# Institutional Diversity and Political Economy

The Ostroms and Beyond

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#### Introduction

ONE OF THE most profound but not always fully understood challenges to modern political economy and institutional theory is the diversity of institutional forms that give substance and structure to political and economic life. Diversity shouldn't be a surprise. Institutional arrangements are intricate clusters of rules and human interactions, shaped in large measure by the variety of situations of social life. The mere diversity of situations is enough to create a wide variety of possible arrangements. If we add to all that the variety of individuals' possible preferences, beliefs, interpretations, and strategies, all leading to possible new rules and situations, we start to grasp the huge range of potential combinations in their evolving dynamism. All of the above suggest the measure in which institutional diversity is indeed messy and complex. It doesn't lend itself easily to analysis. When it comes to institutions, "carving nature at its joints" and arranging it in classes is not a simple and straightforward process. And yet, more often than not, in our institutional theories and in our designs we tend to brush off this profound challenge. More often than not, homogeneity is assumed or expected, while heterogeneity is considered as marginal, unessential, of limited relevance. The limits of this strategy may not be so obvious as long as one is operating mainly as a social scientist, following the notion that social scientists produce generalizations and test them, while the burden of applying the insights thus gained to practical problems and social dilemmas is the business of "practitioners."

But what happens if, instead of the typical approach, which gives a position of preeminence to theoretical generalizations and considers the applied level an extension of peripheral interest, we start by focusing on tangible, applied problems and puzzles, and we consider institutional theory in the light of its instrumental value to contextualized analysis and institutional design? Elinor and Vincent Ostrom's lifework is a case study giving many clues and some possible answers to this question. Their approach is well known for aiming not for grand generalizations but for understanding the nature and

possible solutions to specific problems of collective action, governance, and social dilemmas in various settings and circumstances. Making governance dilemmas and the applied dimension the starting point, as well as the filter of our interest, reveals a different configuration of concepts and themes marking and linking the practice-to-theory continuum. And it is noteworthy that at the core of this configuration the problem of diversity and heterogeneity emerges as salient and pivotal.

"The presence of order in the world," writes E. Ostrom (1998), "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." That is to say, we should not limit our approaches to theoretical frameworks of the State and to theoretical frameworks of the Market. We need theories that match the extensive variety of institutional arrangements existent in the world. In response to that need, the Ostroms have charted and explored a novel domain of the complex institutional reality of social life: the rich institutional arrangements that are neither states nor markets. Small and large, multipurpose or just focused on one good or service, they display a daunting variety of functions and structures: suburban  $municipalities, neighborhood\ organizations, churches, voluntary\ associations,$ and informal entities like those solving the common-pool resources dilemmas the Ostroms studied and documented around the world. In their work they identified the functional principles behind them, tried to find out whether their very diverse forms could be understood as parts of broader patterns, and charted the logic of the institutional process involved. In many cases they found that such institutional arrangements may be related to, and yet different from, both "the state" and "the market." They also found that, irrespective of what one may call these arrangements, in order to analyze them one needs theoretical lenses that do not well fit the classical dichotomy, defined by two and only two major institutional models. This is the reason why the Ostroms' perspective is so difficult to categorize. Rooted in economics, public policy, and political science, recognized by the most prestigious awards in political science and public administration as well as a Nobel Prize in economics, their work develops new approaches to both familiar and unfamiliar social phenomena, while transcending the constraints and simplifications imposed by existing disciplinary boundaries.

And thus, the Bloomington scholars' work, by drawing our attention to the phenomenon of institutional diversity and its implications for governance and public policy, reminds us at the same time that our theoretical lenses are simplifying devices that allow us to see some things in profound ways but, at the same time, obscure others. We are reminded why in political economy, as in any other social science, the methodological tension between generalization and specification is so intense and consequential and cannot be simply assumed away. In addition to that, we learn that, lured by the beauty and parsimony of our theories and models, we may be missing the remarkable facts of institutional diversity. The Ostroms' studies warn us that a predisposition toward homogenization is profoundly rooted in our models of man, action, and institutional order. The homogenization, super-simplification, and formulaic conceptualization in our theories of institutions is in many respects a function of a parallel homogenization of human agents that we practice at the micro level.

For instance, in her studies on collective action, Elinor Ostrom has repeatedly drawn attention to the problem of actor and social heterogeneity and its implications for institutional order and institutional theory. One of her major concerns has been that in the relevant literature, although "the assumption of homogeneity was made for theoretical reasons," it has been too often used as a close approximation of reality, despite the fact that "heterogeneity is a preeminent aspect." Even more important, although "heterogeneity has been obvious to empirical research," too little work has focused on it and its consequences" (Ostrom and Keohane 1995; Poteete, Jansen, and Ostrom 2010). Her take in this respect is both eye-opening and challenging.

What would happen if we started to look at social order through the twin lenses of heterogeneity and institutional diversity? In a sense, this book is an attempt to chart and explore several avenues entailed by this challenge. Its premise is that whether one likes it or not, the related problems of heterogeneity, institutional diversity, and pluralism are a major (and more often than not, unacknowledged) issue in the literature dedicated to institutionalism, governance, and institutional design. Revisiting this challenge opens up a window into the core of the institutionalist contemporary research agenda and implies an assessment of the state and promise of institutionalism, broadly defined as a family of research programs in which institutional emergence, structure, and change are programmatically used as key dependent and independent variables in the conceptual reconstruction of a discipline, field, or thematic area. The re-examination in this light of some of the key themes and concepts of the Ostroms' contribution becomes thus a vehicle for a discussion not only of their research agenda but also of the future of institutionalism, political economy, and, for that matter, any research program in which the problem of governance and the theory of collective action are central.

The Ostroms' distinctive approach was considered from the very beginning an evolving part of the "public choice revolution" exploding in the 1960s. As William C. Mitchell framed it in his 1988 *Public Choice* article, "Virginia,

Rochester, and Bloomington: Twenty-Five Years of Public Choice and Political Science," the Ostroms' school has established itself rapidly as one of the preeminent centers of the movement. Three distinct schools of thought have appeared, he wrote, changing the ways we understand the economic and political reality. These schools could be labeled based on their geographical locations: Virginia, Rochester, and Bloomington. "At each of these institutions one or two dominant figures led...the effort to construct theories of collective choice: Riker at Rochester, Buchanan and Tullock at various Virginia universities, and the Ostroms at Indiana." In the years after Mitchell's article was published, Bloomington has not only consolidated its position as one of the preeminent centers of the public choice but also transformed its blend of public choice into a unique form of institutional theory. In the process, it created a unique research agenda, becoming one of the most dynamic and productive centers of scholarly work in social sciences in general. The fact that Elinor Ostrom was a recipient of the 2009 Nobel Prize in Economics was a telling recognition of Bloomington school's important contributions to the study of institutions and economic governance.

Yet, in the celebratory and retrospective mood created by such honors and public recognition, the Bloomington agenda is far from making its closing arguments. This book argues that if followed consistently, the logic intrinsic to the agenda developed in the last four decades by Elinor and Vincent Ostrom is leading to a unique brand of institutionalism, a research program taking seriously and dealing systematically with the theoretical, empirical, and normative problems of heterogeneity and its consequence and condition, institutional diversity.

The Ostroms started in the 1960s with a theory of collective action based on a theory of goods, theories that were emerging at that time from the mantle of neoclassical economics as major building blocks of the new, modern political economy. In time, their work on governance created one of the main channels of the transition from public choice to the new institutionalism. Today, looking back to the broad field covered (and in many cases created) by them and revisiting the insights growing from the theoretical and empirical studies of collective action and governance done by a large number of scholars in several disciplines, the main conclusion is that the results are in many respects not quite what one may have desired or expected initially, in the light of the theories and conjectures advanced by authors such as Mancur Olson, Garret Hardin, or even Gordon Tullock. Generalizing proved to be very difficult. A key variable like heterogeneity (of preferences, beliefs, or endowments) may both facilitate and impede collective action, as a function of circumstances and situational logic. What goes for heterogeneity goes for other comparable variables. That

may well explain why no general theory of collective action has been offered and may not even be possible: The situational logic circumstances require an approach that goes beyond the simple and global and deals with complex, interactive, and conditional "theoretical scenarios." These results—one may like them or not—have momentous implications. They invite a rethinking of institutional theory and, more generally, any form of political economy or social theory in which collective action is central. We have a situation in which one of the most intense and carefully studied domains in political economy and social sciences leads us to the conclusion that there is an increasing mismatch between, on the one hand, the theoretical-epistemological frameworks used and the expectations based on them, and the phenomena in question, on the other. The process of the growth of knowledge requires a midcourse adjustment.

And thus, exploring the pluralist lines opened by the Ostroms becomes an alternative by necessity. Their thrust is leading to a substantial departure from the conventional wisdom built around theories assuming or expecting homogeneity, "normalization," and "consensus." Indeed, one of the major lessons of the Ostroms' work has been that it is both necessary and possible to deal constructively with the numerous situations in which homogeneity is not assumed, existent, or anticipated. That is to say, it demonstrates the institutional complexity and diversity of possible answers to the problems of governance in conditions of heterogeneity.

In all this, the Ostroms' views converge with a new and innovative agenda advanced in political economy, social philosophy, and political theory: the study of the problem of governance and social order in circumstances of deep heterogeneity, which lack consensus or correspondence of preferences, beliefs, or information. The fact that most authors involved in these efforts happen to be at the same time in search of an alternative to the epistemological credo embraced by the mainstream makes things even more interesting. This book is, in a sense, precisely about this path toward convergence, as seen from the Ostromian side. As such, it shows how, exploring the themes of the Bloomington school, we could both contribute to the contours of the emerging perspective and identify the measure in which the Ostroms provide a core analytical and empirical dimension to this increasingly vibrant agenda.

