ELSEVIER

Contents lists available at ScienceDirect

Geoforum

journal homepage: www.elsevier.com/locate/geoforum



Review

Environmentality unbound: Multiple governmentalities in environmental politics



Robert Fletcher

Sociology of Development and Change, Wageningen University, De Leeuwenborch, Hollandseweg 1, Wageningen, The Netherlands

ARTICLE INFO

Keywords: Foucault Governmentality Environmentality Neoliberalism Natural resources

ABSTRACT

This article reviews an emerging body of research applying a "multiple governmentalities" perspective derived from Michel Foucault to the study of environmental politics. Previous application of the popular governmentality concept to understand such politics had largely overlooked the multiple forms of governmentality, described in Foucault's later work, that may intersect in a given context. This paper outlines the evolution of Foucault's discussion of governmentality and its implications for the study of environmental politics. It then reviews recent research concerning environmental politics employing a multiple governmentalities perspective. It finishes by distilling overarching patterns from this literature and suggesting new directions for future research to explore.

1. Introduction: environmental politics today

The landscape of global environmental politics has become dazzlingly complex. Historically dominant state-centered command-andcontrol approaches to natural resource management, while still widespread, have been thoroughly critiqued for their top-down domination and neglect of local people's interests (e.g., Scott, 1998; Brockington, 2002; Igoe, 2004). At the same time, however, the community-based natural resource management (CBNRM) approach commonly advocated to replace command-and-control strategies has been questioned on a variety of grounds as well (see Dressler et al., 2011). Meanwhile, the global environmental governance architecture erected following the 1992 Rio Earth Summit has provoked growing disappointment for its widespread failure to achieve the vision of sustainable development championed there (Park et al., 2008), Compounding this, critics have recently pronounced several decades of global efforts to integrate conservation and development in support of CBNRM an overwhelming failure, asserting the presence of inherent tradeoffs between environmental and livelihood concerns that policymakers must acknowledge (McShane et al., 2011; Salafsky, 2011). Critique of this type has prompted a variety of responses. Some call for a return to command-and-control strategies (Oates, 1999; Terborgh, 1999). Others, conversely, advocate increased market integration and private sector partnership, arguing that natural resources should be subject to the dictates of neoliberal economic policies prescribing decentralization, de-(or re-) regulation, privatization, marketization, and commodification as a form of 'natural capital' (see UNEP, 2011;

Büscher et al., 2014).

More radical critics call for a move away from growth-dependent economies altogether towards pursuit of 'steady-state' (Dietz and O'Neill, 2013) or even 'degrowth' (e.g., D'Alisa et al., 2014) strategies. Meanwhile, widespread advocacy of indigenous self-governance grounded in traditional ecological knowledge (TEK) (see esp. Berkes, 2008), including growing promotion of nondualistic ontologies (e.g., Descola, 2013), has been challenged by claims that such practices do not necessarily lead to sustainable resource management in practice (see Raymond, 2007). Others call for a new environmentalism based in an 'ethics of care' or sense of spiritual affinity between humans and nonhumans (Boff, 2008).

Making sense of this complex landscape, consequently, has become increasingly difficult. Diverse combinations of the various approaches outlined above jostle to define the policy agenda in different locations and fora, at times competing and at others combining in collaborative ways. One productive way to approach this complexity is via a novel conceptual framework derived from the "multiple governmentalities" perspective developed by Michel Foucault in his more recently published work. In this article, I offer a state-of-the-art review of the growing body of research and analysis concerning environmental politics that has recently arisen around this perspective. I first introduce Foucault's early use of the governmentality concept and its subsequent uptake within a by-now-voluminous literature. I then discuss how the concept has been adopted to address environmental politics specifically. I describe how all of this has been complicated in light of Foucault's later publications in which he expands his discussion to

E-mail address: robert.fletcher@wur.nl.

