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# Policy Analysis in the Future of Good Societies

Elinor Ostrom

The study of public policy during the last century has been dominated by the paradigm that policy was what a government did, and particularly what a national government did. Thus, policy analysis was directed toward advising national governments. Endless articles have started or concluded with an analysis of what “the” policy maker should do whether the article was written by an economist, a political scientist, a policy analyst, or a journalist. The hypothetical “social planner” has been the recipient of considerable unasked for advice in articles devoted primarily to a top-down analysis of a public policy problem.

In this new century, the concept of policy analysis should be substantially broadened. National governments will remain among the targets of advice, but greater attention should be devoted to regional and local governments. More importantly, one of the important targets for all policy analysis in the future should be citizens organized in diverse ways related to a multiplicity of issues. But isn't doing policy analysis what citizens ask their officials to do? Do they not select officials that they think will make good policy? Why should precious time be wasted in instructing citizens to do policy analysis when citizens select public officials to do this?

That is certainly the way that many policy textbooks have been written. How are citizens to know whether their officials are making intelligent decisions, however, if they themselves have no criteria and no insight into the benefits and costs of diverse policies? A citizenry devoid of skills in policy analysis is a set of *subjects* who can easily become the *objects* of an authoritarian regime.

In the development of policy analysis so that advice can be given to both officials and the citizens they serve, social scientists face several challenges. During the past century, policy analysts trying to solve diverse problems have been strongly influenced by a narrow, short-term economic view of human rationality combining an all-powerful computation capacity, on the one hand, with no capability to adapt and stick to moral norms of trustworthiness, reciprocity, and fairness, on the other. When models based on these assumptions are applied to a highly competitive market for homogenous, packageable goods, eco-

nomics theory has produced one of our most powerful and useful forms of policy analysis. When applied to the problems of provision and production of public goods and the management of common-pool resources, however, these models have led scholars to conclude that citizens are unable to solve these problems (even though they are the engine of innovation and economic growth in the other theories), and that an external authority is needed to impose solutions on helplessly trapped individuals.

Thus, one of our great needs is overcoming disciplinary limits. Another is learning to overcome our addiction to overly simple solutions to complex problems. A third is the need to more self-consciously create arenas for experimentation and learning. I will briefly develop each of these themes below.

## Disciplinary Limits and How We Need to Overcome Them

Developing a broader theory of rationality useful for policy analysis immediately requires input from multi-

ple disciplines. Many economists are struggling with the lack of predictive and explanatory power of their theories outside of competitive market settings—particularly those who have seen the lack of empirical support for so many predictions (Camerer, 1997; Selten, 1990, 1991; Fehr and Schmidt, 1999; Frey, 1997). Social psychologists (Messick, 1999), evolutionary psychologists (Cosmides and Tooby, 1992), sociologists and anthropologists (Kollock, 1998; Boehm, 1999), and political scientists (Axelrod, 1984; Axelrod and Cohen, 2000; Simon, 1997) are all concerned about building a better foundation for understanding behavior as a necessary step before trying to improve public policy.

Scholars who have long been interested in diverse public policies have often found themselves somewhat limited by their own disciplinary boundaries within contemporary universities. Cynics sometimes state it this way: “The world has problems, but universities have departments” (see Brewer, 1999: 328). The incentives to stay within the confines of the way a discipline asks questions—particularly for younger scholars—are powerful and frequently counterproductive for the achievement of knowledge needed to analyze policy questions. Even the efforts of senior scholars can be criticized by those who worry about an escape

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from a tight disciplinary focus. As Brewer himself envisioned the nature of policy analysis, it involves asking the following types of questions:

- What goal values are sought and by whom?
- What trends affect the realization of these values? Or where did the problem originate?
- What factors are responsible for the trends? Or what are the driving or influencing conditions?
- What is the probable course of future events and developments especially if interventions are not made?
- What can be done to change that course to realize or achieve more of the desired goals, and for whom (Brewer, 1999: 328)?

These questions are not the primary domain of *any* single discipline. When honest scholars have tried to examine these types of questions from their own disciplinary lenses, they have acknowledged the limits of their own view and thus the importance of involving other disciplines in their explanation.