Needless to say, an approach that makes out of the reality of heterogeneity a key point is more relevant today than ever. Diverse values, identities, principles, and cultures clash in the global arena. Emigration, increasing diverse populations within the boundaries of nation-states, demography and culture, increasing technology-driven social segmentation and cultural heterogeneity—all challenge governance systems not only at the global and national

levels but also, increasingly, at the local level. All these phenomena revive the theme of pluralism, diversity, and collective action with an unprecedented intensity. The increasing preoccupation with it in current political and economic theory is unavoidable once heterogeneity is recognized as a key feature of social reality and as a genuine political and economic practical challenge. In what measure is it possible to have an institutional order defined by freedom, justice, prosperity, and peace in an increasingly interdependent world of diverse and conflicting views, beliefs, preferences, values, and objectives? This is a discussion about the fundamental nature of governance (both domestic and international) in the new era. With it, we are at the core of the major political and economic challenges of our age. And at the same time, we are at the cutting edge of contemporary social science and political philosophy. The empirically grounded, applied institutional analysis of the possibility of social order, governance, and economic performance in extreme conditions that lack consensus or convergence of beliefs, preferences, and values seems to be indeed the new frontier.

This project started as an attempt to look at a set of promising concepts and themes that have emerged within the framework of the Ostromian research program and that had a double characteristic. First, they had a central position in the deeper architecture of the Ostromian system. Second, they were still a work in progress, inviting further discussion and elaboration. The plan was to introduce and further elaborate them, while exploring their analytical and operational implications, and thus to offer the reader an introduction to both the existing state and the potential of this important school of institutional theory. An additional thought was at work in this plan: Bloomington institutionalism is better known today mainly for the empirical work on governance and collective action, with specific applications to public economies in metropolitan areas as well as to the management of diverse common-pool resources. However, that is only part of the story. Those lines of research are rooted and embedded in a complex research program, a multifaceted system of ideas that span from social philosophy to applied political economy. Hence the intention was to go beyond the more salient and publicly visible pieces of the research produced by the Bloomington scholars and to identify several concepts that, at a more foundational level, reflect that less-known facet. The assumption has been indeed that those concepts continue to be the bearers of a significant potential for the renewal and advancement of the agenda.

However, as the book project grew, a larger pattern started to take form, a pattern that went beyond the initial objectives, adding a new dimension to the book. The initial plan remained embedded in the project (and the chapters could still be read as separated concept-based vignettes of a broader intellectual

landscape). Yet the underlying logic uniting these concepts and their interpretation become more and more salient in the economy of the manuscript, and the emphasis shifted slowly toward it. The broader vision and the logic that gives these key concepts their most profound meaning became, in the end, the tacit theme. Out of it came the implicit conjecture that the emerging perspective toward which the Ostroms' work leads may be one of the boldest and most profound propositions advanced in current social sciences. That is to say, it is a sustained theoretical and analytical effort that (a) captures and addresses the structural and functional variety of social institutions, seen as a function of heterogeneity, and (b) follows up to the logical conclusion the normative implications of that variety, in a pluralist philosophy of governance.

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The two themes, heterogeneity and institutional diversity, are, accordingly, two facets of the same problem, while the Ostrom type of institutionalism is a foundational pillar of the research program that unites these two facets, under a pluralist cupola. This is a pluralist perspective that goes beyond the state-centered views, beyond the markets-versus-states dichotomy, and indeed, beyond the policy models and solutions that assume the presence of large areas of consensus and centralization. Notions such as "polycentricity" or instruments such as the Institutional Analysis and Development (IAD) framework, developed and advanced by Elinor and Vincent Ostrom, are thus to be seen as ways by which this type of institutionalist political economy tries to chart and analyze the complexity and diversity of human institutional arrangements emerging from social and individual heterogeneity.

The book starts with a fresh and perhaps surprising interpretation of the place and significance of the Ostromian perspective in the context of the relevant intellectual developments in the political economy and social philosophy of the second half of the 20th century. Then chapter 1 moves to overview the research agenda focused on heterogeneity and its impact on collective action. The findings growing out of this research line are interpreted and used as an indicator for the current state of institutionalism and, by extension, of a large part of contemporary political economy. The idea is that the evolution of that agenda has reached a point where cumulated theoretical, normative, and epistemological challenges are opening up the way for a novel stage in thinking and theorizing about collective action, governance, and institutional arrangements. The rest of the chapters may be read in a double key: (a) as a look at how the Ostromian perspective responds to these theoretical, normative, and epistemological challenges and (b) as a presentation, interpretation, and elaboration of several major underlying themes defining this perspective, while placing these themes in the broader context of the relevant literature.

Chapter 2 focuses on one of the ways the Ostroms have tried to conceptualize the complex problem of governance in conditions of heterogeneity and diversity: the notion of polycentricity. Chapter 3 looks at how they have tried to respond to the methodological and epistemological challenge of heterogeneity and institutional diversity via the development of an original instrument: the Institutional Analysis and Development (IAD) framework. Chapter 4 makes a step further and introduces the issue of resilience as a nexus of institutional processes that offers a unique window from the macro level into the inner functioning of complex socioecological systems. The chapter illuminates how institutional diversity and polycentricity serve systemic resilience and reveals how in dealing with this issue, the Bloomington perspective is bringing together the domains of environmental science, economics, and institutionalism. Chapter 5 replicates the approach of the previous chapter, this time from the micro level, and uses as an inside window the problem of institutional design and its agents, a tacit but constant presence in the previous chapters. The chapter looks at this problem through theoretical lenses highlighting the role of ideas, expectations and predictability in social cooperation, notes the crucial position predictability has in the emergence and the study of institutional order, and then explores its implications for the ways we understand the relationship between institutional theory (ideas), institutional theorists, and social reality. Chapter 6 concludes by noting that the overview of Ostroms' work in the light of some of its pivotal concepts (such as polycentricity, institutional diversity, the IAD framework, institutional resilience, institutional design) reveals two things. The first is that this work sets up the stage for a reconstruction of our very approach to institutional theory by challenging us to rethink assumptions, methods, and entire theoretical perspectives. The second is that a certain philosophical profile, unmistakably associable to the pragmatist intellectual tradition, seems to be latent in it, both as an assumption and an implication. The chapter is a first attempt so far to probe and elaborate the link between a foundational pragmatist perspective and Ostromian institutionalism.

The book closes refocusing on the major underlying theme uniting all the chapters: the idea that Ostroms' work has, *in nuce*, all the attributes needed to inspire and contribute to a powerful agenda, both innovative and consistent with distinguished traditions of theorizing in modern political economy and social philosophy. It is an approach whose defining feature is that it follows steadily the logic of heterogeneity, institutional diversity, and value pluralism up to its epistemic implications and that accepts the normative challenge posed by it. In this respect, it is a natural extension to the next level or the next stage of the current cycle of research on institutions, governance, and collective action. Read in this light, the volume is a contribution to the efforts

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to further outline the contours of this next stage of debates and intellectual investigations.

Before concluding these introductory comments, I must note that this book tries to capture something of the spirit, not just the letter, of the Ostromian perspective. The Bloomington research agenda has always had a trace of the unconventional, the unorthodox. It has always managed to maintain a certain detachment from the mainstream, sufficiently large to be intriguing, but not large enough to place itself in the domain of the marginal. Now that institutionalism is mainstream and that the specific type of institutional theory the Ostroms have advanced is increasingly accepted and embraced in economics, political science, and social science, it is natural to ask in what measure this spirit of unconventionalism, such a subtle but pregnant feature of the school, may be preserved. This book may be seen as an attempt to articulate one of the possible answers. The major themes discussed in it all point toward some less-traveled paths. They reflect parts of the Ostromian universe that continue to operate at the boundaries of the mainstream. While many ideas advanced by the Ostroms have made it to the current mainstream, none of the themes addressed in this book (from polycentricity and institutional resilience to institutional mapping and the reassessment on pragmatist grounds of the philosophical basis of institutional theory) has reached that level yet. They all imply rich, intriguing, and potentially controversial research agendas that, in some cases, in their further elaborations may even move away from the letter of the original Ostromian line. However, in all cases they retain the bold spirit defining Vincent and Elinor Ostrom's attitude toward science, scholarship, and the life of the mind.

# Institutional Diversity, Heterogeneity, and Institutional Theory

ELINOR AND VINCENT Ostrom's affinity for the themes of institutional diversity, pluralism, and heterogeneity comes from two major sources. The first is foundational. The Ostroms operate from the perspective of what in social philosophy has been called a pluralistic worldview or paradigm. For them, diversity, pluralism, heterogeneity are "social facts," an inescapable condition of the social world. Similarly, for them the institutional arrangements people generate in response to this inexorable and irreducible feature of the world are and need to be pluralist. In other words, when it comes to organizing human coordination and interdependence in diverse circumstances, with diverse preferences, endowments, and beliefs, institutional pluralism is a fact, a challenge, and a prima facie normative answer. If that is the case, then the pluralism of criteria and values should as well define the way institutions and their performance are assessed. Last but not least, all of the above encourage a pluralist approach to the methods and theories used to analyze and explain the nature and functioning of institutions and social order. All in all, Ostromian institutionalism seems to have a strong pluralist bent.

When situated in the context of modern social philosophy, the Ostroms stand indeed in the category of thinkers who subscribe to the view that social heterogeneity and the divergence of values, beliefs, and preferences are the crucial elements of an adequate understanding of the central problem of social, politic, and economic order. Even more interesting, if we follow authors such as Lukes (2003), Tallise (2012), Gaus (2003), and Lassman (2011) we may even distinguish between two different branches or views of pluralism, among the broad range of pluralist scholars.

