshold of the new millennium.

Endnotes

¹ For a good review of power as it has been thought about in planning, see Sager (Sager, 1994).

² More detail on the kinds of processes we are talking about can be found in some of our work (Innes, Gruber, Neuman & Thompson, 1994; Innes, 1996; Innes, 1998a; Innes & Booher, 1999a; Innes and Booher, 1999c), and that of a handful of others (Healey, 1997). A definitive guide book for consensus building has also recently been published. (Susskind, McKearnon, & Carpenter, 1999)

³ Curiously, these questions do not come up when we present the ideas to those in the practice of policy making and planning. They nod assent as if this makes good sense to them.

⁴ A study of 13 cases of growth and environmental management offers one example of what can be accomplished (Innes et al., 1994). A comprehensive handbook on consensus building (Susskind et al., 1999) offers 17 detailed case examples in many realms of public policy. An emerging movement to create partnerships among universities and their surrounding communities is beginning to be documented in a series of articles in such journals as *Metropolitan Universities* and the *Journal of Planning Education and Research*. Though the impacts of these activities remain to be fully documented, what is clear is that they are steadily growing in popularity and have been for the last decade or more, and substantial amounts of time and energy are being put into them.

⁵ This case has been made in more detail in two other articles (Innes, 1998b; Innes, 1994).

⁶ An extensive literature has explored the nature of power in local communities. Several of the classics include (Agger, Goldrich & Swanson, 1964; Bachrach & Baratz, 1970; Dahl, 1961; Presthus, 1964). All of them similarly seem to attest to the apparent impotence of planners in local politics.

⁷ Innes has argued that this collaborative, consensus building model permits genuine comprehensive planning to be done in the mode suggested by Kent in his *Urban General Plan* (Kent, 1964) whereas the rational-technical analyst model of planning was indeed at odds with comprehensive planning as Altshuler suggested (Innes, 1996).

⁸ This debate has taken place at the meetings of the Association of Collegiate Schools of Planning, the Association of European Schools of Planning, several conferences on planning theory at Oxford Brookes University and in the journal *Planning Theory*, (Volumes 14 and 17, 1995 and 1997).

⁹ We have elsewhere explored this notion of complex adaptive systems as a productive metaphor for understanding change and action in planning and for evaluating collaborations (Innes and Booher, 1999b).

¹⁰ One historical example that may be relevant is the evolution of the Community Action Program that was part of the War on Poverty in the United States in the late 1960s in which local community

action boards were often composed of representatives of various stakeholders. However, in many cases these turned out to be primarily examples of co-optation. The conditions for collaborative networks did not exist (Booher, 1974; Moynihan, 1969).

¹¹ We should note that, like any model, these are ideal conditions. In the real world of collaborative planning, they are present in less than a complete pattern. The extent to which they are present will determine the extent and range of network power.

¹² Complexity theory first appeared in the physical sciences (Prigogine and Stenger, 1984; Nicolis and Prigogine, 1989; Lewin, 1992; Waldrop, 1992; Kauffman, 1995). Increasingly, some scholars are arguing that this set of ideas can be powerful in understanding the functioning of social systems (Kiel, 1991; Wheatley, 1992; Kauffman, 1995; Hwang, 1996). Key features relevant to collaborative planning have been developed (Innes and Booher, 1999b; Innes and Booher, 1999c).

¹³ For example, in the San Francisco Estuary Project, participants from agriculture, the development community, environmental advocacy organizations, regulatory agencies and local governments were able after extended dialogue to agree on a status and trends report on the condition of the estuary which provided the basis for a comprehensive improvement plan (Innes and Connick, 1999).

¹⁴ "Our notion of heuristics is of a set of rules of thumb and ideas that tacitly guide actions of individuals and groups. An example is when individual representatives of business and environmental interests would articulate the interest of the other when they were not present rather than allow a dialogue to go forward that did not recognize the absent agent's interest (Innes et al., 1994). Another form of shared heuristic is found in discourse coalitions (Hajer, 1995), where the participants share a set of meanings and therefore reactions to policy ideas and types of solutions they seek, without necessarily discussing the ideas among themselves. The concept of a heuristic may also include the notion of planning doctrine (Alexander and Faludi, 1996), a concept that guides planning so that many players incorporate the idea into their thinking like the Green Heart in the Netherlands or the Green Belt around London. The concept of a heuristic includes computer programs that can simulate bird-like flocking behaviors using simple rules encoded into an algorithm such as, "Don't bump into each other, but keep up with your neighbors, and don't stray too far." One of these was used to create the bats flying through the tunnels in the movie *Batman Returns* (Kelly, 1994).

¹⁵ Habermas and the other critical theorists would also add that emancipatory knowledge requires the knower to side with the oppressed and challenge the status quo. But if all stakeholders are at the table, inevitably some will be those who are oppressed. If they are given the ability to speak for themselves, the dialogue will involve challenges to the status quo.

¹⁶ There are other aspects of rational choice theory that are potentially relevant to collaborative planning. For example, Mancur Olson has shown that large groups organized for collective economic purpose cannot be maintained solely by pursuit of that purpose. There must be other benefits of continued participation (Olson, 1968). On the other hand, rational choice theories have

their limitations. For example, the model proposed by Riker relies fundamentally on complete and perfect information, a condition far from the reality of the informational age. A fair reading of Riker's predictions for world affairs in chapter 10 compared to the actual unfolding of world affairs over the last 30 years support the limitations of his model (Riker, 1962). For other critiques of rational choice theory compared to agent based networks, see Epstein (1999). We leave an exploration of such interesting topics for another time.

¹⁷ Throgmorton has written about the importance of planning as persuasive storytelling (Throgmorton, 1996) in planning debates. Stories and images play a crucial part in the emerging understanding, commitment and creativity of successful consensus building (Innes & Booher, 1999a).

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