



Artisans of Political Theory and Empirical Inquiry



**THIRTY-FIVE YEARS OF SCHOLARSHIP AT THE
WORKSHOP IN POLITICAL THEORY AND POLICY ANALYSIS**

by Pamela Jagger

Updated July 2009 by Jacqui Bauer & James Walker

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Thirty-Five Years of Scholarship at the Workshop in Political Theory and Policy Analysis

Indiana University, Bloomington, is home to a group of committed academic “artisans” who have worked since 1973 to understand patterns of organization in multiple environments using the tools of comparative institutional analysis and development. The Workshop in Political Theory and Policy Analysis (hereafter the Workshop)—an outgrowth of the research and teaching efforts of Elinor (Lin) and Vincent Ostrom—is an autonomous research center at IU with faculty associates on campus from Anthropology, Economics, Geography, Informatics, Political Science, Psychology, the School of Public and Environmental Affairs, the Kelley School of Business, and the Maurer School of Law.

Beginning with the relationship between political theory and policy analysis, the focus of the research program has been to illuminate basic puzzles about the place of knowledge in the conduct of public affairs in contemporary societies. The potential for self-governing capabilities to solve problems of production and provision of public goods and services has been the basic foundation of the Workshop’s research program (Mitchell 1988). Understanding the institutional foundations of self-governance, including the conditions that contribute to the establishment and sustainability of self-governing capacities, has been undertaken to achieve a greater understanding of the structured way that communities organize themselves to solve collective problems, achieve common goals, and resolve conflicts (McGinnis 1999b).

This document is a historical sketch of one such self-governing institution. In the following section, a brief background on the origins of the concept of a workshop is given. In section II, the theoretical, philosophical, and practical foundations of the Workshop are reviewed. In addition, insights into the pedagogical foundations and philosophy of the Workshop as applied to graduate students, visiting scholars, and long-term collaborators are reviewed, and the Workshop Colloquium series is discussed. Section III presents an overview of the major junctures of over thirty years of Workshop research. In section IV, the role of the Workshop library in furthering the mission of the Workshop, the facilities where the Workshop are housed, and the staff who have invaluable facilitated over thirty years of productive research are discussed. Finally, some reflections on the future of the Workshop are presented.

I. The Evolution of the Workshop

Formal communications between Vincent and Elinor Ostrom and the Department of Political Science regarding the formation of the Workshop were initiated in 1972. The emphasis of these early proposals was the need to develop political theory as an analytical tool that could be used to guide sound empirical research and policy analysis. Approval for the formation of the Workshop was granted by Leroy N. Rieselbach, chair of the Political Science Department, on January 19, 1973.¹ The concept of a *Workshop* was borrowed from several different academic environments, including the example set by Morton Grodzins, who conducted a Workshop in Federalism at the University of Chicago. At UCLA, Jacob Marschak conducted an interdisciplinary colloquium on Mathematics in the Behavioral Sciences that Vincent Ostrom had participated in during his time as an associate professor at UCLA, and which Lin joined in her last year of graduate residence. The Workshop in Political Theory and Policy Analysis at Indiana University, Bloomington, would be the first workshop focused on the public choice and political economy traditions, building upon earlier works in classical political theory. The emphasis would be on empirical research and applied policy analysis based upon the explicit use of theory to derive testable hypotheses.

Just as a workshop for woodcarvers provides a forum for apprentices to hone their skills as craftsmen, the Workshop was designed to allow faculty members and students to collaborate in productive research efforts. Students act as apprentices who have the opportunity to participate in scholarly endeavors. The ability to bridge the gap between teaching and research, and to move beyond what the Ostros perceived as an overemphasis on preparation for qualifying exams in graduate programs, allowed students to pursue their own inquiry and methods for coping with problems through a lifetime of productive research. In addition, the Workshop supported publications, colloquia, instructional efforts, and research projects. Of particular significance was the ability to provide an institutional mechanism that would facilitate grant applications and highlight the continuity of research undertaken by students and participating faculty. Perhaps most importantly, a defining feature of the Workshop is its self-organizing character.

II. Major Theoretical, Philosophical, and Practical Foundations

In the initial 1972 proposal, the primary focus of the Workshop was identified as the development of political theory as an analytical tool to be used in the design and conduct of empirical research and in the study of public policy problems. Vincent Ostrom, in his writing of the proposal for the Workshop, noted that political theory is the simplifying structure of terms, concepts, and postulated relationships that can be used to infer or think through the effect that different patterns or structures of decision-making arrangements will have on human conduct. While theory is a necessary tool, he acknowledged that the strengths and weaknesses of a particular theory rest upon its power of explanation—thus, the need for empirical research. A close connection between political theory, empirical research, and policy analysis would be the foundation of the research program at the Workshop.

To fully understand the foundations of the Workshop, and to grasp the continuity that is a characteristic of the research program, it is valuable to look to the experiences of the Ostroms before they arrived at IU. Vincent Ostrom's consideration of how people organize themselves to solve complex problems dates back to his employment as a high school teacher in Ontario, California, between 1943 and 1945. He observed during this time period that citrus-growing smallholders developed a system of land and water rights that provided the inputs farmers needed for production to sustain farm incomes. In addition, they created an endowment for a future college and for the local high school. Vincent's observation that a group of people with common interests in production technology and community could create their own institutions to achieve complex objectives was compelling.

Vincent completed his Master's thesis, *School Board Politics: An Analysis on Non-Partisanship in the Los Angeles City Board of Education*, in 1945. The subject of his doctoral dissertation, *Government and Water: A Study of the Influence of Water Upon Governmental Institutions and Practices in the Development of Los Angeles*, completed in 1950, was motivated by the movement to establish Los Angeles as "the metropolis of the Pacific" and the problem of how to get water, which was in short supply, into the Los Angeles area. During the time he was working on his doctorate, Vincent accepted a faculty position at the Department of Political Science, University of Wyoming, where he taught between 1945 and 1948. There he became interested in institutions that developed among cattlemen, including mechanisms for dealing with water allocation for ranching, branding, and other property rights. He also worked closely with the state legislature

and involved students in research that would provide background information to the legislature on a variety of topics. While in Wyoming, Vincent acted as a program coordinator for the Wyoming Assessor's School and Budget Officer's School, as executive secretary to the Wyoming League of Municipalities, and as a consultant to the Wyoming Legislative Interim Committee.

In 1949, Vincent accepted an invitation to join the faculty in the Department of Political Science, University of Oregon. There he served on the state water agency and acted as a speech writer for the governor. His experiences in Oregon increased his concern with the development of natural resources. In 1955, Vincent was nominated as a fellow at the Center for Advanced Studies in the Behavioral Sciences in Palo Alto, California. There he met Harold Lasswell and Abraham Kaplan. The influence of Harold Lasswell's policy sciences framework can be seen in the evolution of the Workshop's Institutional Analysis and Development (IAD) framework as it exists today. Also in 1955, Vincent was asked to help in the drafting of the natural resources article of the Alaska Constitution. He was honored for his contribution in August of 2003.

Vincent returned to UCLA as an associate professor in 1958, where he was invited to join a group of scholars at UC Berkeley who were studying the California water industry. Working with a team of economists, a manuscript on water law in California was prepared, in addition to a manuscript on institutions for water resources. At UCLA, Vincent worked with Charles Tiebout and Robert Warren on their seminal article, "The Organization of Government in Metropolitan Areas: A Theoretical Inquiry." Frustration with an emphasis on teaching and graduate supervision, and a desire to study local institutional arrangements from an interdisciplinary perspective, led Vincent to entertain faculty position offers at institutions including the University of Washington; University of California, Davis; and Indiana University, Bloomington. After spending time working with John Krutilla at Resources for the Future in Washington, DC, on the Columbia River treaty problem, Vincent accepted the position of full professor in the Department of Government at IU at the urging of Charles Hyneman, who was then-president of the American Political Science Association.

Elinor (Lin) Ostrom took all three of her degrees at UCLA, where she completed undergraduate (Honors, 1954), Masters (1962), and Doctoral (1965) studies in the Department of Political Science. Prior to pursuing graduate studies, Lin worked as an employment interviewer and employee relations manager in the private sector and as a personnel analyst at UCLA. Lin's dissertation, *Public Entrepreneurship: A Case Study in Ground*

Water Basin Management, which she started as a student in one of Vincent's seminars, examined strategies used by individuals in organizing public enterprises to provide public goods and services. Her study illuminated the process of devising new public enterprise systems to undertake a groundwater basin management program. Public entrepreneurs sought a solution to the common problem of saltwater intrusion into the groundwater systems in Los Angeles. Lin Ostrom was the 1965–1966 cowinner of the Western Political Science Association Prize for the best dissertation.

Lin arrived at IU without an official position in the Department of Government. She acted as a visiting assistant professor in 1965–1966, and then an assistant professor and graduate advisor until 1969, when she was promoted to associate professor in the Department of Political Science. During her early years at IU, she assisted Vincent in the editing of the *Public Administration Review*. Shortly after the Workshop was formed, Lin was promoted to full professor. She served as chair of the Department of Political Science from 1980–1984, and acting chair from 1989–1990.

The concept of the application of knowledge in the social sciences to the issues of public policy is a foundation of the Workshop. The spirit of inquiry at the Workshop has been inspired by concepts put forth by several notable policy scholars, including the notions that policies could be regarded as hypotheses (Dewey 1938), and that reforms are the character of social experiments (Campbell 1969). Madison's observations, in *Federalist* 37 (Hamilton, Jay, and Madison [1788] n.d.), that the "merits of this Constitution" called for a "critical and thorough survey of the work of the convention" in "calculating its probable effects" (*ibid.*: 224) served as an invitation to inquiry for Vincent Ostrom. From Harold Lasswell's conception of the policy sciences (Lasswell and Lerner 1951) was drawn the importance of starting one's analysis with a careful definition of terms, as well as conscious attention to the development of an overarching framework within which specific applications can be located.

Early scholarship at the Workshop took its departure from several important and evolving intellectual traditions including: public choice, bounded rationality, and what would eventually evolve to be known as new institutional economics. The public choice literature of the early 1970s was characterized by social scientists using the basic structure of terms and postulates in economic theory and applying them to nonmarket decision making (e.g., Buchanan and Tullock 1962; Olson 1965; Tullock 1965). The use of economic reasoning to analyze processes of public choice was leading to a new apprecia-

tion for the analytical relevance of the theory developed by earlier political scientists including Hobbes, Hume, Rousseau, Hamilton, Madison, Tocqueville, and others. The application of economic reasoning to the analysis of public sector problems (i.e., public choice) was not new. Alexander Hamilton and James Madison employed it in *The Federalist Papers*, as did Alexis de Tocqueville and many others in eighteenth- and nineteenth-century political theory.²

The Ostroms and their early collaborators drew extensively on the example set by Herbert Simon, specifically his insistence on the relevance of the bounds within which all individuals must act. By accentuating the boundedly rational nature of human cognition, the Workshop approach deviates from the mainstream public choice literature, in which standard models of rational choice have been applied to nonmarket decision-making situations, without making any significant modifications in the choice model. As with bounded rationality, Workshop scholarship has drawn upon advances in new institutional economics including pressing the notion of Oliver Williamson's business-focused transaction-costs literature to consider not only the magnitude of transaction costs but understanding the human relationships that precipitate their presence. Contributions building upon the work of Douglass North regarding rules and institutions have also been advanced by Workshop scholars.

Organizational theory had emerged since the 1940s to provide an interdisciplinary approach for scholars to pursue a range of theoretical and empirical studies of human behavior in complex organizations found in the private and public sectors of society. However, in contrast to such classic analyses of bureaucratic organization by Simon, Lindblom, and Wildavsky, Workshop scholars chose to focus on the decision processes undertaken by groups of citizens themselves. This led to more of an emphasis on understanding ways in which communities came to share a common understanding of the problems and opportunities confronting them.

