pompous when assuming a 'public' role – and after all, the 'public' in question might only be local or regional or sectional rather than the capital P national or international publics (always much harder to reach and influence if one is not already part of the tight world of journalism and broadcasting). To connect university research with the wider life of the societies that sustain it does not have to mean marketising, corporatising or 'dumbing-down' academic knowledge. There are ready audiences 'out there' for the sort of insights provided in a book like *Neoliberal Environments*.[5] What is now needed is a way of reaching them directly or by other means. Let us not forget that Hayek, back in the 1940s, was a little-known academic peddling what seemed for decades to be 'irrelevant' ideas that could have little purchase in the wider world. Critics of neoliberalism based in universities need to learn from this, if they have not already. There is always a way if the will exists in the first place. But, as ever, the way cannot be found in conditions of our own choosing. Herein lies the challenge for any opposition to neoliberalism, reformist or otherwise.

Notes

1 It would be a conceit to suggest that geographers alone do this, but it's nonetheless true that a core part of our *modus operandi* is to understand how commonality and difference together constitute time and space.

2 This said, where the research is currently lacking is the area of *biophysical* scale: that is, the complex links between nature's neoliberalisation of a resource in one place or region, and the links this process has with biophysical change elsewhere. Heynen and Perkins' Chapter 15 in this volume is among the few to broach this important question. Thus far, critical geographers have been more adept at dealing with the human dimensions of geographical scale.

3 This term, as I will explain, has a slightly different meaning to the editors' title choice *Neoliberal Environments*. The term 'environments' is nonetheless felicitous, even though I prefer the term 'ecology': it suggests not just that neoliberalism is remaking (and being remade by) the natural world. It also suggests that the *society* is being neoliberalised (albeit not always successful) so that the 'social environment' is conducive to further neoliberal projects in the future. Ryan Holifield's Chapter 16 in this book is an example of this attempted neoliberalisation of the social in conjunction with the biophysical.

4 This is not to discount the usefulness of thought experiments and forecasting. However, it is to place limits on the utility of critique where there is, practically speaking, no viable way to change that being criticised.

5 And some of them are currently 'in here': namely our students, who are tomorrow's decision-makers in government, business and civil society.

Conclusion

Unnatural consequences

Nik Heynen, James McCarthy, Scott Prudham, and Paul Robbins

The cases reviewed in this volume bear witness to an incredibly imaginative and frankly disturbing set of experiments, from privatization of wild animals and banking of wetlands to deregulation of water quality. Do we have a name for these experiments? As people adapt and resist, are their responses and adaptations of a certain kind? And in naming these experiments and forms of resistance, and recognizing them as something more or less coherent, are we better poised to do anything about them?

To answer this, and because the discussion about neoliberalism has become so wide-ranging, we want to begin our conclusion by stressing our perspective that neoliberalism *is* capitalism, although a particular historical variant of capitalism. It is the most recent form of capitalism, one similar to, but also distinct from, classical liberalism and the *laissez-faire* liberalism discussed by Polanyi. We want to stress that, because it is capitalism, many of the features attributed to neoliberalism specifically are true of capitalism more generally. We also conclude by recognizing that capitalism has proved to be highly heterogeneous. Thus, Regulationists are right to try to identify characteristics of particular historically and geographically situated variants of capitalism; we see neoliberal capitalism over the past quarter century as one such variant, and we argue it is important to understand its particularities as well. The point here is that neoliberalism has sometimes been discussed, incorrectly in our view, as a single, monolithic and undifferentiated process that is somehow distinct from capitalism, rather than as a diverse and interlinked set of practices that reflect a heightened, evolved and more destructive form of capitalism.