¹ This article also serves as the Introduction to a virtual special issue on "Multiple Governmentalities in Environmental Politics."

distinguish different forms of governmentality. I describe my own use of this perspective to outline a typology of "multiple environmentalities" at work in environmental politics (Fletcher, 2010). I then discuss how this typology has been employed by other researchers with respect to diverse forms of environmental governance in a variety of contexts. I finish by outlining several new directions in which this line of analysis might be further pursued in the future.

2. A Genealogy of Governmentality

First proposed in his Collège de France lecture series from 1977, since published as *Security, Territory, Population* (Foucault, 2007), Foucault's governmentality concept gained widespread popularity following its dissemination via an essay excerpted from that lecture series and published (with another lecture from the previous year's series [Foucault, 2003]) as the chapter "Two Lectures" in the 1980 anthology *Power-Knowledge* (Foucault, 1980). This initial lecture then became the fulcrum of the 1991 collection *The Foucault Effect* in which the governmentality concept was discussed and applied by a variety of interlocutors (see Foucault, 1991; Burchell et al., 1991). From there the concept's rise to analytical stardom was nothing short of meteoric, adopted and expanded upon in myriad ways by countless researchers.²

Application of the concept to analyse processes of environmental governance was a "natural" next step, given that, as Salafsky (2001:185) points out, such processes "are primarily designed to modify human behaviors that affect biodiversity." This application was first pursued by Timothy Luke in his early characterization of the global environmental governance institutions established by the 1992 Rio Summit as a novel "environmentality" (Luke, 1999a,b). A similar framing was soon adopted by other researchers, some of whom instead employed the terminology of "green" governmentality (P. Rutherford, 1999; S. Rutherford, 2007, 2011; see also e.g., Oels, 2005; Hanson, 2007; Malette, 2009). Meanwhile, the "environmentality" terminology in particular was pursued by Agrawal (2005a, 2005b) to describe how local people could be enrolled in community conservation efforts in order to transform them into "environmental subjects - people who care about the environment" (2005b: 162). Agrawal's perspective was subsequently adopted by numerous others as well (e.g., Bose et al., 2012; Jepson et al., 2012).

This burgeoning discussion was complicated by publication of Foucault's 1978 lecture series in English translation as The Birth of Biopolitics in 2008 (Foucault, 2008). In these lectures, it became clear that after his initial formulation of the governmentality concept during the previous year, Foucault went on to expand and transform it in ways that were not reflected in most of the vast literature inspired by his first published fragment. Over the course of the two years' lectures, then, the term "progressively shifts from a precise, historically determinate sense, to a more general and abstract meaning" (Sennellart, 2007: 388). Hence, whereas in his first formulation Foucault had situated governmentality within his famous "sovereignty-discipline-government" triad³ (1991: 102), he later collapses this distinction entirely, making governmentality instead a much more generic term to describe various strategies for directing the "conduct of conduct," of which sovereignty and discipline were now included as two such modalities (rather than constituting opposing forms of governance as before). In the end, then, Foucault outlines a four part typology, describing governmentality as embodying: (1) a disciplinary form, in which subjects are enjoined to internalize particular norms and values by means of which they become compelled to self-regulate (as in his famous Panopticon model of power; see Foucault, 1977); (2) a sovereign form, in which compliance is sought

via top-down injunctions backed by threat of punishment; (3) a novel *neoliberal* form that "will act on the environment and systematically modify its variables" rather than demanding "the internal subjugation of individuals" (2008: 271, 260); and finally (4) what Foucault calls governmentality "according to *truth*," that is, 'the truth of religious texts, of revelation, and of the order of the world" (2008:311, emphasis added) (of which his main example is Marxism). In addition to these, Foucault proposes, but does not further develop, the prospect of yet another "strictly, intrinsically, and autonomously *socialist* governmentality," which, he claims, "is not hidden within socialism and its texts. It cannot be deduced from them. It must be invented" (2008:94, emphasis added). These various governmentalties, Foucault proposes, now "overlap, lean on each other, challenge each other, and struggle with each other" (2008: 313) – an ongoing contest that, he suggests, is in fact what we commonly call "politics."

