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The Two Social Philosophies of Ostroms' Institutionalism

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The article argues that Ostroms' institutionalism has a dimension that is complex and profound enough to deserve to be considered a "social theory" or a "social philosophy." The article pivots around the thesis that the "social philosophy" behind the Bloomington School's research agenda has in fact two facets that may or may not be consistent with each other. The article describes the main features of the two facets, offers a brief overview of the development of these ideas, and clarifies their relationship to Public Choice theory and alternative visions of public goods analysis, public administration, and governance. The argument goes further to raise the provocative question whether the two "social philosophies" involved in the approach undertaken by Elinor Ostrom and Vincent Ostrom are necessarily and inseparably connected with the rest of their research program.

KEY WORDS: institutional theory, polycentricity, governance, public choice, institutional design, social theory

1. Introduction

More often than not Bloomington institutionalism is seen in a narrow way, i.e., only in relationship to the common pool resources studies, which are, indeed, very salient, yet, in fact, only one of the many dimensions of this research program. The reality is that the study of the "commons" emerged from a broader and deeper intellectual perspective that frames at a foundational level the work of the Bloomington scholars. As such, it is only one of the ways in which this intellectual vision becomes operational in the research practice. A closer look at this "perspective" reveals the fact that it is complex and profound enough to deserve to be considered what the literature calls a "social theory" or a "social philosophy." Both explicit and implicit in the Ostroms' work are attempts to understand, chart, evaluate, and articulate the basic categories with which we think about the social aspects of human life, as well as a willingness to deal with philosophical questions about social order and social behavior. Encapsulated in their studies are views about the nature and desirability of alternative systems of social organization and an effort toward their philosophical understanding. Even more, their empirical and policy-relevant contributions could be positioned in a very telling way at the intersection of several major trends in modern social thinking. Such exercises in interpretation reveal that the Ostroms' contributions not only have a well-defined place in this intellectual history context but also that, in many respects, their originality transcends the standard schools of thought and disciplinary boundaries. To focus only on the more salient and publicly visible pieces of the research produced by the Bloomington scholars—such as those on "governance" and "commons"—would be to miss an important part of the Ostroms' perspective on social order and institutionalism. If that is the case, it is understandable why a discussion dedicated to the IAD framework—a central analytical instrument in the toolbox of the Bloomington School—has only to gain from a detour through the broarder intellectual perspective that has induced its creation, defined its context, and inspired its most important applications.

The main objective of this article is to explore this broader "perspective" that we shall call the "social theory" or the "social philosophy" that presumably shapes, inspires, and defines the Ostroms' research program. Our task is not just descriptive. The article pivots around the argument that what we have called the "social philosophy" behind the Bloomington School's research agenda has in fact two facets that may or may not be consistent with each other. Even more, they may or may not be necessarily and inseparably connected with the rest of the program. The first is built around the concept of "polycentricity" and a series of Public Choice insights, and is a challenge to two of the deepest assumptions of political and economic sciences in the twentieth century: the monocentric vision of social order and the "market" vs. "state" dichotomy. The second is built around a view of social order seen as a knowledge and learning process, along with a series of observations about the human condition, fallibility, coercion, and error as well as about the factors engendering institutional order as a response to the challenges posed by them. But irrespective of how we approach and consider the relationship between these two facets, one thing is clear and stays unchanged: both feature an unambiguous normative engagement on behalf of self-governance and a robust faith in human freedom and human ingenuity.

2. A Social Theory of Polycentrism

The easiest way to start exploring the Bloomington School's social philosophy is to use as a vehicle the argument made by V. Ostrom's (1971) book on the crisis in American public administration. Thus one could not only outline the basic elements of the most salient facet or dimension but also place the School on an intellectual history background. The growth of a "science of politics" on the lines defined by Hobbes, Hume, Smith, and Tocqueville, argued Ostrom, was derailed by the twentieth century views about the nature of political inquiry. Political science had adopted the wrong paradigm. A different paradigm, an alternative way of looking at the social and political world, was needed.

2.1 A Challenge to Woodrow Wilson's Power-focused Monocentrism

Vincent Ostrom's book on *The Intellectual Crisis in American Public Administration* contained a powerful elaboration of the idea of an initial paradigm change that was

supposed to be challenged by yet another, new paradigm change effort. Its starting point was the observation that "the profession no longer has confidence in what it professes." The problem was in the end practical, not just theoretical and academic. Thus, urban issues, environmental crises, and race problems seemed without solution or at least that administrative and policy theory had no solution to offer. The cause, he argued, was, in a nutshell, the fact that political science and administrative theory were excessively shaped by a state-centric, "monocentric" vision. This view assumed a bureaucratic paradigm, centralized control, homogeneity of administrative structures, and the separation of the political from the administrative. As such, it neglected two important aspects of public organization. First, different circumstances require different decision-making structures. Second, multi-organizational arrangements might be possible within the same administrative systems. The bureaucratic paradigm was framing both the analytical and practical approaches in ways that not only were unable to offer solutions but were unable to even identify problems. Seeking an alternative was a vital task.

The monocentric vision, focusing on "the state" and "seeing like a state" and assuming the existence of a unique center of power and authority, was so deeply rooted in the practice of social sciences, that by the time the Ostroms started their intellectual assault, it seemed commonsensical. Yet, the Ostroms challenged the conventional wisdom and while criticizing it, they built an alternative (E. Ostrom, 1972; V. Ostrom, Bish, & E. Ostrom, 1988). And thus, we turn to "polycentricity" as a central concept in the architecture of the Bloomington system. The reference point in their endeavour was, interestingly enough, Woodrow Wilson. The decision to identify the paradigmatic case of the monocentric philosophy in Wilson's work may seem idiosyncratic. But the more one advances in understanding the nature of the Ostrom criticism of Wilsonian assumptions, the more one realizes how inspired and appropriate was the choice of the paradigmatic target. Needless to say, in between the lines of this criticism, was a revisionist intellectual history of political and policy sciences in the twentieth century.

As Ostrom (1971) explains in his The Intellectual Crisis in American Public Administration the Wilsonian analysis marked an important paradigm shift in American political science. One of the main dimensions of that shift was in terms of understanding the U.S. political system, a dimension that went beyond the mere notion of efficient administration through the rule of experts, the better known Wilsonian stance. Wilson's assumption that "there is always a single center of power in any political system" was accepted as a basic postulate by many, even if that gave them an obviously distorted perspective. Due to it, their attention was obsessively concentrated on the "central" level. All other levels and forms of governance and association were neglected or considered marginal if they were not directly linked or associated with the "system of government" and its "center of power." The insights given by authors such as Tocqueville (whose work that was a constant source of inspiration for the Ostroms) were lost. Features that were considered of such salience and importance in his classical analysis were ignored. "The incommensurabilities between Tocqueville's portrayal of democracy in America and Wilson's portrayal were of radical proportions even though only fifty years intervened between those two presentations" (Ostrom, 1971, pp. 20–23; 1991a, 1991b, p. 5).