During the 1981–1982 academic year, Lin and Vincent Ostrom were invited to participate in a year-long research group on "Guidance, Control, and Performance Evaluation in the Public Sector" at the Center for Interdisciplinary Research, Bielefeld University, Germany. During their time in Bielefeld, they became acquainted with several intellectual traditions including continental European sociology, Austrian economics, German pioneering work on the theory of order, continental work in game theory in extensive form, and with the use of experimental methods of empirical research with regard to game theory. The publication of *Guidance, Control, and Evaluation in the Public Sector* edited

by Franz-Xaver Kaufmann, Giandomenico Majone, and Vincent Ostrom (1986) brought together the lessons of their joint experience.

Exposure to this multidisciplinary community of scholarship, which had critically focused on the nature of constitution of order in human societies, led to a reformulation of the mission of the Workshop toward a more explicit focus on comparative institutional analysis and development. Several changes that are reflected in the current structure of the Workshop were implemented upon the Ostroms' return to Bloomington. Key aspects of this shift in thinking included:

- Workshop research organized around the study of human institutions as they pertain to the nature and constituency of human societies;
- A shift in emphasis toward more mature scholars (the intellectual core of the Workshop was now concentrated at the post-doctoral level, while encouraging graduate students and exceptional undergraduate students to join that community of dialogue);
- Increased emphasis on the importance of contestability in the realm of ideas that apply to the organization of human institutions, and a search for underlying commonalities within different concepts, theories, and approaches to move toward deeper levels of inquiry about the constitution of order in human societies; and
- An explicit move to a more interdisciplinary approach less confined to political theory.

Pedagogical Innovations for Students, Visitors, and Collaborators

Among the original motivations for the formation of the Workshop was the desire to provide affiliated graduate students with the opportunity to function as colleagues in the pursuit of scholarly interests.³ Graduate students at the Workshop act as apprentices, learning the craft of scholarly research in addition to the formal courses and instructional activities of the doctoral program. Practical skills in field research, data analysis, and preparation of finished products leading to publication are important components of the apprentice's program. The studies of police services in metropolitan areas conducted in the mid-1970s and early 1980s, and the International Forestry Resources and Institutions (IFRI) seminar and training program, are excellent examples of how students benefit from the opportunity to test theoretical propositions with real-life empirical cases. In addition to obtaining field experience to complement the teaching

of theoretical concepts, the Workshop provides numerous other opportunities for students, visiting scholars, and faculty to interact in meaningful ways. For example, over the years, groups have self-organized around various research topics or themes for the presentation of works in progress or research findings, or for collaboration on research papers or proposals.

Scholarly interests at the Workshop were originally pursued in a year-long seminar, *Political Theory and Methodology: Institutional Analysis and Design*, conducted in cooperation with the International Development Research Center on the Bloomington campus. The course applied the rudiments of economic reasoning to the basic problems of political organization and focused on a number of theorists including Hobbes, Madison, Hamilton, Lenin, and Buchanan and Tullock. A book-length manuscript, *Conjectures on Institutional Analysis and Design: An Inquiry into Principles of Human Governance*, was completed in 1975 by Vincent Ostrom and Timothy Hennessey with some individual chapters contributed by students who had participated in the earlier seminar. Professor Harold Schneider from IU's Department of Anthropology cotaught one semester of this seminar with Vincent for several years when it was first initiated.

As noted above, the Ostroms' experience at Bielefeld University in the early 1980s motivated a shift to the more explicit consideration of comparative institutional analysis and development. An important part of this shift was to include visiting scholars at post-doctoral and equivalent professional levels from different parts of the world. A core seminar on *Patterns of Order and Development in Human Societies*, now known as the *Institutional Analysis and Development* seminar, was organized in an effort to explore elements in a common framework that would serve as a basis for inquiries with diverse foci and levels of analysis, including both micro and macro considerations. William Bianco, Michael McGinnis, Tun Myint, Elinor Ostrom, Vincent Ostrom, Armando Razo, Amos Sawyer, and John Williams have taught portions of the year-long seminar over the years. One of the defining features of the *Institutional Analysis and Development* seminar is the miniconference that takes place at the end of each semester. Papers prepared by students and visiting scholars are presented by faculty members, visitors, and senior graduate students. Critiques are offered and authors are given the opportunity to respond to reviewer comments. This approach has led to the further revision and subsequent publication of numerous papers. In the spring of 2009, the Workshop held its 49th miniconference.

An interesting and fruitful outgrowth of the apprentice training that the Workshop provides to students,

post-doctoral researchers, and visitors is the opportunity to return repeatedly to the Workshop for further learning, scholarly interaction, and contestation. A review of the lists of short- and long-term visitors over time finds many names repeated. Former students and other individuals become, in effect, nonresident fellows who continue to collaborate in a number of Workshop efforts and contribute to a growing scholarly product.⁴

Finally, the Workshop has had active participation by faculty across the College of Arts and Sciences and the Schools of Business, Public and Environmental Affairs, and Law at IU throughout the years.⁵ Faculty colleagues participate in research groups that are self-organizing and focus on a wide diversity of research topics, and supervise or sit on the committees of doctoral students. They frequently give early versions of their papers at the Workshop Colloquium, and participate in ongoing research projects.

III. The Evolution of Thought

Providing a comprehensive overview of the research program at the Workshop is a daunting task. Michael McGinnis, Professor of Political Science and Workshop Codirector, undertook just such an effort in the late 1990s. The result was three edited volumes of key works of Workshop and affiliated scholars: *Polycentric Governance and Development* (1999a), *Polycentricity and Local Public Economies* (1999b), and *Polycentric Games and Institutions* (2000). What follows is a summary of the major research initiatives undertaken at the Workshop drawing on the edited volumes prepared by McGinnis, and other summaries of important trends in the scholarly output of the Workshop.

In recent years, the Workshop has increasingly identified its research interests along two distinct tracks, linked together by the concept of institutional sustainability: natural resource management and democratic governance. These themes have appeared consistently throughout the Workshop's history, and continue to find expression in our current research activities, but they are very much built from the original concepts and research themes outlined below.

Polycentricity as a Conceptual Foundation of Institutional Analysis

More than ten years before the Workshop was established, the general concept of polycentric order was articulated in a classic article "The Organization of Government in Metropolitan Areas: A Theoretical Inquiry" (V. Ostrom,

Tiebout, and Warren 1961) published in the *American Political Science Review*. In this article, the prevailing emphasis on government as a unitary command structure was challenged. The general concept of a *polycentric order*—that multiple arenas, or centers of interaction and participation, need to be considered simultaneously—was put forth (McGinnis 1999b). Ostrom, Tiebout, and Warren introduced the distinction between the production of a public good or service and its provision by public authorities or some other group of actors. McGinnis (1999b) notes that though these terms are often used interchangeably in common discourse, the distinction is quite crucial. Production refers to the physical processes by which the good or service comes into existence, whereas provision is the process by which consumers obtain the good or service. Though only a minor factor in the consideration of private goods, the distinction between production and provision is very important for the case of public goods. When the production or provision of public goods is unsatisfactory to the electorate, voters may move elsewhere (as in Tiebout's 1956 model), vote officials out of office, exert other forms of political pressure, or organize to produce or provide public goods themselves (McGinnis 1999b).

Another important analytical distinction that is interwoven throughout the Workshop's research program is the importance of the nature of the good as private, public, toll, or common-pool resource. The argument put forth in V. Ostrom and E. Ostrom (1977a) is that the same institutional arrangements will not be appropriate for all kinds of goods and services. Where the market is an efficient institutional arrangement for the production and allocation of private goods, market mechanisms may fail when applied to the production and provision of common-pool resources (E. Ostrom 1990). The concept of a public economy, as analogous but not identical to a market economy, is put forth with a key element of the idea of a public economy being the ability of service providers to select producers operating at the most efficient scale of production (McGinnis 1999b). Ostrom and Ostrom (1977a) also introduced the concept of public service industries as a way of aggregating the public and private firms engaged together in producing services such as police and education. The related concept of coproduction, which suggests that for some types of goods and services, consumers who adopt a passive attitude may receive a lower-quality product, was developed more extensively in a year-long working group on coproduction (Parks et al. 1981). For example, the involvement of consumers is a requisite input for the production of high-quality education and health-related goods and services. Mitchell (1988) notes that the active involvement

of citizens in their own governance is one of the fundamental ways in which Workshop scholars have differentiated themselves from the broader community of public choice scholars.

McGinnis (1999b) notes that the concept of polycentricity emerges from a deep tradition within the U.S. political system, in particular, the political theory behind the design of the U.S. Constitution.⁶ In *The Intellectual Crisis in American Public Administration* ([1973] 2008), Vincent Ostrom critiques the fields of public administration for being dominated by a conception of centralized administration inconsistent with the foundational principles of American democracy as conceived by the founders. While the mainstreams of American political science and public administration have followed Woodrow Wilson's constitutional theory characterized by a monocentric system of unitary authority and bureaucratic structures, Vincent Ostrom calls for a closer look at a range of new policy alternatives that are more congenial to the theories of polycentric political systems characterized by the American separation of powers and overlapping jurisdictions. The influence of Tocqueville's observations of an underlying pattern of order beneath the confusing array of governing bodies in the United States is invoked.

Police Services as an Empirical Test of Polycentricity

With the theoretical foundations of polycentricity articulated, Lin Ostrom took on the task of empirically evaluating polycentricity. The problem was to take the theoretical conjectures about problems of metropolitan reform and conceptualize them as a set of hypotheses about the organization of local public economies and systems of governance in metropolitan areas (see E. Ostrom 1972). In a graduate seminar led by Lin on the topic of measuring public goods, students were charged with the task of determining a subject area to test the theory of polycentricity—police services were selected. This was a compelling subject for analysis, as police services are an area in which public jurisdictions at all levels of aggregation interact in complex ways.

The major question of the police research was whether police departments in urban areas should remain small and autonomous or should merge into mega-units, as had been happening to school districts all over the country. Lin Ostrom worked with Roger Parks, Gordon Whitaker, Dennis Smith, and several other graduate students to devise a survey that would measure the effectiveness of police departments in several areas. Workshop researchers sought information on multiple indicators of police services employing multiple methods includ-

ing surveys, participant observation, official data, and physical measures.

The first empirical examination of police services was conducted in Indianapolis where the Indianapolis city and Marion County governments had recently been consolidated to form a governing authority known as Unigov. Neighborhoods in Indianapolis that were serviced by the Indianapolis Police Department were matched with demographically similar independent communities that had maintained their own small police forces to measure differences in performance based upon the size of the production unit (E. Ostrom et al. 1973). The Indianapolis study refuted the prevalent “one size fits all, and it should be larger” theory of the 1960s. Workshop researchers found that citizens in smaller communities had higher levels of satisfaction with police than did residents in demographically similar neighborhoods serviced by larger police forces (E. Ostrom and Whitaker 1973).

To address concerns that the research findings from the Indianapolis study might not apply to all types of communities, Workshop researchers looked to the Chicago area to examine whether or not African American communities, which traditionally had poor relations with police forces, could achieve the same outcomes by relying upon smaller police forces. By comparing two small, independent villages in Cook County, Illinois, with three predominantly black neighborhoods in the city of Chicago, Workshop researchers were able to confirm that the Indianapolis research findings were robust. Citizens in the smaller communities received about the same level of services as those in Chicago, but the expenditures were fourteen times *less* in the small, independent communities than in the large Chicago Police Department (E. Ostrom and Whitaker 1974).

Additional police services research was conducted in St. Louis to test conflicting hypotheses about the effects of police force size and professional training upon the quality of police services supplied to residents in different neighborhoods (dissertations by McDavid, Parks, and Smith, respectively, were produced out of the research). In this study, analysis of medium-sized police forces had some advantages over small police forces. Analysis of citizen satisfaction indicated that large police units were not associated with high levels of satisfaction. This research validated the appropriateness of polycentric orders—different scales of production are appropriate for different aspects of police service delivery (McDavid 1979; Parks and Ostrom 1981; Parks 1979, 1982, 1985). The police services research program became less of a focal point of Workshop research after fifteen years of intensive activity. Ostrom, Parks, and others studied over eighty metropoli-

tan areas and discerned patterns of organization that could be applied to many other organizations and institutions.⁷

Institutional Analysis and Development (IAD) Framework

Before moving to a discussion of the Workshop's extensive research on common-pool resources, a very brief overview of the Institutional Analysis and Development (IAD) framework is warranted. The IAD framework was developed by Workshop scholars as an analytical tool for approaching the study of complex institutions and governance structures (Kiser and Ostrom 1982; Oakerson 1992; E. Ostrom, Gardner, and Walker 1994).