For example, Robert Ellickson first attempted as a lawyer to understand the structure of rules and norms that affected how farmers in Shasta County, Calif. related to one another in regard to a wide variety of everyday problems including who was responsible for fencing in (or out) the cattle that farmers were pasturing on their own land. The farmers had hardly used lawyers or the courts to establish local rules regarding constraining externalities. Ellickson found that the legal theories taught in law school, and even by many of the interdisciplinary approaches that combined law with one of the social sciences (e.g., law and economics, law and society), were insufficient. In light of his experience, Ellickson argued that to develop even a rudimentary theory of social order, theorists would need to understand the behavior of multiple “controllers” (e.g., individuals who watched over events of importance to a community, from neighbors through various organizational and governmental forms of regulation).

In other words, a general theory of social control requires sub-theories of human nature, of market transactions, of social interactions, of organizations, and of governments. For starters a theorist thus needs a command of psychology, economics, sociology, organization theory, and political science. (Ellickson, 1987: 80)

Progress in policy analysis can be enhanced by following Ellickson’s advice.

## The Limits (or Failure) of Simple Policy Solutions

Another recurrent theme in American academia is to criticize the number of governments that exist in the United States and the competition that exists among them. During the 1960s and 1970s, for example, the “Metropolitan Reform” movement was the dominant way of thinking about urban governance. The cause of many problems was posited to be the presence of many units of government that were seen as redundant and inefficient. In addition, multiple units of government were viewed as competitive and providing a means whereby the rich could escape without contributing to the provision of public services needed by the poor and disadvantaged members of central cities (see Hawley and Zimmer, 1970; Rusk, 1993; and literature summarized in Stephens and Wikstrom, 1999). Policy analysts repetitively recommended simple, top-down, command-and-control solutions in the belief that those doing analysis of policy problems for large territories would achieve close to optimal policy solutions for difficult problems.

In the field of education, beliefs that large numbers of schools were inefficient and that massive consolidation would lead to increased efficiency as well as equity led to the reduction of school districts in a long series of massive campaigns against considerable citizen opposition during the last three-quarters of this century. In 1932, almost 130,000 school districts existed in the United States. This number was halved by 1952 and quartered by 1962, and halved once again by the early 1970s. Today we have around 15,000 school districts in the United States for a population that has almost doubled since the campaign to consolidate schools was initiated (see V. Ostrom, Bish, and E. Ostrom, 1988). During the heat of this policy reform effort, research was almost nonexistent on the effect of school size, number of schools in a region, and related issues. It was such a simple solution to what was perceived by academics and public officials as an obvious problem that both were willing to push hard for this reform.

Since the 1970s, considerable research on the effects of these variables on school performance has provided contrary evidence to the implicit theory used by policy makers to support the school consolidation movement. A recent study for the National Bureau of Economic Research, for example, finds that having a larger number of schools in a metropolitan area is associated with higher average student performance (as measured by students’ educational attainment, local wages, and test scores) while also being characterized by lower per-pupil spending (Hoxby, 1994; see also Pritchett and Filmer, 1999). After years of trying to

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increase size and reduce the number of schools, policymakers are reconsidering the consequences of past reforms and recommending charter schools, voucher systems, and other reforms to create more responsive schools (see Gardner, 2000, for a review of recent books on these reforms). Similarly, empirical studies of the effect of the size and number of urban public service providers also found that small size and multiplicity did not have the adverse consequences frequently attributed to them and that improvements (rather than reductions) in performance were frequently associated with the presence of a multiplicity of units of government (see McGinnis, 1999, for an overview). Hawkins and Ihrke (1999), for example, have conducted a recent survey of more than 70 empirical studies of fragmentation showing that more than two-thirds of the empirical articles do not support the policies recommended by the metropolitan reform movement.

