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The Impact of Collaborative Planning on Governance Capacity

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The Impact of Collaborative Planning on Governance Capacity

Judith E. Innes and David E. Booher

The overthrow of beliefs is not immediately followed by the overthrow of institutions; rather the new beliefs live for a long time in the now desolate and eerie house of their predecessors, which they themselves preserve, because of the housing shortage.

—Friedrich Nietzsche in *Human All too Human*. Section 8, Number 466 translated by Helen Zimmern. Footnotes from Marion Faber's translation 1909–1913.

The Failure of Institutional Capacity

We live in a time of crisis, uncertainty, and change. We also live in a time when our institutions seem to lack the capacity to deal with these conditions. For example, in the face of a profound terrorist threat, the President of the United States disclaimed responsibility for not being prepared, pointing the finger at Congress and at the FBI. The two intelligence agencies most responsible for protecting the country from such threats not only did not share information, they ignored what their own field agents said. Chains of command, routine procedures, turf protection, secrecy, and displacement of organizational goals meant that no one "connected the dots" that could have led the US to the terrorists before the 9/11 disaster. In the meantime, even as Congress is trying to diagnose the intelligence failures, the White House already has a stock answer: create yet another bureaucracy.

The scenario has been repeated in all sectors of society as well-established institutions fail to carry out their mission due to similar organizational pathologies. The Catholic Church in the United States is in crisis for not protecting its flock from the sexual abuse of children by priests and in turn for covering up the crimes to protect the church. The Vatican's chief lawyer announced that the bishops have neither moral nor legal responsibility for what priests do and pointed the finger of blame at the US legal system and media (Goodstein 2002). Big business is suffering a loss of respect and trust unprecedented in recent decades, with the result that, even as the US economy recovers, the stock market does not. One of the world's largest energy suppliers, Enron, not only created false shortages to make outrageous profits, while causing blackouts,

unheard-of spikes in prices, and the bankruptcy of one of the nation's largest public utilities, but it also siphoned off profits and concealed debt to keep its stock prices up and its managers rich. The revelations caused Enron to go bankrupt and stockholders to lose vast amounts of money in the space of only a few weeks. To make matters worse for the reputation of corporate America, it became clear to the public that Enron was aided in their effort by Arthur Andersen, the auditors, whose fiduciary responsibility is to prevent and expose just such machinations. That company in turn has been convicted and gone out of the auditing business, again in a very short period. In the meantime, the health care sector in the US is on a path to disaster, with costs rising and payments declining to providers, medical practices going out of business, and emergency care clinics closing, while the need grows.

These stories are just a few examples of the lack of capacity of modern societal institutions and practices to deal with the era of globalization, rapid growth of technology, instantaneous worldwide communication, and fragmentation of institutions and communities (Friedman 2000, Castells 1996). Even supposedly powerful leaders in a modernist, Weberian world of rationalized bureaucracy quite understandably believe they cannot manage the system nor even make a substantial difference. In this kind of world, the familiar models of governance do not work because they depend on predictability, approach problems piecemeal, and presume experts can design workable solutions to meet recognized goals. They assume the world is rather like a machine which can be designed to produce particular outputs by smart enough people, when in reality, our contemporary society is complex, dynamic, and evolving—much more like an organic living system (Kauffman 1995) than a machine. Because in reality today, given the fragmentation of communities and governance institutions, no one is in charge (Bryson & Crosby 1992). As a result, all too often no one takes responsibility. Instead of learning from crises or adapting to changes in conditions, players circle the wagons. They resort to legalistic maneuvering, partisan infighting, logrolling, and trotting out of old solutions for new problems.

This paper is concerned with governance and how some new forms of collaborative dialogue, policy making, and action are filling the gaps left as our formal institutions of government are failing to carry out their responsibilities or where no agency has jurisdiction. These collaborative processes, engaging public and private sector players representing many interests working on tasks that are about public welfare, have become part of an emerging governance system. This system lacks formal authority, is linked in varying ways to formal government, and engages stakeholders

who are typically outsiders to public choices. Our goal in this paper is to outline an evaluative framework to assess these emerging collaborative governance efforts in terms of how they are changing our capacity to manage our systems, whether economic, social, or environmental. We hope in this process to explore how these developments may be changing the very concept of governance in contemporary times.

What is Capacity?

> *The problems we have created as a result of our thinking so far cannot be solved by thinking the way we did when we created them.*
> —Albert Einstein

A governance system with capacity can learn, experiment, and adapt creatively to threats and opportunities. It is characterized by regular interaction among diverse players who solve problems or complete complex new tasks by working together. These basic ideas have been understood in the organizational development field for decades (Burns & Stalker 1966) and recognized as fundamental to the creativity of Silicon Valley in California, which became a leading economic region by changing and adapting (Saxenian 1994) along with technology and the economy. These ideas about adaptiveness and experimentation have, however, been little developed in relation to governance during this period. Two exceptions stand out, however, both in the field of planning. Both Donald Schon and Donald Michael wrote about government as a learning system in the early seventies (Schon 1971, Michael 1973). Nonetheless, there is little evidence that many governmental agencies used these ideas to guide their practice. Only in the 1990s has some limited governmental attention gone to this type of learning after the publication of *Reinventing Government* (Osborne & Gaebler 1992).