"Visions" frame the perception of reality, and different visions imply different analytical approaches. Because the entire Wilsonian approach is based on the notion that "there is always a centre of power... within any system of government" (Wilson, 1956 [1885], p. 30), the issue of the location and application of power is shaping the focus and the vocabulary of the monocentric approach. The entire exercise comes to be power-centered in ways that may become extreme and limiting. Choices, decisions, rules, preferences, ideas, values become secondary. They are just inputs or outputs in the power process or, even worse, a "veil" that is clouding the view of "reality" (i.e., power and its workings) (V. Ostrom, 1972, 1991b, 1993b).

These analytical implications of the monocentric approach constituted a major concern for the Ostroms. Their fear was that even when not explicitly dealing with the issue of power, this vision had deeply penetrated and shaped the language of political sciences. Most of political analysis was infused or defined by its hidden assumptions, its implicit social philosophy, and by its language. Hence, a concern not only for the limits and the dangers of the mainstream approach but also for the fact that once the monocentric presumption was abandoned, one was confronted with difficulties arising from an entirely new horizon of complexities that evade the mainstream vocabulary. It was obvious that an approach based on a polycentric vision could not rely on the convenient predefinition of the research agenda in terms of "power" or on using "government" or "state" as the key unit of analysis. An alternative should be constructed, "suggesting that a system of ordered relationships underlies the fragmentation of authority and overlapping jurisdictions that had frequently been identified as chaotic": a polycentric political system viewed as "a set of ordered relationships that persists through time" and "having many centers of decision making that are formally independent of each other" (V. Ostrom [1972] in McGinnis, 1999b, p. 53).

Before and after being operationalized and subject to an empirical agenda, the notion of polycentricity belongs to the realm of social philosophy. In the alternative paradigm advanced by the Ostroms, the government as a basic unit becomes secondary and the individuals and their "action arenas" take the forefront of the analysis (V. Ostrom, 1982, pp. 1–2; 1982b, 1991b, 1993b). This approach combines a theory of human action with a theory of social organization drawing upon "a substantial structure of inferential reasoning about the consequences that will follow when individuals pursue strategies consistent with their interests in light of different types of decision structures in order to realize opportunities inherent in differently structured sets of events" (V. Ostrom [1972] in McGinnis, 1999b, pp. 52–75, 119–139). In other words, the Ostroms suggest a different vision that at its turn implies and fuels a different analytical approach: reframing the issues from one center to many, and from there even further, to the concrete actions of the social actors.

At this juncture, one needs to draw attention to an additional specific aspect of the anti-Wilsonian stance of the Bloomington scholars' approach. This aspect is an extension of an observation of disarming simplicity: human beings "rely upon ideas and knowable regularities" to create "social artifacts." Ideas, knowable regularities, and informed practices are part and parcel of political realities. It is hard even to conceive political order if you do not assume that people "create their own social realities by reference to some shared community of understanding (pictures in their minds) and live their lives within those realities as artifactual creations." If that was the case, then there was no doubt that the most serious mistake in the social sciences was to ignore this aspect of the ontology of the social order, i.e., the role of "ideas, conjectures about regularities, and the careful use of informed practices that are constitutive of that reality" (V. Ostrom, 1991b, p. 11). We will explore later in the article this issue—i.e., how a theory of social order based on the role of ideas, knowledge, and learning may shape up.

For now it is important to note the relationship between this observation and the criticism of the Wilsonian paradigm. Woodrow Wilson's (1956) classical contention that a "constitution in operation" is a very different thing from the "constitution of the books" was for V. Ostrom also an indication of a turning point in the history of modern political thinking. The two constitutions may be different by definition but that does not mean in any way that the "constitution of the books" is irrelevant. That was the reason why Wilson's work was used persistently to illustrate the errors of the mainstream and to pinpoint the moment when the move toward dismissing and marginalizing the role of ideas gained real strength. V. Ostrom was convinced of its paradigm-change nature not only because its radical and aggressive monocentrism, but also because of its stance on the role of ideas. The two issues, monocentrism and the rejection of role of institutional design ideas (and ideas in general) were related. Normally, they may not be; but in the case in point, they were intrinsically connected. They were the basic elements of the historic intellectual shift challenged, at its turn, by the Ostroms.

As a result of this shift the distinction between "institutional facts" and "natural" or "brute facts" was lost and lost, too, was the intricate dynamics that takes place between ideas-rules-decisions-learning that drives social change. Treating ideas as "paper pictures," which concealed the reality of politics, also meant that a major preoccupation of social scientists was the development of methods to penetrate those pictures and disperse them in order to understand the "living reality" behind them. And because ideas were not taken seriously, institutional change by design, and institutional theory, were not seriously considered (V. Ostrom, 1971, pp. 10–11; 1980, 1986, 1990, 1991a, 1993a, 1993b).

To sum up, the polycentric perspective comes as more than a mere challenge; it is, by all standards, the pivot of an entirely new viewpoint and a new conceptual construction. The criticism of the Wilsonian approach, and its analytical and methodological implication, amounts to sketching an alternative to them. The emerging social philosophy has important implications for analysis. Multiple centers of power, overlapping in competition and cooperation, individuals acting in specifically defined social and institutional settings—ecological rationality, emphasis on dynamics that takes place between ideas-rules-decisions-learning. All these as part of an effort to reject the vision behind the (Wilsonian) mainstream approach and indeed as an attempt to contribute to the growth of an alternative to it.

2.2 Public Choice and "The Great Divide"

In order to become a real contender, the polycentrism vision needed to be bolstered by a flexible conceptual framework with a robust analytical apparatus. That was to be found by the Ostroms in the work of "those political economists concerned with institutional weaknesses and institutional failures in non-market economies." By comparing and contrasting the approach of, on the one hand, these political economists and, on the other hand, of bureaucratic theorists of the Weber-Wilson school, the Ostroms concluded that the political economy, more precisely, the Public Choice approach, "vielded the insights" able to revive political sciences. Public Choice, they noted, asked the right questions that pointed out the crucial issue of choice among forms of organization, institutional frameworks, or systems of rules. The crucial implication was that there is no one organization or institutional arrangement that is "good" in all circumstances. The goal of a wise policy is to search for the arrangement, which "minimizes the cost associated with institutional weaknesses or institutional failure." Public Choice has the capacity to lead to a pluralistic theory of organizational life and of institutional arrangements. That, they concluded, made it the best set of ideas around that could also lead (once juxtaposed on the polycentricity framework) to the reconstruction of a paradigm for political sciences in the twentieth century.