On the one hand, toward one end of the spectrum, are the "moderates," authors who while acknowledging the profound challenge of diversity and

pluralism, still try to build their approach on a common grounding principle, a counterweight to heterogeneity, able to anchor in the last resort both social agents and the theory of social order. John Rawls, James Buchanan, and Jürgen Habermas are among the best-known examples. Yes, the argument says, heterogeneity is a problem, but, fortunately, hidden within diversity is a really deeper focal point or functional principle—diversity may be in the end neutralized via one form or another of homogeneity. A shared "point of view," a shared conception of the fundamental goals, some form of agreement or consensus is somehow possible by definition. We should base our approach on that focal point and consequently progressively shift our main focus away from the issue of diversity. That is to say, general solutions transcending the differences of a heterogeneous social landscape are possible because diversity, at its most basic level, can be circumvented, neutralized, normalized. Ultimately, the approach is based on the supposition that "if we could only achieve 'normalization,' if only the problem of social evaluation could be reduced to the reasoning based on a single perspective, then we would have solved the problem of uncovering the social rules (laws, basic structure, or whatever) that would promote the common good" (Gaus 2011, 2).

On the other hand, toward the other end of the spectrum, are the more radical pluralists, scholars who question the faith in universal theoretical or institutional strategies able to offer a general solution via reducing heterogeneity and divergence to some second-best form of convergence and homogeneity. They challenge the assumption that agreement, consensus, and homogeneity should be treated as the natural and default position. Diversity, divergence, disagreement are unavoidable characteristics of our social conditions. In a realistic vein, they claim that we should treat this condition as a state of fact, not as a malfunction, an accidental defect, a transitory deviation from the natural equilibrium point (to be discerned through a combination of analytical reason and intuition by the philosopher-king or the economist-king). At minimum we should be ready to accept that both homogeneity and heterogeneity have a foundational role to play. Consequently, we should be prepared to think in contextual and situational terms, about a variety of solutions to the variety of problems, identified by a variety of people in a variety of circumstances, sometimes involving profound trade-offs and irreconcilable tensions and sacrifices. This is the tradition defined by the work of an entire range of authors starting with Isaiah Berlin's classical take on pluralism and leading to the current exploration of the nature and implications of diversity and heterogeneity advanced by Gerald Gaus (2011) and Scott Page (2007). This is the tradition that looks at the interplay between homogeneity and heterogeneity, never forgetting the importance of the former but focusing mainly on the

latter. And this, claims this book, is the tradition toward which leads the logic of the Ostromian project. This book will illuminate how and in what measure the work of the Bloomington scholars is or could be a contribution to the consolidation, renewal, and reconfiguration of this tradition, in the context of the increasingly converging efforts of a group of scholars that sometimes in coordination, sometimes independently, seem to be on the verge of transforming it into a major alternative in contemporary social sciences and social philosophy. However, for now, we need to return to the sources of the Bloomington school institutionalism's affinity for the problems of heterogeneity and pluralism.

If the first source was related to the very foundational assumptions and attitudes, the second is related to the evolution of the research program set into motion on the bases of the initial, original principles and ideas. Indeed it may be debatable in what measures the Ostroms were from the very beginning fully aware of the profound pluralism embedded in their approach. It seems more likely that the all-the-way-down pluralism (sociological, institutional, epistemological, methodological, etc.) grew in time, and was revealed more or less indirectly as the Bloomington research agenda progressed. For instance, the empirical work done in various settings on themes related to governance seems to have been an ongoing source of insights reinforcing a particular trend in the evolution of the Ostroms' thought. In other words, Ostromian pluralism, the focus on heterogeneity and institutional diversity, was not the result of purely axiomatic thinking, the deduction of propositions, conclusions, and corollaries from a particular set of assumptions about social order and its optimal institutional arrangements. Instead, it was a process that was checked, calibrated, and validated step by step, over the years, by the ongoing rethinking and confrontation with the empirical reality—in brief, a long and tenuous process of discovery, growth of knowledge, and self-clarification. This is the reason one presents and discusses it in terms of a trend, a direction toward which leads the logic of the Ostromian approach. And this is the reason why the Bloomington school's contribution to the emerging new paradigm is best seen not in doctrinaire terms but as driven by a series of separated yet related research endeavors, each incrementally bringing to light new elements (or validating already existing ones) as an outcome of an ongoing dialogue between theory and empirical reality.

If that is the case, then, in all probability, the best way to start our discussion of the Ostroms' institutionalism is to use as a vehicle the developments taking place on one of the main research fronts in one of the major areas in which they invested their efforts. Looking at concrete attempts to disentangle the complex factors and forces determining governance and collective action will illustrate the intrinsic logic of their approach and the direction in which

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it presses on. It is important to note the large measure in which the empirical front is a chief driver of its pluralist orientation. The growth of knowledge taking place on it (as well as the dead ends) invites conceptual, methodological, and epistemological responses, and these responses seem to be more often than not on pluralist lines. Later in the argument the broader and bolder conceptual, methodological, and philosophical facets will be addressed at length. However, for now it is important to show in a concrete way how a specific cycle of research, on a specific key theme, both echos and (possibly) shapes the general direction of the Ostromian perspective.

Given the fact that the Bloomington school is so famous for its work on collective action, the choice of the investigations on these topics as our working example should not come as a surprise. We'll hence take as a starting point the challenge entailed in Elinor Ostrom's remark that although in the relevant literature "the assumption of homogeneity was made for theoretical reasons," it had been too often used as a close approximation of reality, despite the fact that "heterogeneity is a preeminent aspect" (Ostrom and Keohane 1995, 7-11; Ostrom 2005). More precisely, we'll start our incursion into the domain of the institutionalism of diversity and pluralism with a closer look at the research program investigating the impact of heterogeneity on collective action. The choice is reinforced by the conjecture that heterogeneity (understood as operating under conditions of interdependence and imperfect information) is the most profoundly defining element of institutionalism, or at least of the variety of institutionalism advanced by the Ostroms. In brief, this chapter will use the theme of heterogeneity and the conclusions based on research on it as a vehicle. The objective is to show that, if seen in this context and if fully developed to its logical conclusions, the Ostrom type of institutionalism announces itself as a unique contribution to a broader perspective acknowledging and dealing consistently with the problem of heterogeneity and its consequence, institutional diversity.

#### Heterogeneity: Findings and Challenges

The definition of heterogeneity used by the Bloomington school institutionalists has come in time to pivot around three dimensions or facets: heterogeneity of capabilities, heterogeneity of preferences, and heterogeneity of beliefs and information (Ostrom and Keohane 1995; Poteete and Ostrom 2004; Poteete, Janssen, and Ostrom 2010). However, the literature defines and operationalizes the concept in multiple and sometimes richer ways and, in reviewing the literature, it is important to look at the entire range of heterogeneities considered relevant by various authors: economic, technological, social, cultural,

racial, ethnic, linguistic, gender, community, education, and even personal experience. The Bloomington scholars themselves vacillate between the more constrained and the rather liberal uses. But, irrespective of perspective and definition, the preoccupation with the problem and its many facets has been a result of necessity: the limits of models and theories based on the assumption of homogeneity were a major motivator for such efforts. In the literature, the first-generation models based on the "representative agent" were crucial for the development of an entire family of rational choice theories linking individual decision-making to aggregate data. Yet the notion that aggregate behavior can be explained on the basis of the behavior of a single type of unit, a homogenous "representative agent," was increasingly questioned. That was especially the case in the wake of the birth of a new research agenda: fieldwork having research designs framed by rational choice political economy theories. Pioneers of such studies, the Ostroms pointed toward heterogeneity, diversity, context, and situational logic as critical elements in the analysis of institutions, governance, and collective action. Indeed, very soon heterogeneity was becoming salient for an increasing number of authors.

This salience was also reinforced by the fact that any discussion of size, scale, and numbers in collective action has sooner or later to come to terms with the fact that the problem of the number of actors involved is related to the problem of heterogeneity. Collective action is indeed essentially defined in terms of numbers, of multitudes. The very notion evokes first and foremost the quantitative aspect. However, as those authors studying it rapidly noted, the number and the heterogeneity of actors tend to be related variables. Both have a special place in the studies of collective action and governance, looming large. Yet at the same time researchers noted that in an overwhelming number of instances of collective action, problems of number could be converted, for analytical and normative purposes, into problems of heterogeneity. In a complex, dynamic social system, number and heterogeneity are not independent variables, and for most analytical and normative purposes, it is not number per se that is important, but only its effects on the problem of collective action. By keeping track of heterogeneity, one is implicitly keeping track of the relevant scale aspects and, at the same time, including some other possibilities that might be lost if the focus were just the issue of number. For instance, a focus on heterogeneity brings with it two other important elements that are intrinsic to its very conceptualization: interdependence and the possibility of imperfect information, based on asymmetries between social actors. Setting aside such corollaries, we should simply note that one of the most effective ways the literature deals with the number-heterogeneity issue is by developing the notion of "second-level dilemmas" or "second-level collective action."

The "collective action within a collective action," subgroup segmentation, and self-selection of participants contributing to collective goods are mechanisms by which, ultimately, a problem of numbers becomes (or may be addressed as) one of heterogeneity. Thus, all in all, the theme of heterogeneity comes to be recognized as central.

This interest in heterogeneity has taken two directions: The first has been more radical. In time it led to the thesis that in a "complex system," because of heterogeneity, complexity, and interaction, one cannot explain aggregate dynamics as the sum of the behavior of individuals. Emergence, clustering, thresholds, and nonlinear and discontinuous relationships are the norm (Miller and Page 2007). The aggregate is different from the sum of its parts. Even more, the aggregate in its dynamics may strongly determine individual behavior. This is a new form of holism whose practical implications are more often than not unclear. The relative unpredictably of "emergence" phenomena and the associated processes at the level of "the whole" suggest rather ambiguous normative and policy insights. That is why the attention of the Bloomington institutionalists, whose interests were always strongly driven by the normative and policy side, was on the second, more operational perspective. In this second view, the problems associated with the aggregation of heterogeneous agents are of central relevance, but the holistic and nondeterministic implications are toned down. Agents have asymmetric features and endowments, and the structure of the aggregate process may have a logic different from that of the individual behavior. Yet the discontinuity between the two levels is not assumed to be so massive, prevalent, and inscrutable for immediate practical purposes. Dramatic threshold effects are not a key feature. This is a perspective driven more by case studies, fieldwork, the analysis of events and processes in historical time, surveys, and lab experiments, as well as by concrete case-based scenarios, than by the radical propositions inspired by simulations interpreted through complexity theory and agent-based modeling.