Workshop scholars—building on the foundations of Tocqueville, Lasswell, and others—have emphasized the importance of considering the physical nature of the good, the attributes of the community, and the institutional rules in use within their community as they try to solve problems related to their environment. The IAD framework differentiates between three levels of interaction—operational, collective choice, and constitutional—that function concurrently. At the operational level, concrete actions are undertaken by those individuals most directly affected, or by public officials. The actions of actors at the operational level impact the world in some observable outcome. Rules that define and constrain the actions of individuals and citizens in operational areas have been established at the collective-choice level. At the constitutional level lies the system that determines how the rules can be modified (McGinnis 1999a). The demarcation of the three levels illustrates that there are fundamental similarities among political processes at different levels of analysis. At each of the three levels, actors confront an action situation and must consider strategic options and role expectations at higher levels (McGinnis 1999a).

Common-Pool Resources

Given that both Vincent and Lin Ostrom began their professional careers conducting research on water or natural resource related public policy issues, it seemed only natural that the theoretical and analytical tools being developed at the Workshop would eventually return to these common-pool resource problems. A query from Paul Sabatier, a colleague who had been at Bielefeld with the Ostroms, about whether or not the set of rules that groundwater producers had developed in southern California was still performing well, prompted Workshop scholars to revisit these water-producer institutions (Blomquist 1987). Thus, in the mid-1980s, the research

focus of the Workshop turned to the study of how common-pool resource user groups throughout the world manage a diversity of common-pool resources. Fisheries, irrigation systems, and groundwater basins were the subjects of the first generation of Workshop common-pool resource studies.

In the late 1980s, inspired by the challenge of proving that there were alternatives beyond nationalization or privatization for dealing with commons situations as asserted by Hardin in his classic 1968 “Tragedy of the Commons” article, Workshop scholars set out to develop a broader theory of institutional arrangements for the effective governance and management of common-pool resources. A series of studies focused on common-pool resources were organized using a framework prepared by Ronald Oakerson (1986), and were presented at a meeting held in 1995 in Annapolis, Maryland, organized by the National Research Council panel on common property resource management. The papers were later published as an edited volume (see National Research Council 1986; Bromley et al. 1992). The rich data available in existing case studies precipitated the need for a synthesis of literature that had emerged out of multiple disciplines. Workshop scholars set out to develop a coding system that would allow for the transformation of detailed qualitative data into a structured database for empirical analysis. The IAD framework was used as the organizational foundation for the coding exercise (E. Ostrom 1990).

Bielefeld University would prove influential a second time, as Lin Ostrom returned there in the mid-1980s at the invitation of Reinhard Selten to write an initial draft of *Governing the Commons* (1990), which would become one of the best-known and most-cited outputs of the Workshop. The empirical analysis of case studies indicated that successful and enduring cases of common-pool resource management exhibited a number of common design principles, including mechanisms for monitoring and sanctioning the behavior of participants in the community, well-defined boundaries and others. An important implication of this finding for the potential for self-governing institutions is that cooperation requires some mechanism whereby individuals will not take advantage of opportunities for personal gain that will be harmful to others (McGinnis 1999a).

The use of game theory and laboratory experiments to understand how individuals behave in the context of diverse political economic institutions has been an important part of the Workshop's research program since the early 1980s. Workshop-affiliated colleagues have developed formal models of common-pool resource dilemmas (Gardner and Ostrom 1991; E. Ostrom and Gardner

1993; Walker, Gardner, and Ostrom 1990; E. Ostrom, Gardner, and Walker 1994) that could be tested in several empirical settings. An important way of testing the theoretical propositions has been in an experimental laboratory, where it is possible to change one element of an institutional structure at a time and examine the difference this makes in behavior and outcomes (Walker, Gardner, and Ostrom 1991; Sell and Wilson 1991; Herzberg and Wilson 1991; E. Ostrom and Walker 1991; E. Ostrom, Walker, and Gardner 1992; Walker and Gardner 1992; Weissing and Ostrom 1991, 1993). To further the scope of experimental methods at IU, a state-of-the-art interdisciplinary experimental laboratory funded by NSF and IU was opened in April 2004 in collaboration with the Departments of Economics, Geography, and Psychology. The Interdisciplinary Experimental Laboratory is housed in Woodburn Hall in the old Workshop Annex.

Equally important to the development of common-pool resource theory and empirical analysis have been field-level studies that indicate that individuals have an extensive repertoire of options from which they select different strategies given their understanding of the nature of the situation at hand (McGinnis 1999b). Common-pool resource research at the Workshop (Gibson, Williams, and Ostrom 2005; E. Ostrom et al. 1999) includes field studies that have examined aspects of the theory in different sectors, such as groundwater (Blomquist 1992; Blomquist and Ostrom 1985; Gardner, Moore, and Walker 1997), inshore fisheries (Sandberg 1991; Schlager 1990, 1994), irrigation (Tang 1991, 1992; E. Ostrom 1992; Lam, Lee, and Ostrom 1997; Benjamin et al. 1994), forests (Agrawal 1992, 1994; Poteete and Ostrom 2004), information as a common-pool resource (Hess and Ostrom 2003, 2007), and resilience and complexity (Janssen, Anderies, and Ostrom 2007).

Constitutional Order

The study of macro-level political and economic orders has also been a central component of the Workshop's research program. Of particular relevance to the overall theme of self-governing capabilities is the pursuit of conditions conducive to the establishment and maintenance of local capacities for self-governance and sustainable development (McGinnis 1999a). The focus of constitutional analysis is the implication of how society organizes itself at its most fundamental level. The constitutional level forms the most macro of the levels of analysis in the IAD framework and is a central component of any complete institutional analysis. Vincent Ostrom (1982) argues that it is important to understand the context within which policy debates take place; constitutional

order can either support or undermine the foundations for self-governance. Of primary concern to Workshop scholars has been the question of sovereignty, and the deleterious effects that unitary sovereignty or paternalistic governance can have on self-governing capabilities.

Many of the topics of constitutional order explored by Workshop-affiliated scholars can be thematically organized as great experiments or monumental disasters. Tai-Shuenn Yang's (1987) dissertation on "Property Rights and Constitutional Order in Imperial China" suggests that the periodic collapse of the imperial order accompanied a cycle of dynasties. Vincent Ostrom's (1991) *The Meaning of American Federalism: Constituting a Self-Governing Society* and Mark Sproule-Jones's (1993) *Governments at Work: Canadian Parliamentary Federalism and Its Public Policy Effects* also suggest that those great experiments are subject to substantial risks that might be transformed into monumental disasters. The analyses offered by Antoni Kaminski (1992) in *An Institutional Theory of Communist Regimes: Design, Function, and Breakdown*; Amos Sawyer (1992) on *The Emergence of Autocracy in Liberia: Tragedy and Challenge*; James Wunsch and Dele Olowu's (1995) *The Failure of the Centralized State: Institutions and Self-Governance in Africa*; and Brian Loveman's (1993) *The Constitution of Tyranny: Regimes of Exception in Spanish America* would suggest that experiments in constituting aggregate systems of order can yield monumental disasters.

Analysis of macro-level constitutional order suggests that national governments can either support and foster self-governing capabilities, or they can act in predatory ways, undermining the objectives of local communities. This finding is highlighted by work on centralized and decentralized systems of governance in Africa by Wunsch and Olowu (1995), Olowu and Wunsch (2004), and Olowu (1989). Though decentralization may seem congruent with self-governance, reforms often result in a change in decision-making power to more localized actors who are just as able to undermine self-governing capabilities (McGinnis 1999a).

IV. Major Activities

Workshop-Affiliated Research Programs

Several substantive research programs and initiatives are affiliated with the Workshop, including the International Forestry Resources and Institutions (IFRI) research program; the Center for the Study of Institutions, Population, and Environmental Change (CIPEC); and the Working Group on the Political Economy of Democratic Sustainability (PEDS).

CIPEC and the IFRI Program

IFRI was initially inspired by the Workshop's database on irrigation institutions, which illuminated how various kinds of governance arrangements affected the performance of irrigation systems (Tang 1992; Lam 1998). Marilyn Hoskins, the former head of the Forests, Trees and People Program at the United Nations Food and Agriculture Organization (FAO), inquired whether the Workshop might be willing to take the lead in establishing a research program to study forest resources and institutions throughout the world.

After several years devoted to designing and pretesting the IFRI survey instrument, a network of collaborating research centers (CRCs) evolved. Each of the CRCs uses the same methods and database to collect environmental and social data. Currently, there are collaborating research centers in Africa (Kenya, Tanzania, and Uganda), Asia (Nepal, India, and Thailand), Latin America (Bolivia, Colombia, Guatemala, and Mexico), and North America at Indiana University and the University of Michigan. IFRI methods use the IAD framework crafted by scholars at the Workshop. IFRI is an innovative and unique research program in that the survey instrument has been applied by each of the CRCs in several time periods. This allows for the characterization of changes in forests, institutions, and governance over time.

In keeping with the Workshop's tradition of merging the teaching of theoretical concepts with empirical application and research skills, an annual training program—the IFRI seminar—has been held at IU from 1994–2004, and is now held in alternating years at IU and the University of Michigan. During the two-month training period, visiting scholars and local PhD students conduct joint studies of local forest institutions. The goal is to learn to apply the concepts of the IFRI database in a field setting in southern Indiana or in southern Michigan. Also in keeping with Workshop tradition is the level of involvement between researchers and the communities that volunteer information about their physical, economic, and institutional characteristics. The research findings of the IFRI project are subsequently made available to local communities.

Several key findings have emerged out of the IFRI research project. First, based upon the analysis of several IFRI research sites over time, there is no conclusively superior institutional arrangement associated with successful forest management. Rather than government, communal, or private control emerging as the best way to manage forest resources, what appears to be most important are the specific rules in use and incentives of the actors involved in managing the forests. Second,

in cases where forests have been decentralized, there is evidence that a multitiered system—where actors at varying levels have a say in how the resource will be managed—is more effective than single layers of governance. Third, the most important single variable associated with better forest conditions around the world is regular monitoring and enforcement of forest users by others in the community and/or officials (see Gibson, McKean, and Ostrom 2000).

The IFRI research program was initiated and coordinated by the Workshop until 1996 when IU won a NSF special centers competition to establish CIPEC, which would use the IFRI research instrument as one of the core sets of measurement in all of its major sites. Throughout the late 1990s and early 2000s, IFRI has been cosponsored by the Workshop and CIPEC. As of 2009, the central administration of the IFRI program has moved to the new network headquarters at the University of Michigan, School of Natural Resources and Environment, where Arun Agrawal is an associate professor. Indiana University continues to offer training every other year, and will continue as one of the CRCs in the IFRI network.

The Working Group on the Political Economy of Democratic Sustainability (PEDS)

The Working Group on the Political Economy of Sustainable Democracy (PEDS) sponsors and coordinates research and training on the micro-foundations of sustainable democracy. The goal is to move toward interdisciplinary studies of democratic decision making in different contexts, from new or consolidating systems to established democracies and self-governing systems, by characterizing factors that shape processes and outcomes in a wide range of working democracies.

These goals extend both the substantive focus and the methodological pluralism that is the hallmark of the Workshop. The choice to invoke the concept of sustainability is deliberate and intended to resonate with the Workshop's leadership in the study of when individuals are likely to coordinate behavior to secure common-pool resources. We ask when, and under what conditions, citizens of democratic regimes—new and old—are likely to coordinate to build majorities to pursue shared goals.