In this discussion, one must always keep in mind that Elinor Ostrom and Vincent Ostrom V. Ostrom, 1971; V. Ostrom & E. Ostrom, 1977; Ostrom, Tiebout, & Warren, 1961 are foundational contributors to the Public Choice School. Even more, both were elected, at one point or another, presidents of the Public Choice Society. One could hardly exaggerate their involvement in the Public Choice movement. But the Ostroms went further than contributing to the ordinary Public Choice agenda. In fact, their contribution was entirely original, as it opened up a new horizon, not only in Public Choice but also in traditional political and policy sciences. In order to see the groundbreaking dimension, one has to go back to the basic dichotomy of modern political sciences, "states vs. markets" and the corresponding "market failure" vs. "state failure" theories.

Let's take as a starting point the conventional wisdom. Typically, when economists show that market arrangements fail, they usually make the simple recommendation that "the" state should take care of these problems. The Ostroms demonstrated empirically that "the" state may not be "the" solution. Their work argues for the wisdom of institutional diversity, looking to individuals to solve problems rather than relying on top down, one-size-fits-all solutions. For instance, the conventional wisdom assumes that natural resources and environmental problems should be solved in a centralized—and if possible, global—manner. Through innovative analysis in the field, in the experimental laboratory, and in theory, E. Ostrom's work has show that creative solutions to problems such as the depletion of common pool resources exist outside of the sphere of national governments. Hence, the 2009 Nobel Memorial Prize in Economic Sciences.

But there is more to be read in that work in this respect. The most important is that the Ostroms mounted a remarkable challenge to the mainstream views in

economics and political science, indeed. As E. Ostrom (1996, 1998, 2000) described it herself, her work is a systematic attempt to transcend the basic dichotomy of modern political economy. On the one hand, there is the tradition defined by Adam Smith's theory of social order. Adam Smith and his intellectual descendants, focused on the pattern of order and the positive consequences emerging out of the independent actions of individuals pursuing their own interests within a given system of rules. That was the "spontaneous order" tradition where the study of markets—the competition among producers and consumers of pure private goods leading to a better allocation of resources—occupied a preeminent place. On the other hand, there is the tradition rooted in Thomas Hobbes's theory of social order. From that perspective, individual actors, pursuing their own interests and trying to maximize their welfare, lead inevitably to chaos and conflict. From that possibility is derived the necessity of a single center of power imposing order. In that view, social order is the creation of the unique "Leviathan," which wields the monopoly power to make and enforce law. Self-organized and independent individuals thus have nothing to do with making order.

The Ostrom view is that the theorists in both traditions managed to keep not only the theories of market and state alienated from each other, they also managed to keep the basic social philosophy visions of the two separated. Smith's concept of market order was considered applicable for all private goods, while Hobbes's conception of the single center of power and decision applied for all collective goods. But what if the domains of modern political-economic life could not be understood or organized by relying only on the concepts of markets or states? What if we need "a richer set of policy formulations" than just "the" market or "the" state? Answering that challenge is probably the best way to see the Ostroms' work, be it on policentricity, governance, or common pool resources: A theoretically informed, empirically based contribution to a larger and bolder attempt to build an alternative to the basic dichotomy of modern political economy, an effort to find an alternative to the conceptions derived from Smith and Hobbes.

"The presence of order in the world," E. Ostrom (1998) writes, "is largely dependent upon the theories used to understand the world. We should not be limited, however, to only the conceptions of order derived from the work of Smith and Hobbes." We need a theory that "offers an alternative that can be used to analyze and prescribe a variety of institutional arrangements to match the extensive variety of collective goods in the world." In response to that need, the Ostroms have explored a new domain of the complex institutional reality of social life—the rich institutional arrangements that are neither states nor markets. They are small and large, multipurpose or just focused on one good or service: suburban municipalities, neighborhood organizations, condominiums, churches, voluntary associations, or informal entities like those solving the common-pool resources dilemmas they studied and documented around the world. Yet, once the functional principle behind them was identified, the very diverse forms could be understood as part of a broader pattern, and the logic of the institutional process involved could be revealed with relative ease. They could be seen as a "third sector" ("public economy" was one of the suggested names for it) related to, but different from, both "the state" and "the market." Irrespective of what we call these domains, the fact is that a theoretical perspective that takes it into account is substantially different from the one based on the classical dichotomy.

If that is the case, then we are now in the position to place the work of the Ostroms in the Public Choice context and, with that, to reveal more about the specific social theory they advanced. Together with authors like James Buchanan or Gordon Tullock, the Ostroms are among those thinkers who looked at the proposition "Markets fail, therefore the state is the solution" and "States fail, therefore the market is the solution," not through the lenses of fashionable academic doctrines or the ideologies of the day, but through the lenses of logic and empirical evidence. As E. Ostrom put it, "Showing that one institutional arrangement leads to suboptimal performance is not equivalent, however, to showing that another institutional arrangement will perform better." But the Ostroms went beyond the Buchanan and Tullock demonstration of the fact that in numerous cases the state is far from being "the solution." Buchanan and Tullock argue convincingly that state failure is even more systematic and perverse than market failure. Now, with the Public Choice theory of Buchanan and Tullock, we had a theory of state failure. The State's efficiency must be proved, not postulated.

The Ostroms took all that a step further. However, their emphasis was not on the "bad news" but on the "good news." Their work demonstrated that, even when we talk about public goods and services that the market cannot supply (and the state pretends to supply efficiently) people can develop complex institutional arrangements in order to produce and distribute precisely those goods and services. That people can solve complex cooperation and coordination problems of governance, without the state being involved in any way. They discovered for instance the possibility of conceiving a situation when the units of government were "collective consumption units" whose first order of business is to articulate and aggregate demands for those goods that are subject to joint consumption where exclusion is difficult to attain. In that specific situation relationships are coordinated among collective consumption and production units by contractual agreements, cooperative arrangements, competitive rivalry, and mechanisms of conflict resolution. No single center of authority is responsible for coordinating all relationships in such a "public economy." Market-like mechanisms can develop competitive pressures that tend to generate higher efficiency than can be gained by enterprises organized as exclusive monopolies and managed by elaborate hierarchies of officials (Ostrom and Ostrom [1977] in McGinnis, 1999b, p. 99).