That said, recent scholarship has rightly called for the implicit grounds of normative critiques to be made explicit and honed; the overwhelmingly critical research and scholarship on neoliberal natures has both an opportunity and an obligation to respond to this challenge by clarifying the linkages among its empirical, theoretical and normative projects. The research in this volume therefore comes at a critical moment. As research on the multiple geographies of neoliberalism referenced within this collection has proliferated, critical questions have emerged about how to proceed. The first question is whether "neoliberalism" is a valid analytical category, and if so,

of what sort? Is it a Weberian ideal-type, an empirical generalization describing a conscious political project, a pejorative label academics apply to policies they dislike, or something else altogether?

Second, how do we recognize, "neoliberalism," amidst the complexities of real examples? That is, in this domain, what specific goals, measures, and practices does "neoliberalism" encompass, specifically with respect to environmental governance, and how do these disparate aspects all fit together? For instance, privatization and the creation of markets for "fictitious commodities" are clearly compatible, but how central are these to the neoliberalization of environmental governance relative to the rollback of command-and-control environmental regulations and increased roles in governance for non-state actors such as NGOs and communities?

Third, how might we best theorize such trends? For example, what analytical purchase is offered by Marxian political economy as opposed to governmentality or actor-network theory, or by institutional versus ethnographic research methods? On what grounds and by what criteria can and should we evaluate the neoliberalization of environmental governance?

We initially argued that collecting these works in one place adds value in several ways. After going through the process of producing this collection, we are convinced. First, both neoliberal discourses and critical debates about neoliberalism too often share the flaw of remaining abstract: too often, neither those who sing neoliberalism's praises nor those who parse its components do the work – or take the risks – of grounding their arguments in real examples. By contrast, this volume brings together specific case studies that span more than two decades of experience and evidence linking neoliberalism with concrete environmental changes, politics, and outcomes in diverse, international contexts. The chapters evaluate specific political ecologies and dynamics and the implications of particular reforms and enforcements, while collectively affording new contributors and readers the possibility of thinking comparatively across sectors and geographic contexts. Such specificity and comparative potential serve important analytical functions because they allow the authors and editors to craft stronger, more credible criticisms of common crises and outcomes, but also because they shed light on ways forward that are more just and more ecologically sound.

Precisely for this reason, this collection does political work. The contributors advance and refine both logical and substantive critiques of the neoliberalization of environmental governance both through deductive critiques of the internal contradictions of neoliberal thought and practice, and through case studies that document the effects of neoliberal reforms and the efficacy of resistance to them. These contributions, despite their pluarality, demonstrate that Margaret Thatcher's famous claim of "there is no alternative" to neoliberalism belies (1) the diversity of actual institutional and political projects mobilized under the rubric of neoliberal discourse; (2) the particular outcomes of neoliberal governance reforms; (3) the divergences between these outcomes and the promises by which neoliberalism is typically

legitimated; and (4) the myriad and effective ways in which neoliberalizations have been and continue to be resisted. In short, the work of the volume's many authors collectively offers the careful, empirically supported analysis and argumentation needed to challenge the abstractions that underpin pernicious orthodoxies. And it shows that like most orthodoxies, neoliberalism cannot be sustained.

The political utility of rhetorically involving neoliberalism also connects the work with countless activists and oppositional political movements around the world for whom the term carries clear meanings and normative associations. Such efforts to speak a common language are vital in reaching beyond the academy. Along the same lines, however, much as we may be critiquing capitalism when we critique neoliberalism, the latter seems to be a far more palatable language than a bald critique of "capitalism." Admittedly, a focus on critiquing the excesses of neoliberalism may point toward a more reformist politics than a direct critique of necessary features of capitalism (i.e., you can keep wage labor, just let us have some sort of environmental and social safety net and some public spaces), but inasmuch as the latter would be a stunning political victory at the moment, we can live with it for the time being.