A second set of simple policies gone amok relates to the presumed necessity of nationalizing ownership and management of common-pool resources such as forests, rivers and lakes, irrigation systems, grazing areas, and in-shore fisheries, and imposing one set of policies for an entire nation. Common-pool resources are characterized by difficulties of excluding beneficiaries and subtractability of use (E. Ostrom, Gardner, and Walker, 1994). In other words, the benefits affect all who use the resource whether they restrain their use or not, and what one person withdraws, no one else can withdraw. In the conventional theory, appropriators are frequently assumed to be homogeneous in terms of their assets, skills, discount rates, and cultural views. They are also assumed to be short-term, profit-maximizing actors who possess complete information. In the conventional theory, *anyone* can enter the resource and take resource units. Appropriators only gain property rights to what they harvest, which they then sell in an open competitive market. The open-access condition is a theoretical given. With these assumptions, the logical conclusion is that common-pool resources will be overused and eventually destroyed.

Many textbooks on environmental policy present this conventional theory of an open-access common-pool resource as the *only* theory needed for making effective policies (but, see Baland and Platteau, 1996). Massive deforestation in tropical countries and the collapse of multiple ocean fisheries are cited

by many policy analysts and public officials as sufficient evidence to confirm the general validity of the theory. Garrett Hardin's (1968) dramatic article in *Science* convinced others that the conventional theory captures the core of the problem. The metaphor of resource users helplessly trapped in a relentless tragedy has been used by scholars and policy makers to rationalize central government control of forests, in-shore fisheries, and many other common-pool resources. Thus, analysts have tried to "see like a state" and generate reform proposals that are built on the essential role of the state as the source of all rules (Scott, 1998).

Recent research has found that many appropriators have organized themselves so as to regulate the use of common-pool resources, and some have sustained resources and their own organizations for very long periods of time (McCay and Acheson, 1987; Berkes, 1989; E. Ostrom, 1990; Blomquist, 1992; Bromley et al., 1992; Tang, 1992; among many others). Further, national governmental agencies are frequently found to be unsuccessful in their efforts to design effective and uniform sets of rules to regulate important common-pool resources across a broad domain. Many developing countries nationalized all land and water resources during the 1950s and 1960s. The institutional arrangements that local users had devised to limit entry and use lost their legal standing, but the national governments lacked funds and personnel to monitor these resources effectively. Thus, common-pool resources were converted to a *de jure* government property regime but reverted to a *de facto* open-access regime (Arnold, 1998).

The incentives of the collective-action problem that resource users faced were accentuated because now they were told that they would not receive the benefits of adopting a long-term view in their use of the resource. When resources that were previously controlled by local participants have been nationalized, state control has usually proved to be less effective and efficient than control by those directly affected, if not disastrous in its consequences (Curtis, 1991; Panayotou and Ashton, 1992; Ascher, 1995). The substantial increase in the rates of deforestation following adoption of policies to nationalize forests that had earlier been governed by local user-groups has been well documented for Thailand (Feeny, 1988), Africa (Shepherd, 1992;

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Thomson, 1977; Thomson, Feeny, and Oakerson, 1992), Nepal (Arnold and Campbell, 1986), and India (Gadgil and Iyer, 1989; Jodha, 1990, 1996). Similar increases in uncontrolled overharvesting have occurred in regard to in-shore fisheries taken over by state or national agencies from local control by the in-shore fishers themselves (Cordell and McKean, 1992; Cruz, 1986; Dasgupta, 1982; Higgs, 1996; Pinkerton, 1989). These policies have confused resources that are genuinely large-scale in extent with resources that exist throughout a nation but are not highly interconnected and vary substantially in the structure of their ecological systems from place to place.

Both sets of policy reforms—centralizing urban governance and the governance of common-pool resources—have been based on an overly simplified view of the nature of social order. Policy analysts tend to distrust local citizens to create effective forms of governance. Consequently, they assume that multiplicities of self-organized regimes (some formal, some informal) are by their very nature disorderly and ineffective. Order is presumed to result from central direction. Unfortunately, this perspective is viewed as self-evident. It is hard to make progress against self-evident truths. These common-sense assumptions, however, lead to proposals to improve the operation of political systems that have had the opposite effect. By removing decisions about the ways to innovate, adapt, and coordinate efforts from those who are directly affected, these policy reforms have created institutions that are less able to respond to the problems for which they were created.