In our view, a society with capacity is self-organizing and works in real time through networked, shared, and distributed intelligence (Innes & Booher 1999b, Booher & Innes 2001, Innes & Booher forthcoming). Governance in such a society is part and parcel of this self-organizing activity. Research has shown that complex systems at the edge of chaos (Kauffman 1995, Holland 1998) can be adaptive to rapid change and even move to higher levels of performance through the individual actions of many agents, linked together and acting with a few common heuristics on the basis of their local knowledge. Such a process can be more quickly responsive and more "intelligent" than top-down guidance or highly structured action and more suitable to our near-chaotic times of rapid change and multiple conflicting goals and perspectives. In a society with

capacity, instead of bureaucracies in silos, protecting their turf and maintaining hierarchical control, we would have information flowing freely through networks of players, each of whom is capable of acting autonomously in response to events and information, and in this process, the system can respond more quickly and intelligently. Instead of relying primarily on standardized ways of proceeding, we would rely more on ad hoc gatherings of interested and knowledgeable players to frame problems in new and shared ways and develop nuanced actions to respond to them. Instead of guiding players by rigid, highly-specified rules, they would develop shared meanings and heuristics, allowing them to act cooperatively or on their own.

Our working definition of capacity is drawn from the community development literature, and though it focuses on community, we see this as equivalent to institutional or societal capacity.

> *Community capacity is the interaction of human capital, organizational resources, and social capital existing within a given community that can be leveraged to solve collective problems and improve or maintain the well being of a given community. It may operate through informal social processes and/or organized effort* (Chaskin 2001, p. 295).

Central to this vision of capacity is learning: learning by individuals about which of their own actions is effective, by organizations about the results of their actions, and by the larger economic and political systems in which they are embedded about how to respond creatively and adapt in the face of change, crises and simply new information. An individual, organization, or system with capacity is one which is constantly learning and evolving.

How to Build Capacity

We contend that the way to build societal and institutional capacity, and the learning processes that are essential to them, is through collaborative planning and action. In this respect, our view very much parallels that of Patsy Healey (Healey 1998). Indeed, the capacity we are talking about is essentially collaborative capacity. Collaboration itself leads to breaking down the institutional barriers to productive problem solving. Our research and practice suggest that, as collaborative planning becomes more used, it has already begun to change the very idea of governance—that new forms of self-organizing, inclusive governance are emerging to replace the top-down, hierarchical, modernist model. While the US bishops met in secret to decide on an official policy about sexual

abuse, for example, the Catholic laity were starting a movement to gain control of their own parishes. Fung and his colleagues (Fung, Karkkainen & Sabel 2001) have identified collaborative approaches to environmental regulation that allow for more adaptive and environmentally sensitive approaches. In Cincinnati, a year-long collaborative dialogue defused tensions that had erupted in race riots as a result of perceptions of racial profiling by the police and resulted in an agreement for moving forward that was adopted by black leaders, the police, city agencies and the city government itself, all of whom had been warring parties for some time.[1] United Nations leaders today recognize that they must work in partnership with the non-governmental organizations (NGOs) because they can go places, say things, and gather information that they cannot.[2] Essentially, the UN is not merely an organization with a secretariat and formal decision making bodies, but a far-flung network that includes thousands who are not UN employees.

We have written extensively on the many experiments in California for collaborative policy making among stakeholders which have resulted in social, political, and intellectual capital, shared meaning, and creative solutions to difficult problems (Connick & Innes 2001; Innes, Gruber, Neuman & Thompson 1994; Innes & Booher 1999a) and changed not only the way policies are made, but also the kinds of outcomes. We have argued elsewhere that sustainability is a process rather than a "particular vision, pattern, set of rules or criterion" (Innes & Booher 1999b) and that it must be maintained by distributed intelligence and series of three levels of indicators which all agents in a society can use (Innes & Booher 2000).

Scholars have argued on the basis of research and practice that learning is the central element for building capacity (Schon 1971, Argyris & Schon 1996). Thus, a whole variety of methods for gathering information about how things are working must be part of any system with capacity. These include indicators, evaluations, and simply listening to the many agents who are operating in the world. These methods, however, must be integrated into the governance system and become part of the thinking of the participants if they are to build capacity.

Approaches to Evaluation

Recently there has been a revival of interest in evaluation (Chelinsky 1995), perhaps because of the rapid changes we face and a perception that our systems lack capacity. How can those responsible for funding new initiatives tell whether they are worthwhile? How can

participants tell if these initiatives are worth their time? Unfortunately, the only paradigm for evaluation that many decision makers understand is grounded in the machine model of the world. In this model, programs and their outcomes are evaluated against their presumed goals according to the "rational" or positivist model of research, paying attention primarily to what is quantifiable and assuming a fixed and well-defined program that a bureaucracy would have or that a nonprofit organization might be implementing. Evaluation is often used in a punitive way when, almost inevitably, it shows that the goals were not achieved. It is not built on the idea that, in the course of a program, people learn and evolve—at least one hopes they do—and that the environment itself changes and requires program adaptation. Such evaluations may be appropriate for systems or programs that are linear in structure, stable in design, and predictable in outcomes. However, few planning or policy issues are responsive to programs with such characteristics. Instead, most planning issues involve wicked problems (Rittel & Webber 1973) embedded in systems that are characterized by fragmentation, uncertainty and complexity.