The Workshop's focus on complexity also reminds us that generating democratic sustainability is not just a function of good constitutional choice. As Vincent Ostrom has argued, a deep and nuanced understanding of individual preferences, groups, and competing social, economic, and political structures is important for shaping outcomes from majority-rule decision making. The goal of this research group is to build on the interdisci-

plinary and area studies expertise present on campus to build a better understanding of the basic building blocks of democratic states.

The group held its first conference in early 2009, drawing together a number of prominent scholars in the field to discuss research directions and the future of this revitalized theme in Workshop research.

Bottom-Up Governance

In addition to its more theoretical research, the Workshop has a number of affiliates involved with the study and implementation of bottom-up governance processes. Long-time affiliate Amos Sawyer has been closely involved with the efforts of the Liberian state to recover from fourteen years of civil war. Since 2006, he has worked with the government of Ellen Johnson Sirleaf as chair of the Governance Commission (formerly the Governance Reform Commission) to reform numerous aspects of governance in Liberia. This effort has brought him into contact with decentralization, land, security, corruption, and natural resource issues, among other things. Alumni Wal and Julia Duany are participating in similar efforts in the Sudan, with Wal serving the Southern Sudan legislature and Julia appointed by the President of Southern Sudan as the Undersecretary of the Ministry of Parliamentary Affairs—the first woman to serve in this position. IU affiliates like Lauren Morris Maclean also maintain close ties to the challenges associated with the implementation of bottom-up governance. Through this work, the Workshop's theoretical foundations—such as the IAD framework and the concept of polycentricity—are constantly being rethought and revitalized as they are applied to constantly changing contexts.

Experimental Methods

Complementing and contributing to the work in institutional analysis is the Workshop's use of experimental research. Laboratory experiments in the social sciences are central to exploring linkages between theory, institutions, and behavior. Workshop colleagues are centrally involved in utilizing and directing the Interdisciplinary Experimental Laboratory on the IU campus and have a new NSF-funded project with James Cox of Georgia State University that will extend prior work on common-pool resource and public goods experiments.

Affiliated Centers around the World

In addition to its own research programs, the Workshop has served as a model for a number of research centers

throughout the world. The Center for the Study of Institutional Diversity was established at Arizona State University in 2008 with the purpose of using agent-based modeling, laboratory research, fieldwork, and other tools to examine linked social-ecological systems. Colleagues at Renmin University in China have organized the Workshop in Institutional Analysis and Public Policy (WIAPP) as a forum for Workshop concepts as they apply to China. Workshop alumni Dr. Paul Aligica established a similar center, the Center for Institutional Analysis and Development (CIAD), in Bucharest, Romania. The center involves professors, scholars, and students from Bucharest University and the National School of Political Studies and Public Administration (NSPSPA) in “a research, education and outreach organization building a bridge between theoretical developments in economics, political science, legal studies and organizational sciences, and their public policy and management applications.” Workshop visiting scholar Dr. Cheibane Coulibaly, President of Mande Bukari University in Mali, has initiated an effort to create a seminar on institutional analysis with a permanent room and adjacent facilities devoted to Workshop materials. With time and investment, we hope to work with Dr. Coulibaly to develop this initial idea into a center similar to the ones in China and Romania.

Workshop Colloquium Series

One of the enduring foundations of the Workshop has been the weekly colloquium series, which commenced in 1973 and has taken place during every fall and spring semester since then. In April 2009, the Workshop closed out the academic year with its 901st colloquium. Vincent Ostrom, in his original memo regarding the establishment of the Workshop, noted that “productive inquiry is facilitated by opportunities to expound ideas which can be subject to the critical scrutiny of colleagues sharing similar intellectual interests.” Those who have attended colloquium sessions know the format—questions for clarification are encouraged during the course of the presentation so that important terminology and methodological points can be well understood. Further questions and contestations are welcome after the presenters have completed their talks.

The Workshop colloquium series has provided a forum for a breadth of presenters and topics over the years. One of the most striking characteristics of the series is the dynamic group of presenters during the course of any semester. A sampling of notable scholars who have given colloquium presentations include:

- Garrett Hardin, “From the Tragedy of the Commons to the Management of the Commons,” 1976
- William Riker, “A Confrontation between the Theory of Social Choice and the Theory of Democracy,” 1978; “Campaign for the Constitution,” 1984
- Kenneth Shepsle, “The Political Economy of Benefits and Costs: A Neo-Classical Approach to the Politics of Distribution,” 1980; “The Institutional Foundations of Committee Power,” 1985
- William Mitchell, “Blacksburg, Bloomington, and Rochester: Impact of Public Choice on Political Science,” 1983
- Norman Uphoff, “Developing Water Management Institutions in Sri Lanka,” 1985
- Vernon Ruttan, “Toward a Theory of Induced Institutional Change,” 1986
- Robert Wade, “Industrial Policy in East Asia: Does it Lead or Follow the Market,” 1987
- Oliver Williamson, “The Logic of Economic Organization,” 1987
- James Coleman, “Constitutions and the Construction of Corporate Actors,” 1988
- Douglass North, “Shared Mental Models: Ideologies and Institutions,” 1993
- Samuel Bowles, “Group Conflicts and Cultural Evolution,” 2000
- Amartya Sen, “The Need for a New Theory of Justice,” 2006
- Robert Keohane, “Anti-Americanisms in World Politics,” 2006
- Thomas Schelling, “What is Game Theory: A Social Science Reply,” 2008

In any one semester, these and other renowned scholars present back-to-back with senior doctoral students and visiting scholars, among others.

In essence, the scholars invited to participate in the colloquium series over the years have echoed the themes of the Workshop’s research program. In the late 1970s and early 1980s, there were several presentations that reflected the interest of Workshop and affiliated scholars on the topics of public choice, federalism, and understanding the production and provision of public services. Throughout the 1980s, presentations on experimental game-theoretic methods, constitutional choice, and a diversity of collective-action dilemmas from around the globe were among the topics that repeatedly emerged in the colloquium series. During this time, Workshop scholars struggled with defining and understanding polycentric systems, and the decentralization and recentralization of public service provision. The Workshop’s

emphasis on common-pool resources—particularly irrigation systems and forest management—is reflected in the colloquia that took place throughout the 1990s and into the current decade. In addition, the broadening interests of Workshop scholars in problems in developing and transition economies around the world, including applications of Tocquevillian analytics to understanding self-governance in various countries and cultural contexts, emerged in the colloquium series. Though shifts in the emphasis of the Workshop research program can be discerned from a review of the colloquia series, threads of continuity are also observed throughout the series’ history. Understanding public service production and provision, common-pool resource dilemmas, self-governance, and the methods for reaching greater understanding of the dilemmas of human institutions are present throughout the colloquia presentations.

Workshop Publications Program

The vibrancy of the Workshop is well reflected by its vigorous publications program. In recent years, affiliates within Indiana University have published an average of four to six books per year, in addition to countless articles and book chapters, with increasing interest by major publishing houses. Examples of recent books that demonstrate the breadth of Workshop research include:

- Elinor Ostrom, *Understanding Institutional Diversity* (Princeton University Press, 2005)
- Clark Gibson, Krister Andersson, Elinor Ostrom, and Sujai Shivakumar, *The Samaritan’s Dilemma* (Oxford University Press, 2005)
- Charlotte Hess and Elinor Ostrom, *Understanding Knowledge as a Commons: From Theory to Practice* (MIT Press, 2007)
- Catherine Tucker, *Changing Forests: Collective Action, Common Property, and Coffee in Honduras* (Springer, 2008)
- Aurelian Craiutu and Sheldon Gellar, *Conversations with Tocqueville: The Global Democratic Revolution of the Twenty-First Century* (Lexington Books, 2009)
- Paul Aligica and Peter Boettke, *Challenging Institutional Analysis and Development: The Bloomington School* (Routledge, 2009)

Wider exposure of the culmination of the Workshop’s diverse scholarship, and dedicated commitment by numerous staff and collaborators, are an indication that the innovations of the Workshop are being fully realized.

Workshop Visiting Scholars Program

Also adding to the sense of innovation at the Workshop is its active visiting scholars program.⁸ Visitors from all over the world add a constant sense of newness to the Workshop's atmosphere, and their contribution is an essential part of the Workshop's ongoing tradition of dialogue. At any given time during the academic year, the Workshop hosts an average of six to ten long-term visitors from affiliated organizations, as well as numerous short-term visitors throughout the year. Ongoing relationships with partners like Humboldt University in Germany, Renmin University in China, and Makerere University in Uganda have brought us multiple visitors over the years. Other visitors have hailed from Australia, Colombia, Costa Rica, France, India, Nepal, Nigeria, Norway, South Korea, Sweden, and numerous other countries around the world.

V. The Workshop Research Library, Facilities, and Staff

The level of research and administrative support required to keep the Workshop running smoothly over the years has been achieved by building a state-of-the-art research library, and amassing facilities sufficient to house scholars and provide an institutional base for Workshop courses, conferences, and regular working groups. The collegial atmosphere of the Workshop is unique and has provided both a home and a workplace for Workshop-affiliated researchers over the years. Perhaps most importantly, the success of the Workshop has been backed by a supportive and dedicated staff who have worked tirelessly over the years to see that the objectives of the Workshop are met.

Workshop Research Library

Workshop colleagues have always shared a deep belief in the importance of collecting, archiving, and disseminating high-quality research literature. The Workshop Library, initially maintained by cofounders Elinor and Vincent Ostrom, has been an intricate part of Workshop activities since its founding.⁹ Fenton Martin was the first Workshop librarian, on a half-time basis shared with the Department of Political Science. She initiated the search for materials related to common-pool resources soon after the 1985 scholarly meeting on this topic in Annapolis. The Workshop Research Library collection was centered on the study of institutions, with focus areas in political economy, constitutional analysis, federalism, game theory, governance systems, urban studies, and common-pool

resources, including an emphasis on irrigation systems and forestry resources. Rather than duplicate the holdings in other IU libraries, the focus of the Workshop Research Library has been to collect a wide diversity of materials related to core Workshop research interests.

When the Department of Political Science promoted Fenton to a full-time position, the Workshop was fortunate to be able to employ Charlotte Hess as a full-time librarian and director, who stayed at the Workshop for sixteen years before departing to take a position at Syracuse University in 2008. The Workshop Research Library grew significantly and branched off in new and innovative directions under Charlotte's leadership; since Charlotte's departure, Emily Castle has served as Library Director and has continued to innovate and improve the library. The library serves as a resource center for IU and Workshop faculty, students, staff, and visitors. The library's main reading room and core collections are housed on the third floor of 513 N. Park Avenue. Collections and electronic equipment are also housed in seven other rooms in two of the Workshop's four buildings. The facility includes study carrels, discussion tables and meeting areas, online public computers, printers, and scanners.

The library collections are unique in their scope, containing books, journals, articles, papers, and reports supporting or resulting from the many Workshop research projects and theoretical interests. The library contains 9,000 books and reports; almost 50,000 articles, pre-prints, and working papers; and 380 runs of newsletters, journals, and newspapers. The library's unique database, however, contains over 82,000 records. The records include details such as chapters-in-books and over 25,000 abstracts. In addition, it serves as a *virtual library*, including full-records on relevant materials in other IU libraries.

The library has evolved into one of the premier resources for studies on the commons, institutions, and collective action. A unique aspect of its interdisciplinary collection is that it brings together a large body of the world's grey literature on the commons, as well as published books and serials. The library has also published several volumes of authoritative bibliographies, beginning with Martin's 1989 volume, "Common Pool Resources and Collective Action," with 3,500 citations, to the most recent online edition of *The Comprehensive Bibliography of the Commons* (July 2008), a searchable multilingual, interdisciplinary database with over 57,500 records and over 16,700 abstracts.