Moreover, the investigations revealed a whole series of cases wherein the collaboration between those who supplied a service and those who used it was the factor determining the effective delivery of the service—i.e., that in many instances the users of services also function as co-producers. Without the informed and motivated efforts of service users "the service may deteriorate into an indifferent product with insignificant value" (Ostrom & Ostrom [1977] in McGinnis, 1999b, p. 93). Production was not separated from consumption. Instead (the client or consumer) was part of the production process, consumer's input being essential "if there was to be any production at all." Co-production means more than the existence of at least two

producers; it means the existence of two types of producers, a regular and a consumer producer, who "mix their efforts." Therefore, "the resources, motivations, and skills brought to bear by the client or consumer are much more intimately connected with the level of achieved output than in the case of goods production." The organization of a public economy that "gives consideration to economies of consumption as well as of production and provides for the co-ordination of the two is most likely to attain the best results" (Ostrom & Ostrom [1977] in McGinnis, 1999b, p. 94). Co-production problems could be identified in many sub-domains of the service industries in both the private and public sectors. The metropolitan areas were salient because they just offered a high concentration of very extreme and obvious cases.

The notion of "public economy" was meant to accomplish two goals: To save the concept of "public" from the false notion that "public" meant "the State" and "centralized systems of governance" and to make clear the difference from the market economy. In other words, to show that it is possible to have systems that are neither markets nor states, and which preserve the autonomy and the freedom of choice of the individual (Ostrom & Ostrom [1977] in McGinnis, 1999b, p. 76). A new perspective on the institutional structures of that type was opened. A complex system was revealed in which not only markets and hierarchies but also more hybrid and peculiar arrangements were combined to generate a special institutional architecture. Until then, the private sector (associated to market transactions and competition) and the public sector (associated to governmental administration and with a bureaucratic system) were viewed as two mutually exclusive parts of the economy. Not anymore. Public economies, building blocks or areas of polycentrism, are different from state economies but also are different from market economies. That is indeed, by any standard, a radical change of perspective.

All of the above abundantly justifies the claim that an entire research program, based on a fresh vision and with its distinct social philosophy (or social theory) has emerged offering an alternative and original vision of social order. We could see how the Bloomington School grew and consolidated challenging at the same time both the monocentric perspective and the market vs. state dichotomy. In other words, it did that by challenging nothing less than two of the deepest and far-reaching assumptions of political and economic sciences in the twentieth century.

3. A Social Theory of Institutional Order as a Knowledge Process

The previous section illustrates why even if it would be limited to the themes and perspectives surrounding the concept of polycentricity, the Ostrom research program would imply and engender a rich and challenging social philosophy. At the same time, the section illuminates the context in which the IAD framework was imagined and developed as a conceptual instrument meant to guide the analytical effort through the complexities of the diversity of polycentric institutional arrangements. But to make things even more complex and intriguing, there is a second facet (or an additional dimension) to the underlying social theory or philosophy of the Bloomington school. We have seen how its first facet grows around polycentricity

and Public Choice while maintaining itself in some measure close to the general tone of the standard neoclassical economics approach (albeit in a way full of heterodox nuances and strides). The other facet goes even further away from orthodoxies. It is nothing less than a tentative social philosophy of institutional order, seen as a knowledge and information process, nuanced by an almost existentialist concern for the "human condition" and its limitations.

3.1 Human Nature, Choice, Institutions

To unveil the sources of the second dimension of the social theory behind the Bloomington agenda, one needs to go back to a series of papers written by V. Ostrom in the 1970s and the beginning of the 1980s, in an attempt to crystallize his views on the problem of social order. From this second perspective, the starting point of the study of social order does not rest in a formal definition of rationality, as many of the fellow Public Choice and new institutionalist scholars suggested, but in an anthropological and historical understanding of "the human condition and what it is about that condition that disposes human beings to search out arrangements with one another that depend upon organization" (V. Ostrom, 1982, 1984). In the picture emerging out of the series of stylized facts reflecting that understanding, the first key element is choice. Nonetheless, the view on choice differs from the one advanced by the standard rational choice paradigm. Its basis is not formal or axiomatic but philosophical, in the broad, one may say, classical sense of the word.

The argument is shaped by a bold ontological assertion that choice is the basic and defining element for both humans and the social order they create. Choice—loosely defined as being able to consider alternative possibilities and to select a course of action from among a range of such possibilities—is not only a fundamental part of human behavior, but also the source of social order and social change. From an evolutionary standpoint, choice could be seen as a particular form of selection: alternative possibilities are assessed and compared. The more diverse and better defined the possibilities, the better founded the choice will be. The better the choice, the better the adaptation. And because choice is a basic form of adaptive behavior, social organization could be seen as the expression of choice as a form of adaptive behavior. Up to this point, this is more or less a standard evolutionary account.

Yet, argues V. Ostrom, the cycle of adaptation does not stop there: organization solves problems but also creates new problems. Humans have to adjust to them through learning and new choices. We should not bypass this side of the story. Rather, a special emphasis should be placed on this point. The very solutions create, at their turn, new problems and challenges. And thus the cycle is continued through the dialectic problem-solution-new problem . . . Social organizations get more and more complex. Yet, precisely because it is the outcome of choice and it is engendering new choices, social organization is always fluid and vulnerable to ongoing challenges. Out of the many possible challenges, in the end, the most important are not external but could be traced back to human nature itself:

Any creature that has unique capabilities for learning and generating new knowledge inevitably faces an uncertain future. Learning and the generation of new knowledge are themselves marks of fallibility. Infallible creatures would have no need to learn and generate new knowledge. Fallible creatures need to accommodate their plans to changing levels of information and knowledge. (V. Ostrom [1980] in McGinnis, 1999a, p. 382)

Fallibility, uncertainty, ignorance, learning, and adaptability become thus key concepts in this stylized narrative of social order: "An appreciation of the tenuous nature of order in human society is the most important lesson to be learned about the human condition," writes V. Ostrom (1982, p. 3; 1973, 1986). In the end, the source of vulnerability of humans' social arrangements could be found in the same forces that generate their dynamic resilience. This is indeed a profound paradox and an inexhaustible source of social dilemmas.

These are, at a very basic and oversimplified level, the most elemental parameters of the other facet of the Bloomington social philosophy. Further elaborating beyond them reveals the fine links that connect a theory of choice to a theory of rules and institutions via a theory of learning, knowledge, and ideas. A pivotal element in this narrative is that language radically amplifies human capabilities to shape ideas, to accumulate and transmit knowledge. With language, the fact of choice is profoundly affected too. With language, the power of choice increases in an unprecedented and unique way in evolutionary history (V. Ostrom, 1982, pp. 7–11). But the increase of options (imagined or real) makes the act of choice daunting. To coordinate, cooperate, and work through the looming chaos and structural uncertainty, rules and their institutionalization are needed. In the absence of such heuristic devices that diminish the diversity of possibilities, economize and focus cognitive effort, reason-based choice becomes impossible. It is noteworthy the large measure in which this implies an ideas-centered account. Ideas—or correlated concepts such as learning or knowledge-frame and permeate choices. Ideas set into motion actions, ideas give solutions, but they also generate new problems and challenges. Ideas are present at different levels: ideas on possibilities, ideas on rules, ideas on institutions. Ultimately, an account of human societies is fundamentally an account of the social avatars of ideas and knowledge, manifested through choices. That is to say that at the most fundamental level, understanding the nature of institutions is rooted in understanding the role of ideas, and knowledge in the human condition. Everything pivots around them because everything pivots on choice. Or, the other way round, it pivots on choice because it pivots on ideas.

