

Elinor Ostrom Speaks about Property Rights*

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Abstract

In a 2011 speech, Elinor Ostrom describes how, in the 1960s, producers of groundwater from a basin below Los Angeles determined how to allocate water rights and how to stop overpumping and saltwater intrusion. A private group called the West Basin Water Association recognized the problems and worked with the United States Geological Survey to produce a study showing the groundwater basin's boundaries. They then used equity jurisprudence to determine how much water different entities had been pumping from the basin. With a committee of attorneys and engineers and the help of a state court, they developed the idea of mutual prescription and established private property rights to the flows from the groundwater basin. They also built a series of wells along the coast to pump fresh water. Additionally, the association created a special district that imposed a tax to fund the groundwater basin's replenishment.

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In some cases, people have assumed that what I've *only* studied is common property, and I think it's very important that we recognize that there are many institutions that we call common property that are real property institutions, and we ignored them for a very long time, and destroyed many, because we had ignored them and

* On April 10, 2011, Nobel laureate Elinor Ostrom spoke at the Sheraton hotel in Nassau, Bahamas, after the Association of Private Enterprise Education honored her at its annual meeting. The following transcript, lightly edited and annotated for clarity, contains her remarks about her PhD dissertation. As a candidate at the University of California, Berkeley, Ostrom studied how stakeholders managed the property rights to a groundwater basin in Los Angeles in the 1960s. This work informed her lifelong studies of property rights that led to her receipt of the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel in 2009.

presumed that they weren't property rights, and that people couldn't do it.¹

In my own work, in my dissertation, I studied how a group of about 800 producers of groundwater from a groundwater basin under the Los Angeles metropolitan area faced a really difficult problem.² Over time, people have settled in Los Angeles, and out West, there were no distinct rules as to how water should be allocated. There were debates so that there were people who said, "Oh, we should use riparian water rights, like they do on the East Coast," and others said, "No, we shouldn't, water's like gold, so we should use first in time, first in right." And then, in California, there was a small statement in the constitution that water should be used first and foremost for urban [purposes] and only for other purposes once urban [users' needs were satisfied]. Well, that's three really distinct ideas.

People [in California] had overpumped in the [19]30s and early '40s, but then we had war, and who's going to worry about overpumping? So around '46, since the groundwater basins were going down, down, down, and saltwater was coming in . . . it was a much more distinct and emergency situation than in some places where [the groundwater level] goes down, and there's a good year of water, and it goes back up, etcetera. This was a real threat.

Well, what I was fortunate to do was to start attending [the meetings of] a private water association called the West Basin Water Association. This was composed of people who worked for oil companies, people who were farmers, people who were private water utilities, people who were representing public water utilities, because all of those were involved.³ And what was very fortunate is that some of the people there recognized that "well, we've got a problem, and we've got to figure out a way of beginning to seriously address it, so we can solve it." And at those meetings they brought in experts on geology and experts on various kinds of water law and experts on

¹ By "it," we believe Ostrom meant "cooperate to prevent the destruction of resources." Before her work, economic models assumed "tragedy of the commons" or "prisoners' dilemma" situations in which people won't cooperate for their collective good.

² See Elinor Ostrom, "Public Entrepreneurship: A Case Study in Ground Water Basin Management," PhD diss., University of California, Berkeley, 1964.

³ The West Basin Water Association was "a permanent association of all the major water producers extracting water from West Basin. The creation of the association was an acknowledgment on the part of all those who joined that a deficiency in ground water supplies existed which could adversely affect every West Basin pumper." Ostrom, "Public Entrepreneurship," p. 30.

water being imported from Colorado or from the north, just a wide diversity of different views to make themselves at least begin to be aware that they had a common problem.

Now, they were fortunate. . . . In one of the things that they were able to do, they were able to go to a US national government authority, but it had quite different rules than just top-down sovereignty, “Here is the sword.” The United States Geological Survey had rules [which stated] that if a group of people could come to it and say, “We have a public problem, improve it,” and could show why there are millions of people [being affected] and [that the problem is] real,” that they would be willing to pay for it.

And this [the West Basin Water Association] was a private association, but they raised the funds from these variety of different users to contribute one-third of the cost of doing a study. . . . [And then they went to the US Geological Survey, where] the incentive is to have a very good reputation for high-quality work, because then they can get some people to contribute to their budget for high-quality science, and that [study] is then made public.

Well, part of the problem is, if you’re fighting over something and you don’t know your boundaries, you know, how many people know the boundaries of the groundwater basins that they get their water from? Not very many. Especially in California, where you have all the various fault zones and things of this sort.

So [the groundwater association’s] first information was a national study that came in and took five years but gave them a really firm idea of boundaries, and [it was] well supported, very well supported, so they bought into that. Then, they fought with themselves on this appropriative vs. riparian [issue, but got] nowhere.

They finally decided to use a court system in a way that we’re not teaching very much about There’s something called equity jurisprudence, and it comes out of common law and it is a method of discovery that can be used when we have a conflict and we’re trying to resolve it. And when you use equity jurisprudence, you go again to the court, and you say, “Court, we have a problem, but it ain’t criminal, we can’t use criminal court. It ain’t civil, in that we don’t have a contract change—we just don’t have a contract. But it’s real, and we want you to appoint a master at law.” And masters at law, in common law equity jurisprudence, their task is to get the facts. And the water master that was appointed here started with all of those producers, [saying,] “Okay, we want to know exactly what you’ve been pumping for the last ten, fifteen, twenty years.”