As we have written elsewhere (Innes & Booher 1999a), we contend that a different model of evaluation is required for collaborative, evolving efforts like consensus building. Goals in such collaborative processes are not predefined, but discovered in the course of problem solving. In such a context, evaluation needs to build on an understanding of complex adaptive systems and what makes them effective. From this perspective, the criterion for success of collaborative policy making has to be whether or not it builds the capacity of society and the governance system to be self-organizing, intelligent and sustainable.

Plan for the Paper

This paper will outline key elements of two evaluation plans which Innes and colleagues have recently prepared to assess the impact of each of two major programs of collaborative planning. One is the Collaborative Regional Initiatives (CRI) program of the James Irvine Foundation, which includes 17 complex, cooperative regional initiatives around the state of California, each of which is engaged in multiple activities directed toward land use, economic development, education and a variety of other topics.[3] The second is the emerging program of the Center for Collaborative Policy at California State University, Sacramento. The Center designs, manages, and facilitates collaborative policy making for state and regional agencies and nonprofits, and it is engaged explicitly in building governance capacity.[4] The framework for these two evaluations is grounded in the work of Innes and Booher (1999a) in that it assumes that

the central way to assess long term collaborative planning is in terms of the degree to which it helps to build capacity of an organization or governance system to be self-organizing, intelligent, innovative, and adaptive to changing conditions. Each evaluation was designed to apply three different perspectives in parallel. First, each will look at outcomes of specific individual collaborative planning projects and programs of a CRI or of the Center; second, each will examine the performance of the organization (CRI or participating client agencies in the Center) as a whole; and third, each will look at the overall effectiveness of the basic collaborative models employed by the CRI program and by the Center.[5]

The Center for Collaborative Policy and the Collaborative Regional Initiatives Program

The organizations and programs to be evaluated differ considerably in their form and purpose, but they share the characteristics that they involve collaboration and dialogue among stakeholders, they focus on matters of public interest or policy, and they involve collective action of various kinds. Some of the individual collaborative activities are primarily composed of private sector participants, some of mainly public sector actors, and some are mixed public and private. Some focus on developing a shared vision; some work on solving particular problems such as traffic congestion or worker training; and some try to develop collaborative policy that cuts across agencies and gets the support of stakeholders who would otherwise oppose it. Even those that involve public agencies and public funding operate in an ad hoc way outside of formal government and without regulation or governmental mandate. They are self-organizing, created in a variety of ways, maintained by a wide variety of funding sources, including not only government, but also foundations and self-funding by those stakeholders with sufficient resources. Sometimes they lobby public agencies and legislators for formal changes in laws and procedures. Sometimes they simply take action as a group or individuals to implement shared goals. They may raise funds, organize and do public education, or implement programs that do not require government action, such as an investment fund for poor neighborhoods. If they include public agencies, the agencies themselves may voluntarily make changes in how they operate as a result of discussions. In some sense, these collaborative processes are doing what we might have expected government to do and they are filling in a gap in the governance, particularly of regions, where in the US there is typically a vacuum of power and responsibility.

The 17 Collaborative Regional Initiatives (CRIs) supported by the James Irvine Foundation include Joint Venture Silicon Valley, the Sierra Business Council and the San Diego Dialogue. They were typically initiated by business organizations to address problems that were interfering with the economy, including traffic, housing costs, and poor school quality. In the process, they have brought in environmental and equity stakeholders and broadened their mission to include quality of life issues and equity concerns. They have initiated such things as smart growth programs, indicator projects, ballot initiatives and legislative proposals. In San Diego, they developed the concept for and assisted the Immigration Service in creating a program to identify those who frequently cross the US–Mexico border for work. The CRIs rely on task groups, staff, and volunteers, and some of them have become important forces in regions.

The Center for Collaborative Policy (formerly California Center for Public Dispute Resolution), designs and facilitates public policy dialogues, most often at the state and regional level on water policy, transportation, land use, and a variety of other topics. In California, public agencies are increasingly relying on such processes to deal with issues and problems that cut across functional agencies and which generate opposition and litigation from stakeholders. They enter into agreements that end stalemates and governmental paralysis and sometimes produce innovative approaches to problems that are only possible because of the social capital and collaborative capacity that has been built (Connick & Innes 2001).