Since 1993, the central focus of the library collections is the rapidly growing field of the "commons": interdisciplinary perspectives on the question of *how people jointly manage shared resources*. Known throughout

the world as an epicenter for the study of the commons, the library's mission is to supply materials and services to local, visiting, and remote scholars. The library now contains the world's largest collection on the commons. The commons collection contains books, articles, and papers on the study of shared resources. The unifying thread throughout this collection is the focus on the *relationship between resources and human behaviors, how rules affect outcomes*.

The Digital Library of the Commons (DLC) (<http://dlc.dlib.indiana.edu/>) is an innovative, multifaceted digital library intended to serve as a gateway to the international literature on the commons and common-pool resources (CPRs). The purpose of the digital library is to make both recent and historical CPR research and materials globally available to developing-country researchers as well as to those in the developed world. For scholars without adequate information-technology capabilities, DLC staff will digitize and submit their works upon request. The vision of the DLC grew out of the international, interdisciplinary nature of scholarly research on the commons. This growing area of scholarly concern is often built on international collaborations of scientists—teams working together from both the developed and the developing world. Building library resources for the study of the commons and international environmental research has made particular dilemmas apparent: the inequitable access to scholarly resources between scholars in the developed and the developing world; the difficulty of building new systems of information archiving among primary researchers; and the problems of information provision of local information in developing countries are just some of these dilemmas.

Workshop Facilities

The Workshop was first located on the second floor of Woodburn Hall. In 1974, the Workshop moved from Woodburn Hall to Morgan Hall on the north side of campus, where it occupied seventeen rooms. Due to growth in the number of scholars and staff throughout the 1970s, a move to a larger facility was requested. In 1978, the Workshop would be housed independently for the first time, occupying a house at 814 E. Third Street. Eventually, an annex was added on Atwater Avenue.

In 1983, the Workshop moved to its present location in an old fraternity house at 513 N. Park Avenue; it has maintained its home in this cozy building ever since. The main building on Park is now surrounded by three other buildings located at 521 N. Park, 515 N. Park, and 505 N. Park, which house visiting scholars, graduate students, and Workshop staff.

Workshop Staff

Throughout its history, the Workshop has been incredibly fortunate to have a very able staff. The high level of productivity of the Workshop simply could not be maintained without the energy, thoughtfulness, and active participation of these wonderful colleagues.

Patty Lezotte has been a core foundation for the Workshop for over 30 years. The many thank-you's and acknowledgements of her excellent editing skills found in the forewords and footnotes of the Workshop's extensive publications—and her eagle eye for errors and wonderful suggestions for better phrasing—are famous among all Workshop scholars. The cheerfulness and energy she brings are always remarkable.

Gayle Higgins is another long-time staff member who has been with the Workshop for 20 years. She has provided executive secretary services for Vincent Ostrom, Michael McGinnis, Amos Sawyer, and James Walker as well as somehow coping with the ever-present changes in four buildings. The WOW (Workshop on the Workshop) conference series that has been held every five years, and many other Workshop events, could not have happened as efficiently without her foresight and organizational skills. Gayle also handles the frequent comings and goings of the Workshop's many short-term visitors.

At the current time, we are also blessed with the thoughtful and creative energies of Nicole Todd and David Price. Nicole somehow finds a way of keeping order in Lin's life and does so cheerfully. Nicole manages Lin's calendar, her complicated travel schedule, and her long to-do list. David, a more recent addition and the Workshop's receptionist, is the smiling public face of the Workshop.

No research institute could run without effective information technology staff. Ray Eliason has been with the Workshop since 1999 and has kept the Workshop current in terms of computer hardware and programming. His loyalty and hard work have been integral to ensuring a constant flow of scholarly output over the years.

Carol Buszkiewicz joined the Workshop as fiscal officer in 2004 after serving in a similar position at our partner center, the Center for the Study of Institutions, Population, and Environmental Change (CIPEC). Carol ably handles all budget issues, administers and monitors all Workshop accounts, and manages the long-term visiting scholars program; she is known affectionately by some as "Super Carol."

Jacqui Bauer assumed the newly created role of assistant director in early 2005, and continues to define this role as she goes along. The assistant director acts as liaison between the directors, visiting scholars, staff, and

graduate students, as well as assisting with grantwriting, fundraising, and publicity. Jacqui also contributes to Workshop research, both as project manager and as a participant in data collection and analysis.

VI. The Road Ahead

The Workshop in Political Theory and Policy Analysis has been the center of 35 years of theoretical advances, research experiences, and insights. Growing awareness of the importance of governance and institutional analysis to solving many of the major dilemmas facing human societies in the twenty-first century suggests that there will be increased demand for Workshop outputs and expertise in the future. Mitchell (1988), in his discussion of the schools of public choice, indicated that the innovations of the Workshop were not yet fully realized, but most certainly would be in the future.

The Workshop is now in the midst of a transition from its long-time leaders, Vincent and Lin Ostrom, to the next generation.¹⁰ In the summer of 2009, Lin transitioned from her role as Codirector to the newly created role of Senior Research Director, and leadership transferred to long-time affiliates and colleagues Michael McGinnis and James Walker. Meanwhile, an even younger generation of Workshop scholars continues to grow and become more involved, promising continued innovations in scholarship and interdisciplinary research.

Notes

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1. In the early years, funds to support the Workshop came entirely from outside sources including the National Science Foundation, the National Institute of Mental Health, and the National Water Commission. Eventually, the Workshop became an official research center and received a university budget from the Office of Research and Advanced Studies at Indiana University, which has evolved into the Office of Vice President for Research. During the last 35 years, NSF has been a major source of funding for projects undertaken at the Workshop. In addition, various grants have been awarded by: the Ford Foundation, the MacArthur Foundation, the Food and Agriculture Organization of the United Nations, the Earhart Foundation, the Bradley Foundation, the Mellon Foundation,

the U.S. Agency for International Development, the U.S. Institute of Peace, the U.S. Department of Justice, the U.S. Forest Service, the U.S. Geological Survey, and others. In 1984, the Tocqueville Fund for the Study of Human Institutions was established at the IU Foundation, with many Workshop colleagues making contributions. The endowment is a core part of Workshop funding, supporting visiting scholars and graduate students. In addition, three other IU Foundation endowments have been established: the Elinor Ostrom–Johan Skytte Prize Fellowship, the Workshop Research Chair for Visiting Scholars in Institutional Analysis and Development, and the Matching the Promise Workshop Graduate Fellowship.

2. The content of the Institutional Analysis and Development (IAD) framework was drawn from analogy to the classic work of Alexis de Tocqueville. Three major categories that jointly define the action situation in the IAD framework, the nature of the good, the rules in use, and the attributes of community, were directly inspired by the general categories of explanatory factors used by Tocqueville in his effort to understand the basis for democracy in America.

3. See appendix A for a list of dissertations completed by students supervised by Workshop-Affiliated Faculty.

4. See appendix B for a list of External Workshop-Affiliated Faculty currently engaged in the intellectual enterprise of the Workshop.

5. See appendix C for a list of current Indiana University Workshop-Affiliated Faculty.

6. *The Political Theory of a Compound Republic* (V. Ostrom [1971] 2008) was an effort to reconstruct the theory used to conceptualize the design of the U.S. Constitution from the arguments advanced by Alexander Hamilton and James Madison in *The Federalist* ([1788] n.d.).

7. Parallel efforts were initiated by NSF to undertake large-scale studies of solid-waste disposal and fire protection as well as police services in some 80 metropolitan areas (MacGillivray 1976; E. Ostrom, Parks, and Whitaker 1978; Savas 1977, 1987). Studies of neighborhood and community in urban affairs (O'Brien 1975) and of the public economy of water resource development (V. Ostrom 1971; V. Ostrom and E. Ostrom 1977b) are complementary to the Police Services Studies.

8. See appendix D for a list of long-term Visiting Scholars.

9. The library started as a filing cabinet filled with clippings from newspapers and magazines related to ongoing research and teaching interests. Many of these original clippings are now in the Indiana University Archives.

10. See appendix E for a summary of the numerous awards that Elinor Ostrom and Vincent Ostrom have received over the years for their scholarly contributions.

References

- Agrawal, Arun. 1992. "Risks, Resources, and Politics: Studies in Institutions and Resource Use from India." PhD diss., Duke University.
- . 1994. "Rules, Rule Making, and Rule Breaking: Examining the Fit between Rule Systems and Resource Use."

- In *Rules, Games, and Common-Pool Resources*, ed. Elinor Ostrom, Roy Gardner, and James Walker (with Arun Agrawal, William Blomquist, Edella Schlager, and Shui Yan Tang), 267–82. Ann Arbor: University of Michigan Press.
- Benjamin, Paul, Wai Fung Lam, Elinor Ostrom, and Ganesh Shivakoti. 1994. *Institutions, Incentives, and Irrigation in Nepal*. Decentralization: Finance & Management Project Report. Burlington, VT: Associates in Rural Development.
- Blomquist, William. 1987. “Getting Out of the Trap: Changing an Endangered Commons to a Managed Commons.” PhD diss., Indiana University.
- . 1992. *Dividing the Waters: Governing Groundwater in Southern California*. San Francisco, CA: ICS Press.
- Blomquist, William, and Elinor Ostrom. 1985. “Institutional Capacity and the Resolution of a Commons Dilemma.” *Policy Studies Review* 5(2):383–93.
- Bromley, Daniel, David Feeny, Margaret McKean, Pauline Peters, Jere Gilles, Ronald Oakerson, C. Ford Runge, and James Thomson, eds. 1992. *Making the Commons Work: Theory, Practice, and Policy*. San Francisco, CA: ICS Press.
- Buchanan, James, and Gordon Tullock. 1962. *The Calculus of Consent: Logical Foundations of Constitutional Democracy*. Ann Arbor: University of Michigan Press.
- Campbell, Donald T. 1969. “Reforms as Experiments.” *American Psychologist* 24(4):409–29.
- Dewey, John. 1938. *Logic: The Theory of Inquiry*. New York: Holt.
- Gardner, Roy, Michael Moore, and James Walker. 1997. “Governing a Groundwater Commons: A Strategic and Laboratory Analysis of Western Water Law.” *Economic Inquiry* 35:218–34.
- Gardner, Roy, and Elinor Ostrom. 1991. “Rules and Games.” *Public Choice* 70(2):121–49.
- Gibson, Clark, Margaret A. McKean, and Elinor Ostrom, eds. 2000. *People and Forests: Communities, Institutions and Governance*. Cambridge, MA: MIT Press.
- Gibson, Clark, John Williams, and Elinor Ostrom. 2005. “Local Enforcement and Better Forests.” *World Development* 33(2):273–84.
- Hamilton, Alexander, John Jay, and James Madison. [1788] n.d. *The Federalist*. Ed. Edward M. Earle. New York: Modern Library.
- Hardin, Garrett. 1968. “The Tragedy of the Commons.” *Science* 162:1243–48.
- Herzberg, Roberta, and Rick Wilson. 1991. “Costly Agendas and Spatial Voting Games: Theory and Experiments on Agenda Access Costs.” In *Laboratory Research in Political Economy*, ed. Thomas R. Palfrey, 169–99. Ann Arbor: University of Michigan Press.
- Hess, Charlotte, and Elinor Ostrom. 2003. “Ideas, Artifacts, and Facilities: Information as a Common-Pool Resource.” *Law and Contemporary Problems* 66(1&2):111–45.
- Hess, Charlotte, and Elinor Ostrom, eds. 2007. *Understanding Knowledge as a Commons: From Theory to Practice*. MIT Press.
- Janssen, Marco, John M. Anderies, and Elinor Ostrom. 2007. “Robustness of Social-Ecological Systems to Spatial and Temporal Variability.” *Society and Natural Resources* 20(4):307–22.
- Kaminski, Antoni. 1992. *An Institutional Theory of Communist Regimes: Design, Function, and Breakdown*. San Francisco, CA: ICS Press.
- Kaufmann, Franz-Xaver, Giandomenico Majone, and Vincent Ostrom, eds. 1986. *Guidance, Control, and Evaluation in the Public Sector*. Berlin and New York: de Gruyter.
- Kiser, Larry, and Elinor Ostrom. 1982. “The Three Worlds of Action: A Metatheoretical Synthesis of Institutional Approaches.” In Elinor Ostrom, ed. *Strategies of Political Inquiry*, 179–222. Beverly Hills, CA: Sage.
- Lam, Wai Fung. 1998. *Governing Irrigation Systems in Nepal: Institutions, Infrastructure, and Collective Action*. Oakland, CA: ICS Press.
- Lam, Wai Fung, Myungsuk Lee, and Elinor Ostrom. 1997. “The Institutional Analysis and Development Framework: Application to Irrigation Policy in Nepal.” In *Policy Studies and Developing Nations: An Institutional and Implementation Focus*, vol. 5, ed. Derick Brinkerhoff, 53–85. Greenwich, CT: JAI Press.
- Lasswell, Harold D., and Daniel Lerner, eds. 1951. *The Policy Sciences*. Stanford, CA: Stanford University Press.
- Loveman, Brian. 1993. *The Constitution of Tyranny: Regimes of Exception in Spanish America*. Pittsburgh, PA: University of Pittsburgh Press.
- MacGillivray, Lois. 1976. *Evaluating the Organization of Service Delivery: Fire. Technical Report of Phase I and IIa*. Durham, NC: Research Triangle Institute.
- McDavid, James C. 1979. *Police Cooperation and Performance: The Greater St. Louis Interlocal Experience*. University Park: Pennsylvania State University Press.
- McGinnis, Michael D., ed. 1999a. *Polycentric Governance and Development: Readings from the Workshop in Political Theory and Policy Analysis*. Ann Arbor: University of Michigan Press.
- , ed. 1999b. *Polycentricity and Local Public Economies: Readings from the Workshop in Political Theory and Policy Analysis*. Ann Arbor: University of Michigan Press.
- , ed. 2000. *Polycentric Games and Institutions: Readings from the Workshop in Political Theory and Policy Analysis*. Ann Arbor: University of Michigan Press.
- Mitchell, William C. 1988. “Virginia, Rochester, and Bloomington: Twenty-Five Years of Public Choice and Political Science.” *Public Choice* 56(2):101–19.
- National Research Council. 1986. *Proceedings of the Conference on Common Property Resource Management*. Washington, DC: National Academies Press.
- Oakerson, Ronald. 1986. “A Model for the Analysis of Common Property Problems.” In National Research Council, *Proceedings of the Conference on Common Property Resource Management*. Washington, DC: National Academies Press, 13–30.
- . 1992. “Analyzing the Commons: A Framework.” In *Making the Commons Work: Theory, Practice, and Policy*, ed. Daniel Bromley et al., 41–59. San Francisco, CA: ICS Press.
- O’Brien, David. 1975. *Neighborhood Organization and Interest-Group Processes*. Princeton, NJ: Princeton University Press.