This expanded understanding of governmentality as encompassing multiple overlapping forms has profound implications for analysis conducted in its name, something that was of course quickly recognized by some of Foucault's closest followers (see Elden, 2007). In point of fact, commentary on these implications had already begun some years before *The Birth of Biopolitics* appeared, based on the notes and recordings in French archived from the original lecture series (see Lemke, 2001). The implications for a more nuanced and multi-dimensional analysis was then quickly absorbed, resulting in a new wave of commentary both on Foucault's expanded framework and on its value for empirical analysis (see e.g., Ferguson, 2011; Lemke, 2012).

This expanded framework would, of course, have implications for understanding environmental politics as well. Long a fan of Foucault's work myself, I had encountered The Birth of Biopolitics soon after its publication and surmised its potential to help elucidate the increasingly complex contestation concerning appropriate strategies for environmental conservation that was then the principle focus of my research. In particular, I was intrigued by the framework's utility for understanding the rise of what had come to be labeled "neoliberal conservation" (Sullivan, 2006; Igoe and Brockington, 2007), entailing promotion of so-called "market-based mechanisms" by means of which natural resources could be commodified in situ as the basis of income generation strategies (ecotourism, payment for environmental services, etc.) intended to incentivize their sustainable utilization (see also Büscher et al., 2012, 2014). I realized that, in Foucault's expanded terms, Agrawal's identification of efforts to create "people who care about the environment" could be considered merely one, disciplinary mode of "environmentality," while other forms of environmental governance could be equated with the other governmentalities Foucault later distinguished. In this way, this trend towards neoliberalization within conservation and other forms of natural resource management (see Heynen et al., 2007; Castree, 2008) could be understood as a particularly neoliberal environmentality seeking to govern via external incentives rather than internalized norms and values (see Fletcher, 2010). Likewise, so-called "command-and-control" governance, such as the classic "fortress conservation" approach (Brockington, 2002; Igoe, 2004), could be considered a sovereign environmentality, while even Foucault's governmentality "according to truth" could be identified in efforts to ground environmentalism in TEK (Berkes, 2008) or various forms of spirituality (Sponsel, 2012).

Inspired by Foucault's speculation concerning the prospects of inventing a novel *socialist* governmentality, I also raised the possibility of building on discussion of "liberation ecology" (Peet and Watts, 1996) to pursue a novel "liberation environmentality" concerned "to champion democratic, egalitarian, and non-hierarchical forms of natural resource management in which local people enjoy a genuinely participatory (if not self-mobilising) role" (Fletcher, 2010: 178) – as in the ideal common property regimes (CPRs) championed by Elinor Ostrom and her followers (see esp. Ostrom, 1990; Agrawal, 2003). This resonated with growing critique of Agrawal's use of the environmentality concept for overemphasizing processes of top-down manipulation in his concern

² See Rose et al., 2006 for a useful if by now somewhat outdated review of this research

 $^{^3}$ This triad was intended to describe an historical process whereby each new form of governance overlay but did not entirely replace the preceding as the modern state developed.

to describe means by which state forces exercised a form of "intimate government" via community forestry and hence overlooking the ways that local people could self-mobilize to exercise relatively autonomous and locally-directed forms of environmental governance (see Cepek, 2011; Singh, 2013; Forsyth and Walker, 2014; Haller et al., 2016).

As with Foucault's multiple governmentalities, these various environmentalities can be seen to overlap as well. For instance, I have previously described ecotourism as a form of environmental governance combining disciplinary and neoliberal elements in its promotion, on the one hand, as an ethical practice intended as a form of environmental education and, on the other, as an economic incentive for conservation (see Fletcher, 2014, 2015). Analysis in these terms can thus help to elucidate issues conflated by description in terms of a more monolithic understanding of governmentality. Li (2007), for example, describes the "will to prove" underlying integrated-conservation-anddevelopment efforts in Indonesia. She observes that such efforts proceed "by educating desires and configuring habits" while at the same time describing them (with reference to Bentham) as "artificially arranging things so that people, following their own self-interest, will do as they ought" (2007: 5). From a multiple governmentalities perspective, these could be viewed as two different yet overlapping environmentalities (disciplinary and neoliberal, respectively) pursued simultaneously in this particular context.