### Creating Arenas for Experimentation and Learning

Thus, underlying much policy analysis of the last several decades has been a presumption that the responsibility for designing institutional rules to overcome various kinds of public problems should be assumed by large-scale and centralized governments (for different views, however, see Simon, 1997; Landau, 1969; V. Ostrom, 1987, 1997; Bendor and Mookherjee, 1987). Policy analysts have had great faith in their own capacity to analyze theoretical models of typical problems and come forward with a set of institutional fixes that will lead those involved in a collective-action problem to take actions generating higher, rather than lower, outcomes. In doing so, policy analysts tend to think of citizens or users as motivated by narrow, self-interested preferences and of themselves as motivated by a general public interest. Both assumptions are exaggerated. As

discussed above we need to be working with a broader theory of a boundedly rational, learning, and potentially norm-using individual (see E. Ostrom, 1998). The evidence gathered from studies of the behavior of policy analysts and government officials is consistent with a presumption that officials are similar to citizens in regard to their internal motivation. Officials may be placed in institutional settings, however, that bring substantial temptations for personal gain and even illegal payoffs without much chance for others to learn about behavior. Officials may also be isolated from the people and locations they are supposed to represent and not have much knowledge about time and place information. Officials in one jurisdiction (or one department within a larger jurisdiction) may put the interest of their own unit

ahead of achieving objectives requiring full participation of all units. Thus, finding ways of solving collective-action problems exist within the public sector as well as in the private sector.

A better foundation for public policy is to assume that neither citizens nor their officials are able to analyze all situations fully, but given a conducive, macropolitical regime, they may make efforts to solve complex problems through trial-and-error testing out of different rules for solving various collective-action problems. Recent recognition of the need for demonstration projects and learning general guidelines

or “best practices” from the more successful policies are consistent with this effort. To learn from policy experiments requires some long-term continuity of both leadership and citizenry. Our capacity to learn from policy experiments may thus be threatened by the increased mobility of public officials and citizens.

Because many analysts have become disillusioned with the performance of highly centralized systems in the management of natural resources, numerous proposals have been advanced to support radical decentralization of centralized regimes (see Agrawal, Britt, and Kanel, 1999 and Agrawal and Ribot, 1999, for an overview of the relevant literature). One form of decentralization is to radically move decision making down to a horizontal layer of governments that is composed entirely of local bodies each of which governs a smaller-scale resource system. From one simple solution—centralizing everything—policy analysts are flipping to another simple solution—radical decentralization. Neither full centralization nor full decentralization promises much in the way of learning, even though greater experimentation can occur in decentralized systems. The likelihood of successful solutions of many policy questions is not, however,

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increased by jumping from one pet solution to another. A serious study of complex, polycentric systems needs to be on the agenda for policy analysts as well as the citizens and officials they serve.

### Teaching Policy Analysis

The issues raised in this essay lead one to return to the question of how we teach policy analysis at both an undergraduate and graduate level. In many of these courses, citizens are described as passive consumers of political life. We have robbed citizens of almost any kind of active political life in our textbook renditions of democracy other than going to the polls.

Thus when students take courses on policy analysis, they do so partly with an image that they themselves will become public officials whether elected or appointed. Few students actually taking policy analysis are trying to inform themselves on how to become better citizens. As we reformulate the intellectual foundations of policy analysis, we also need to pay serious attention to how we teach the future citizens of a democratic system. Given the complexity of contemporary life, we need to energize the innovative potential of future citizens who see themselves engaged in trying to improve their own societies and polities. Focusing on what citizens do rather than entirely on what government officials do is an essential step in developing better policy analysis for future generations.

Further, we need to think about how to overcome the disciplinary walls that have been erected in the contemporary university scene. If students are to understand a diversity of policy questions, they need to gain real knowledge of the substantive areas of interest and not be limited to studying only in a department of political science or even to a school of policy analysis. At the Center for the Study of Institutions, Population, and Environmental Change, we require students to “cross-train.” Students with a strong background in anthropology, economics, or political science are introduced in their graduate program to a heavy dose of ecology, the analysis of spatial metrics, the use of geographic information systems, and the analysis of remotely sensed data. Similarly, students with strong backgrounds in the latter areas receive a strong introduction to skills learned in anthropology, economics, and political science. Throughout our training efforts, we stress the skills needed to analyze complex adaptive systems.

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## SYMPOSIUM

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