

# Book Reviews

*The Paradox of Scale: How NGOs Build, Maintain, and Lose Authority in Environmental Governance.* Balboa, Cristina M. 2018. Cambridge, MA: The MIT Press.

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*The Paradox of Scale* is an interesting exercise in theory building. It uses three case studies of environmental NGOs in the Asia-Pacific region to develop an explanation of why global-level NGOs often have trouble operating successful and legitimate programs at the local level and why successful and legitimate local NGOs often have so much difficulty scaling up.

Balboa's three cases are all recent, somewhat unsuccessful, habitat and marine species conservation efforts. The first involves Conservation International's (CI) local-level work in the least-populated province of Papua New Guinea. The second considers the attempt to expand an innovative local Philippine project initiated by an American ornamental fish hobbyist. The project initially encouraged sustainable and humane fishing practices at a number of sites in the one country, and successfully expanded to other countries in the region and even beyond, but collapsed when USAID funding, upon which it had become dependent, was severely delayed in the wake of the 9/11 terrorist attacks. The third looks at an attempt to extend internationally a project assisting fishing communities in developing their own conservation systems; the project began in a tiny, outlying community in the microstate of Palau (which is between the Papua New Guinea and the Philippines); leaders were able to balance global and local demands for many years but never fully developed the needed global administrative capacity.

In each of the case studies, Balboa demonstrates that the political, administrative, and technical capacities needed for the organizations to thrive at the local level differed from those needed to manage an international or transnational organization. The local level required flexible organizations steeped in local knowledge. At the international level, the capacity to deal with global donors and follow complex reporting conventions was essential. Relatedly, the accountability mechanisms differed at the two levels: it is one thing to be successful in the eyes of local clients focused on sustaining traditional livelihoods; it is something quite different to navigate successfully among the often-conflicting requirements of national governments, intergovernmental organizations, and big foundations. The paradox of scale is that what contributes to authority (i.e., power and legitimacy) at one level not only fails to do so at the other level; it can even get in the way.

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Balboa argues that the dilemmas that this paradox creates need to be overcome, and they can be. Local-level organizations face an imperative to grow in order to solve what are international, if not global, problems. At the same time, global organizations need to work at the local levels at which the human actions that threaten habitats take place. In each of these cases, there were people and institutions that served as bridges between the two levels. What is needed is to assure that those bridges are strong enough for both levels to operate effectively.

*The Paradox of Scale* develops a theory that is convincing enough to be tested further, especially alongside other hypotheses that may account for some of the things Balboa observes.

In their internationalized versions, each of her cases can be considered instances of hybrid forms of global governance in which local NGOs act as executing agencies for global-level funders, whether national (e.g., USAID), intergovernmental (e.g., UNDP), or nongovernmental (e.g., CI). Recent studies of both peacebuilding and development have noted an increasing denigration of country-level experience and local knowledge among most global funders over the last twenty-five years, with a negative impact on their effectiveness. The problem may be not the paradox of scale but the perversity of funders.

In addition, there are long-standing movements that have, from the beginning, successfully worked simultaneously at the local, national, and international levels. They have created similar organizations and used similar methods of legitimation at every level. Perhaps the most prominent of these is the industrial standardization movement that operates through a nested set of organizations under the International Organization for Standardization (ISO). Standard-setting bodies at all levels work through the consensus of experts representing key stakeholders—the producers of a good or service in question, their immediate consumers, and the “general” or public interest. The resulting standards tend to be both influential and highly legitimate (again, at all levels). This is true even in the environmental field, where these organizations have become increasingly active. This legitimacy sometimes surprises both the big environmental NGOs and environmental social entrepreneurs based in the Global North, although perhaps it should not, since the ISO-style process has involved at least some participants from the Global South for decades. The stakeholder standard setters would probably argue that different methods of legitimation are not needed at different levels; what are needed are just methods that equally engage everyone that matters at every level.

Finally, it may be important to foreground the fact that the problems Balboa investigated, like many global environmental problems, do have this North–South dimension. The number of powerful organizations that are equally legitimate in the Global North and the Global South is probably quite small, but the cause of that phenomenon may not be apparent if we look only at the organizational level of analysis. Nonetheless, *The Paradox of Scale* makes it abundantly clear that studies at the organizational level can provide practical critical insight into some of the most vexing problems of global environmental governance. The

book's clear, straightforward, and sensible analysis makes it a good model to recommend to advanced undergraduate and graduate research students.

*Africa's Gene Revolution: Genetically Modified Crops and the Future of African Agriculture.* Schnurr, Matthew A. 2019. Montreal, QC: McGill-Queen's Press.

