NATIONAL SOCIO-ENVIRONMENTAL SYNTHESIS CENTER



Grazing Lands in the UK.
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Lesson – Governance Theory, Part 1: Revising the Tragedy of the Commons

By Heidi Scott, SESYNC | August 31, 2022

Overview:

This is the first lesson in a two-part series on governance. It is recommended to read the companion explainer articles on governance and polycentric governance first and to then complete the lessons in order, as they build upon concepts. The second lesson can be found here: Governance Theory, Part 2: Case Studies in Polycentric Resource Management.

Political economist Elinor Ostrom won a Nobel Prize for her work on polycentric governance—which is roughly defined as a system, consisting of multiple stakeholders who collaborate to govern a limited resource. Ostrom based her theory on innovative research of polycentric water management in the arid American West. Ostrom and her collaborators critiqued the prevailing paradigm of the Tragedy of the Commons from Garrett Hardin's 1968 article that argued that common pool resources would inevitably be overused if unregulated, and that top-down government management or privatization were the only ways to avoid a tragic collapse of shared natural resources. What can polycentric theory add to socio-environmental governance strategies today? Positive outcomes result from what researchers call "social fit," the ability of a governance structure to reconcile diverse people's values, beliefs, and expectations in the management of a socio-environmental system.

This lesson is the first in a two-part series. This lesson, Part 1, addresses the paradigm shift from Hardin's pessimistic view of the commons to Ostrom's more inclusive and constructive theory of polycentric governance. Participants are asked to study polycentric design in climate change governance to understand the crucial elements of trust and communication. Part 2 develops the idea of social fit and takes up a case study of a vast marine reserve in Hawai'i. This model demonstrates how the design of polycentric governance can include local, tribal, state, and federal stakeholders, as well as how the design of polycentric governance can evolve in time to promote sustainable use, community input, and even spontaneous information sharing to build values and consensus across stakeholder groups with contrasting worldviews.

Assumed Prior Knowledge:

Appropriate for undergraduate, graduate, and higher-level learners.

Learning Objectives:

- Consider and critique the Tragedy of the Commons from a governance perspective and seek new ways of envisioning shared-pool resource management.
- Use personal anecdotes to recall and illustrate specific episodes of tragic commons or polycentric preserves.
- Illustrate polycentric resource-management strategies using the particularly wicked case study of global climate change.
- Evaluate the advantages and challenges of polycentric design, particularly as they relate to the evolution of structure and flows of communication and trust among diverse stakeholders.

Key Terms and Concepts:

tragedy of the commons; polycentric governance; Elinor Ostrom; shared-pool resource management; enabling conditions; worldviews; cultural norms; psychology; sustainable management; socio-environmental networks

The "Hook" (suggestions for quickly engaging students):

1. Ask learners to think of a time when they felt like a winner or a loser in an unequally shared burden or resource. They might consider domestic household tasks or family or roommate dynamics related to resources like quiet space or access to goods (e.g., the TV, food supplies, the car).

2. Once they have an incident in mind, ask them to write down four elements of the conflict and resolution (if there was one): who the stakeholders were; what the conflicts were; how they communicated; and what strategies for reconciliation they employed (or did not employ). Some participants may not have resolved their problem and are stuck at the point of conflict. That's fine—maybe this lesson will shed light on paths forward.

Teaching Assignments:

Humans Are More Than Mouths to Feed: Reform the Tragedy of the Commons (One, 50-min. class)

1. **Prior to Class:** As preparation, have participants read the highlighted parts of Cole (2015), "Advantages of a Polycentric Approach to Climate Change." They should take notes on the elements of communication and trust, as well as the advantages and challenges of polycentric governance.

   Cole_2015_Highlighted.pdf

2. **(10 min.)** Start the class with a review discussion of Hardin's Tragedy of the Commons and counterexamples that show how diverse groups can form governance structures that preserve common-pool resources. See PPT slides 1-6.

   Governance_Theory_Pt1_Lesson_Slides_Accessible.pptx

3. **(5 min.)** Ask for a few learners to contribute their personal anecdotes about regulating common-pool resources from The Hook. For each problem, list the **stakeholders**; the **conflicts**; how the **communication** presented; and what strategies there were or could be for **reconciliation**.

4. **(10 min.)** Have the whole class discuss elements of polycentric governance that apply to their anecdote: stakeholders and their levels of authority, identity, and worldviews; communication, trust, and evolution of the governance network; and fate of the resource—is it shared in a way that preserves future use, or does it lean toward degradation from overuse?

5. **(5 min.)** As a whole group, invite learners to list the global "commons" that they see as threatened by individualistic, nationalistic, or short-term economic actions. They should note how climate change exhibits a tragedy of the atmospheric commons: The United States and developed industrial nations in Europe have benefited from freely emitting carbon from fossil fuels; developing nations are projected to suffer disproportionately from climate change shifts.