3. Environmentality unbound

When I first published this typology, I concluded with the aspiration that future research would use it

to understand the particular environmentalities informing different stakeholders' positions concerning appropriate resource management within a given context; the differences among the environmentalities espoused by various stakeholders; the (potentially) multiple environmentalities that may articulate within any given position; and how all of this intersects to create the actual conservation practices operating on the ground

(Fletcher, 2010: 180)

In the years since I have been gratified to see a growing group of researchers begin to do just this. I have previously applied the framework productively to understand ecotourism, as described above. In an article previously published in this journal, I have also worked with a colleague to understand Costa Rica's celebrated payment for environmental services (PES) program as an expression of neoliberal governmentality even as it implements decidedly non-neoliberal practices (Fletcher and Breitling, 2012). Subsequent research published in this journal pursued this line of analysis as well. Wynne-Jones (2012) identifies neoliberal governmentality is a PES project in Wales. Youdelis (2013) describes an ecotourism project in Thailand as comprising overlapping disciplinary and neoliberal environmentalities. Boelens (2014) finds forms of sovereign, disciplinary, neoliberal and truth governmentalities all present in community water management regimes in highland South America. Boelens et al. (2015), again, identify elements of sovereign and neoliberal governmentality in water management strategies promoted by the Ecuadorian government under then-President Correa. Hommes et al. (2016) distinguish sovereign, disciplinary and neoliberal governmentalities in contestations concerning dam development in Turkey. Bluwstein (2017), finally, describes negotiations among neoliberal, sovereign and truth environmentalities in community-based conservation projects in Tanzania.

In other venues, meanwhile, researchers have productively employed the framework as well. Adams (2015) identifies neoliberal environmentality in soybean production in the Brazilian Amazon. Lloro-Bidart (2014, 2015) distinguishes neoliberal and disciplinary environmentalities in promotion of "sustainable seafood" in a Californian museum. Astuti, McGregor and colleagues call attention to disciplinary, neoliberal and truth as well as more locally-grounded (liberatory?)

governmentalities exercised by different stakeholders in negotiation over the Reduced Emissions though avoided Deforestation and forest Degradation (REDD+) mechanism in Indonesia (Astuti and McGregor, 2015a,b; McGregor et al., 2015). Erb (2012) finds sovereign, disciplinary, neoliberal and truth environmentalities all overlapping in conservation politics on the island of Flores (Erb, 2012). Leffers and Ballamingie (2013) analyse neoliberal, disciplinary and sovereign governmentalities in urban land-use conflict in Canada. Rodriguez de Francisco and Boelens (2014) identify both neoliberal and disciplinary governmentalities in a PES programme in Ecuador. Kolås (2014) highlights sovereign and disciplinary governmentalities in grasslands management in Inner Mongolia, Orihuela (2017) finds disciplinary and neoliberal governmentalities in conservation policy in the Peruvian Amazon. Leibenath (2017), finally, identifies competing neoliberal, disciplinary and sovereign governmentalities at work in the Natural Capital Germany - TEEB4 DE project.

What this growing corpus of research reveals is that, rather than any unified strategy of governance, environmental managers often seek to operationalize multiple strategies simultaneously. At times different managers compete to implement their particular governance strategies while at others a given manager may operate with several (distinct yet overlapping) strategies embodied in the same set of policies or practices. In some cases these different strategies may synergize, acting to enhance one another in an overarching governance field, while in others they may incite conflict as target populations strive to negotiate the contradictory demands placed upon them.