*Reviewed by Robert L. Paarlberg*  
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Matthew Schnurr's book, *Africa's Gene Revolution*, stakes out an important position. It argues that genetically modified crops (commonly known as GMOs) have not been widely taken up in Africa because they fail to meet the needs of the numerous smallholder farmers on that continent. GMO crops can deliver benefits on some large-scale commercial farms (operated by white farmers in South Africa), and on some large irrigated farms (cotton farms in Sudan), but for poor smallholder farmers, the seeds are less valuable. For example, GMO cotton seeds protect against the wrong crop pests in Uganda, and they have produced low-quality fibers in Burkina Faso. They are developed and disseminated top-down, by distant researchers who do not understand the social and economic circumstances of poor farmers.

Schnurr builds his case from an impressive research effort inside Africa, including more than 125 interviews conducted over a decade with local informants, as well as ranking exercises with more than 200 farmers. The result is a detailed country-by-country, crop-by-crop account, packed with valuable technical and institutional detail. The language is clear and the tone is admirably nonpolemical. The frequently alleged food safety and environmental safety risks associated with GMOs are for the most part not evaluated in the book, in part because the author has concluded that they are "relatively minimal." Instead, the focus is on whether GMO seeds are "pro-poor," and the author's judgment is negative, because the seeds seldom fit the distinct needs and circumstances of smallholder farmers.

Missing from Schnurr's work is an alternative explanation for why GMO crops have failed to spread in Africa, an explanation based on the regulatory actions of African governments. In nearly all of Africa, government regulations have made it illegal for farmers to plant GMO crops. Schnurr may be right about the new seeds being a poor fit to the needs of smallholders, but how can we know, so long as government "biosafety" policies have blocked farmers from even trying the seeds? The only country in sub-Saharan Africa to have fully legalized the planting of any GMO food crops so far has been the Republic of South Africa, and there they have been widely successful.

Schnurr ignores this regulatory blockage. In his chapter on rules and regulations, he describes Uganda, Ghana, Nigeria, Malawi, Ethiopia, Mozambique,

Swaziland, and Cameroon as “emerging adopters” of GMO crops, yet among these countries, only the governments of Nigeria and Ethiopia have so far approved the commercial planting of any GMO crops at all, and the only crop approved has been cotton, not a food crop. This lack of approval means that food crop producers in all of these countries, along with the rest of the region, are still legally blocked from planting GMO varieties of maize, rice, yams, cassava, or banana. Some African countries do have significant GMO crop research programs (Kenya has been doing research on GMOs since the 1990s, as Schnurr points out), but they have yet to give their farmers permission to grow these crops.

Schnurr’s analysis also downplays the source of Africa’s highly precautionary GMO regulations. They were brought in primarily from Europe, through NGOs, foreign assistance agencies, and the United Nations system. Highly precautionary biosafety regulations have kept GMOs out of farm fields in Europe, so it is no surprise that similar regulations copied from Europe would do the same in Africa. Schnurr correctly identifies the African Model Law of the Organization of African Unity (OAU) as an umbrella instrument framing these policies, but he fails to mention that promoting this model law in Africa was a German foreign assistance project. Schnurr discusses Zambia’s rejection of GMO food aid, but little or no attention is given to the role of European NGOs in scaring the Zambians away from the aid. One organization from the United Kingdom, named Farming and Livestock Concern, even told the Zambians that GMO maize might introduce a retrovirus similar to HIV (Paarlberg 2008).

While underplaying Europe’s blocking efforts in Africa, Schnurr also exaggerates the promotional efforts made by GMO supporters, such as USAID and the Bill and Melinda Gates Foundation. USAID’s Program for Biosafety Systems (PBS) actually reinforced the risk narratives around GMOs by training African regulators to do separate risk assessments for these seeds. When the Bill and Melinda Gates Foundation launched its Alliance for a Green Revolution in Africa (AGRA), the first board chair, Kofi Anan, specifically excluded GMO crops from the technologies AGRA would develop and promote (Southgate 2007).

Schnurr’s book can still be used to good advantage, especially by those with research interests in the case studies. Schnurr’s work on the Insect Resistant Maize and Water Efficient Maize projects, and on cotton in Sudan, Burkina Faso, and South Africa, is well informed and up to date. Yet even here something is missing. When Schnurr concludes that GMO cotton will not work for the kind of smallholder farmers found in Africa, he never mentions that smallholders in China and India have been using Bt cotton widely and successfully for several decades now. Most Bt cotton farmers in India are very small, planting only three to four acres of the crop. Bt cotton spread rapidly in these two countries as soon as government regulators legalized use of the seeds; African farmers in cotton-growing countries like Uganda, Kenya, and Tanzania deserve a similar chance to try the seeds in their own fields.