Well, it took a long time, and the benefit was that they would come up with a tentative report and say, “Here is what we think you’ve been pumping, are any of you in disagreement?” “Yes! Yes! Yes!” “All right, if you are in disagreement, show me the evidence.” And [they went] back and forth on evidence, so that they eventually got a report that people said, “Okay, what you’ve said about my past pumping is true.”

If you think about governance, part of it is how you resolve difficult conflicts. And if you can use a method that is really very carefully thought through, to get at as good—you never get truth, you never get perfect truth—but if you can get a common understanding, I mean this is what we assumed, right? . . . That everybody involved in some kind of process has complete information, which means it’s common. Well, getting there is difficult, and we have to be thinking through what are some of the mechanisms that enable us to get there.

Well, equity jurisprudence is one, and they [the West Basin Water Association] took a while, but once they had a report that they agreed to, they created a committee of attorneys and engineers who began to really work on, “Well, let’s come up with an idea of how to get our water rights established.” And they eventually developed an idea of mutual prescription.⁴

If I were to move like this [Ostrom shuffles to the left of the podium and nudges herself into a seated panelist] and said, “This is my property right,” [laughter] well, robbers do this, they sometimes will take a fence and move it two feet over one year, and then another two feet, and then another two feet, and if the other landowner doesn’t complain, the son of a gun [who is] moving across is given rights to the land by prescription, and there are many famous cases on how you got property rights. Was it notorious? You have to

⁴ In *Pasadena v. Alhambra*, 33 Cal. Ed. 908, 930-1 (1949), the California Supreme Court described mutual prescription as follows: “The pumping of each group, however, actually interfered with the other group in that it produced an overdraft which would operate to make it impossible for all to continue at the same rate in the future. . . . Although the pumping of each party to this action continued without interruption, it necessarily interfered with the future possibility of pumping by each of the other parties by lowering the water level. The original owners by their own acts, although not by judicial assistance, thus retained and acquired a right to continue to take some water in the future. The wrongdoers also acquired prescriptive rights to continue to take water, but their rights were limited to the extent that the original owners retained and acquired rights by their pumping.” Ostrom, “Public Entrepreneurship,” p. 195.

do it openly and notoriously, and it has to go on for five or seven years—again, I can’t remember right at this moment, my mind is slipping whether it’s five or seven⁵—but the idea is that if you don’t protect your property rights, you know, we have this image that people have rights, huh? Well if you don’t protect them, somebody else can just notoriously come onto your land and use it, and they get the rights.

Well, here they didn’t have that kind of a situation. They argued, “We have mutual prescription, because we’ve known for some time we’re overusing this groundwater basin. It’s going down, down, down, down. And so we’ve been prescribing on each other.” And thus they took the record of what all everyone had been producing, and 85 percent of the pumpers agreed on cutting back a very substantial amount and literally creating private property rights to so much flow. So one of the big steps was creating property rights to a groundwater basin in terms of the flow, and so one of the things I was very happy to see was the governance process that enabled people to achieve known and agreed-upon property rights.

But it didn’t stop there. Once they had done that, they realized that the basin was, really, the saltwater was coming in, and even if they now slowly but surely stopped overpumping as much . . . you don’t just automatically have the water come up, and so they thought of a very clever thing of building a series of wells along the coast and using engineering as a way of pumping water, fresh water, down, and then they thought, “Well, we could really use some things.”

They created a government. So step one was all the negotiation and the use of the government, national government, and the state court; step two was their own negotiation within the court system to come up with a set of rights, in the shadow. They faced the court that if they didn’t come up with something themselves, the judge could. So in the shadow of a judge, they were able to negotiate. Sometimes we have to recognize when our negotiation is successful and sometimes being in the shadow of a national or a state—in this case state—authority can help.

But then they did this radical thing of creating government. . . . California has a very rich tradition of enabling people to create their own government units. Well, creating a replenishment district that was the same boundary as two adjacent [districts,] Central Basin and

⁵ The minimum statutory period for claiming adverse possession of property varies by state. It can be as few as three years or as many as twenty. In California, the minimum is five years.

West, they could then put a very big tax on the amount of water being pumped out, but that tax didn't go to Sacramento or Washington. The tax went to that district, and they were charged to use that tax money effectively for replenishment. It was a replenishment district. . . . This was something I studied—I called it public entrepreneurship, hence thinking of the entrepreneurship that you better thought of in the private sector, but putting all of this together in a private-public arrangement was a form of entrepreneurship.

But there wasn't one solution, and so much of what we try to think about is, one, this is the ideal thing to come up with this kind of solution. Fortunately, I did that before Garrett Hardin wrote "The Tragedy of Commons," and before Mancur Olson. I defended in December of '64 and Olson's book [*The Logic of Collective Action*] was out that spring, but I . . . wasn't fighting those ideas, I was just trying to understand this complicated thing in a way that was theoretically useful and understood the ingenuity of what we've been able to do.