In most instances, however, all of this complex maneuvering has remained largely invisible – either to those directly involved within it or to the researchers reporting upon it – as we have lacked the conceptual language needed to describe it. By highlighting differences in governance strategies and the structures through which specific approaches are enacted, therefore, a multiple governmentalities framework can facilitate understanding of conflicts and/or miscommunications that may arise among various environmental managers on the basis of fundamental differences in belief, values, and the nature of humannonhuman relations of which they themselves may be largely unaware.

4. Future directions

Notwithstanding this recent proliferation of research, analysis in the terms outlined herein is only just beginning and tremendous potential exists to explore its utility and application to new dynamics and contexts. In the following, I briefly outline some of the potential directions I believe could be quite productive in a next round of research.

4.1. The varieties of biopower

In his *Birth of Biopower* lectures Foucault speculates concerning the implications of his multiple governmentalities perspective for understanding his related concept "biopower." In his initial exploration of this equally influential term, Foucault (1991) had directly equated biopower – a power exercised in the interest of "life itself" (Rose, 2007) – with the rise of modern governmentality (Foucault, 1991). This description of governance as an invocation of biopower has proven influential in discussion of environmental politics specifically (see e.g. Luke, 1999a,b; Oels, 2005; Youatt, 2008; Biermann and Mansfield, 2014; Cavanagh, 2014). Yet in his subsequent elaboration of the multiple forms governmentality could take Foucault suggested that these could embody different forms of biopower as well. With respect to neoliberal governmentality, for instance, he suggested:

What should now be studied, therefore, is the way in which the specific problems of life and population have been posed within a technology of government which, although far from always having

⁴ The Economics of Ecosystems and Biodiversity

been liberal, since the end of the eighteenth century has been constantly haunted by the question of liberalism

(2008: 324)

Likewise, Foucault (2008) implied that sovereignty, which had previously been positioned in contradistinction to both governmentality and biopower (see Foucault, 1991, 2003), could in fact prescribe its own mode of biopower as well. The same is true of a governmentality according to truth.. Hence, a useful direction for future research concerning multiple environmentalities would be to explore the varieties of biopower these advocate as well.

4.2. Vision vs. execution

Research from a governmentality perspective has tended to "start by asking what authorities of various sorts wanted to happen" rather than what actually "happened and why" (Rose, 1999: 20). Yet it is clear that there is frequently a significant gap between "vision" and "execution" in environmental governance (Carrier and West, 2009). Hence, future research could more exactingly examine the relationship between the multiple governmentalities embodied in planners' visions of environmental policy and the intersecting ways in which these actually play out in on-the-ground practice as the two sides of this equation co-evolve in an iterative fashion.

4.3. Environmentality and subjectivity

A central component of governmentality research concerns the forms of subjectivity intended to be cultivated (Miller and Rose, 2008). Yet different forms of governmentality may pursue different subjectivities; while a disciplinary governmentality seeks to inculcate a particular ethical orientation in its subjects, for instance, neoliberalism characteristically envisions a rational actor who seeks to maximize her/ his material utility by weighing the costs and benefits of alternative courses of action (Foucault, 2008). In addition, it is clear that, as in the preceding, there is no one-to-one causality between the forms of subjectivities promoted and how the targets of interventions will actually relate to these. While "a central problem in environmental politics," however, thus far the question of how "people come to a sense of commitment to their local 'environment'" (Raffles, 2005: 183) has been only superficially explored, and in particular, how target populations negotiate the specific subject positions promoted by different environmentalities remains a vital question for future study.

4.4. Linking levels and scales

Thus far most research concerning mutiple environmentalities has taken a single case study approach to analyse the different forms of governance operating in a particular context. Another intriguing subject for future research would be to explore how these articulate with the different governmentalities operating at different levels and scales as well. In this way, how different forms of governance operate and interconnect across levels and scales, and the negotiations among them, might enrich our understanding of the landscape of environmental politics significantly.

