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The role of the state in governing the commons*



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ABSTRACT

Elinor Ostrom did not argue that state action is antithetical to local knowledge and effective organization. She argued, to the contrary, that higher levels of state action are often necessary to solve complex common-pool resource problems. In Ostrom's central concept of polycentrism, local decision making groups must often be "nested" within state structures at a higher level, so that the higher structures can provide the coercion and other resources that make local negotiation efficient. The state has four potentially crucial roles in a polycentric system. The first is to threaten to impose a solution (a "public-interest penalty default") if local parties cannot come to a negotiated agreement. The second is to provide a source of relatively neutral information to mitigate the problem of self-serving bias regarding the relevant facts. The third is to provide an arena for negotiating that facilitates lowcost, enforceable agreements. The fourth is to help monitor compliance and sanction defection in the implementation phase. All four arise in Governing the Commons. Today we must also consider the international level, which has no state. Issues such as global warming therefore require that we build overarching institutions to perform these state functions while at the same time preserving the flexible, grounded, local knowledge and participant commitment that facilitate legitimate and efficient systems of cooperation.

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Elinor Ostrom's dissertation and her first book, Governing the Commons, analyzed the depletion of groundwater in the Los Angeles metropolitan area. Based on this and many other cases, her work has often been described as showing that local people acting together to solve collective action problems can do much better than "the state." The Nobel Committee, in awarding her the Nobel prize, described her work as focusing on systems created collectively by the "users themselves" rather than by "privatization and government regulation" Royal Swedish Academy of Sciences, 2009. The Committee concluded that her "principles are in stark contrast to the common view that monitoring and sanctioning are the responsibility of the state and should be conducted by public employees" (2009, 1, 3).

Not only the members of Nobel Committee but many others have taken this anti-state message from Ostrom's

work. This interpretation is not surprising. Her own words often conveyed such a message. Her Design principle #7, for example, states that "The rights of appropriators to design their own institutions are not challenged by external government authorities" (1990, 101). In many of the cases about which she has written, external government authorities, although sometimes well meaning, often appear as foolish, powerful, blundering, and uniformity-promoting, destroying the fragile and delicately equilibrated systems that users with deep local knowledge have painstakingly constructed over time. In many of these examples Ostrom seems to echo James Scott's "seeing like a state" (1999). Reading these cases, one approves the local people as they work out their regulatory systems themselves and winces with dismay as the government officials apply, without concern for local variation, rules that undermine or obliterate what the locals have laboriously

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created over time and with sensitivity to the demands of their specific context.

If we examine Ostrom's examples more closely, however, we see that the state often plays a productive role at higher than local levels. Ostrom usually argued for "nesting" local decision-making groups within state structures at a higher level, because these higher-level structures can provide coercion and other resources that make local decision-making efficient. We may find the key to her thinking in her final design principle (#8), which applies to "more complex, enduring" institutions. That principle requires that the processes of appropriation, provision, monitoring, enforcement, conflict resolution, and governance be "organized in multiple layers of nested enterprises" (1990, 101). This is also the main message of her central concept of "polycentrism." As she and colleagues put it in 2000, "Scholars have found that in many cases a multilevel, polycentric system is more efficient than one large...governmental unit or only a single layer of smaller units" (Gibson, Ostrom & Clark 2000, 234). Her point is that "a single layer of smaller units," where local collectives make their decisions sensitively, in response to local conditions, must often be paired with a higher level governmental unit - in most cases, the state.

Ostrom's first case study, the one she studied for her dissertation and the one that is most carefully dissected in *Governing the Commons*, exemplifies the productive symbiosis between local groups and the state. In this case, the many parties to the groundwater negotiation would very probably never have come to any agreement – or would have dragged on negotiations past several points in which irreparable environmental harm would already have been done – if the state, through its court system, had not threatened to impose a solution if the stake holding parties had not come to agreement by a certain time (1990, 117). In this groundwater case the state also provided information, accepted by all parties as neutral and unbiased, which gave all parties a "common image" from which to negotiate (115).

My own analysis of this case suggests at least four crucial roles for the higher levels of the state - roles that are intended to be illustrative, not exclusive. The first role is to threaten to impose a solution if local parties cannot come to a negotiated agreement. In the groundwater dispute that forms the heart of Governing the Commons, the parties negotiated "in the shadow of the law" in the same way that divorcing couples who use a mediator to come to an agreement outside the court system nevertheless negotiate "in the shadow of the law." In this dispute, the state imposed what I suggest calling, in extension of the concept of a "default penalty" in contract law (Ayres and Gertner, 1989), a "public-interest default penalty." A "publicinterest default penalty" is a publicly interested solution, admittedly not well informed by local knowledge, which the state will impose if the more informed local stakeholders cannot negotiate an agreement. The looming shadow of the potential penalty, the coercive imposition of a solution from above, gives considerable incentive to the negotiators at the local level to compromise.

A second role of the state is to provide a source of relatively neutral information. Sometimes the local parties cannot provide that information themselves. In addition, sometimes the antagonistic parties at the local level do not believe the facts provided by their adversaries. Even without any intent to deceive, a preconscious self-serving bias often leads different parties to select different facts and interpretations of facts from those available. Parties to a negotiation therefore often spend a large amount of time arguing over what the facts are. A neutral institution that can provide agreed-upon information can be of great help in moving negotiations along. Sometimes, as in the groundwater dispute, states can generate such relatively neutral information-providing institutions.