With respect to *environmental* governance, while neoliberal policies are of course varied and unpredictable in their outcomes (as Bakker has shown, for instance), we believe it is still reasonable to anticipate that they are more likely to produce negative than positive outcomes, insofar as their underlying assumptions about markets and property are overwhelmingly mismatched to the character and quality of biophysical systems, and their functions and flows. Beyond this, our concern about these negatives, these unnatural consequences, is further rooted in a precautionary evaluation of the incomplete information available to evaluate neoliberal capitalism's effect across spatial and temporal scales. Because environmental ramifications of today's radical experiments will possibly be irreversible in so many cases (extinction of species, for instance), we feel it is imperative to take a stand now. Let history judge us all for our critical perspective if we are wrong and applaud us if we are not.

Instead of just assuming we are right, however, we must continue to undertake ecology and social science research in collaborative ways, with the same questions in mind, using robust methodologies to evaluate just how destructive these experiments are, how tractable they are to change, and how uneven they are in their effects. In this regard, it is important to maintain a view of neoliberalism in terms of hegemony and overdetermination. Given the interdependencies and interrelatedness of agency, contingency, and complexity, how and why is it that people willingly choose the same items from the same tiny menu over and over? Why is there so much congruence in the menus and choices on offer around most of the world for some decades? Why do people make choices that maintain or exacerbate inequalities and undesirable status quos, and where do changes

(that do sometimes occur!) come from? These are some of the ambitious questions that must be at the heart of our empirical work.

With this in mind, though, we suggest that work at the other end of the spectrum will be simultaneously essential, requiring us to roll our sleeves up and do environmental research to convincingly demonstrate what we suspect to be happening. In an era when climate scientists stand before Congress making undeniably political interventions against a status quo regime, we should not be afraid of engaging and cooperating with physical science and physical scientists. In a world where information, data, and evidence are increasingly available from diverse sources, we should not hesitate to consult secondary literatures and sources in the natural sciences. But more radically, at a time when the questions of social and physical sciences increasingly converge, we should not be afraid to retrain ourselves to interpret, communicate, and produce new forms of data outside the confines of our own disciplinary and sub-disciplinary training, and to train the next generation of scholars to be more wholly integrative. Political economic climatology, regulation hydrology, and subaltern wildlife ecology are *de facto* fields of research. We need to prepare ourselves to engage them.

We believe there is great analytical utility in naming and explaining neoliberalism. Enormous infringements on class privileges and powers, whether in the form of communism or strong welfare states, marked much of the prior century; neoliberalism is in large part about the effective elimination of such infringements and the political alternatives they represented, in order to create a space for the clawing back of the wealth, power, and privilege that the capitalist class was forced to cede. We see in neoliberalism, therefore, an international project to reclaim, reconstitute, or establish capitalist class privilege and power, dating from the late 1970s (see Harvey 2005). Clive Barnett (2005) is certainly correct that many elements of what we now characterize as neoliberalism are present as strands within the liberal tradition, but the question is which strands of liberalism are operationalized, in what ways, and to what effects in different periods. It seems to us madness, and a real failure, to fail to acknowledge that there has been an enormous global change over the past 25 years in the political context in which wealth is produced and distributed. How that works in particular contexts, including inside of people's heads, is of course always complicated, with any number of contingencies and internal contradictions at play, but to leave it at that is likely to miss the forest for the trees.

Finally, and despite our understanding of the natures around us as produced through politics and economy, we continue to hold to an explicitly normative environmental vision, one that holds hope for a cessation of potentially cataclysmic environmental changes in the world around us. The failed logic of neoliberalism and its ravenous craving for markets, commodities, and sites of accumulation across the planet, propels a loss of species that it has promised to defend, a destruction of ecosystems it has claimed to value, and a reduction in the quality of life that it professed to

maintain. It is in need of replacement! We require utopian forms of environmental praxis to help us imagine alternative possibilities, emancipatory projects, and an end to social and environmental destruction at all scales. While communicating our skepticism toward the market enthusiasms so much a part of creeping neoliberal environmentalism, we require alliances with traditional members of the environmental community, and the green visions they carry and foment. If we are not willing to identify the possible range of environmental futures through our intellectual and political efforts, we are fated to produce an environmental outcome that mirrors the harsh, destructive logics that created it.

References

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