Sources

This paper has its intellectual roots in many fields. Indeed, the ideas in this paper owe a debt to so many scholarly perspectives and research findings that we could not enumerate them all here. They have all become part of our thinking to such an extent that it is difficult to disentangle them, much less to give specific credit to any particular author or article for any particular point. The most important influences on our thinking can at least be highlighted. On the subject of collaborative planning and collaboration, the work of Gray (Gray 1991), Healey (Healey 1997), and Bryson and Crosby (Bryson & Crosby 1992) have all been central. Among social theorists, the work of Habermas (Habermas 1981), Bernstein (Bernstein 1976), and Dryzek (Dryzek 2000, Dryzek 1990, Dryzek 1987) has provided a perspective on how interaction, dialogue and dialectical processes involving interests can provide access to a truth of communicative rationality rather than of instrumental/positivist rationality.

On negotiation, *Getting to Yes* (Fisher & Ury, 1981) is fundamental. On mediation and facilitation, the literature is too extensive to single out a few, but Bush and Folger's work on transformative mediation has been particularly important (Bush & Folger 1994). On dialogue, key works are by Isaacs (Isaacs 1999) and Yankelovich (Yankelovich 1999). On consensus building, which is perhaps the most collaborative of methods of policy deliberation, the pathbreaking work of Larry Susskind is key (Susskind & Field 1996; Susskind & Cruikshank 1987), along with the many important articles in the *Consensus Building Handbook* (Susskind, McKearnan & Thomas-Larmer 1999) and the work of Carpenter and Kennedy (Carpenter & Kennedy 1988). On organizations, the review by Scott is particularly useful on open organizational systems (Scott 1992). On inter-organizational coordination, Alexander's (Alexander 1995) and Chisholm's (Chisholm 1989) books and on organizational learning, the work of Argyris and Schon (Argyris 1993, Argyris & Schon 1996, Argyris & Schon 1974, Schon 1971) and Senge (Senge 1990) is foundational. Many works have shaped our thinking on and use of complexity theory, most notably Kauffman (Kauffman 1995) and Capra (Capra 1982). The recent book *Harnessing Complexity* (Axelrod & Cohen 1999) has assisted us in thinking through the applications of complexity theory to social and political systems. Early work by Schon (Schon 1971) and emerging thinking on networks and network management has been useful, particularly *Managing Complex Networks* (Kickert, Klijn & Koppenjan 1997). The field of community development has provided the most developed insights on community capacity building that we have found (Chaskin 2001, Foster-Fishman, Berkowitz, Lounsbury, Jacobson & Allen 2001, Kaplan 2000). An important analysis of how to build capacity for people to participate in US Environmental Protection Agency decisions has also provided significant insights (Breggin & Hallman 1999). On institutional capacity, the work of Patsy Healey and her colleagues has been seminal (Healey 1998; Cars, Healey, Madanipour & de Magalhaes 2002). Finally, on evaluation, the most important work has been *Utilization Focused Evaluation* (Patton 1997) because it provides an eloquent guide to a much more adaptive and usable form of evaluative research that can become integral to the learning of organizations, communities and individuals.

Our Own Research and Practice

Finally, the ideas in these evaluations are built on our own extensive case study research and practice in collaborative planning and policy making during the last 15 years as well as on that of our

collaborators in the CRI evaluation. We have been influenced by what we have found in this work, and in particular, by the varying ways observers and participants assess the collaborative processes and their results. We often noted that there were unrecognized outcomes, that stakeholders continued to participate even when agreements were not reached, and explicit goals were not met despite a sense that the group had value. We understood that much was going on that was under their radar because it was not what they were looking for. We noticed that they began to develop new norms of interaction, new expectations as well as new relationships and practices that they had learned within the processes but were using outside. We knew that it would not be doing justice to these projects if we did not develop a way to account for these more elusive second- and even third-order consequences. This framework and outline of an evaluation strategy is what we have developed as a result.

Two major monographs and a dissertation detail a series of cases of collaborative policy making (Innes et al. 1994, Innes & Gruber 2001, Connick forthcoming) for those who want to see the data out of which these arguments grow. We have reported further on this work in several articles (Innes & Booher 1999a, Connick & Innes 2001, Innes & Gruber 2001, Innes 1996a), and we have written a series of articles building our theories about collaboration (Booher & Innes 2001, Innes & Booher forthcoming, Innes 1996b). In addition, the work of AnnaLee Saxenian in her book *Regional Advantage* (Harvard 1994) and of Karen Christensen in *Cities and Complexity* (Sage 1999).

Assessing Capacity

A review of 80 articles and book chapters on building collaborative capacity (Foster-Fishman et al. 2001) contends that such capacity has to be built at four levels in a community: within members, within their relationships, within their organizational structure, and within the programs they sponsor. This review identifies a number of key points on which there is substantial agreement in this literature. To highlight just a few which are most pertinent, these include: personal skills and knowledge have to be developed including how to communicate, cooperate, resolve conflicts and respect others, as well as how to plan, design and evaluate programs, how to build coalition infrastructure, and how to understand the various roles and responsibilities in a collaborative effort. Attitudes about collaboration and about other stakeholders are important, as is motivation.