- Olowu, Dele. 1989. "Local Institutes and Development: The African Experience." *Canadian Journal of African Studies* 23(2):201–31.
- Olowu, Dele, and James S. Wunsch. 2004. *Local Governance in Africa: The Challenges of Democratic Decentralization*. Boulder, CO: Lynne Rienner.
- Olson, Mancur. 1965. *The Logic of Collective Action: Public Goods and the Theory of Groups*. Cambridge, MA: Harvard University Press.
- Ostrom, Elinor. 1972. "Metropolitan Reform: Propositions Derived from Two Traditions." *Social Science Quarterly* 53:474–93.
- . 1990. *Governing the Commons: The Evolution of Institutions for Collective Action*. New York: Cambridge University Press.
- . 1992. *Crafting Institutions for Self-Governing Irrigation Systems*. San Francisco, CA: ICS Press.
- Ostrom, Elinor, William Baugh, Richard Guarasci, Roger B. Parks, and Gordon P. Whitaker. 1973. *Community Organization and the Provision of Police Services*. Beverly Hills, CA: Sage.
- Ostrom, Elinor, Joanna Burger, Christopher Field, Richard Norgaard, and David Policansky. 1999. "Revisiting the Commons: Local Lessons, Global Challenges." *Science* 284(5412):278–82.
- Ostrom, Elinor, and Roy Gardner. 1993. "Coping with Asymmetries in the Commons: Self-Governing Irrigation Systems Can Work." *Journal of Economic Perspectives* 7(4):93–112.
- Ostrom, Elinor, Roy Gardner, and James Walker, with Arun Agrawal, William Blomquist, Edella Schlager, and Shui Yan Tang. 1994. *Rules, Games, and Common-Pool Resources*. Ann Arbor: University of Michigan Press.
- Ostrom, Elinor, Roger B. Parks, and Gordon P. Whitaker. 1978. *Patterns of Metropolitan Policing*. Cambridge, MA: Ballinger.
- Ostrom, Elinor, and James Walker. 1991. "Communication in a Commons: Cooperation without External Enforcement." In *Laboratory Research in Political Economy*, ed. Thomas R. Palfrey, 287–322. Ann Arbor: University of Michigan Press.
- Ostrom, Elinor, James Walker, and Roy Gardner. 1992. "Covenants With and Without a Sword: Self-Governance is Possible." *American Political Science Review* 86(2):404–17.
- Ostrom, Elinor, and Gordon P. Whitaker. 1973. "Does Local Community Control of Police Make a Difference? Some Preliminary Findings." *American Journal of Political Science* 17(1):48–76.
- Ostrom, Elinor, and Gordon P. Whitaker. 1974. "Community Control and Governmental Responsiveness: The Case of Police in Black Neighborhoods." In *Improving the Quality of Urban Management*, ed. Willis Hawley and David Rogers, 303–34. Beverly Hills, CA: Sage.
- Ostrom, Vincent. 1971. *Institutional Arrangements for Water Resource Development — With Special Reference to the California Water Industry*. Springfield, VA: National Technical Information Service.
- Ostrom, Vincent. 1982. "A Forgotten Tradition: The Constitutional Level of Analysis." In *Missing Elements in Political Inquiry: Logic and Levels of Analysis*, ed. Judith A. Gillespie and Dina A. Zinnes, 237–52. Beverly Hills, CA: Sage.
- . [1973] 2008. *The Intellectual Crisis in American Public Administration*. 2d ed. Tuscaloosa: University of Alabama Press.
- . [1971] 2008. *The Political Theory of a Compound Republic: Designing the American Experiment*. Rev. ed. Lincoln: University of Nebraska Press.
- . 1991. *The Meaning of American Federalism: Constituting a Self-Governing Society*. San Francisco, CA: ICS Press.
- Ostrom, Vincent, and Timothy Hennessey. 1975. *Conjectures on Institutional Analysis and Design: An Inquiry into Principles of Human Governance*. Preliminary draft ms. Bloomington: Indiana University, Workshop in Political Theory and Policy Analysis.
- Ostrom, Vincent, and Elinor Ostrom. 1977a. "Public Goods and Public Choices." In *Alternatives for Delivering Public Services: Toward Improved Performance*, ed. E. S. Savas, 7–49. Boulder, CO: Westview Press.
- Ostrom, Vincent, and Elinor Ostrom. 1977b. "A Theory for Institutional Analysis of Common Pool Problems." In *Managing the Commons*, ed. Garrett Hardin and John Baden, 157–72. San Francisco, CA: W. H. Freeman.
- Ostrom, Vincent, Charles M. Tiebout, and Robert Warren. 1961. "The Organization of Government in Metropolitan Areas: A Theoretical Inquiry." *American Political Science Review* 55:831–42.
- Parks, Roger B. 1979. "Assessing the Influence of Organization on Performance: A Study of Police Services in Residential Neighborhoods." PhD diss., Indiana University.
- . 1982. "Citizen Surveys for Police Performance Assessments: Some Issues in Their Use." *The Urban Interest* 4(1):17–26.
- . 1985. "Metropolitan Structure and Systemic Performance: The Case of Police Service Delivery." In *Policy Implementation in Federal and Unitary Systems*, ed. Kenneth Hanf and Theo A.J. Toonen, 161–91. Dordrecht, the Netherlands: Martinus Nijhoff.
- Parks, Roger B., Paula Baker, Larry Kiser, Ronald J. Oakerson, Elinor Ostrom, Vincent Ostrom, Stephen L. Percy, Martha Vandivort, Gordon P. Whitaker, and Rick Wilson. 1981. "Consumers as Coproducers of Public Services: Some Economic and Institutional Considerations." *Policy Studies Journal* 9:1001–11.
- Parks, Roger B., and Elinor Ostrom. 1981. "Complex Models of Urban Service Systems." In *Urban Policy Analysis: Directions for Future Research*, ed. Terry N. Clark, 171–99. Beverly Hills, CA: Sage.
- Poteete, Amy, and Elinor Ostrom. 2004. "Heterogeneity, Group Size and Collective Action: The Role of Institutions in Forest Management." *Development and Change* 35(3) (June 2004): 435–61.
- Sandberg, Audun. 1991. "Fish for All: CPR-Problems in North-Atlantic Environments." Working Paper. Bloomington: Indiana University, Workshop in Political Theory and Policy Analysis.
- Savas, E. S. 1977. *The Organization and Efficiency of Solid Waste Collection*. Lexington, MA: Lexington Books.

-
- . 1987. *Privatization: The Key to Better Government*. Chatham, NJ: Chatham House.
- Sawyer, Amos. 1992. *The Emergence of Autocracy in Liberia: Tragedy and Challenge*. San Francisco, CA: ICS Press.
- Schlager, Edella. 1990. "Model Specification and Policy Analysis: The Governance of Coastal Fisheries." PhD diss., Indiana University.
- . 1994. "Fishers' Institutional Responses to Common-Pool Resource Dilemmas." In *Rules, Games, and Common-Pool Resources*, ed. Elinor Ostrom, Roy Gardner, and James Walker, with Arun Agrawal, William Blomquist, Edella Schlager, and Shui Yan Tang. Ann Arbor: University of Michigan Press.
- Sell, Jane, and Rick K. Wilson. 1991. "Levels of Information and Contributions to Public Goods." *Social Forces* 70(1):107–24.
- Sproule-Jones, Mark. 1993. *Governments at Work: Canadian Parliamentary Federalism and Its Public Policy Effects*. Toronto: University of Toronto Press.
- Tang, Shui Yan. 1991. "Institutional Arrangements and the Management of Common-Pool Resources." *Public Administration Review* 51(1):42–51.
- . 1992. *Institutions and Collective Action: Self-Governance in Irrigation Systems*. San Francisco, CA: ICS Press.
- Tiebout, Charles. 1956. "A Pure Theory of Local Expenditures." *Journal of Political Economy* 64:416–24.
- Tullock, Gordon. 1965. *The Politics of Bureaucracy*. Washington, DC: Public Affairs Press.
- Walker, James, and Roy Gardner. 1992. "Probabilistic Destruction of Common-Pool Resources: Experimental Evidence." *Economic Journal* 102(414):1149–61.
- Walker, James, Roy Gardner, and Elinor Ostrom. 1990. "Rent Dissipation in a Limited-Access Common-Pool Resource: Experimental Evidence." *Journal of Environmental Economics and Management* 19:203–11.
- Walker, James, Roy Gardner, and Elinor Ostrom. 1991. "Rent Dissipation and Balanced Deviation Disequilibrium in Common Pool Resources: Experimental Evidence." In *Game Equilibrium Models II: Methods, Morals, and Markets*, ed. Reinhard Selten, 337–67. Berlin: Springer-Verlag.
- Weissing, Franz, and Elinor Ostrom. 1991. "Irrigation Institutions and the Games Irrigators Play: Rule Enforcement without Guards." In *Game Equilibrium Models II: Methods, Morals, and Markets*, ed. Reinhard Selten, 188–262. Berlin: Springer-Verlag.
- Weissing, Franz, and Elinor Ostrom. 1993. "Irrigation Institutions and the Games Irrigators Play: Rule Enforcement on Government- and Farmer-Managed Systems." In *Games in Hierarchies and Networks: Analytical and Empirical Approaches to the Study of Governance Institutions*, ed. Fritz W. Scharpf, 387–428. Frankfurt: Campus Verlag; Boulder, CO: Westview Press.
- Wunsch, James S. and Dele Olowu, eds. 1995. *The Failure of the Centralized State: Institutions and Self-Governance in Africa*. San Francisco, CA: ICS Press.
- Yang, Tai-Shuenn. 1987. "Property Rights and Constitutional Order in Imperial China." PhD diss., Indiana University.