4.5. Towards a liberation environmentality?

Ultimately, critical scholarship concerning environmental politics should, I believe, seek to support projects of emancipation promoting direct democratic decision-making and egalitarian distribution of resources. Thus far, however, the potential of the socialist, leftist (Ferguson, 2011) or liberatory governmentality that Foucault envisioned has received very little attention, within the environmental realm or elsewhere. Related work has begun to explore similar dynamics under different labels (Singh, 2013; Haller et al., 2016). A key

challenge, then, is to build on this foundation to explore cases in which this type of liberatory politics may be enacted vis-à-vis other forms of governmentality underlying competing programs and strategies. In this, the aim would be to identify and nurture forms of environmental management, grounded in an ideology of participatory egalitarianism, that transcend the growing hegemony of neoliberalism to appropriate and redistribute surplus in ways that do not exploit wage labor and for ends other than capital accumulation.

5. Conclusion

The set of articles previously published in this journal provides a useful starting point for understanding how a multiple governmentalities framework can be applied to investigation of environmental politics. The other studies surveyed here help to broaden this understanding. Taken as a whole, this growing body of research and analysis signals the utility of a multiple governmentalities perspective to facilitate fine-grained analysis of the complex intersection among overlapping approaches to environmental management within a given context as well as among interrelated sites within the often bewilderingly complex terrain of contemporary environmental politics. I look forward to witnessing how this ongoing conversation continues to evolve and expand into the future.

References

Adams, R.T., 2015. Neoliberal environmentality among elites: becoming "responsible producers" in Santarém, Brazil. Cult. Agri. Food Environ. 37 (2), 84–95.

Agrawal, A., 2003. Sustainable governance of common pool resources: context, methods, and politics. Ann. Rev. Anthropol. 32 (1), 243–262.

Agrawal, A., 2005a. Environmentality: Technologies of Government and the Making of Subjects. Duke University Press, Durham, NC.

Agrawal, A., 2005b. Environmentality: community, intimate government, and the making of environmental subjects in Kumaon, India. Curr. Anthropol. 46 (2), 161–190.

Astuti, R., McGregor, A., 2015a. Governing carbon, transforming forest politics: a case study of Indonesia's REDD+ Task Force. Asia Pac. Viewpoint 56 (1), 21–36.

Astuti, R., McGregor, A., 2015b. Responding to the green economy: how REDD+ and the One Map Initiative are transforming forest governance in Indonesia. Third World Quarterly 36 (12), 2273–2293.

Berkes, F., 2008. Sacred Ecology: Traditional Ecological Knowledge and Resource Management, second ed. Routledge, London.

Biermann, C., Mansfield, B., 2014. Biodiversity, purity, and death. Environ. Plan. D Soc. Space 32, 257–273.

Bluwstein, J., 2017. Creating ecotourism territories: environmentalities in Tanzania's community-based conservation. Geoforum 83, 101–118.

Boelens, R., 2014. Cultural politics and the hydrosocial cycle: water, power and identity in the Andean highlands. Geoforum 57, 234–247.

Boelens, R., Hoogesteger, J., Baud, M., 2015. Water reform governmentality in Ecuador: neoliberalism, centralization, and the restraining of polycentric authority and community rule-making. Geoforum 64, 281–291.

Boff, L., 2008. Essential Care: An Ethic of Human Nature. Baylor University Press, Waco, TX.

Bose, P., Arts, B., van Dijk, H., 2012. 'Forest governmentality': a genealogy of subject-making of forest-dependent 'scheduled tribes' in India. Land Use Policy 29 (3), 664–673.

Brockington, D., 2002. Fortress Conservation: The Preservation of the Mkomazi Game Reserve, Tanzania. James Currey, Oxford.

Burchell, G., Gordon, C., Miller, P., 1991. The Foucault Effect: Studies in Governmentality Eds (Harvester Wheatsheaf, Hemel Hempstead), pp. 87–104.

Büscher, B., Dressler, W., Fletcher, R. (eds.), 2014. NatureTM Inc.: Environmental Conservation in the Neoliberal Age (University of Arizona Press, Tucson, AZ).