The literature reflects a consensus that a diversity of stakeholders is important in a collaborative effort because they provide access to a range of skills and knowledge. Technical and other forms of assistance are often needed to assure meaningful inclusion. Moreover, it is important to build strong working relationships among participants, a shared vision and an inclusive culture. Collaborative coalitions also need positive external relations, and they need their own organizational capacity and roles and responsibilities. They also need to have financial and human resources. They need to have a continuous learning orientation and the ability to design and implement programs (Foster-Fishman et al. 2001). These views parallel our own findings in our research and practice and mirror the best practices guidelines outlined in the *Consensus Building Handbook* by leading practitioners and scholars. This evaluation design will build on these ideas in the literature, but will also break some new ground, going beyond individual, organizational or relational, capacity to look at capacity of the governance and policy making system. Capacity, of course, is not an absolute but a relative quality, and we will be looking for how much of it there is and whether it has changed during the course of a collaborative effort.

Individual Capacity

First, we will look for changes in the capacity of individuals directly involved in collaborative processes. Change in all the other levels of the system depends on individual capacity, just as the intelligence of a complex adaptive system depends on the capacity of each of its individual agents. At the most obvious level, an individual with more capacity is one who has more skills, better understanding of problems and opportunities and of others' perspectives, and more creative ideas. Such a person is self-reflective and self-aware, with the willingness to experiment and learn from mistakes. The individual with most capacity can see his or her role in the larger system and assess the larger implications of his or her actions rather than simply focusing on an immediate task or problem. The person with capacity is able to do this because he/she has learned to listen empathetically and carefully learn from what is said, and make sense of many kinds of information (Forester 1989, Forester 1999, Argyris 1993). This in turn helps the individual to build and maintain professional and personal networks that empower him or her in whatever the individual tries to accomplish. The individual with capacity is good at working with people because that collaboration extends his or her power (Booher & Innes 2001). Finally, the person with most capacity takes initiative, and is

able to provide leadership through vision, ability to inspire others and to assist others to develop their own capacity.

Organizational Capacity

From the perspective of collaborative capacity and capacity to operate in a globalized, fast-moving world, organizations cannot be organized hierarchically with all decisions coming down from the top, and with participants hemmed in by detailed rules and standard operating procedures. There are too many unanticipated situations and the world moves too fast for such a cumbersome process to work. An organization with capacity has to be nimble and able to respond to change quickly. It has to rely on all its members for information and ideas. To operate effectively, it must be both internally and externally collaborative because of the importance of shared skills and information. Accordingly, such an organization has well-networked communications among its members, along with mutual trust and shared understandings. Its members can work in cooperative ways as needed to address complex problems. Information can flow both up and down the hierarchy as well as across the divisions or branches. Experiments can occur and failures can be discussed so learning can occur. An organization with capacity has ample ability to gather real-time information from its environment and to use that information to adapt its strategies (Stinchcombe 1990) and stay at the cutting edge of its field. Participants in such an organization operate with shared heuristics that they have learned through dialogue and communication so that each knows how to act independently for the benefit of the organization without necessarily having to get permission or check in a rule book. An organization with capacity has resilience and the ability to respond rapidly to the unexpected.

Relational Capacity: Collaborations, Coalitions, Partnerships, Interagency and Interjurisdictional Relationships

The capacity of the many types of collaborative efforts that cut across organizations has some parallels to that of organizations, but in this case, capacity lies in the relationships they create. Collaborations with capacity share information and engage in constructive dialogue rather than debate and argument (Yankelovich 1999). They have well-developed interactions among themselves as well as links to outside groups. They share both understandings of problems and recognition of their shared or reciprocal interests. Effective collaborations engage diverse interests and allow their decisions to be informed by the knowledge of these differing

stakeholders. They are not exclusive provinces of the powerful, but incorporate the interests of those ordinarily excluded. As a result, they produce more robust and legitimate strategies. They have both depth and breadth in their leadership with diverse participants willing to take responsibility and initiative as needed. They have roots in their communities and can mobilize players to get results. They produce innovative solutions to problems that have seemed intractable. They can respond in a timely way to new challenges, whether they are threats or opportunities. The most effective collaborations build their own capacity by tracking outcomes they are producing and by providing this information back to participants to enhance their learning process. They continually reassess their directions and strategies. Collaboratives that do these things are recognized and respected in their communities, which in turns increases their capacity.

Governance Capacity

A governance system has more capacity when it is characterized less by paralyzing conflict and stalemate and more by collective action. A governance system with capacity is one that encourages diverse voices and interests, making sure they are informed and empowered to play roles in governance. It has a rich array of nonprofits, interest groups, and others who represent the full range of interests in the society and who develop specialized knowledge and expertise which they contribute to the governance process. Such a system is characterized by well-networked working relationships among jurisdictions; agencies representing different sectors; business, education, social equity, and ethnic interests; the nonprofit sector; and advocacy organizations. These diverse players can trust one another and recognize their reciprocal interests. Such a governance system makes use of the knowledge and expertise of these and is able to pull together appropriate groups to solve problems or address opportunities on short notice. It depends on a distributed intelligence system, where many players are able to act independently on the basis of their own local knowledge in ways that will be beneficial not only to themselves, but also to the system as a whole. Participants and constituencies are neither passive nor confrontive, but play active and engaged roles in shaping public action. Agencies, legislative bodies, and formal governance arrangements cannot co-opt the citizens and stakeholders into activities or agreements which are against their interests because they are well informed and reflective. That is, such a governance system incorporates a well-developed civil society, with citizens able to have dialogues among themselves, to become informed observers and