APPENDIX A: Dissertations Completed at Indiana University (Supervised by Workshop Faculty)

- Ahn, Songmin. 1995. "The Influence of Governance Structure and Size of Public Libraries on the Provision and Production of Library Service."
- Ahn, T. K. 2001. "Foundations for Cooperation in Social Dilemmas."
- Allen, Barbara. 1981. "Democracy in America Revisited: An Application of Tocqueville's Political Theory to Feminist Theory and Action."
- Allen, David N. 1980. "Street-Level Police Supervision: the Effect of Supervision on Police Officer Activities, Agency Outputs, and Neighborhood Outcomes."
- Allen, Linda. 2005. "The Politics of Structural Choice of the Commission for Environmental Cooperation: The Theoretical Foundations of the Design of International Environmental Institutions."
- Andersson, Krister P. 2002. "Can Decentralization Save Bolivia's Forests? An Institutional Analysis of Municipal Forest Governance."
- Araral, Eduardo K. 2006. "Decentralization Puzzles: A Political Economy Analysis of Irrigation Reform in the Philippines."
- Baden, John A. 1969. "The Management of Social Stability: A Political Ethnography of the Hutterites of North America."
- Bartlett, Robert V. 1984. "Rationality and Science in Public Policy: The National Environmental Policy Act."
- Beck, Peter A. 2000. "Conservation, Development and Collaboration: Analyzing Institutional Incentives for Participatory Conservation in Uganda."
- Berheide, Michael. 1984. "Methodology and Metaphysics: Karl Popper and the Practice of Political Science."
- Bish, Robert L. 1968. "The Distribution of Housing Taxes and Subsidies and Effects on Housing Consumption of Low-Income Families."
- Blomquist, William. 1987. "Getting Out of the Trap: Changing an Endangered Commons to a Managed Commons."
- Brandt, Patrick. 2001. "Lawmaking and Separated Powers: Agenda Setting in Executive-Congressional Relations and Budgeting."
- Bushouse, Brenda K. 1999. "The Mixed Economy of Child Care: An Institutional Analysis of Nonprofit, For Profit, and Public Enterprises."
- Choe, Jaesong. 1992. "The Organization of Urban Common-Property Institutions: The Case of Apartment Communities in Seoul."
- Collins, Brian K. 2000. "Contestable Markets for State Economic Governance: Reducing the Costs of Democracy in U.S. States."
- Coleman, Eric. 2009. "Essays on the Effects of Institutions and Trust on Collective Action."
- Cooper, James L., Jr. 1993. "The Solicitor General and Federal Litigation: Principal-Agent Relationships and the Separation of Powers."
- Crawford, Sue E.S. 1995. "Clergy at Work in the Secular City."
- Croissant, Cynthia. 2005. "Uses and Landscape Patterns: A Study of Relationships between Human Activities and Spatial Patterns of Land Use and Land Cover on Private Parcels in Monroe County, Indiana."
- Dean, Debra L. 1982. "Comparative Models of the Social Services Production Process: The Case of Police Service Production in Police-Citizen Encounters."
- De Castro, Fabio. 2000. "Fishing Accords: The Political Ecology of Fishing Intensification in the Amazon."
- Dolšak, Nives. 2000. "Marketable Permits: Managing Local, Regional, and Global Commons."
- Duany, Julia Aker. 1996. "Sudanese Women and Education: The Struggle for Equal Access and Participation."
- Duany, Wal. 1992. "Neither Palaces Nor Prisons: The Constitution of Order among the Nuer."
- Dudley, Dean. 1993. "Essays on Individual Behavior in Social Dilemma Environments: An Experimental Analysis."
- Ehrhardt, George. 2002. "Engagement and Alliances in Northeast Asia: The Role of Security Consultation."
- Elliott-Teague, Ginger. 2007. "NGOs in Policymaking in Tanzania: The Relationships of Group Characteristics, Political Participation and Policy Outcomes."
- Fielder, Virginia D. 1976. "Priorities for the Coverage of Law Enforcement News: Perceptions of Citizens, Police, and Media Gatekeepers."
- Fotos, Michael, III. 1999. "Organized Interests and the Implementation of Environmental Policy."
- Futemma, Celia. 2000. "Collective Action and Assurance of Property Rights to Natural Resources: A Case Study from the Lower Amazon Region, Santarem, Brazil."
- Goetze, David. 1980. "The Impact of Inputs, Employee Characteristics, Organizational Arrangements, and Activities on the Environmental Effectiveness of State Air Pollution Control Agencies."
- Greene, Barbara P. 1971. "The Politics of Regulation: Responsiveness and Control."
- Greene, Vernon L. 1978. "The Metaphysical Foundations of Constitutional Order."

- Gregg, Phillip M. 1972. "A Reformulation of Theory in Policy Studies."
- Griffith, Nathan. 2004. "We, the High Contracting Parties: A Constitutional Economics Theory of Regional Integration."
- Haney, Patrick J. 1992. "Organizing for Foreign Policy: Presidents, Advisers, and Crisis Decision-Making."
- Hayes, Tanya. 2007. "Forest Governance in a Frontier: An Analysis of the Dynamic Interplay between Property Rights, Land-Use Norms, and Agricultural Expansion in the Mosquitia Forest Corridor of Honduras and Nicaragua."
- Herr, Andrew R. 1996. "Appropriation Externalities in the Commons: Theory and Experimental Evidence."
- Hung, Chi-Kan Richard. 1999. "Credit Risk Management and Rules: The Experience of Group-Based Microcredit Programs in the United States."
- Hwang, Su-Ik. 1985. "Constitutional Choice and the Individual Calculus of Voting."
- Jagger, Pamela. 2009. "Can Forest Sector Devolution Improve Rural Livelihoods? An Analysis of Forest Income and Institutions in Western Uganda."
- Johnson, Avra. 2001. "Structures and Processes: The Political Economy of Community Development Corporations in Indianapolis."
- Kauneckis, Derek. 2005. "The Co-Production of Property Rights: Theory and Evidence from a Mixed-Right System in Southern Mexico."
- Kessler, David A. 1989. "Improving Policing: The Impact of Neighborhood-Oriented Policing on Officers' Attitudes Toward the Public."
- Koontz, Tomas M. 1997. "Federalism and Natural Resource Policy: Comparing State and National Management of Public Forests."
- Lam, Wai Fung. 1994. "Institutions, Engineering Infrastructure, and Performance in the Governance and Management of Irrigation Systems: The Case of Nepal."
- Lee, Myungsuk. 1994. "Institutional Analysis, Public Policy, and the Possibility of Collective Action in Common Pool Resources: A Dynamic Game Theoretic Approach."
- Loveman, Brian. 1973. "Property, Politics and Rural Labor: Agrarian Reform in Chile, 1919-1972."
- Matejczyk, Anthony P. 1997. "A Theory of Institutionally-Induced Consensus: An Empirical Test of Zoning Exceptions."
- McDavid, James C. 1975. "Interjurisdictional Cooperation and Police Performance: The St. Louis Experience."
- McIver, John P. 1986. "The Control of Bureaucrats in Representative Democracies: A Study of Urban Policing."
- Mwangi, Esther. 2003. "Institutional Change and Politics: The Transformation of Property Rights in Kenya's Maasailand."
- Myers, Marissa E. 1999. "Calling the Shots in U.N. Peacekeeping: Principal-Agent Relationships among the Great Powers, the U.N. Secretary-General and Troop-Contributing Countries."
- Myers, Martha A. 1997. "The Effects of Victim Characteristics on the Prosecution, Conviction and Sentencing of Criminal Defendants."
- Myint, Tun. 2005. "Strength of 'Weak' Forces in Multilayer Environmental Governance: Cases from the Mekong and Rhine River Basins."
- Namubiru, Evelyn Lwanga. 2008. "Coping with Top-Down Institutional Changes in Forestry."
- Never, Brent. 2005. "Institution Making in Times of Crisis (Benin)."
- Potoski, Matthew. 1998. "Managing Uncertainty in Environmental Policy: Air Pollution Regulation in the American States."
- Prakash, Aseem. 1997. "A Logic of Corporate Environmentalism: 'Beyond Compliance' Environmental Policymaking in Baxter International Inc. and Eli Lilly and Company."
- Raines, Susan. 2002. "Unheard Voices in International Environmental Agreements: Implications of Stakeholder Absence on the Legitimacy and Efficacy of ISO 14001."
- Ray, Dixie Wiles. 1992. "Neighborhood Health Centers: An Analysis of Collective Action."
- Regmi, Ashok. 2007. "The Role of Group Heterogeneity in Collective Action: A Look at the Intertie between Irrigation and Forests. Case Studies from Chitwan, Nepal."
- Reiners, Derek. 2006. "Institutional Effects on Decision-Making and Performance in Public Land Agencies: The Case of Wildfire in the Interior West of the United States."
- Roberts, Michael E. 2008. "Human Collective Behavior."
- Sabet, Daniel M. 2005. "Thickening Civil Society: Nonprofit Organizations and Problems of Water and Sanitation Along Mexico's Northern Border."
- Sabetti, Filippo. 1977. "The Political Basis of Human Misery: A Study of a Sicilian Village."
- Schaaf, Jeanne. 1989. "Governing a Monopoly Market under Siege: Using Institutional Analysis to Understand Competitive Entry into Telecommunications Markets, 1944-1982."
- Schlager, Edella. 1990. "Model Specification and Policy Analysis: The Governance of Coastal Fisheries."
- Schoon, Michael. 2008. "Building Robustness to Disturbance: Governance in Southern African Peace Parks."
- Schweik, Charles M. 1998. "The Spatial and Temporal Analysis of Forest Resources and Institutions."
- Shoup, Brian. 2007. "Institutional Incentives, Ethnic Myths, and Interethnic Conflict in Counterbalanced States."