3.2 Institutions—Bulwarks Against the "Threat of Chaos" and the "Threat of Tyranny"

This is the background on which one could read V. Ostrom's (1973, 1982) interpretation of institutions as responses or solutions to generic challenges or "threats." Let us take a step further with a brief look at such two key challenges: the "threat of potential chaos" and the "threat of tyranny."

We have already seen how new ideas, free will, learning, and imagination, as intrinsic elements of human nature, do come with the price of generating an ongoing "threat of potential chaos." The future course of human development is always influenced by the generation of new knowledge. New knowledge opens new possibilities; and challenges more often than not the status quo—it has destabilizing effects. Increasing the potential variety in human behavior, the multitude of combinations, combinations of combinations and patterns of interactions, threatens with chaos the maintenance of a predictable order (V. Ostrom, 1982, p. 18). Hence, the paradox that choice requires constraints:

Mechanisms for ordering or constraining choices must simultaneously occur if human development is to advance beyond a most primitive level. The development of order out of chaos requires that each human being establish a basis for anticipating how others will behave so that each person can act with an expectation that other persons will act with constraint. (V. Ostrom, 1982, p. 19)

The basis for anticipating others' behavior is what one calls a "social rule." Rules are the mechanism constraining and ordering choice and, thus, "a necessary condition, but not a sufficient condition, for establishing ordered social relationships." They are the magic that transforms and stabilizes that potential chaos coming from the fundamental unpredictability of human nature and human ideas. Out of the range of potential diversity, individuals are constrained from exploiting all possibilities and are limited in their choice to a smaller range of possibilities. Consequently, human behavior can be surprisingly predictable in the presence of relevant decision rules.

Yet, the very existence (and necessity) of rules introduces a new challenge or threat: the "threat of tyranny." Social order depends on human agents who have the task to formulate, determine, and enforce rules. But that creates drastic asymmetries between those agents and the rest. Rules, thus, by their very nature, generate two social types: the rulers and the ruled. It looks like it is unavoidable that collective action and social order imply "organized inequalities in the management of interdependent rule-ordered behavior." Therefore, it is fair to conclude that the most fundamental source of inequalities in human societies is the inevitable use of rules to order social relationships (V. Ostrom, 1982, pp. 22–23; 1984, 1986).

The problem is amplified by the fact that ruled-based order depends on the use of sanctions. That means that social order "not only requires an assigning of authority to those who govern but also requires giving them the right to use coercion." Therefore, as social beings, humans are forced to "accept coercion as use of instruments of evil to permit orderly social relationships." The ubiquity of coercion means that in the final count, order and organization in human societies "depend upon a Faustian bargain where the use of instruments of evil, i.e., sanctions, including those of organized force, become necessary conditions for deriving the advantages of social organization" (V. Ostrom, 1982, p. 2). That is undoubtedly introducing a tragic element in human condition. What V. Ostrom calls a "Faustian bargain" is inevitably ensuing from the "tensions which arise from efforts to give force and effect to words and ideas in structuring human relationships."

This condition makes a Faustian bargain of human societies; and no one can escape from the burden of using such instruments of evil to do good. [...] We are all intricately bound in a Faustian bargain which we as human beings cannot avoid. At most, we can attempt to understand the fundamental tensions that are inherent in such a bargain and conduct ourselves accordingly. We are all potential tyrants unless we learn to act justly. (V. Ostrom, 1982, p. 35)

To sum up, social order and its institutional dynamics are seen as shaped by (and operating under) the shadow of the ongoing tension between the "threat of chaos" and the "threat of tyranny." Force and political constraint can be used as "instruments of tyranny as well as instruments to support productive and mutually advantageous relationships." Could the problem of elemental asymmetry in the relationship between the "rulers" and the "ruled" be dealt in any way? Does, by its very nature, social order require that someone rules over society and cannot be held accountable to other members of society? Is it possible to conceptualize and organize the relationship between rulers and ruled so that rulers themselves are subject to a rule of law? In other words, could we design a "meta-level rule of law" where rulers themselves are subject to enforceable rules? Could we encapsulate it creating a climate dominated by deliberation and critical reason tempering the rulers and the application of force by checking and balancing them not only with the force of rules but also with reason and deliberation. The very effort of specifying such a solution is a means to appreciate the deep tensions that are involved in establishing a system of governance where both the "threat of chaos" and the "threat of tyranny" are circumvented. We are already in the territory of the "science and art of self-governance."

3.3 Institutions as Knowledge Processes

Even a preliminary overview of this second dimension of the social philosophy of the Bloomington school reveals a significant departure from the polycentricity-Public Choice perspective presented in the first part of the article. First of all, to introduce explicitly and unabashedly a moral problem—good and evil—is not the typical thing in standard institutional analysis and even less so in Public Choice. In some of his writings, V. Ostrom's paradoxes, Faustian bargains, dilemmas of human condition, etc. sound like the repertoire of an existentialist philosophy of the tragic. But behind and beyond it, the argument leads to a problem of knowledge, and to a theory of knowledge processes. The knowledge (both practical and theoretical)—the "science and art"—to devise rules and meta-rules and to support their operation by force, deliberation, and reason, is the pivotal element of the vision. Knowledge and learning are stabilizers of social order and drivers of social change. Social order, in the end, is nothing less than a huge knowledge process. Yet, although the argument sounds Hayekian, the nuances and differences are significant. To illustrate that point, let us take a brief look at two other "threats" discussed by V. Ostrom as parts of this philosophy of institutional order: the "threat of uncertainty" and the "threat of ignorance and error."

We have already discussed the thesis that as human capabilities for learning and communication increase, as new knowledge increases, that has the effect of disrupting existing or established relationships as well as the expectations about the future based on them. It is one thing to hope that more knowledge will reduce that uncertainty and something else to realize that while new knowledge may reduce uncertainty in some areas, it may increase it in many others. One needs to know not only how to reduce uncertainty in specific domains but also how to manage it in the aggregate.

One way would be simply to block the advent of the growth of new knowledge in the society. In this case, routines based on specific and meticulous prescriptions for each activity become the norm. However, there is a second possibility, and this one is of most interest to the institutional theorist: designing rules and institutional arrangements that leave open to choice an entire range of learning and actions and at the same time try to channel them in the most beneficial way. The domain of learning should be understood in broad terms. For instance, learning takes place in market through prices—profit and loss—that signal the direction in which resources are best directed. In a similar way, learning takes place through organizational experiments, failure, and success. The principle of bankruptcy in the legal system helps society to deal with failed organizational experiments. The list of examples of rule systems that administer knowledge and implicitly manage uncertainty could continue. The point is clear: the solution is not to try to block the knowledge process but to work with it through institutional means.