Büscher, B., Sullivan, S., Igoe, J., Neves, K., Brockington, D., 2012. Towards a synthesized critique of neoliberal biodiversity conservation. Capital. Nat. Social. 23 (2), 4–30.

Carrier, J.G., West, P. (Eds.), 2009. Virtualism, Governance and Practice: Vision and Execution in Environmental Conservation. Berghahn, New York.

Castree, N., 2008. Neoliberalising nature: the logics of deregulation and reregulation. Environ. Plan. A 40, 131–152.

Cavanagh, C., 2014. Biopolitics, environmental change, and development studies. Forum Develop. Stud. 41 (2), 273–294.

Cepek, M.L., 2011. Foucault in the forest: questioning environmentality in Amazonia. Am. Ethnol. 38 (3), 501–515.

D'Alisa, G., Demaria, F., Kallis, G., 2014. Degrowth: A Vocabulary for a New Era. Routledge, New York.

Descola, P., 2013. Beyond Nature and Culture. University of Chicago Press, Chicago. Dietz, R., O'Neill, D., 2013. Enough is Enough: Building a Sustainable Economy in a World of Finite Resources. Berrett-Koehler Publishers. San Francisco. CA.

Dressler, W., Büscher, B., Schoon, M., Brockington, D., Hayes, T., Kull, C.A., McCarthy, J., Shrestha, K., 2011. From hope to crisis and back again? a critical history of the global