commentators on what the public sector is doing, and to influence the public sector as appropriate to their concerns. These concerns are not simply narrowly self-interested, but reflect concern for the collective welfare as a result of the dialogues. A governance system with capacity is resilient—that is, it responds quickly to new conditions, events, opportunities and problems, and adapts and changes its procedures, heuristics and relationships as needed. It constantly improves its economic, environmental and equity performance, or slows down or reverses negative change. It is in a constant state of institutional evolution as it adjusts to maintain a sustainable system.

Applying Complexity Theory to Assess the Sustainability of the System

While it is difficult to assess the sustainability of a social, political, economic or environmental system in the short run, it is possible to look at the workings of the system to see if it has the necessary features to be an adaptive, intelligent, and robust system—a system with capacity over the long run. Axelrod and Cohen (Axelrod & Cohen 1999) have developed a simple way of understanding these key features. They contend that an effective complex adaptive learning system is one that has diversity, interaction, and mechanisms for selection. These are concepts we already understand for natural systems, but they can apply equally to social systems.

First, an adaptive system requires diversity of agents or stakeholders to keep multiple forms of information and perspectives in the system and to maintain the tension that brings creativity. It needs to maintain a diversity of ideas and strategies so that these will be available for the bricoleur (Innes & Booher 1999a) to draw on when a new approach must be designed. Creation and widespread use of a preferred alternative may mean that, when the unexpected happens, other alternatives are not available, nor are people who are skilled in implementing them. In the case of the CRIs, there are 17, each of which is different from the others in some important ways as it evolves in its region. Within the CRIs are diverse participants and different types of projects.

Second, for learning to occur in the system, interaction is needed. Participants need to find out about each others' differing perspectives and about how different experiments and strategies have worked. An adaptive learning system is one which is well-networked so that information can flow and in which there is sufficient trust and social capital for different agents to believe and act on information. A system with agencies and

functions separated into silos with little information flowing across them not only cannot assist in what Healey calls “place making” (Healey, de Magalhaes, Madanipour & Pendlebury forthcoming) where, for example, housing and transportation converge, but the system cannot learn and is doomed to repeat mistakes, like the FBI and CIA. Many environmental disputes cannot be productively solved because of adversarial science (Ozawa 1991), where neither scientists nor the public trust others’ data. In part, to achieve this interaction among the CRIs, the California Center for Regional Leadership (CCRL) has been also funded by the James Irvine Foundation to assist in this networking effort (www.calregions.org). This organization holds summits for CRIs to learn from one another and to find better ways of dealing with key issues such as funding, media relations, or keeping people at the table. CCRL staff also interview CRI participants to find out what kinds of assistance they need, and in turn, provide consulting assistance. CCRL is a key node in the network of CRIs.

The third and equally critical feature of an adaptive complex system is selection. The system needs a way not only to examine experiments and strategies, but also to test and evaluate them and select the most effective for a given purpose and context. In the case of the CRIs, several selection mechanisms are in place. The James Irvine Foundation conducts evaluations of its grantee projects and makes the decision on whether to continue to fund them, in part, based on the evaluations. It also uses these evaluations to identify those components of the CRIs warranting further development and support and shares findings with the CRIs. In its granting effort, it may incorporate some of those findings to encourage proposals that seem most likely to be productive. Secondly, CRIs themselves can select among the ideas they get from the summit those which suit their needs or, more likely, adapt them to their needs. Finally, the CRIs do some self-evaluation and some gathering of indicators and outcome information, and they get feedback from their communities to assist them in deciding which projects should be developed and which ones dropped.

The advantage of these evaluations and summits is that they help the information to flow and provide critical assessments. The danger is that the Foundation could end up encouraging all its CRIs to fit the same mold through its tacit and explicit messages about what can be proposed and how it will be evaluated. This would defeat the purpose of developing a self-organizing learning system in each region. A fine line exists between selecting the most effective strategies and encouraging continued experimentation and learning.

Evaluation Strategies

While no evaluation design can do full justice to the complexity and many activities of either the Center or the CRIs, nor thoroughly assess their role in building capacity of many types, we did come up with a three-pronged strategy for each of these evaluations that gets at several crucial issues. This strategy involves: (1) *Assessing project outcomes*—looking at programs and specific projects within the Center or the CRI and identifying their outcomes, particularly in terms of the ways they have helped to build capacity of the four types outlined above; (2) *Organizational Performance*—looking at the overall performance of the organization as whole in terms of its adaptiveness, collaborative capacity, and ability to respond creatively to environmental challenges and opportunities, through its diversity, interactions and selection methods; and (3) *Effectiveness of the Collaborative Model*—looking at the basic model employed by the organization and comparing the outcomes with the outcomes of different models employed by others with similar objectives or doing comparable tasks. In all cases, a multiplicity of research methods—both quantitative and qualitative—will be used, including surveys, in-depth interviews, and review of documents and secondary sources. We will use both self reports from individuals about their own learning and change and their agency's activities, and reports from observers, as well as, wherever possible, objective data about results.