The problem of knowledge and its uses in society highlights an additional issue (Ostrom, 1982, p. 34; 1973, 1990a, 1991b, 1991c). Social order increases and intensifies the division of labor, which leads to better use of skills and knowledge in society. But at the same time, it leads, by definition, to specialization, and specialization in a particular domain has a cost: the lack of specialization in others. If one defines the issue in cognitive terms, then one may conclude that relative knowledge brings relative ignorance, "the limited mastery that each individual can attain in relation to the aggregate pool of knowledge" (V. Ostrom, 1982, p. 31). In other words, while the division of labor increases the overall level of knowledge in a society, it also increases the relative ignorance of its individual members. Adam Smith (1981 [1776], pp. 734–735) in The Wealth of Nations was among the first to identify this downside, or "perverse effect" of the division of labor. Specialization means coming to know more and more about less and less. Note that the threat of relative ignorance is not limited to the undereducated or to physical laborers. It is a general or structural problem deriving from specialization of any type of knowledge and/or any type of division of labor.

In brief, individuals are necessarily limited in their capacity to master large bodies of knowledge. As the aggregate pool of knowledge increases, the relative ignorance of each individual about that aggregate pool of knowledge will also increase. The implications are two-fold. The first is cognitive. The more complex the institutional order, the deeper the division of labor; the deeper the division of labor, the less one single person can "see" or "know" the "whole picture." Out of that emerges a second implication—an operational one. In the circumstances created by

a permanent dynamic limit to our knowledge, all decision making could be subject to error. Hence, all decision makers are fallible. "No decision maker can know all of the consequences that flow from his decision and actions. A proneness to error will plague all human efforts" (V. Ostrom, 1982, p. 32; 1973, 1990, 1991b). Needless to say, that conclusion converges with the conclusions of previous arguments surrounding the discussions of the other "threats."

We could now move to the final stage of our overview. Based on the discussion of the "threats" we are now in the position to highlight two noteworthy sets of corollaries that round up and nuance our view of the second facet of the social philosophy of the Bloomington School.

The first set of corollaries starts with the observation that the salient place of knowledge and learning implies a similar place for error, ignorance, and fallibility. One could make a step further: there is a relationship between accepting a vision of the limits of individual and human knowledge and accepting the necessity of an open, pluralist, and polycentric political system functioning on the basis of dispersed knowledge. Alternatively, there is a relationship between assuming the perspective of an "omniscient leader" and believing in the viability of monocentrism, centralism, and comprehensive social planning. One could thus start to see how the two facets of the Bloomington social theory may be linked or at least how they resonate with each other. Decision makers and analysts, writes V. Ostrom, who assume that "they can take the perspective of an omniscient observer," that they can "see" the "whole picture," are always a potential source of troubles. Their solutions or decisions will increase the predisposition to error, not to speak of the fact that their perception of their own capabilities may invite a tyrannical behavior. In monocentric systems, this property is exponentially more dangerous—in fact is self-reinforcing.

Those who have recourse to the perspectives of "omniscient" observers in assessing contemporary problems, also rely on political solutions which have recourse to some single center of authority where officials can exercise omnipotent decision-making capabilities and dealing with the aggregate problems of a society [...] Somebody who takes the perspective of an omniscient observer will assume that he can "see" the "whole picture, "know" what is "good" for people, and plan or pre-determine the future course of events. Such a presumption is likely to increase proneness to error. Fallible men require reference to decision-making processes where diverse forms of analysis can be mobilized and where each form of analysis can be subject to critical scrutiny of other analysts and decision-makers. (V. Ostrom, 1973)

This way of framing the "threat of ignorance" brings to the fore another facet of institutions and another insight into the nature of the "science and art of politics." If a society accepts that all decision makers are fallible, then it recognizes the need to create institutional bulwarks against error. That is to say, it responds to the necessity of reducing error proneness by building "error-correcting procedures in the organization of decision-making processes" (V. Ostrom, 1982, p. 32; 1973, 1990). These error-correcting procedures are nothing else than organizational and institutional

processes aimed at facilitating and speeding up the rate of learning. Learning is the quintessence of error-fighting mechanisms. Correcting errors is part of a learning process. In this respect, systems of organization, including systems of government, can ultimately be viewed as arrangements that either facilitate or stifle opportunities for learning to occur (V. Ostrom, 1982, pp. 31–32; 1973; E. Ostrom, Gardner, & Walker, 1994). This is a simple thesis with very interesting implications for the ways we think of institutional performance.

The second set of corollaries build on the observation that a "science of rules" is crucial for a functional social order. The notion that in order to survive and flourish, social order requires rules able to cope with uncertainty has an ineluctable implication. The idea has already been mentioned: one needs the knowledge of rules or "a science of rules." Such knowledge, writes V. Ostrom, should "enable us to understand how rules constrain choice and affect behavior in ways that are likely to generate social pathologies under changing conditions of interdependency." At the same time, such knowledge might then be used to change rules and create new patterns of behavior to avoid those "pathologies." If orderly change is to occur, he continues, "advances in human knowledge about institutional analysis and design must accompany the generation of those other forms of new knowledge which enable human beings to manipulate nature and alter the structures of events" (V. Ostrom, 1982, pp. 27-29; 1971, 1992). Maintaining a complex and functional order requires an ongoing investment in the study of rules, institutions, and institutional design principles. Seen in this context, the IAD framework is to be understood as a contribution to this effort. Its cognitive and heuristic content is an ingredient of the larger pool of "human knowledge about institutional analysis and design" that we need in the race to keep up with the growth of other types of knowledge and the "threats" they pose.

In brief, the overview of the "threats" illustrates the tenuous and volatile nature of social order as an extension of the human condition "plagued by critical tensions" (V. Ostrom, 1982, p. 33; 1973). The human capability for learning poses a "threat of chaos." The solution to that threat implies a "Faustian bargain" in which human beings are required to "use instruments of evil to advance their joint good." The threat of chaos and the creation of order from chaos, in turn, pose a "threat of tyranny" while in parallel the amplification of human capabilities for learning, necessarily increases the "threat of uncertainty." These threats are compounded by a "threat of increasing relative ignorance" that accompanies the modern growth of new knowledge. To sum up, once the crucial tension between learning and constraints, ideas and rules is projected as a background, and once the complexity and diversity of the attempts of human beings to organize and find solutions to unavoidable threats generated by the very human condition are considered, a deeper perspective on the institutional and political order is opened. This is a perspective that does not shy away, using epistemological or methodological excuses, to recognize the existential significance of the notions of tragic, dilemma, tyranny, ignorance, and error. In fact it is for the first time that institutionalist authors take seriously the other facet of notions like "the tragedy of the commons" or "dilemmas of social cooperation." Emphasizing "dilemma" and "tragedy," as opposed to, or at least as much as,

"commons" and "social cooperation," reminds us that there is more than meets the eye even in the most familiar conceptual models we use to analyze and interpret social reality. Irrespective of what one may think of what a social philosophy or social theory should look like, the perspective offered by the Bloomington School is an unquestionably powerful and profound piece of intellectual work.