At this stage the question is this: How do we understand heterogeneity and its consequences in the light of recent research dedicated to the issue? What do we know today about the role that heterogeneity plays in various collective action situations? Revisiting the theme of heterogeneity and its consequences, as well as the relevant scholarly developments related to it, what have we learned during the last several decades? What insights have we reached about collective action and governance in conditions of heterogeneity and about the theories that guide our attempts to explain and understand them? What do those lessons entail in terms of the next steps and the future agenda? Are we closer to understanding the design principles able to guide collective action and governance in conditions of heterogeneity? In other words, what

are the implications of what we know today for the knowledge base on which institutional theory, institutional design, and normative considerations are to be built? The scope of the exercise is clear: We want to overview some of the key insights that are emerging from the various attempts to explore theoretically and empirically the implications of heterogeneity and thus to provide the background against which we'll be able to appraise in context the relevance of the Ostroms' proposition as well as to address the broader facets and implications of the institutionalist perspective they advance.

At the very beginning two major theses are on the table: on the one hand, the thesis that heterogeneity has negative effects on collective action; on the other hand, the thesis that there are nontrivial positive effects, more precisely, that in many instances, heterogeneity increases the chances of collective action. Let's use as a starting point Lore Ruttan's (2006) attempt to systematize a part of the relevant literature. Her study looks at the effect of social and cultural heterogeneity on collective action and the management of natural resources, and more precisely of the commons. Ruttan organizes the discussion around the two sets of precisely defined hypotheses.

The first originates in the work of Oliver and Marwell (2001; Oliver, Marwell, and Teixeiria 1985). The argument is that "heterogeneous groups would not generally behave the same way as homogeneous groups" and that the emphasis on heterogeneity in model building reveals the phenomena of the critical mass and leadership (defined as "the subset of highly interested and/or highly resourceful people" who play a crucial role in the critical phases of collective action). Heterogeneity is thus seen as a potential facilitator or a precondition of innovation and leadership. Central to these arguments is the use of production functions (the relationship between the effort invested in providing a collective good and the quantity of the collective good). The crucial link between heterogeneity and leadership-entrepreneurial action is determined by the shape of the collective goods production function. Differently shaped functions induce different kinds of actions. Accelerating and decelerating curves determine the dynamics of collective action at different stages and induce different strategies depending on stage. Hence there are phases of collective action that have different properties. In certain stages, entrepreneurs may have the incentive to act either to provide a collective good or to absorb the costs of organizing people to do that. The bottom line is that relatively small groups of people are often at the core of action. The importance of a small initial group leads to the idea of "second order" collective action. This is indeed the logic behind the argument that in the analysis of most collective action situations the problem of number may be reduced in the end to a problem of heterogeneity.

The second set of hypotheses is broadly based on the analysis of the conditions leading to solution to the collective action problem, as developed by Elinor Ostrom's book *Governing the Commons* (1990). Ruttan questions interpretations that take Ostrom's work to mean that homogeneity is a necessary condition for successful outcomes. She suggests the following twofold interpretation: (a) Success is most likely when users have similar discount rates, similar views of the resource, and high levels of trust, while (b) trust and similarities in cultural view of the resource might be intervening variables. In this case, social heterogeneity may reduce levels of trust and/or create different preferences of cultural views about how the resource is to be used and managed. It is more likely that sociocultural heterogeneity has a negative effect on outcomes.

Ruttan tests these specific alternatives against data on 40 fisheries and 54 irrigation cases contained in the Common-Pool Resource Database. The results, she writes, "do not support the hypothesis that sociocultural heterogeneity is associated with positive outcomes, and in fact, among the irrigation cases, more entrepreneurial activity is observed when there is homogeneity." There is "only very slender support for the idea that sociocultural differences result in heterogeneity in preferences that in turn induces some individuals to take on an entrepreneurial role in facilitating collective action." However, results support the argument that "trust is required for successful outcomes and that heterogeneity can limit levels of trust." Finally, and very important, while engaged in the exercise, she notes an important observation: the evaluation of the impact of heterogeneity depends heavily on how success is defined.

For now let's note that Ruttan doesn't seem to be very surprised by the results. Indeed, she mentions a number of works that, in some sense, have set up her expectations. Baland and Platteau (1996) and Bardhan and Dayton-Johnson (2002) find that differences in economic endowments or in sociocultural attributes of the resource users affect the levels of free riding. The same Baland and Platteau (1999) argue that in the context of economic inequality, the same conditions that lead some individuals to have an increased preference for the collective good lead other individuals to have a diminished interest.

In fact the literature is very generous in presenting studies such as (or those surveyed in) Habayrimana et al. (2009) that conclude that heterogeneity has negative effects, and that trust may mediate the relationship between sociocultural heterogeneity and success. Works such as Vadeld (2003) find that distributional conflict "may occur where resource users have substantially different culture views of the resource," and other field and laboratory results support the idea that reduced levels of trust have negative effects

on cooperative outcomes (Ostrom and Walker 2003; Jones 2004; Hackett, Schlager, and Walker 1994).

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Going beyond the boundaries of strict commons and natural resource governance studies, one interesting area of research on the impact of heterogeneity on collective action has been the investigation of its consequences for social capital. Once social capital is seen as group participation (volunteering, organizational membership, voting), as strength of network ties (trust), or as community commitment, the direct relevance for the broad equation of collective action becomes evident. Using General Social Survey data, Alesina and La Ferrara (2000) find that organizational membership and group participation are lower in metropolitan areas that feature greater racial and ethnic diversity and higher income inequality. Costa and Kahn (2003) use data from US cities, metropolitan areas, and urban counties to show that "the share of spending on such productive public goods as education, roads, sewers, and trash pickup is inversely related to the area's ethnic fragmentation even after controlling for other socioeconomic and demographic characteristics." Heterogeneity does not increase civic engagement. Diverse communities, with heterogeneous members, participate less, measured in both time and money. In addition their voting, and their willingness to take risks to help others, is diminished. Miguel and Gugerty (2002, reported in Costa and Kahn 2003) find that there is lower school funding in communities that are more ethnically diverse. The list of relevant findings, following Costa and Kahn (2003), is pretty consistent in its results: Public goods expenditures are inversely related to an area's ethnic fragmentation (Alesina et al. 1999). Trust is higher when race and nationality coincide (Glaeser et al. 2000). Support for welfare spending is higher if a greater share of welfare recipients is from one's own racial group (Luttmer 2001). State spending on education is lower when the share of elderly is rising and they are from a different racial group than schoolchildren (Poterba 1997). The census response rate is lower in counties where ethnic fragmentation is greater (Vigdor 2001, reported in Costa and Kahn 2003). And so on... To sum up: civic engagement tends to be lower in more heterogeneous groups, societies, and communities.

The study of cooperation and regimes in international relations is by definition the domain where the assumption of heterogeneity and interdependence in various forms and shapes is central (Keohane and Nye 1977; Martin 1994; Keohane 2002; Snidal 1994). International relations studies are emblematic examples showing how heterogeneity is a real challenge to coordination and collective action. Different authors emphasize different kinds of heterogeneity, from differences of structure and endowments of states as actors, to different types of actors altogether. The more the position of the state as a

unit of analysis has been challenged by internal economic developments, by the role of transnational non-state actors and by transnational issues such as environmental problems or terrorism (Janssen et al. 2006; Oberschall 2004) the more the theme of deep heterogeneity and its implications has become a background reference point in international relations theorizing. The result is the widespread acceptance of the notion of a much more heterogeneous international arena, involving not just state actors, but many different private, state, and private-public partners, operating at different scales: "The logic of collective action is becoming a heterogeneous, multilayered logic, derived not from one particular core structure, such as the state, but from the structural complexity embedded in the global arena" (Cerny 1995, 595).

In this context, when it comes to the theme of heterogeneity and number, Arce (2000) is typical when he argues that the success of international environmental protocols is a function of scale but at the same time notes that the entire theory involves a heterogeneous population: "The global diversity of economic development itself is often viewed as a major stumbling block for the formation of regimes." Heterogeneity implies "asymmetric levels of provision (or abatement)" and raises questions about "the ability of international regimes to accommodate differences between various countries of the world" (Arce 2000, 754). It is a very good illustration of the ways heterogeneity reasserts itself as a key variable even when scale is meant to occupy the first stage. The fact is that in a field like international relations theory, it is difficult to diverge too much from the thesis that heterogeneity poses real challenges for global coordination and collective action.

The pattern emerging so far seems to suggest at least skepticism regarding the positive effect of heterogeneity on successful collective action. Yet, overall, the literature dealing with collective action reveals huge gray areas of ambiguity. The final results are more nuanced, and they complicate things by showing how context-dependent and ambiguous are all our findings when it comes to collective action. Baland, Bardhan, and Bowles (2007) note that "the complexities of the relationship between inequality and collective action are in need for more context-specific empirical investigations into different types of alternative mechanisms through which the relevant processes may operate." Hence the existing alternatives are not limited to pessimism and skepticism. After all, one has as a key exhibit Scott Page's work celebrating the "difference" and claiming that heterogeneity is a condition, even a strategy, of success.

Page's book (2010) explains how diversity produces collective benefits, and more precisely, the conditions under which diversity produces benefits. It analyzes problem solving and prediction in collectives of people, the creation of alternative solutions, and the evaluation of possibilities, all crucial for

collective action. Page argues that given a set of conditions, diversity trumps homogeneity: "collections of people with diverse perspectives and heuristics outperform collections of people who rely on homogeneous perspectives and heuristics." In addition to that, diversity trumps ability: "random collections of intelligent problem solvers can outperform collections of the best individual problem solvers." At least in theory, cognitive heterogeneity (of perspectives and heuristics) may be in fact a facilitator of collective action solutions.