Assessing Project Outcomes

Both the Center and the CRIs engage in a wide variety of projects. In the CRIs, these might include visioning efforts, efforts to get new land use initiatives passed, workforce development programs, or K–12 reform efforts. In the Center, projects include a collaborative policy making process for managing American River water both to protect the environment and serve urban development, an effort to resolve disputes among off-road vehicle users and environmentalists in public lands, preparation of the state water plan, and a transportation/air quality policy forum in the Sacramento area.

In the case of the CRIs, we anticipate using a wide range of outcome measures suited to the individual projects. Some of these will be conventional measures such as number of jobs created, ballot measures passed, or projects constructed. Other less conventional measures will address more directly the degree to which the project has built collaborative capacity. These would include such things as the degree to which the CRI collaborative values are adopted by others, the degree to

which people who were once at odds are now working together on a problem, an increase in shared and high quality knowledge about an issue, the ending of stalemate around an issue, innovative strategies developed, and second-order effects such as spin-off partnerships, new projects, and ideas developed in the process that are applied in other settings.

For the Center, identification of the direct and most tangible outcomes will also be done in combination with the outcomes that bear directly on capacity building. Thus, we will look at such outcomes as consensus-based decisions like formal agreements, plan, policy and project proposals; legislative proposals and ballot initiatives; widely accepted solutions to otherwise difficult problems; and vision and mission statements adopted. But we will also look at such capacity-building outcomes of projects like changes in relationships among participants, improvements in the quality and quantity of information used by participants, changed practices by participating organizations, new networks of relationships, new heuristics and norms of dialogue, and cooperation among agencies or agencies and advocacy groups.

Organizational Performance

To assess organizational performance, as differentiated from the outcomes of particular projects, we propose to apply the three variables identified by Axelrod and Cohen (1999) as characterizing complex systems that are adaptive and creative, and capable of responding effectively to environmental stresses and opportunities. The first variable is diversity. The organization must have a diversity of participants and voices involved in its deliberations and actions and a diversity of actions and projects. This, diversity like biodiversity, provides the raw material for inventing new strategies and variants. It provides many kinds of information and many options that can be drawn on to meet new challenges. Without diversity, the system stagnates and cannot be creative and problem solving when it needs to be. The second variable is interaction. For diversity to make a difference, there must be ways within the system for diverse players to interact and learn from one another. There must be ways for the diverse agents in a system to learn about the different strategies and programs that are at work. There must be networks and information flows throughout the system. The third variable is selection. For a complex system to be successfully adaptive, it must have ways to select among the diverse opportunities and ideas that have been generated. These must be ways of selection that build on feedback from the environment and from those that have tried out the ideas so that the system itself can move to higher levels of performance. In a natural

system, random selection is at work with the less successful agents and strategies dying off. In a social system, we have to have a method of choosing the more successful approaches, without of course, eliminating diversity and just putting all eggs into one basket.

Therefore, with the CRIs before the Foundation's goals changed, we originally planned to examine the three variables in the following ways. We would identify the diversity of participants in the CRIs. They have board members, staff, volunteers and many others who are involved in task groups. Some of the CRIs are mostly oriented to economic development and business, and they may include participants who are primarily from business organizations, whereas others include environmental or social equity participants, or academics and other kinds of leaders. Interaction levels and types would be explored by looking at the networks the CRIs have developed and the various methods they use to bring people together and to create forums for dialogue and exchange over the issues. It would look at the role of the California Center for Regional Leadership and other organizations in helping to build these networks. It would look at partnerships and working relationships the CRIs have with other organizations. For selection, we would identify how they decided to take on particular projects or design them in particular ways. Selection methods might include such formal activities as evaluation and the use of outcome measures, or such informal activities as getting feedback from members and participants. Selection might be made by simply following the available funding and doing what can be funded. Or, as in the case of Joint Venture Silicon Valley, a laissez-faire approach can allow projects to grow or die based on the interest and energy that participants bring to them—a sort of natural selection process. Our overall assessment of CRI performance would be based on the degree to which they are diverse in participation and activities, on the quantity and quality of interaction and information flows among players and those inside the CRI and outside it, and on the quality of the selection process and degree to which it depends on feedback about what is working and what is not.