4. Summing Up: Questions and Challenges

We have now a clearer view of the two dimensions of what we have called the "social philosophy" associated with the Bloomington School of Institutional Analysis. Once familiarized with them, the first questions that come to mind are: in what measure are these two facets consistent with each other? Are they connected or connectible by a clear-cut logic? Are they convergent, divergent, or simply parallel?

Such questions are, no doubt, legitimate. On the one hand, is a perspective close to the Public Choice tradition but deviating from it, among others, in the role given to the ideas and belief systems of social actors as well as to the "situational logic" or "ecological rationality" defining the actions of those actors. Built around the concept of "polycentricity," this perspective is a challenge to two of the deepest assumptions of political and economic sciences of the twentieth century: the monocentric vision of social order and the "market" vs. "state" dichotomy. On the other hand, is the outline of a social theory built around a view of social order seen as a knowledge and learning process, and bolstered by a series of observations about the human condition, fallibility, coercion, and error and their role in creating and undermining institutional order. The shift of emphasis to learning and knowledge as main drivers of social change and the use of notions heavy of intellectual history, such as "human condition" or "Faustian bargain" signals a departure even further from the mainstream. However, unorthodox as they both are, no one could deny that each presents the student with its own, different angle on institutional order and its interpretation. For instance, on the other hand, we have a perspective in which institutional diversity is a function of a formally constructed taxonomy of goods—public, private, common—in which the nature of goods more or less shapes the institutional structure, including that of the polycentric order. On the other hand, we have a perspective in which institutions are seen primarily in the light of fluid, volatile, and difficult to formalize knowledge and decision processes. The many functions institutions have (in order to meet the multitude of challenges they are supposed to be a response to) create institutional patterns that seem to defy the simplicity and rigidity of more typical conceptualizations. A rapid look at the variety and complexity of institutional solutions emerging in history as a response to the "threat of uncertainty" is sufficient to illustrate the point.

In brief, even a cursory overview confirms that the two social philosophies of the Bloomington school are different enough to give good reason for asking questions about their compatibility. That is why the first problem that comes to mind is not that of the differences between them but the question: Different as they may be, is there a structural—logical or theoretical—link between them? Addressing this question on the spot is very tempting. Indeed, once that is done, two solutions immediately

offer themselves as possible responses. The first would be to say that the two perspectives address two different levels of analysis. One could make reference in this respect to E. Ostrom's own argument that explanations have to occur at multiple levels, hence the task is (i) to identify the appropriate level of analysis relevant to addressing a particular puzzle, and (ii) to learn or to build the appropriate language for understanding that level and one or two levels above and beyond the focal point (E. Ostrom, 1986, 1990, 1997, 2005; E. Ostrom et al., 1994). Taking advantage of the argument developed by her, one could simply translate it by making the point that they apply to these social philosophy frameworks too. The two social philosophies are visions of different levels, each addressing particular puzzles regarding the institutional reality.

Yet, as much one may wish to make it fade away, we are still left with a problem. Different languages may lead to different approaches and even more important, to different truth claims, some of them contradicting each other. In the end, to avoid the impression that anything goes, it may still be necessary either to show how the two are logically and theoretically linked or to confront directly an even more basic problem: Is it really necessary to have them (logically and consistently) linked at all? If finding some principle of consistency is unavoidable, then a meta-level conceptual construction is inevitable. And this approach (that represents in fact the second solution) seems inescapable because even if we assume a modular, multi-faceted approach, one still needs to offer an account and a coherence criterion for the various truth claims introduced by the various perspectives, from various levels.

The effort to explore the possibility of a "third" social philosophy that operates as a meta-level framework above the two discussed in this article is undoubtedly worthy. Yet the real dimensions and the significance of this and other similar efforts could be fully understood only if we take a look at the entire picture and at the entire range of questions and challenges revealed by an investigation into the two social philosophies of the Bloomington institutionalism and their relevance. The point is that if we look from a broader perspective, we realize that the issues of how consistent the two facets are and of how we reinforce that consistency, are important because they are leading us to a deeper and larger set of insights. It becomes clearer that the focus shifts from the relationship between the two philosophies toward their relationship with the rest of the research program. How consistent are the two (separately or in conjunction) with the rest of the program? How important are they for the unity, identity, and completeness of the school of thought advanced by the Ostroms? We know, for instance, that what we called "social philosophy" ideas are an easily identifiable part of the history of their work. As such they are part of, so to speak, the genealogy of E. Ostrom's recent and widely praised empirical work. We also know that in the minds of the Ostroms, these more foundational and general ideas and the more applied, empirical, and theoretical agenda were coexisting. They saw a link, a continuity between them; they were considered to be part of a larger whole.

But the fact that, at one point or another, the Ostroms hold these views, or that they saw them connected—part of a system of thought—does not imply that those ideas are truly consistent in a philosophical or epistemological sense with each other

or with the rest of the research program. Whether they are intrinsic pieces of a larger and coherent system is yet to be determined. And that task is not so much an effort of discovery but an effort of construction. The fact that a genealogical approach could document and trace back some theoretical insights (or some pieces of empirical research) to a social philosophy, is not a test of consistency. The genesis of some of the governance and CPR theories (the Popperian "context of discovery") may be linked to a certain social philosophy. One could see specific conjectures and hypotheses emerging from a broader vision. But it is also conceivable that something like the CPR agenda, once articulated, may have taken a life of its own. And thus, once established, it goes on to subsist independently of the initial social philosophy vision that created the conditions for its emergence. That is to say, once established as a scientific agenda, one may simply kick off the philosophical ladder. After that, all is a matter of just formulating testable hypotheses and falsifying them using impartial, value-free methodological devices.