Thus there are studies that argue strongly in favor of "differences" (Page 2007; 2010), there are studies that report no general effect of heterogeneity (Bardhan and Dayton-Johnson 2002), and there are studies that do suggest positive or at least context-dependent effects (Ruttan 1998; Ruttan and Borgerhoff Mulder 1999; Andersson and Agrawal, 2010; Agrawal 1998; Vedeld 2003). In some cases, the same study gives mixed signals. Baland, Bardhan, and Bowles (2007) conclude that in some settings inequality inhibits collective governance but in other settings the effect of inequality is minor in comparison to other factors. Anderson and Paskeviciute (2006) examine how heterogeneity defined on ethnic and linguistic parameters affects citizenship behavior (measured by cognitive and interpersonal engagement about politics), membership in voluntary associations, and interpersonal trust. They report that their data from 44 countries show that "heterogeneity does affect the quality of civil society in a country." Heterogeneous societies have problems of trust, "but it is linguistic rather than ethnic heterogeneity that reduces trust in less democratic societies." However, "indicators of population heterogeneity do not have uniformly positive or negative effects on individual-level measures of civil society—while they reduce some, they shore up others." Hence, "heterogeneity may be a necessary ingredient for building a vibrant and stable civil society and democratic life rather than being a prime cause of democratic distress" (Anderson and Paskeviciute 2006, 783).

One may think that adding to our inventory further subliteratures that focus on the issue from different angles may change the direction of the assessment. But the fact is that the general haziness of the findings will persist. New perspectives may be brought into the picture by looking, for instance, at the studies focused on heterogeneity as a facilitator of leadership/entrepreneurship. These are studies in which leadership is considered "a noncooperative means to achieve (more) cooperation in social dilemma situations" (Arce 2001). Levati, Sutter, and van der Heijden (2007), for example, focus on leadership and the private provision of a public goods when group members are heterogeneously endowed. Results show that in cases of homogeneous endowments, the average contribution is higher. "Leadership is almost ineffective, if participants do not know the distribution of endowments." However,

"the presence of a leader increases average contribution levels." Yet another hint at the complexity of variables in play.

Speaking of endowments, Levati, Sutter, and van der Heijden (2007) mention the research line opened by Warr (1982; 1983) on the impact of income distribution on voluntary contributions to a public good. Warr's initial conjecture was that group contributions should be invariant under redistributions of income. But as Levati et al. (2007) report, Chan et al. (1996; 1999) actually "find that on average, this turns out to be true in a nonlinear setting, although, contrary to Warr's income-neutrality postulate, the rich tend to undercontribute and the poor to overcontribute relative to their endowments." On the other hand, note Levati et al. (2007), Cherry, Kroll, and Shogren (2005) use a linear public goods game to show that "average contributions are lower with asymmetric rather than symmetric endowments." Van Dijk and Wilke (1995, 1-2), using an asymmetric step-level public goods game, find that "participants with a twice as high endowment contributed almost twice as much as low endowed participants." The same Van Dijk (this time with Grodzka, 170-1) (1992) observes "no significant difference between participants with high and low endowments." Aquino, Steisel, and Kay (1992, 665) find "strong support for the hypothesis that inequality leads to decreased cooperation." In the light all of the above, it is plain why Levati, Sutter, and van der Heijden (2007, 813-14) are compelled to conclude that "the evidence on the effect of asymmetric endowments on cooperation levels is thus far from being conclusive."

Before concluding this bird's-eye view on a good sample of insights emerging from the research done in the last 20 years or so on heterogeneity in collective actions, one should bring up Heckathorn's work, not only because of its emphasis on sanctions but also because it illustrates in such a clear way one of the most important insights emerging from this family of research efforts. Heckathorn builds on the already mentioned line of research opened by Marwell and Oliver (1993, 2001), a line of research whose leading conjecture is that heterogeneity is a positive force for collective action for several reasons: It facilitates the organization of uncoordinated individuals; it weakens the cohesion of social groups; and in general it shapes the structure of opportunity costs of collective action that move the groups and individuals along the production function curve regions in areas that may inhibit or encourage action. Heckathorn's work illustrates how sensitive are the results to contextual factors and different models and variables setups. He explores the link between group heterogeneity and collective action in three regimes: "voluntary" systems (domains of unrestricted decision-making, with no sanctions); "compliance" systems (domains with sanctions to enforce cooperation, in which there are norms compelling actors to participate in public goods production); and

"balanced" systems (domains in which there are sanctions both for and against cooperation). The findings are both telling and intriguing. When the average/ mean interest is low, heterogeneity increases cooperation in all three types of systems. Cooperation increases most in the compliance systems, least in the voluntary systems, with the oppositional or balanced systems in between. However, there is "a transitional range after which heterogeneity produces even higher cooperation for voluntary compliance systems but produces lower cooperation for compliant control systems and drastically lower cooperation for oppositional control." Resource and cost heterogeneity "improve voluntary compliance when conditions are otherwise unfavorable but have little effect on systems with sanctions" (Heckathorn 1993, 329).

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One thus may see how a more nuanced and complex understanding could be achieved with each further specification of the model applied. As Ostrom (1998, 15) put it, "this illustrates how changes in one structural variable can lead to a cascade of changes in the others." A small change "may suffice to reverse the predicted outcome." The context or the regime matters. Yet this volatility and the variability it entails raise serious doubts about the possibility of isolating and charting the code of collective action via the heterogeneity factor. One could get out of such analytical exercises a better understanding of the phenomenon, but no universal key or general model. It would be wonderful to be able to establish a straightforward, plain, linear relationship between heterogeneity and collective action, but the most likely result is the identification of a variety of mechanisms and linkages connecting possible configurations of variables of interest, in various scenarios. We thus come to understand "how difficult it is to make simple bivariate hypotheses about the effect of one variable on the level of cooperation" (Ostrom 1998, 15). This conclusion was reinforced by Oliver and Marwell (2001, 293)—representing the other great line of research on heterogeneity mentioned at the beginning of this section. In collective action and governance studies, they write, "it is necessary to move from simple mono-causal theorizing about 'collective action.'" Things may be even more challenging. In fact, write Oliver and Marwell (2001), it may be the fact that there is no single and unitary social phenomenon under that label. One needs "a disciplined search for the distinctions among different types of collective action and the factors that distinguish them." These are very important conclusions, indeed. Their implications for the way we think about institutional theory and design are considerable. And it looks like the case for pluralism and diversity (or for that matter for heterogeneity), if it is to be made, has to rest on a much more sophisticated line of argumentation than one limiting itself to simple causal analysis and the simple political economy models based on it.

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#### A Set of Preliminary Implications

The preceding overview of a sample of the relevant literature through the lenses of three theses (heterogeneity facilitates the initiation of collective action; heterogeneity impedes the initiation of collective action; heterogeneity can either facilitate or impede collective action, depending on context) shows that reconciling the conclusions of various attempts to confront the theory with empirical reality is difficult. Many of these studies were done under different assumptions, different models, and different variables. Some broad patterns seem to emerge, but we need to recognize that social and institutional arrangements such as those under examination are "complexly organized and that we will rarely be able to state that one variable is always positively or negatively related to a dependent variable" (Ostrom 1998, 16). In these circumstances it should be no surprise that "the kind of theory that emerges from such an enterprise does not lead to the global bivariate (or even multivariate) predictions that have been the ideal to which many scholars have aspired" (Ostrom 1998, 16). That doesn't mean that it is not possible to have theoretical predictions. It means "only that they cannot be simple and global. Instead, the predictions that we can validly generate must be complex, interactive, and conditional" (Marwell and Oliver 1993, 25).

We are now very far away from the broad initial generalizations of the "tragedy of the commons" or the "logic of collective action" of the early literature. In the years that have passed since, social scientists have been increasingly put in the position of reconsidering their efforts to build "the theory of collective action." After all, this seems to be one of those domains in which "it is not possible to relate all structural variables in one large causal model, given the number of important variables" (Ostrom 1998, 14). Today scholars are more than ever ready to acknowledge that "there are many different issues and many different kinds of collective action and that one can shade into the other depending upon the structural characteristics of the situation" (Marwell and Oliver 1993, 25).

Where does all this leave us? What are the implications? The reaction to these conclusions depends indeed on our initial expectations. For those starting with great expectations of finding the "grand theory" and "the solution" to the Problem of Collective Action and Governance, they are indeed disappointing. No grand design blueprint seems to be emerging. On the other hand, those starting with more modest expectations may be satisfied with the fact that at least we better understand the limits of our approaches. It is important to note that these conclusions apply not only to the specific domains focused on by the Ostroms and their associates, but to the broader field of

the game-theory-based new institutionalism. In this respect the discussion is indeed, as it has mentioned from the very beginning, a discussion about institutionalism in general and about its future.

Taking a broader stand, let's focus now on a preliminary set of implications and conclusions emerging in light of all of the above. A brief look at theoretical and analytical, applied and normative implications will reveal how this perspective is integrating itself into a broader framework, spanning social scientific prediction and moral philosophy, a framework that points to a particular horizon of epistemological and social philosophy. In brief, one may see that a set of principles (theoretical, normative, and applied) seem to consistently underlie the institutionalist enterprise, as sketched by E. Ostrom, giving it a certain tone and stance, and imprinting on it a certain logic and direction of development.