A third role of the state is, from the earliest stages, to provide an arena for negotiating in which "low-cost, enforceable agreements can be reached" (1990, 146; see also 156). In the groundwater dispute, state actors not only threatened to impose a solution if the parties did not come to agreement and provided crucial information that the parties could use as the basis for negotiation, but also facilitated the negotiation itself by making available many "state-wide institutional facilities" (137), including a court system in which individuals have the capacity to initiate litigation, subsidies for such potential litigation, and technical assistance (138–9).

A final, and traditionally most important, role of the state is to help in the necessary activities of monitoring compliance and sanctioning defection from compliance in the implementation phase after the negotiators have reached agreement. As Ostrom put it, purely local sanctions for defection can produce "escalating retribution," with "feuds, raids, and overt warfare" (1998, 17; cf. 1990, 21). Indeed, without such assurances regarding future sanctions from a higher level of the state in the implementation phase, many parties will not enter into the agreement in the first place.

For all four of these reasons and more, Ostrom concluded in her Presidential Address to the American Political Science Association, "...without some external support of such [higher-level state] institutions, it is unlikely that reciprocity alone completely solves the more challenging common-pool resource problems" (1998, 17). She particularly pointed to the structural features of large size, heterogeneity of participants, difficulties in monitoring, low levels of information, short time horizons, and lack of access to effective and reliable sanctions that placed difficulties in the way of informal agreements based only on reciprocity (2, 14–15).

Ostrom's theory is thus compatible with Archon Fung's (2004) concept of "accountable autonomy," also derived inductively from successful practice, which marries the two levels of local participation and state monitoring. In the successful participatory experiments that he analyzed in Chicago, local participants at the precinct and school level devised the specific means for cooperation and the details of implementation, while the state at the higher city level provided support, monitoring and sanctioning for defection, and information sharing across the several local sites.

Ostrom's polycentric model assumes some levels higher than the local, which can threaten to impose other solutions, provide neutral information, provide venues and support for the local negotiation, and, crucially, sanction non-compliance. Although she advocates a strategy of beginning at the local level and working up (1990, 189–90), she points out herself that this strategy usually works best when there is a higher level into which the local work can nest. The higher level need not be a state level, because polycentrism is possible through

nested informal arrangements or through nested private arrangements enforced by state coercion. Yet the state, with its legitimate monopoly of violence, often best provides the supportive functions that make possible lower level solutions. As Ostrom points out, "the theory of collective action is...the core of the justification of the state" (1998, 1).

In some realms, no higher level functions effectively as a state, wielding its hallmark legitimate coercion. This is the case currently in the international realm, where our common pool resource problems are the most life threatening. On issues like global warming, we cannot adopt Ostrom's nesting strategy without also creating the overarching institutions in which local agreements can nest. We must try to build such overarching institutions - that is, create a "state," or at least a state-like entity, with some powers of legitimate coercion - at the same time that we work to preserve the flexible, grounded, local knowledge and the commitment of participants to the undertaking that make possible more local and more informal legitimate and efficient systems of cooperation, with their mutual monitoring and sanctions. We must do so even while agreeing, as she pointed out, that the greater the numbers involved in any collective action problem, the harder it is to come to agreement (1990, 188, 198).

Whether we apply Ostrom's lessons to forests in India, irrigation in Spain, fishing grounds in Mexico, or global warming on our planet, we must pay heed to the subtlety of her thought. We should not take from her work the simplistic lesson that higher-level state action is always ham-handed and insensitive, but rather the polycentric lesson that higher levels of state action are often necessary to make the lower levels work well. Polycentric theory contends neither that "bottom-up is good and top-down is bad" nor that "top-down is good and bottom-up is bad." Rather, it looks to the useful contributions that can be made at all levels, by states, by private associations supported by states, by associations of individuals supported only by their own institutions of informal reciprocity, and by complex multi-sectoral arrangements that incorporate and cross many levels of government and private association (e.g., Sabel and Zeitlin, 2010). The state may play a structuring and entrepreneurial role in these complex arrangements or it may simply allow these arrangements to function efficiently by providing the legitimate coercion that enforces their contracts.

Polycentrism embraces these "mixtures of institutional types" (Deitz et al., 2003) in their "multiplicity, diversity, interdependency" and variety (Toonen, 2010, 194), directing the attention of citizens, scholars, and policy makers to the

particular mixtures that work best in particular settings. The appropriate role of the state in any setting depends, Ostrom would tell us, on the characteristics of that setting. She stressed consistently, in her words, the need for "compound systems" (196) and for "institutional variety, layers within layers and a multi-scale society: large scale and small scale. Embedded in and next to one another" (195). Because Ostrom was writing against a state-centric tradition, she did not dwell upon the functions of the state, but as a clear-eyed, analytically keen, and honest observer she always recognized important roles for the state, particularly in large-scale cases.

Elinor Ostrom has left us a complex legacy. It would do her, and our future, a great disservice to oversimplify what she had to say.

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