At this point we could see more clearly the dimensions and relevance of this discussion about social philosophy (and its place in the Ostroms' version of institutionalism). The issue cuts at the core of the Bloomington research program. We understand that as such, it was unavoidable to address it in the context of this or any other discussion about the past, present, or future of this School. In the end, our overview of the social philosophy of the Bloomington institutionalism has left us with an impressive set of challenging questions. What is the relationship between the two social philosophies and the rest of the Bloomington research program, especially as developed in relationship to the recent empirical agenda? Does the more salient and well known dimension of the agenda really imply (or require) the social philosophies? What is the relationship between the two social philosophies and the analytical tools—such as the IAD framework—developed by the Ostroms and their associates? Or any social philosophy at all? How necessary is a social philosophy once the program is fully functional in its empirical dimension? Is a preoccupation with social philosophy adding to or distracting from the further development of the School? What is the relationship between the two social philosophies? Should the Bloomington agenda be really concerned with their further development? Could it go ahead and advance without them? Why both? Why engage in a meta-level effort to unite them? What if only one of them could function pretty well by itself, as a social theory basis for the empirical, theoretical, and applied agenda?

Last, but not least, are the normative assumptions and implications that have not even been touched in this article but that are nonetheless of paramount importance. We have seen that the Ostroms' institutionalism is infused with a profound trust in human creativity, ingenuity, and ability to self-organize as well as with a deep presumption in favor of human freedom. These are part and parcel of both social philosophies; they are not and could not be contained by abstract analytical models or by value-neutral methodological devices. Hence a question: What would happen if the normative dimension is removed from the Bloomington perspective? How would that affect the future of the School, its agenda, and its relevance?

These and other similar questions seem to challenge in unexpected and profound ways our thinking about the Ostroms and their work. They compel us to see their endeavor as a remarkable invitation to a work in progress, to a real intellectual workshop where our task is not only one of discovery and interpretation of established facts and ideas, but also (and even more important) one of intellectual construction and creativity. In the end, this is the essence of the Elinor and Vincent Ostrom challenge to us. A challenge we are yet to respond to.

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References

- McGinnis, Michael. 1999a. Polycentric Governance and Development: Readings from the Workshop in Political Theory and Policy Analysis. Ann Arbor: University of Michigan Press.
- ———. 1999b. Polycentricity and Local Public Economies: Readings from the Workshop in Political Theory and Policy Analysis. Ann Arbor: University of Michigan Press.
- Ostrom, Elinor. 1972. "Metropolitan Reform: Propositions Derived from Two Traditions." Social Science Quarterly 53: 474–93.
- ——. 1986. "An Agenda for the Study of Institutions." Public Choice 48 (1): 3–25.
- ———. 1990. Governing the Commons: The Evolution of Institutions for Collective Action. Cambridge: Cambridge University Press.
- ———. 1996. "Crossing the Great Divide: Coproduction, Synergy, and Development." World Development 24 (6): 1073–87.
- 1997. "A Behavioral Approach to the Rational Choice Theory of Collective Action." Presidential Address. American Political Science Association, Indiana University.
- ——. 1998. "The Comparative Study of Public Economies", Presented upon Acceptance of the Frank E. Seidman Distinguished Award in Political Economy. Memphis, TN: P.K. Seidman Foundation.
- -----. 2000. "The Danger of Self-Evident Truth." PS: Political Science & Politics 31 (1): 33-44.
- ——. 2005. Understanding Institutional Diversity. Princeton, NJ: Princeton University Press.
- Ostrom, Elinor, Roy Gardner, and James Walker. 1994. Rules, Games, and Common-Pool Resources. Ann Arbor: University of Michigan Press.
- Ostrom, Vincent. 1971. The Intellectual Crisis in American Public Administration, 3rd ed. Tuscaloosa, AL: University of Alabama Press, 2008. [1st ed. 1971; 2nd ed. 1989].
- 1972. "Polycentricity." Workshop Archives, Workshop in Political Theory and Policy Analysis, Bloomington, IN: Indiana University. Presented at Annual Meeting of the American Political Science Association, September 5–9, Washington, DC.
- ——. 1973. "Order and Change Amid Increasing Relative Ignorance." Working Paper No. W73–1, Workshop in Political Theory and Policy Analysis. Bloomington, IN: Indiana University.
- -----. 1980. "Artisanship and Artifact." Public Administration Review 40 (4): 309–17.
- ——. 1982. "The Human Condition." Workshop Archives, Workshop in Political Theoryand Policy Analysis. Bloomington, IN: Indiana University.

- ——. 1984. "Why Governments Fail: An Inquiry into the Use of Instruments of Evil to Do Good." In The Theory of Public Choice—II, ed. J. M. Buchanan, and R. D Tollison. Ann Arbor: University of Michigan Press.
- ——. 1986. "The Constitutional Level of Analysis: A Challenge." Working Paper No. 85–41, Workshop in Political Theory and Policy Analysis. Bloomington, IN: Indiana University.
- ——. 1990. "Problems of Cognition As A Challenge to Policy Analysts and Democratic Societies." Working Paper No. 90–5, Workshop in Political Theory and Policy Analysis. Bloomington, IN: Indiana University.
- ——. 1991a. The Meaning of American Federalism: Constituting A Self-Governing Society. San Francisco: ICS Press.
- ——. 1991b. "Some Ontological And Epistemological Puzzles In Policy Analysis." Working Paper No. W82–16, Workshop in Political Theory and Policy Analysis. Bloomington, IN: Indiana University.
- ——. 1991c. "Some Puzzles in Using Knowledge to Inform Choices About Public Affairs." Working Paper No. W91–4, Workshop in Political Theory and Policy Analysis. Bloomington, IN: Indiana University.
- ——. 1992. "Opportunity, Diversity, and Complexity." In Rethinking Institutional Analysis and Development: Issues, Alternatives, and Choices, ed. Vincent Ostrom, David Feeny, and Hartmut Picht. San Francisco: ICS Press.
- -----. 1993a. "Epistemic Choice and Public Choice." Public Choice 77 (1): 163-76.
- . 1993b. "The Place Of Languages In The Political Economy Of Life In Human Societies." Working Paper No. W93–6, Workshop in Political Theory and Policy Analysis. Bloomington, IN: Indiana University.
- Ostrom, Vincent, and Elinor Ostrom. 1977. "Public Goods and Public Choices." In Alternatives for Delivering Public Services. Toward Improved Performance, ed. E. S. Savas. Boulder, CO: Westview Press, 7–49.
- . 1971. "Public Choice: A Different Approach to the Study of Public Administration." *Public Administration Review* 31: 203–16.
- Ostrom, Vincent, Robert Bish, and Elinor Ostrom. 1988. Local Government in the United States. San Francisco: ICS Press.
- Ostrom, Vincent, Charles Tiebout, and R. Warren. 1961. "The Organization of Government in Metropolitan Areas: A Theoretical Inquiry." *American Political Science Review* 55: 831–42.
- Smith, Adam. 1981. The Wealth of Nations. Indianapolis, IN: Liberty Press.
- Wilson, Woodrow. 1956. Congressional Government. New York: Meridian Books, First published in 1885.