Let's start with the theoretical and analytical level. One of the most salient implications is that one needs to rethink the aims and limits of our attempts to theorize and generalize in this domain. We are approaching a point in which we need to realign our methodological and epistemological expectations and assumptions to the realities of the last cycle of empirical research. The gap between the theory-building and generalizing ambitions of the initial approach and the ensuing results requires a recalibration. The alternatives suggest a departure from the traveled path. For example, in response to this challenge, Oliver and Marwell (2001, 308) advance the notion of "response surface" as a tool aimed at helping us to think "about the complexities involved in collective action." A response surface is "a k-dimensional graph of an outcome variable as predicted by k-1 independent variables." Outcome is the variable that one decides defines best the solution to the collective action/good problem in case (the total contribution, the number of contributors, etc.). The independent variables are the standard ones, such as group size, the shape of the production function, the degree of interest and resource heterogeneity, and so forth. There are regions of the response surface in which the values and combination of variables make collective action impossible and regions in which collective action is made possible. "It is obviously impossible to study all possible independent variables at once," argue Oliver and Marwell (2001, 308), "but when we write models, we should be envisioning the location of our model within the full response space, recognizing what is being held constant (and at what level) and what is being varied (and within what ranges)." This, they suggest, is a heuristic strategy that may work better than the current one: "Envisioning the full response surface should be linked with a search for controlled comparisons and thoughtful experimental designs to clarify complex interdependencies. This is all too rare. Instead, most of us seem to

approach modeling so that we can say something like, 'See, I can make my model do something different from what your model did.'" The alternative seems therefore superior: "simply explicitly listing the factors held constant and comparing them to other models might more readily call to attention seemingly unimportant operational decisions that turn out to make big differences in the results" (Oliver and Marwell 2001, 308–9).

Recognizing the significance of all of the above, Elinor Ostrom introduces the notion of "theoretical scenarios." An alternative to grand generalizing could be to build scenarios of how "exogenous variables combine to affect endogenous structural variables." Their function is first and foremost heuristic. They are an instrument that facilities understanding. It is possible to "produce coherent, cumulative, theoretical scenarios that start with relatively simple baseline models. One can then begin the systematic exploration of what happens as one variable is changed." The logic of combinations and permutations reinforced by empirical verification would guide the research. The reason behind explanation and analysis reveals something important about the phenomena. But the most important thing is that at the end of the day, one could hence see how this line of research ends up confronting us with, as Ostrom (1998, 15-16) put it, "a world of possibility rather than of necessity." That is to say, "we are neither trapped in inexorable tragedies nor free of moral responsibility for creating and sustaining incentives that facilitate our own achievement of mutually productive outcomes." Possibilism entails pluralism. Institutional arrangements are not predetermined; they are not a mere matter of a combinatorial theory of variables and forces but also a matter of human deliberation, decision, and responsibility. In this respect, human decisions are important not as expressions of mechanical maximizers but of moral agents able to imagine and create alternative rules and bear the responsibility for alternative courses of action. Such conclusions immediately suggest the next dimensions: the applied and normative.

When it comes to the applied level, the first thing to recall is that relaxing our ambitions for theoretical and empirical generalization implies a limitation of our expectations regarding the nature and power of the institutional design principles derivable from our data. Overall, the evidence points toward the idea that, more often than not, heterogeneity impedes collective action. And yet sometimes heterogeneity may facilitate it, depending on various factors and conditions. This conclusion is definitely baffling for practical purposes. Context matters, and institutional design is an enterprise largely driven by context and circumstances. Various configurations of homogeneity and heterogeneity seem to be crucial factors in institutional design, irrespective of what one thinks of the general directions and forms of influence. And

heterogeneity brings with it an entire set of problems that remain dormant as long as one is concentrated on merely determining the relation between homogeneous actors and predefined rules.

The message is that irrespective of what we think about theory, when it comes to policy, applied-level work, the configurations of circumstantial variables cannot be dismissed as mere outliers. As Scott Page (2010b, 4–5) has demonstrated, relying on means or averages in policy analysis and design can be misleading. For that reason economists, "especially those interested in policy effects," have reached the conclusion that heterogeneity "pushes back against the tendency towards averaging" (Page 2010b, 4–5). This is a real challenge for any field or project that aims to be relevant for institutional design. Alternatives to averaging need to be further developed. This is to say that scholars who look at scientific results as a basis for social interventions have to rethink in some fundamental respects their approaches and the methodological apparatus supporting them.

Could one simply limit the study to the mere documentation and "lessons learned" from the wealth of institutional design experiments and cases available to us? Or should one try to go beyond that and identify broader institutional design principles? If the second, what would be the basis of generalization for these principles? These are serious questions for a research agenda that has reached the conclusion that a general theory of collective action may be beyond our reach and that the tendency toward averaging in public policy could be seriously misleading. Even more, with heterogeneity (of endowment, of beliefs, of preferences, etc.) taken seriously into account, the empirical and theoretical investigations (especially when they are meant to be relevant for institutional design) force additional dimensions to the forefront. Whether one likes it or not, pluralism of perspectives and of alternatives comes to occupy an important place on the stage. And in these circumstances, the foundational normative dimension, the third set of implications on our list, has to be an important part of the conversation.

Certain normative assumptions and preferences are undoubtedly and inescapably embedded at a very basic and intuitive level in the perspectives advanced by scholars, like the Ostroms, who explore collective action and institutional arrangements. For instance, lurking behind is a problem that has only been alluded to in the discussion up to now: What is the definition of "success," "performance," or "solution" for the variety of collective action problems relevant for institutional and governance analysis? As Ruttan (2006) put it, one must be careful about how "success" is defined. Success may be defined and measured in terms of participation, but this is not the sole criterion. Degrees of provision, the nature of provision, conservation, mobilization, reducing

or halting trends, minorities mobilization, and so on, could all be seen as legitimate criteria and/or objectives. Trade-offs, tensions, and incompatibilities matter. As long as we define the "goal" as "saving the planet" or "saving the commons," these things and the complexity of the assessment scale may be lost between the lines. But we should not forget that "outcomes that are positive with respect to resource conservation may not always be positive with respect to equity" or, for that matter, other criteria. It looks like, when it comes to the applied level, collective action and institutional and governance arrangements "must be judged in the context of particular kinds of success, rather than in the abstract" (Ruttan 2006; Ruttan and Borgerhoff Mulder 1999).

"To judge" and to do it "in context": The contextual impact of heterogeneity, the diversity of possible social arrangements emerging from it, and the plurality of perspectives and criteria to be applied to them all matter. In the end it seems that, like it or not, a significant part of the agenda hinges on the normative and applied dimensions and the basic social theory that embeds these dimensions. The agenda advanced by Bloomington scholars seems to be a project that starts solidly in the empirical realm, but the more it advances, the more salient the normative presuppositions of the social theory framework behind it become. And thus the Ostroms' institutionalism looks more and more like a broader intellectual enterprise that belongs to that realm, properly identified by James Buchanan (2000), "between predictive science and moral philosophy."

To sum up, reviewing this set of implications and conclusions, one realizes that the results and directions of the research front on which the Bloomington school has been an important participant during the last decades are in fact setting up the intellectual scaffold for a novel stage in thinking and theorizing about collective action, governance, and institutional arrangements. It is a new stage that displays both continuity and change. The evolutions on this front made clearer and clearer the contours of a new perspective that integrates the varieties of pluralist themes and insights that emerge as a result of the last cycle of research on institutions and collective action. All essential dimensions of a well-rounded paradigm or school of thought—the analytical (theoretical and empirical), the normative, and the applied—are present.

Confronted with this fact, we have two options: (a) To deny or neglect the reality that at the end of the current cycle of research on collective action, institutions, and governance, the problems and challenges clustered around the theme of heterogeneity are setting the stage for a thorough reassessment and reconstruction of our approach to institutional theory and analysis as well as to their epistemological and social philosophy foundations; (b) to accept that the challenges brought to the forefront by a research agenda that is increasingly

pressed to embrace the themes and theoretical lenses of pluralism are creating the conditions favorable to a profound reconsideration of the institutionalist project. The contours of an overhauled intellectual avatar of this project seem in sight. This new version emerging at the end of this cycle of research is, needless to say, the natural extension of previous projects. In brief, the first alternative is to continue to do pretty much what we are doing now, as Oliver and Marwell (2001) put it, to continue to play the game of "See, I can make my model do something different from what your model did." The second choice would be to boldly embrace an effort to rethink some of the dearest and deepest assumptions of our methods, approaches, and theories. It is this book's contention that the Ostroms and their collaborators have made important contributions to opening up the second alternative.

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### Heterogeneity, Diversity, and Institutional Theory

We have seen so far that an overview of the relevant developments in the study of collective action and governance with a focus on the problem of heterogeneity leads to significant insights regarding the potential broad evolution of the type of institutionalism advanced by the Ostroms. It is also plausible that the developments have already set up the parameters for a new cycle of theorizing and research in social sciences and social philosophy, and hence at this juncture it is appropriate to try to make a first step in outlining some of the most distinctive and interesting contours of the variety of institutionalism that seems to be emerging. As we have already noted, first and foremost, this refurbished institutionalism is strongly rooted in the problem of heterogeneity. The roots are multiple and multifaceted: Although homogeneity is fully considered a key element, heterogeneity and not homogeneity is the premier background condition to be dealt with in social theorizing. The challenge of heterogeneity is foundational and does not lend itself to easy solutions, be they theoretical or normative, such as universal institutional recipes for institutional design. However, although an intrinsic challenge for collective action, heterogeneity may nonetheless also be a resource for collective action and governance, and, from this perspective, diversity should be seen as instrumentally important. Hence the normative implications suggest at the operational level a process able to capture it as a resource, while minimizing its unavoidable drawbacks.

