

Unit 2.6 Actors, institutions and power: How does the unequal distribution of power among actors affect the pursuit of sustainability?

The pursuit of sustainable development is a massively redistributive agenda and thus often faces opposition from powerful incumbent interests intent on maintaining the status quo. Understanding development pathways in nature-society systems—with an eye towards fostering more sustainable pathways—requires examining the actors who shape nature-society systems, the institutional arrangements that govern their interactions, and the power dynamics that determine whose interests prevail.

In this unit, we explore how actors—entities with agency ranging from individuals to community groups to corporations to states—operate as agents within institutional contexts. Institutions, the formal and informal rules that structure human interactions, shape what actors may, must, or must not do in their interactions with one another and with nature. In the context of natural resource governance for example (such as a fishery), institutional arrangements help determine who has the right to harvest resources, who monitors compliance, who participates in decision-making, and how rules can be changed.

Central to understanding actor dynamics is the concept of power. We have found it most effective to use a three-dimensional view of power as a way of analyzing how actors use power within nature-society systems. Building on the scholarship of Steven Lukes and John Gaventa, we use a three-dimensional view of power outlined below and in greater detail in reading 'a':

- 1) **Compulsion (First Dimension):** Power derived from actors' ownership of or access to resources and their ability to compel others to act only on terms set by the powerful. This is the most visible form of power—the ability to prevail in open conflicts over decisions.
- 2) **Exclusion (Second Dimension):** Power derived from actors' ability to shape institutional structures, rules, and norms to serve their own interests, often by excluding others from decision-making arenas or keeping certain issues off the agenda entirely.
- 3) **Influence (Third Dimension):** Power derived from the ability to shape the goals, aspirations, values, beliefs, and even knowledge systems of others. This most subtle form of power can lead less powerful actors to internalize and accept their subordination as natural or inevitable.

These three dimensions of power reinforce one another to shape development pathways. When powerful actors control resources (first dimension), they can make rules to exclude challengers (second dimension) and promote narratives that make their dominance seem natural or beneficial (third dimension). However, this same framework reveals how power can be redirected toward sustainability: movements that shift values and narratives (third dimension, e.g. reframing development from GDP growth to wellbeing and SDGs) can change the status quo and open space for institutional reforms (second dimension, e.g. including indigenous peoples in resource governance), eventually enabling marginalized groups to gain control of resources (first dimension, e.g. indigenous lands, marine protected areas). Understanding how these dimensions interact is essential for identifying both barriers to and opportunities for advancing sustainable development.

Note: This unit provides an analytical framework for understanding power dynamics. Unit 3.2 explores how to build capacity for promoting more equitable distributions of power and well-being.

Preparation for class: To prepare for this Unit, please:

- a) **Read:** Harley, A. G. (2025). *A framework for thinking about actors, institutions and power in nature-society systems*. Harvard University. (Available in Course Library)
- b) **Read:** Harley, A., & Wexner, H. (2022). The Struggle for Sustainable Development in Appalachia's Mineral Rich Mountains. *Sustainability Science Program Working Paper*, 2022(1), 65. and in the Course Library.

Study Questions to help you get the most out of the readings:

- I. **Actors, Institutions, and Power:** In your own words, explain how the three dimensions of power differ from one another. Why might focusing only on visible, observable conflicts (first dimension) give us an incomplete picture of how power operates in nature-society systems? How do the three dimensions reinforce each other to maintain existing development pathways?
- II. **Three Dimensions of Power in Appalachia between 1870 and 1920 :** Using the company town era described in Section 5 (pages 11-16) of the Appalachian case (reading 'b'), map the coal-based consumption-production system from extraction through consumption. Identify key actors at each stage and the institutional arrangements (both formal rules and informal norms) that governed their interactions. Then analyze how coal companies exercised all three dimensions of power to maintain control over this system. Provide specific examples for each dimension.
- III. **Power Dynamics in Contemporary Appalachia:** How have the actors, institutions, and power dynamics evolved in contemporary Appalachia? Focus on current struggles over mountaintop removal mining and economic transition. Which dimensions of power are most important today? How do contemporary coal companies maintain influence despite declining employment and environmental opposition? What has changed since the company town era and what remains similar?
- IV. **Your Case:** Apply our examination of actors, institutions, and power to a sustainability challenge you're studying. Identify the key actors and map which dimensions of power they exercise. Is the current distribution of power fostering or hindering efforts to promote a more equitable distribution of wealth and well-being within and among generations in your case?

Digging deeper (optional materials for further exploring frontiers in the pursuit of sustainability):

- c) **Read:** Gaventa, J. (1980). *Power and Powerlessness: Quiescence and Rebellion in an Appalachian Valley*. University of Illinois Press.
This foundational text develops the three-dimensional framework of power through a detailed study of the same Appalachian coal region examined in our case study.
- d) **Read:** Global Witness. (2023). *Standing firm: The Land and Environmental Defenders on the frontlines of the climate crisis*. <https://globalwitness.org/en/campaigns/land-and-environmental-defenders/standing-firm/>
Documents 177 environmental defenders killed in 2022 while protecting their community's land and resources, illustrating the most extreme form of compulsion through violence—the first dimension of power.
- e) **Read:** Kashwan, P. (2017). Inequality, democracy, and the environment: A cross-national analysis. *Ecological Economics*, 131, 139–151. <https://doi.org/10.1016/j.ecolecon.2016.08.018>
Analyzes how institutional arrangements in different political systems systematically exclude certain actors from environmental decision-making—second dimension of power in action.
- f) **Read:** Supran, G., Rahmstorf, S., & Oreskes, N. (2023). Assessing ExxonMobil's global warming projections. *Science*, 379(6628). <https://doi.org/10.1126/science.abk0063>
Documents how ExxonMobil's internal climate scientists accurately predicted global warming while the company publicly sowed doubt—quantitative evidence of the third dimension of power in action.