In the case of the Center, we will be looking at whether organizational performance has improved for the participating organizations during the time they have been engaged with the Center in collaborative processes of policy making and management. We will follow the same principles we did for the CRIs, but the organizations in question will be of the three main types of clients and participants in Center processes: public agencies like the California Department of Water Resources or the City of Sacramento, advocacy groups like the Building Industry Association or Friends of the River, and less structured

neighborhood and community organizations. We will be looking to see whether the collaborative and adaptive capacity of a representative set of these organizations has increased, using the diversity, interaction, and selection variables. Thus for diversity, we will be measuring the change in the range and types of activities engaged in by the organizations during the period and the change in the diversity of participants in their decision making and policy making processes. We hypothesize that working with the Center will increase the range of these activities and encourage them to work with a greater variety of people even outside of the actual Center project. For interaction, we will be looking at both internal interactions and external working relationships of the organization. Thus, we will be looking at whether there has been an increase of collaborative work groups within the organizations, especially those which cut through hierarchies or organize participants in new ways around problems and tasks. For selection, we will be examining how each of these groups makes decisions, what information they use to do so, and what criteria they apply. Do they, for instance, make a point of getting feedback on the work they are doing so they can improve it or select a better strategy? We hypothesize that working with the Center will model for them both interaction and selection methods that they will use in other arenas of their work. If so, the Center could be said to be helping build the capacity of these organizations.

Effectiveness of the Basic Model of Action

Testing the basic CRI model of collaborative evolving and self-organizing action was a particular challenge. The CRIs all differ in their structure, though they share the characteristics that they are all highly networked and adaptive to conditions in their regions. We could not compare their effectiveness to other organizations in the regions like transportation planning agencies, because these had powers and mandates that the CRIs did not, and they were focused on a much more limited set of issues. We needed a way to control for everything but the basic model. We used Karen Chapple's concept of comparing CRI efforts at workforce development with the efforts of other organizations in the regions that do workforce development. The general hypothesis was that the CRI model, with its networked cooperation among many players, allows linkages among business, education and labor and training providers that are not available to other workforce development providers. Accordingly, we anticipate that CRIs will demonstrate better results in terms of job placement and other criteria for program success.

To test the Center's model of action, we chose to look at the example of water resource planning. This is an area which, for many years, has been characterized not only by intense conflict among many players, but also by the use of detailed technical studies and very much an expert driven rational/technical planning model where alternatives are laid out and assessed by technicians who make recommendations and possibly have them reviewed through a conventional public participation process as more or less a pro forma activity. The Center, however, has been involved with many state and regional water agencies and their constituencies over a decade or more and has been applying their collaborative model using their steps of conflict assessment; gathering key stakeholders; joint development of ground rules, information, and careful process design; and facilitation of dialogue over many months or even years.

The Center's current work on the development of the new State Water Plan will provide an excellent case in point for making this comparison of traditional rational/technical model of planning with the collaborative one. The previous state water plan was developed five years ago, almost uniquely through the rational/technical model. We can look at that plan and its impacts over the last five years along with impacts of the process of developing it in-house. The collaborative approach now underway for the new plan is, thus far, focused less on the plan and more on engaging the stakeholders and developing and spreading learning about the problems and about possible actions. We will be looking at the impact of the collaboration activities on water management as well as on the impact of the plan once it is prepared in 2003. We will also be evaluating the quality of the two plans in terms of strategies and action orientation. Preliminary evidence suggests that the technical plan presented only options and few action recommendations, and that it consciously eliminated from consideration all options that were innovative or might require new legislation. Typically, the collaborative model produces action agendas and innovative ways of solving problems.

Conclusion

The effort to build collaborative and adaptive capacity in society and to assess whether collaborative efforts over time truly result in capacity increases is a challenging one that will require efforts such as this and many others if the field is to move beyond action to reflection and then to increasingly powerful action. Collaborative planning is moving forward and spreading as a method despite the concerns of critics and skeptics. It is time systematically to assess its impacts, but to do so in a way that respects the nature of collaboration and the kinds of results that

come from it, rather than to simply apply the mechanical model of inputs producing outputs and the criteria of tangible concrete results. While collaboration does produce tangible outcomes like agreements or actions, it has many other consequences that the more traditional rational/technical or bureaucratic approach to planning, program design, and implementation does not have. These we can only see, however, if we apply a complex adaptive systems model to understand how collaboration affects the players and actions. This model allows us to see whether and how collaborative processes can build community and societal capacity for self-governance. The impact on governance capacity, we contend, is the most important criterion for assessing collaborative processes over the long run.

Notes

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1 The master agreement reached in this settlement can be found at http://www.ariagroup.com/

2 Comments by the Honorable Gillian Sorenson, Assistant Secretary General for External Relations, United Nations, as part of a panel discussion on International/Community Disputes at the Hewlett Theory Centers 2002 Meeting, March 22, 2002.

3 The original evaluation plan for the CRI program described here, "A Design for the Evaluation of the Collaborative Regional Initiatives Program, A Proposal for the James Irvine Foundation," was developed by Karen Chapple, Karen Christensen, Judith Gruber, Judith Innes and AnnaLee Saxenian, all from the University of California, Berkeley, in a draft dated September 6, 2002.

4 This evaluation design was done by Judith Innes in a document entitled "Evaluation Design for the Capacity Building Program of the California Center for Public Dispute Resolution," September 2002. The design was adapted from the CRI evaluation plan.

5 Due to changes in the James Irvine Foundation's strategic plan, the study of the second perspective—CRI performance—will not be implemented, but the original scheme will be described here.

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