The best way to further specify these synoptic points is to use as a vehicle the very conceptualization of heterogeneity. As previously discussed, one way of sketching it is to focus on three dimensions: heterogeneity of capabilities, heterogeneity of preferences, and heterogeneity of beliefs and information (Ostrom and Keohane 1995). Page (2009) conceptualizes the three

dimensions from a slightly different angle: diversity of resources and capabilities (diverse endowment natural resources, diverse economic capital, diverse social capital); cognitive diversity (diverse perspectives, diverse interpretations, diverse heuristics, diverse predictive models); and diversity of preferences (diverse fundamental or end state preferences, diverse instrumental or means preferences.) Such distinctions help us to get a clearer view on the full range of implications heterogeneity has for the way we theorize and design institutional arrangements. Many mixtures of heterogeneity and homogeneity are possible. And these combinations are both building blocks and keys to collective action and institutional order. The bottom line is that each of the various possible combinations poses specific problems for collective action. Each invites or discourages certain processes and institutional solutions.

Taxonomies like those introduced by Ostrom and Keohane (1995) or Page (2009) thus illuminate the broad range of heterogeneity in its polar relationship with homogeneity and the multitude of cases and combinations that reflect it. At one extreme, one may simply imagine a case in which heterogeneity defines all dimensions in play: resources, capabilities, perspectives, interpretations, heuristics, predictive models, fundamental preferences, and instrumental preferences. The other extreme is a case of radical homogeneity: homogenous resources, capabilities, perspectives, interpretations, heuristics, predictive models, fundamental preferences, and instrumental preferences. Once things are seen from this perspective, one understands that such extreme situations are in fact the background and boundary condition of social theorizing. In between these extremes of the conceptual space ranges the entire economic and political theory that uses agents, rules, preferences, and incentives as basic elements and building blocks.

If one adopts this perspective, it becomes obvious that more often than not we are shaping our discussions on a "response surface" improperly defined. Instead of taking into account the full range of dimensions and combinations, we focus only on fragments of it, singled out more or less arbitrarily. Yet, arbitrary as it may seem, there is a bias in all this. More precisely, as Keohane and Ostrom note (1995), we tend to use models in which a lot of homogeneity is assumed, sometimes in regards to the most sensitive features, which are in fact visibly and consequentially characterized by deep heterogeneity.

The global warming / climate change problem is exemplary for the discussions about collective action, coordination, cooperation, and institution building at a global level. For many years, the discussions operated under the postulate that a set of perspectives, interpretations, and predictive models was uniquely valid, and as such (should be) homogenously shared in the communities of interest. An additional assumption was that we knew more or less

what the "correct" set of fundamental or end-state preferences was, as well as the "correct" set of instrumental or means preferences. Things were in many cases further simplified by the fact that the problem was implicitly operationalized as a fixed point, a catastrophe threshold, a 1 or 0 situation—a radical trade-off, disaster versus salvation. The variation of temperature vis-à-vis a projected baseline (scientifically determined) was combined with one form or another of the precautionary principle to convey a sense of epistemic closure. From there to the conclusion that all that was needed was to generate a global collective action with an old-fashioned, simple Olson-Hardin situation was just a step. It is no surprise that with all that came packaged the idea of a standardized global solution. The diversity of heuristics, interpretations, and even preferences, as calibrated to different levels, forms, and circumstances of collective action and governance, although empirically real, was conceptually and normatively sidelined. As we know now, there were better alternatives.

Such alternatives involve, as Keohane and Raustiala (2009) have demonstrated, a more nuanced and calibrated approach, for instance, one in which it is acknowledged that in solving these problems, one needs to deal with issues of participation, effectiveness, and compliance as related but distinct issue-areas, each with its own functional, geographic, and political arenas and dynamics, each involving trade-offs. "Solving all three problems simultaneously," write Keohane and Raustiala (2009, 2), "is particularly difficult, since these goals are often in tension." These problems "require careful institutional design," with "careful attention to the realities of world politics" and following in most cases a "bottom up" process. In a similar way, Keohane and Victor (2011) explain that when it comes to efforts to limit the extent of climate change, "there is no integrated, comprehensive regime" governing these efforts. "Instead, there is a regime complex: a loosely coupled set of specific regimes" that could be explored and explained using functional, strategic, and organizational perspectives.

The alternative articulated by such authors is thus not a broad and decontextualized criticism of the standard models or their application. In many cases, they write, the models' application may be legitimate and valid, as their isomorphism (be it formal or intuitive) is warranted. Yet what is suggested instead is that if used as benchmarks, such conceptualizations reflect and take into account just one possible combination of values for the variables in play. Out there is more heterogeneity (of agents, circumstances, and functions) than it is assumed. Complex as they are in comparison with the initial, first-generation models, even the newer frameworks still do not capture the full potential and implications of the challenge of heterogeneity. And thus it looks like the diversity-centered approach to institutionalism, on the lines

advanced by the Ostroms' work, is leading toward a special kind of "general theory." It is a theoretical perspective that fully accepts the challenge of heterogeneity and all that this entails in theoretical, methodological, normative, and epistemological terms. The cases or models that assume certain combinations of homogeneity and heterogeneity are to be seen against the background of the whole "response surface," while the response surface is to be seen against the background of a social philosophy able to capture and illuminate both the assumptions and the implications of the theoretical perspective.

# The Institutionalism of Heterogeneity and Diversity

And thus we have reached the major point of this argument: The Ostromian brand of institutionalism seems to be an embodiment of a theoretical and methodological discipline dealing consistently with heterogeneity and its consequence: institutional diversity (Munger 2010). The fact that it goes beyond the markets-versus-states dichotomy, or the state-centered perspectives, or the fact that it introduces notions such as "public economy" and polycentricity is not an accident. They are the expression or corollary of a basic intuition and conjecture about the nature of institutional theory seen as the effort to formulate, chart, and analyze the diversity of human institutional arrangements emerging from heterogeneity in its interplay with homogeneity. How do we deal conceptually, theoretically, methodologically with the fundamental problem of heterogeneity? How do people deal, and how should they be dealing with it, in practice so that they can be more effective in their institutional designs? The two themes, heterogeneity and institutional diversity, are two facets of the same problem. Institutionalism is the research program that unites these two facets and confronts the theoretical, empirical, methodological, and policy challenges emerging from this task.

That being said, it is important to admit straightforwardly that the Ostrom brand of institutionalism has a robust normative component. There is in it an implicit embrace of pluralism and diversity, a predilection toward negotiation and commonly agreed solutions. Imposing solutions using force, centralization of decision-making, monocentrism, and compelling consensus and homogenization by design are not regarded as prima facie answers, and when accepted, they are accepted as a mere second best—"Faustian bargains," as Vincent Ostrom put it. Certain normative preferences seem to be embedded in the Ostroms' way of approaching things, either as assumptions or as conclusions, or sometimes as a synthesis of both. However, at the same time we want to acknowledge that by pivoting and functioning as a link between normative and positive theory, this type of institutionalism entails a more nuanced

view of the relationship between motivation and obligation in collective action and institution building. What is the individual-level motivation for cooperative behavior in collective action situations? One cannot simply assume that motivation is simply and straightforwardly "flowing from moral obligation" (Muldoon 2009). And we cannot assume that motivation generates simply and straightforwardly moral obligation. Once we realistically accept the widespread reality of heterogeneity, the conundrum of how to base political and moral obligation in motivation becomes even more salient. How is and how should obligation be rooted in motivation in conditions of deep heterogeneity of beliefs and preferences?

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The idea is that the issue of how moral and political obligations could follow or could get aligned to an incentive system generated by an institutional arrangement is essential. Humans operate in a world in which incentives, rule-guided behavior, and morality all play their part. When homogenization of motivation is assumed and the homogenization of moral and political attitudes and commitments is factored in from the very beginning, things are relatively easy. This point can get lost between the lines of complex models and arguments. It is evident why an important part of political theory, public choice, and economics, not to speak of institutional theory, is based on (or emphasizes) one version or another of the "normalization," "homogenization" thesis. Yet the empirical and practical presence of resilient and widespread heterogeneity reminds us that this strategy is the easy way out of a real and important challenge with significant practical implications. What happens when normalization is not a viable alternative? There are cases in which achieving normalization (on one facet or another of the relevant variables) is part of the problem, and the social, political, and institutional strategies of reaching it are the first step toward a solution. There are situations in which even the very notion of what a solution is, or the criterion on which it should be evaluated, is far from being shared, situations in which homogenization of this or that key variable or factor remains a distant desideratum. With homogeneity assumed or conceptually manufactured, things are easier. But either to sidestep heterogeneity or to generate homogeneity through arrangements in which individuals (with all their diversity of preferences, information, resources, and capabilities) interact as incentives-motivated strategists and rule-guided and moral human beings—that is the true and real challenge.

This is the juncture where the Bloomington perspective reveals its full relevance. The work done by the Ostroms and their collaborators demonstrates that it is both necessary and possible to deal at both the analytical and institutional design levels with situations in which homogeneity is not assumed via any a priori normalization procedure. In the governance situations studied

And it is a fortunate fact of communal life that people's interests can coincide without any significant degree of agreement between them (a circumstance illustrated in both domestic and international politics). (Rescher 1993, 180)

This may be indeed a very bold and controversial thesis. But the theoretical and philosophical literature exploring the nature and limits of such theses sets into motion a shift of attention from "abstractly universal and collective basis of agreement" (and for that matter of institutional design) to various ways in which social actors in various circumstances manage "convergence based on concrete, particular commonalities of interest and value" (Rescher 1993, 180). In the end the thesis may be deemed too bold, but its investigation has already led to a shift to concrete institutional mechanisms and processes.