6. **(5 min.)** Ask learners to discuss how we can discern between: the truths about selfish human nature that we do see in our behavior toward each other and the natural world; and inverse truths about human capacity for trust, altruism, shared goals, community-building, and even global collaboration. How do we hold two opposing truths in mind at once, yet find the best governance mechanisms to support grassroots, multilevel, diverse, and egalitarian governance?

7. **(10 min.)** Now, consider how polycentric forms of governance have evolved to attempt to tackle the climate change conundrum. Learners can share their knowledge of how many-layered regulatory agencies, private companies, and community groups have stepped up to form governance bodies to limit emissions. What are some of those groups? (Intergovernmental Panel on Climate Change, national governments, Natural Resources Defense Council, Greenpeace, Sunrise Movement, venture capitalists, carbon recapture innovators, community tree planters, gardeners, biking groups, etc.)

8. **(5 min.)** Have each learner write down 1–2 reasons they feel optimistic about human nature's more positive abilities to employ polycentric, egalitarian, and sustainable forms of governance. This may relate to regulatory structure and authority, but it may also relate to the exploration of shared values, development of trust, and the honoring of worldviews across cultures. They should also list challenges to maintaining a more complex multilevel regulation strategy, including enforcement and legal jurisdiction.

Background Information for the Instructor:

1. **The Uncommon Knowledge of Elinor Ostrom**

    - This accessible book celebrates Ostrom's legacy to ecology and economics, challenges the Tragedy of the Commons, and presents a series of case studies to illustrate polycentric design.

    - Nordman, E. (2021). The Uncommon Knowledge of Elinor Ostrom. Island Press. https://www.google.com/books/edition/The_Uncommon_Knowledge_of_Elinor_Ostrom/UHBWEAAAQBAJ?hl=en&gbpv=0

2. **Toward comparative institutional analysis of polycentric social-ecological systems governance**

    - This paper develops a conceptual approach to evaluating the function of polycentric governance designs and advocates for Comparative Institutional Analysis to better evaluate case studies.

    - Thiel, A., & Moser, C. (2018). Toward comparative institutional analysis of polycentric social-ecological systems governance. *Environmental Policy & Governance, 28*(4), 269-283. https://doi.org/10.1002/eet.1814

3. **The Environmental Optimism of Elinor Ostrom**

    - This collection of essays explores the Water Management case study in Ostrom's work, with specific chapters to elaborate on integrative polycentric case studies.

    - Jenkins, M.E., Simmons, R., & Wardle, C. (2020). *The Environmental Optimism of Elinor Ostrom*. The Center for Growth and Opportunity at Utah State University. https://www.thecgo.org/wp-content/uploads/2020/09/The-Environmental-Optimism-of-Elinor-Ostrom.pdf

4. **Emergence of polycentric climate governance and its future prospects**

    - Polycentric governance offers new opportunities to govern climate change, but based on existing empirical research, it is too early to judge whether hopes about the performance of the 'new' forms are well founded. More time and coordinated research are needed to comprehend their full potential—time that is in very short supply in governing climate change.

    - Jordan, A.J., Huitema, D., Hildén, M. et al. (2015). Emergence of polycentric climate governance and its future prospects. *Nature Climate Change, 5,* 977-982. https://doi.org/10.1038/nclimate2725

References:

- Carlisle, K., & Gruby, R.L. (2019). Polycentric systems of governance: A theoretical model for the commons. *Policy Studies Journal, 47*(4), 927–952. https://doi.org/10.1111/psj.12212

- Cole, D.H. (2015). Advantages of a polycentric approach to climate change policy. *Nature Climate Change, 5*, 114–118. https://doi.org/10.1038/nclimate2490

- Jordan, A., Huitema, D., Hildén, M. et al. (2015). Emergence of polycentric climate governance and its future prospects. *Nature Climate Change 5,* 977–982. https://doi.org/10.1038/nclimate2725

- Nordman, E. (2021). T*he Uncommon Knowledge of Elinor Ostrom: Essential Lessons for Collective Action*. Island Press.

Related SESYNC Content:

- Palmer, M.A. (2024, July 19). *Explainer – What Is Governance? A Socio-Environmental Perspective.* SESYNC. https://www.sesync.org/resources/explainer-what-governance-socio-environmental-perspective
- Scott, H. (2023, July 27). *Explainer – Polycentric Governance: When Is It Good?*. SESYNC. https://www.sesync.org/resources/polycentric-governance-when-it-good
- Scott, H. (2022, August 31). *Lesson – Governance Theory, Part 2: Case Studies in Polycentric Resource Management*. SESYNC. https://www.sesync.org/resources/governance-theory-part-2-case-studies-polycentric-resource-management

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