Norman Borlaug, the Nobel Prize-winning scientist who grew up on a small farm in Iowa, and who launched the original green revolution in South Asia in the 1960s, uttered these last words before he passed away: “Take it to the farmer” (Quinn 2010). That would be good advice for Africa today.

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*Ecomodernism: Technology, Politics and the Climate Crisis*. Symons, Jonathon. 2019. Cambridge, MA: Polity Press.

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A few months ago, 7.6 million people joined a week-long global coordinated strike to protest government and business inaction on climate change. Millions of schoolchildren around the world continue to walk out of their classrooms every Friday in solidarity with sixteen-year-old Greta Thunberg. This movement is on fire, says the left-wing journalist and author Naomi Klein. For Klein (2019), there has never been a more obvious appetite for abandoning incremental moves away from fossil fuels, in favor of a radical decarbonization of society, redistributing wealth to fund a just, zero-carbon energy transition.

According to Symons in *Ecomodernism*, these fear-based appeals to drum up public support for frugality are turning people away, rather than attracting them toward taking effective action on climate change. The book requests more faith in government and corporations and underscores the value of individual aspiration and technological innovation to provide a more hopeful response. In doing so, Symons promotes the capability of a global capitalist economy to solve social and environmental issues. The book’s recurring metaphor of the US HIV/AIDS epidemic attempts to exemplify how state-funded innovation should engage with such crises. In the early 1980s, the costly (yet profitable) pharmaceutical development of retroviral drugs was thwarted by ideologically conservative arguments promoting celibacy and heteronormativity. The ecomodernist innovations required to address the contemporary climate crises include

nuclear energy; natural gas fracking; more sustainable (yet highly industrial) agriculture; GMO experimentation; and, once a global democratic consensus is achieved, a permanent global program of geoengineering.

*Ecomodernism* is critically engaged, but instead of squaring up to the usual international corporations and neoliberal governments, its critique is aimed at the “Greens,” whose emotive fearmongering Symons blames for historical inaction on climate change. The Greens in question are a “bizarre” and “beguiling” (7) group of popular left-leaning journalists, such as Naomi Klein and George Monbiot, lumped together with the conservative author of *The Population Bomb*, Paul Erlich, and other “globophobic” thinkers. Distancing itself from fearmongering rhetoric, the book adopts a cold algorithmic utilitarianism. Nuclear power, genetic engineering, and other options are all considered through their climate mitigation potentials, often ignoring other social and environmental risks and contemporary ethical debates. Symons seems to reject a precautionary principle with these innovations so long as net emissions are reduced. Geoengineering, despite its severe risks from unforeseen outcomes, including global “termination shock” (179), is considered tolerable, as it would efficiently decrease emissions while helping poor people in the tropics whose day-to-day lives are already blighted by heat.

Ecomodernism opposes scholars who assume that global market forces are the culprit for accelerating ecological decline. Globalization, for Symons, is held up as the necessary solution to reduce poverty and the associated drivers of environmental degradation. He maintains an enduring faith in regulated global markets and carbon pricing regimes. The book omits discussions concerning already existing global carbon market mechanisms, payments for ecosystem services projects, or Reducing Emissions from Deforestation and Degradation (REDD+).

The concept of ecomodernism is loosely conceptualized in the book’s introduction, which also functions as a manifesto for nuclear energy as much as for an entrepreneurial state. The definition of ecomodernism gains coherence in the following two chapters. The concept attempts to marry competitive markets with globally egalitarian social outcomes. In this spirit, action on climate change is technical, rather than emancipatory. Symons engages alternative theoretical frameworks for assessing the technological challenge, such as political ecology, more-than-human thinking, and degrowth, but not enough to allow the reader much room to explore.

Proponents of growth-based development discourses, nuclear energy, and already-existing agricultural technologies may find this book useful. The book describes these technologies as “zero-carbon” (78), but proponents of Green New Deal thinking, advocated for by Klein and others (see Pettifor 2019; Rifkin 2019), are likely to question the conservative decarbonization visions described by the book. The book’s brief conclusions do not mention pioneering disruptive technologies, for example, tackling climate change with blockchain, artificial intelligence for conservation, or the Internet of Things (IoT) for natural resource

management (see Howson 2019). Such technologies could provide emancipatory outcomes without having to wait for the author's proposed formal system of "global social democracy" or other political settlement. In the 1980s, HIV/AIDS sufferers from around the world mobilized a mass movement against neo-liberal government and corporate interests, using peaceful disobedience to promote a more socially just response to crises. Similarly, while we wait for a system of global social democracy to end the climate crisis, shouldn't today's activists do the same?

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