It is noteworthy that such a shift of interest points toward exactly the type of analysis developed by the Ostroms and their collaborators. It draws our attention to the fact that "cooperation among real people is based on the concrete realities of their personal situation" and that in our approaches to institutional theory and design we need "to exploit this fact as best we can in the best interests of the community at large" (Rescher 1993, 180-83, 191). This is indeed convergent with the message regarding institutional design received from our overview of the heterogeneity and governance literature. The basic idea is the same: "Even if we could agree on what ideally rational people would do under ideally rational circumstances," writes Rescher," this would provide precious little guidance as to how to proceed in the real world." Theorizing about "how to play a perfect hand in a card game will not help us to decide how to play the imperfect hands that fate actually deals to us.... A theory geared to utopian assumptions can provide little guidance for real-life conditions." We need to forget about universal institutional designs and general "solutions" and to focus on the processes "attuned to the suboptimal arrangements of an imperfect reality," a reality defined by abundant heterogeneity, diversity, and endemic disagreement (Rescher 1993, 178; Levy 2000; Newey 2001; Root 2012; Carr 2010; Schmidtz 2011). This is about a space of "negotiated compromises" (Bellamy 1999), of a "modus vivendi based on working compromises" (Kukathas 1999) reflecting the relative power of parties "that have partially conflicting and partially complementary interests" (Gaus 2003, 57). The trick is, writes Gaus (2003, 230), "to explicate a robust conception of public reasoning-citizens reasoning together-while avoiding making too much a matter of consensus or looking for agreement when none is to be found."

Such an approach that takes seriously and confronts the reality of heterogeneity is more relevant today than ever. The empirically grounded institutional

by the Ostroms and their collaborators in depth, one could see how institutional processes (empirically analyzable, not postulated in their end results) illustrate the complexity and diversity of possible approaches to the problems of governance in conditions of heterogeneity. In this way their views converge with the innovative agenda advanced in social and political theory by a group of authors including Gerard Gaus, Jack Knight, James Johnson, Nicholas Rescher, Scott Page, Chandran Kukathas, Fred D'Agostino, David Schmidtz, and Ryan Muldoon. These authors open-from dissimilar but convergent angles—new ground, challenging (and going beyond) the theoretical universe defined by one version or another of the "normalization/homogenization/consensus" thesis. With all that comes an entire set of issues related to the problems of comparability and commensurability (D'Agostiono 2003). Their work reconsiders, adjusts, extends, and in some cases transcends various themes of the pluralist neo-Berlinian literature associated with such names as William Galston, John Gray, George Crowder, John Kekes, Robert Talisse, and Craig Carr. At the same time it is important to note that, as Peter Lassman (2011, 8) put it, this tradition of research owns much to F. A. Hayek, Raymond Aron, and Karl Popper, who "all subscribed to versions of the view that an appreciation of the reality of plural and conflicting values was an essential component of an adequate understanding of modern politics." The work on these lines opens up the possibility of challenging what the authors advancing it call the "deep strain of utopianism" of contemporary social theory. Diversity and heterogeneity are a fact of life, and it is utopian to base our approaches on the idea that a firmly secured general consensus that homogenizes various beliefs or objectives of the social actors is the key precondition to governance and institutional order. The management of a society's business, writes Rescher (1993, 166-168), "need not root in agreement—and not even in a second-order agreement in the processes for solving first-order conflicts—as long as the mechanisms in place are ones that people are prepared (for however variant and discordant reasons) to allow to operate in the resolution of communal problems." The message is that even without first-order agreement and consensus, without homogeneity of preferences, opinions, goals, objectives, values, and so on, people may nevertheless be able to coordinate and create social order:

The key consideration for the conduct of interpersonal affairs is that the activities of people can harmonize without their ideas about ends and means being in agreement. It is a highly important and positive aspect of social life that people can and do co-operate with one another from the most diverse of motives.... What is needed for co-operation is not consensus but something quite different—a convergence of interests.

analysis of the possibility of governance and social order in extreme conditions that lack convergence of beliefs, preferences, and values seems to be, like it or not, a priority of the age. We live in a world in which diverse values, identities, principles, and cultures clash in the global arena while emigration, demography, technology, and culture challenge separately or in conjunction governance systems at all levels: global, national, and local. The problem of the impact of diversity on collective action, public goods production and consumption, and their governance imposes itself on the public agenda with an unprecedented intensity. The problem of endogeneity in the emergence of rules, and the dynamics of discovery and choice in institution building and change are indeed an increasing preoccupation in current political and economic theory. The move is unavoidable once heterogeneity is recognized as a key feature of the social reality to be dealt with. This is not merely a discussion about community-based cooperation or natural resources and their governance (although these problems are an important part of the picture). This is a discussion about the fundamental nature of governance (both domestic and international) in the new era. The attempt to determine whether it possible to have a peaceful and prosperous institutional order in an increasing interdependent world of diverse and conflicting views, beliefs, preferences, values, and objectives places us both at the core of the major political and economic challenges of our age and at the cutting edge of contemporary social science and political philosophy.

## Beyond the "End State" Perspective

We find ourselves, thus, in a territory in which, again, old themes of constitutional and political theory converge explicitly with the core themes of institutional theory. Yet the emphasis is different. With diverse perspectives and preferences, it is clear why the discovery of institutional solutions is an essentially social process: "There is no possibility of a philosopher sitting in her study, abstractly considering what our shared interests are, proclaiming the common good. Until we actually engage in social interaction with diverse interests, we cannot know whether there will be a convergence" (Gaus 2011, 15). Instead of focusing on static structures and institutional formulae, the attention shifts to the processes by which the normative diversity of perspectives leads dynamically to solutions or arrangements acceptable if not to all, at least to a (super)majority. One is left not with a standard of institutional design, a blueprint for institutional forms, but with an institutionalized process of interaction and discovery. In such processes "the best boundedly rational and good-willed persons can expect" is that they may be able to "eliminate some

possible social worlds as clearly suboptimal." It is a relatively open-ended process that is generating solutions that are possible imperfect and potentially clouded by "moral indeterminacy" (Gaus 2011, 14–15), yet, in the end they are solutions that satisfy criteria that otherwise would be elusive and difficult to replicate.

At the same time, the diversity of perspectives and strategies offers a diversity of ways to imagine solutions and arrangements. Social actors will try different approaches; they will combine and recombine in different configurations and arrangements. It is not just a matter of statistical probabilities. This diversity sets into motion social discovery that increases the chances that poor local optima are identified and replaced with better alternatives. A society, hence, moves via a collective process toward better alternatives. "This selection process is an actual collective social choice," writes Gaus. In this respect, "choice by a society takes up where discovery leaves off" (Gaus 2011). In most cases

this is not an intentional "we-choice"; it is a social choice that arises out of a multiplicity of individual choices. Neither is it an abstract choice from some impartial Archimedean perspective outside our real social world. It is a collective choice that arises out of the social nature of individual choices: each person choosing to do what his perspective recommends given what others are doing. (Gaus 2011, 15)

Or as Rescher put it, we need to seriously consider the fact that a

political process that is both theoretically valid and practically workable must seek not to abolish divisive self-interest but to co-ordinate it. It must provide for a system of interaction within the orbit of which co-operation of individuals for the greatest common good ("the best interests of the community as a whole") becomes an integral component of the interests of each. And this requires not methodology alone ... but substantive mechanisms of co-ordination. (Rescher 1993, 181)

What authors like Gaus and Rescher are describing at the normative-theoretical level, the Ostroms and their associates have been analyzing at the empirical level. Their brand of institutionalism draws our attention to real-life cases of social choice processes in collective action and governance in conditions of heterogeneity. Social interaction, information exchange and negotiation, learning, and adjusting are crucial parts of a process that not only is different from top-down, centralized, technocratic approaches but also does not predetermine the content or specific substance of the solution.

These insights and their corollaries come to support sooner or later, from a new angle, an older distinction between, on the one hand, "end state" (or final outcome) perspectives and, on the other hand, "process" (or chain of causes and consequences) perspectives. End-state social theories, writes Norman Barry (1988, 19), attempt "an understanding of social phenomena through a description of the features of a society at a specified point in time. It is a kind of photograph which reveals such elements as a society's distribution of income, wealth, power, status, the structures of the economic and political arrangements, and so forth." The static character of end-state analyses is obvious. On the other hand, process theories focus on the ways end states emerge (Wagner 2007, 56). In a sense, they are rule-oriented and procedural theories; they concentrate on the nature of the rules as well as the actions and decisions of the social actors who follow them. From a "process" perspective, when it comes to the applied level, the question is not so much how we imagine and get the optimal end state X, but how we create the conditions to solve problem Y, aiming, admittedly, to do it in ways that satisfy some normative criteria of fairness and efficiency. From this perspective, political and economic design aims at improving institutional procedures and less at precisely specified end states. The key conjecture is that institutional arrangements that maximize individual choice in conditions of heterogeneity offer better conditions for performance and adaptive strategies. In a word, political and economic design should aim at improvement of institutional procedures and not at end states defined by criteria difficult to operationalize and preconceived outside the social process, as from an Archimedean viewpoint.

While a large part of theorizing in political economy is more or less explicitly "end state" oriented, the Ostroms' research agenda seems to be closer to the "process" perspective. In a sense, the "process" view and the associated social philosophy defining it seem to be the natural companion of this agenda, the two being interconnected by an inner logic, as facets of the same conceptual corpus. That is to say that the Ostroms' institutionalist line of research seems to provide the much-needed empirical and analytical basis of the "process" perspective and its social philosophy, a basis much needed to illustrate and bolster its normative- and applied-level claims.

At this juncture one may have already noticed the fact that the discussion of "end states" versus "process" is traditionally associated with the study of constitutionalism and constitutional political economy—a study that, although most of the time it starts with "end states," goes beyond that and investigates the procedural rules and human interactions that generated it. But this convergence between the logic of applied institutionalism and the logic of normative endeavors such as those associated with constitutionalism and constitutional

political economy should not be a surprise. Vincent Ostrom (1998) has already drawn our attention to it. And, after all, we have already established that the type of institutionalism advanced by the Ostroms and their associates offers a broader theoretical framework, spanning scientific prediction and moral philosophy. It is a framework broad enough to accommodate a large part of the mainstream's models but also to transcend them and set the stage for the analysis of rules and choices in conditions of radical heterogeneity, uncertainty, and bounded rationality. In other words, it is a powerful instrument for the study of institutional diversity, seen both as a consequence and as a cause of heterogeneity of resources, capabilities, perspectives, interpretations, heuristics, and preferences.