- Silva-Forsberg, Maria Clara. 1999. "Protecting an Urban Forest Reserve in the Amazon: A Multi-Scale Analysis of Edge Effects, Population Pressure and Institutions."
- Sislin, John. 1993. "Arms as Influence: The Elusive Link between Military Assistance and Political Compliance."
- Smith, Dennis C. 1976. "Police Professionalization and Performance: An Analysis of Public Policy from the Perspective of Police as Producers and Citizens as Consumers of a Public Service."
- Smith, Ronald S. 2006. "Discerning Differences in Social Capital: The Significance of Interpersonal Network and Neighborhood Association Structure on Citizen Participation."
- Southworth, Jane. 2000. "Global Environmental Change: What are the Impacts of Climate Change and Land Cover Change on Different Ecosystems?"
- Sproule-Jones, Mark. 1970. "Toward a Theory of Public Employment."
- Squires, Michael Leslie. 1982. "Modeling the U.S.-U.S.S.R. Strategic Arms Race."
- Sun, Wenjie. 2006. "A GIS-Based Integrated Approach to Explore Land-Use/Cover Change Dynamics in South-Central Indiana."
- Swindell, David W. 1997. "Community Organizations and the Governing Capability of Indianapolis Neighborhoods."
- Tang, Shui Yan. 1989. "Institutions and Collective Action in Irrigation Systems."
- Thomson, James T. 1976. "Law, Legal Process and Development at the Local Level in Haus-Speaking Niger: A Trouble Case Analysis of Rural Institutional Inertia."
- Toniolo, Maria Angélica. 2004. "The Role of Land Tenure in the Occurrence of Accidental Fires in the Amazon Region: Case Studies from the National Forest of Tapajós, Pará, Brazil."
- Turner, Jennifer. 1997. "Authority Flowing Downwards? Local Government Entrepreneurship in the Chinese Water Sector."
- Turner, Paul W. 1998. "Constitutional Orders and Deforestation: A Cross-National Analysis of the Humid Tropics."
- van Laerhoven, Frank. 2008. "Local Governance and the Challenge of Solving Collective Action Dilemmas."
- Van Houweling, Douglas E. 1976. "A Microeconomic Theory of Political Participation."
- Varughese, George. 1999. "Villagers, Bureaucrats, and Forests in Nepal: Designing Governance for a Complex Resource."
- Vogt, Nathan. 2005. "Mechanisms of Land-Cover Change in Uganda: Longer-Term Analyses of the Role of Institutional Arrangements."
- Walker, S. Tjip. 1998. "Both Pretense and Promise: The Political Economy of Privatization in Africa."
- Wang, Jianxun. 2006. "Political Economy of Village Governance in Contemporary China."
- Welch, David. 2007. "Multidisciplinary Approaches to the Study of Forest Dynamics in South Central Indiana and Southern Illinois."
- Whitaker, Gordon P. 1971. "Urban Police Forces: The Effect of Scale on Neighborhood Services."
- Wilson, Richard K. 1982. "Institutional Effects on Committee Behavior: A Game Theory Experiment."
- Wise, Lois R. 1982. "Public Employee Membership Incentives: The Effect of Organizational Change and Individual Characteristics."
- Wunsch, James S. 1974. "Voluntary Associations: Determinants of Structure and Activity in Two Ghanaian Secondary Cities."
- Wynne, Susan G. 1989. "The Land Boards of Botswana: A Problem in Institutional Design."
- Yandle, Tracy. 2001. "Market-Based Natural Resource Management: An Institutional Analysis of Individual Tradable Quotas in New Zealand's Commercial Fisheries."
- Yang, Tai-Shuenn. 1987. "Property Rights and Constitutional Order in Imperial China."
- York, Abigail. 2005. "Land Use Institutions in an Urbanizing Landscape."
- Zauderer, Donald G. 1971. "The Rig of the Game: An Analysis of the Political Consequences Resulting from an Alteration in the Ohio Ballot Form."

APPENDIX B: Current External Workshop-Affiliated Faculty

Arun Agrawal, School of Natural Resources, University of Michigan, Ann Arbor

T. K. Ahn, Department of Public Administration, Korea University, Seoul, KOREA

Paul Aligica Mercatus Center, George Mason University, Arlington, VA

Barbara Allen, Department of Political Science, Carleton College, Northfield, MN

J. Marty Anderies, School of Human Evolution and Social Change; School of Sustainability, Arizona State University, Tempe, AZ

Krister Andersson, Department of Political Science, University of Colorado, Boulder

Xavier Basurto, Duke University Marine Laboratory, Nicholas School of the Environment, Beaufort, NC

Kenneth Bickers, Department of Political Science; University of Colorado, Boulder

Juan-Camilo Cardenas, Facultad de Economia, Universidad de Los Andes, Bogota, COLOMBIA

Salvador Espinosa, School of Public Affairs, San Diego State University, San Diego, CA

Clark Gibson, Department of Political Science, University of California, San Diego

Charlotte Hess, Collections and Scholarly Communication, Syracuse University, Syracuse, NY

Marco Janssen, School of Human Evolution & Social Change, Arizona State University, Tempe, AZ

In Kim, Graduate School of Public Administration, Pusan National University, Pusan Metropolitan City, SOUTH KOREA

Kwanbo Kim, Graduate School of Public & International Affairs, The Catholic University of Korea, Puchon City, SOUTH KOREA

Myungsuk Lee, Department of Public Administration, Sungkyunkwan University, Seoul, SOUTH KOREA

Maria Claudia Lopez, School of Environmental and Rural Studies, Pontificia Universidad Javeriana Bogotá, COLOMBIA

Thomas Lyon, School of Natural Resources and Environment, University of Michigan, Ann Arbor

Jennifer McKay, Business Law, University of South Australia, Adelaide, AUSTRALIA

Amy Poteete, Department of Political Science, Concordia University, Montreal, Quebec, CANADA

Filippo Sabetti, Department of Political Science, McGill University, Montreal, Quebec, CANADA

Larry Schroeder, Department of Public Administration, Syracuse University, Syracuse, NY

Charles Schweik, Department of Natural Resources Conservation & Center for Public Policy and Administration, University of Massachusetts, Amherst

Mark Sproule-Jones, Department of Political Science, McMaster University, Hamilton, Ontario, CANADA

Emil Uddhammar, School of Social Science, Växjö University, SWEDEN

Jon Unruh, Department of Geography, McGill University, Montreal, Quebec, CANADA

Tommaso Vitale, Dipartimento di Sociologia e della Ricerca Sociale, Università di Milano Bicocca, Milano, ITALY

APPENDIX C: Current Indiana University Workshop-Affiliated Faculty

Matthew Auer, Hutton Honors College; School of Public & Environmental Affairs

Stephen Benard, Department of Sociology

William Bianco, Department of Political Science

Lisa Blomgren Bingham, School of Public & Environmental Affairs

William Blomquist, School of Liberal Arts; Department of Political Science, IUPUI

Eileen Braman, Department of Political Science

Jerome Busemeyer, Department of Psychology

Daniel Cole, School of Law–Indianapolis

Aurelian Craiutu, Department of Political Science

Tom Evans, Department of Geography; Co-Director, CIPEC

Burnell Fischer, School of Public & Environmental Affairs

Roy Gardner, Department of Economics

Kerry Krutilla, School of Public & Environmental Affairs

Lauren Morris MacLean, Department of Political Science

John Maxwell, Kelley School of Business

Michael McGinnis, Department of Political Science; Co-Director, Workshop

Lloyd Orr, Department of Economics

Elinor Ostrom, Senior Research Director, Workshop; Founding Director, Center for the Study of Institutional Diversity, Arizona State University

Vincent Ostrom, Founding Director, Workshop

Roger Parks, School of Public & Environmental Affairs

Eric Rasmusen, Kelley School of Business

Armando Razo, Department of Political Science

Kenneth Richards, School of Public & Environmental Affairs

Amos Sawyer, Workshop in Political Theory and Policy Analysis

Beate Sissenich, Department of Political Science

Regina Smyth, Department of Political Science

Jeffrey Stake, School of Law

Verlon Stone, Department of Folklore & Ethnomusicology

Catherine Tucker, Department of Anthropology

James Walker, Department of Economics; Co-Director, Workshop

APPENDIX D: Current Workshop Visiting Scholars for 2009–2010

Christopher Bartlett (Aug 2009–May 2010), PhD, ARC Center of Excellence for Coral Reef Studies, James Cook University, Australia

Bryan Bruns (Aug 2009–May 2010), independent researcher and consulting sociologist

Jingjing Cai's (Aug 2009–Aug 2010), PhD candidate, School of Public Administration, Renmin University of China

Carina Cavalcanti (Sept 1–May 2010), PhD student, Professorship of Environmental Policy and Economics, Swiss Federal Institute of Technology, Zurich

Luz Aliette Hernandez (Fall 2009), PhD student, Department of Political Science, National Autonomous University of Mexico (UNAM)

Derek Kauneckis (Fall 2009), Assistant Professor, Department of Political Science, University of Nevada, Reno

Andreas Leibbrandt (academic year), Postdoc, Department of Economics, University of Chicago; PhD, University of Zurich

Lei Liu (Aug 2009–Aug 2010), PhD candidate, College of Environmental Sciences and Engineering, Peking University, Beijing, China

Jiang Nie (Jan 2009–Dec 2009), Associate Professor, School of Resources and Environmental Management, Guizhou College of Finance and Economics, China

Lauri Sääksvuori (Fall 2009), PhD candidate, Department of Economics, Max Planck Institute of Economics, Germany

Pontus Strimling's (Aug 2009–Jun 2010), Center for the Study of Cultural Evolution, Stockholm University, Sweden

Jiangtao Tan (Aug 2009–Aug 2010), Ph.D candidate, School of Business, Hohai University, Nanjing, China

Yahua Wang (Aug 2009–Aug 2010), Associate Professor, School of Public Policy and Management; deputy director, Center for China Studies, Tsinghua University, China

APPENDIX E: Awards and Honors Received by Elinor Ostrom and Vincent Ostrom

Elinor Ostrom

Elazar Distinguished Federalism Scholar Award, APSA, Federalism and Intergovernmental Relations Section, 2009

Reimar Lüst Award for International Scholarly and Cultural Exchange, Fritz Thyssen Foundation and the Alexander von Humboldt Foundation, Germany, 2009

Jonathan M. Tisch Prize for Civic Engagement Research, Tufts University, Medford, MA, March 5, 2009

Honorary Doctorate, Norwegian University of Science and Technology, Trondheim, Norway, 2008

Galbraith Award, American Agricultural Economics Association, 2008

Honorary Doctorate, McGill University, Montreal, 2008

William H. Riker Prize in Political Science, University of Rochester, 2008

Fellow, American Academy of Political and Social Science, Philadelphia, 2008

Beijer Fellow, The Beijer Institute of Ecological Economics, Stockholm, Sweden, 2007

Honorary Doctorate, Humboldt University, Berlin, Germany, 2007

Honorary Doctorate in Commemoration of Carl Linnaeus, Uppsala University, Sweden, 2007

Cozzarelli Prize, Proceedings of the National Academy of Sciences, 2006

APSA, Political Economy Section, William Riker Award for Best Book on Political Economy, APSA, Political Economy Section, 2006

Doctor of Humane Letters, University of Michigan, Ann Arbor, 2006

Member, American Philosophical Society, Elected 2006

James Madison Award, American Political Science Association, 2005

Sustainability Science Award, Ecological Society of America, 2005

Honorary Doctorate, Luleå University of Technology, Sweden, 2005

John J. Carty Award for the Advancement of Science, National Academy of Sciences, 2004

Lifetime Achievement Award, Atlas Economic Research Foundation, 2003

Fellow, American Association for the Advancement of Science, Elected September 2001

Member, National Academy of Sciences, Elected May 2001

APSA, Public Policy Section, Aaron Wildavsky Enduring Contribution Award for *Governing the Commons*, 2000

Johan Skytte Prize in Political Science, Uppsala University, 1999

Thomas R. Dye Service Award for outstanding service to the Policy Studies Organization, December 1997

Frank E. Seidman Distinguished Award in Political Economy, 1997

Policy Studies Organization Miriam Mills Award for being an outstanding woman in the field of policy studies, 1996

International Studies Association Harold and Margaret Sprout Award for excellence in the field of international environmental affairs for *Governing the Commons*, 1992

Fellow, American Academy of Arts and Sciences, Spring 1991–present.

Policy Studies Organization Donald Campbell Award for an outstanding methodological innovator in public policy studies, 1986

Vincent Ostrom

John Gaus Distinguished Lecturer Award honoring a lifetime of exemplary scholarship in the joint tradition of political science and public administration, APSA, 2005

Co-Recipient with Elinor Ostrom of the Atlas Economic Research Foundation's Fund for the Study of Spontaneous Order's Lifetime Achievement Award in honor of their individual contributions and their joint work with the Workshop, 2003

Robert O. Anderson Sustainable Arctic Award from the Institute of the North for vital role in the drafting of the Natural Resource Article in the Alaskan Constitution (the first and only state constitution to contain such an article) at the International Association for the Study of Common Property (IASCP) Northern Polar Conference, 2003

Best Book on Federalism and Intergovernmental Relations Award for *The Political Theory of a Compound Republic*, American Political Science Association, APSA Section on Federalism and Intergovernmental Relations, 1999

Special Achievement Award for significant contributions to the study of federalism, American Political Science Association, 1991

Hooker Distinguished Visiting Scholar, McMaster University, Hamilton, Ontario, 1984–85

Fellow, Center for Interdisciplinary Research, Bielefeld University, Germany, 1981–1982

Fellow, Center for Advanced Study in the Behavioral Sciences, 1955–1956

Faculty Research Fellow, Social Science Research Council, 1954–1955, 1956–1958