- CBNRM narrative. Environ. Conserv. 37 (1), 5-15.
- Elden, S., 2007. Rethinking governmentality. Polit. Geogr. 26 (1), 29-33.
- Erb, M., 2012. The dissonance of conservation: environmentalities and the environmentalisms of the poor in eastern Indonesia. Raffles Bull. Zool. 25, 3–15.
- Ferguson, J., 2011. Toward a left art of government: from 'Foucauldian critique' to Foucauldian politics. History Human Sci. 24 (4), 61–68.
- Fletcher, R., 2010. Neoliberal environmentality: towards a poststructuralist political ecology of the conservation debate. Conserv. Soc. 8 (3), 171–181.
- Fletcher, R., 2014. Romancing the Wild: Cultural Dimensions of Ecotourism. Duke University Press, Durham, NC.
- Fletcher, R., 2015. Nature is a nice place to save but I wouldn't want to live there: environmental education and the ecotourist gaze. Environ. Educ. Res. 21 (3), 338–350.
- Fletcher, R., Breitling, J., 2012. Market mechanism or subsidy in disguise? Governing payment for environmental services in Costa Rica. Geoforum 43 (3), 402–411.
- Forsyth, T., Walker, A., 2014. Hidden alliances: rethinking environmentality and the politics of knowledge in Thailand's campaign for community forestry. Conserv. Soc 12 (4), 408.
- Foucault, M., 1977. Discipline and Punish: The Birth of the Prison. Vintage, New York.
- Foucault, M., 1980. In: Gordon, C. (Ed.), Power-knowledge: Selected Interviews and Other Writings, 1972–1977. Pearson Education, New York.
- Foucault, M., 1991, "Governmentality. In: Burchell, G., Gordon, C., Miller, P. (Eds.). The Foucault Effect: Studies in Governmentality, Harvester Wheatsheaf, Hemel Hempstead, pp. 87–104.
- Foucault, M., 2003. Society Must Be Defended. Picador, New York.
- Foucault, M., 2007. Security, Territory, Population. Palgrave MacMillan, New York.
- Foucault, M., 2008. The Birth of Biopolitics. Palgrave MacMillan, New York.
- Haller, T., Acciaioli, G., Rist, S., 2016. Constitutionality: conditions for crafting local ownership of institution-building processes. Soc. Nat. Resour. 29 (1), 68–87.
- Hanson, P.W., 2007. Governmentality, language ideology, and the production of needs in Malagasy conservation and development. Cult. Anthropol. 22 (2), 244–284.
- Heynen, N., McCarthy, J., Robbins, P., Prudham, S. (Eds.), 2007. Neoliberal Environments: False Promises and Unnatural Consequences. Routledge, New York.
- Hommes, L., Boelens, R., Maat, H., 2016. Contested hydrosocial territories and disputed water governance: struggles and competing claims over the Ilisu Dam development in southeastern Turkey. Geoforum 71, 9–20.
- Igoe, J., 2004. Conservation and Globalization: A Study of National Parks and Indigenous Communities from East Africa to South Dakota. Wadsworth/Thompson, Belmont, CA.
- Igoe, J., Brockington, D., 2007. Neoliberal conservation: a brief introduction. Conserv. Soc. 5 (4), 432–449.
- Jepson, W., Brannstrom, C., Persons, N., 2012. "We Don't Take the Pledge": environmentality and environmental skepticism at the epicenter of US wind energy development. Geoforum 43 (4), 851–863.
- Kolås, Å., 2014. Degradation discourse and green governmentality in the Xilinguole grasslands of Inner Mongolia. Dev. Change 45 (2), 308–328.
- Leffers, D., Ballamingie, P., 2013. Governmentality, environmental subjectivity, and urban intensification. Local Environ. 18 (2), 134–151.
- Leibenath, M., 2017. Ecosystem services and neoliberal governmentality–German style. Land Use Policy 64, 307–316.
- Lemke, T., 2001. The Birth of Bio-politics': Michel Foucault's lecture at the Collège de France on neo-liberal governmentality. Econ. Soc. 30 (2), 190–207.
- Lemke, T., 2012. Foucault, Governmentality, and Critique. Paradigm Publishers, Boulder, CO.
- Li, T.M., 2007. The Will to Improve: Governmentality, Development, and the Practice of Politics. Duke University Press, Durham, NC.
- Lloro-Bidart, T., 2014. They call them "good luck polka dots": disciplining bodies, bird biopower, and human-animal relationships at the Aquarium of the Pacific. J. Polit. Ecol. 21 (2104), 390.
- Lloro-Bidart, T., 2015. Neoliberal and disciplinary environmentality and 'sustainable seafood' consumption: storying environmentally responsible action. Environ. Educ. Res. 1–18.
- Luke, T., 1999a. Environmentality as green governmentality. In: Darier, E. (Ed.), Discourses of the Environment. Blackwell Publishers, Oxford, pp. 121–151.
- Luke, T., 1999b. Eco-managerialism: environmental studies as a power/knowledge

- formation. In: Fisher, F., Hajer, M.A. (Eds.), Living with Nature: Environmental Politics as Cultural Discourse. Oxford University Press, Oxford, pp. 101–120.
- Malette, S., 2009. Foucault for the Next Century: Eco-governmentality. A Foucault for the 21st Century: Governmentality, Biopolitics and Discipline in the New Millennium, pp. 221–239
- McGregor, Andrew, Challies, Edward, Howson, Peter, Astuti, Rini, Dixon, Rowan., Haalboom, Bethany, Gavin, Michael, Tacconi, Luca, Afiff, Suraya, 2015. Beyond carbon, more than forest? REDD+ governmentality in Indonesia. Environ. Plan. A 47 (1), 138–155.
- Miller, P., Rose, N., 2008. Governing the Present. Polity Press, Cambridge.
- Oates, J.F., 1999. Myth and Reality in the Rain Forest: How Conservation Strategies are Failing in West Africa. University of California Press, Berkeley.
- Oels, A., 2005. Rendering climate change governable: from biopower to advanced liberal government? J. Environ. Pol. Plan. 7, 185–207.
- Orihuela, J.C., 2017. Assembling participatory Tambopata: environmentality entrepreneurs and the political economy of nature. Forest Policy Econ. 80, 52–62.
- Ostrom, E., 1990. Governing the Commons: The Evolution of Institutions for Collective Action. Cambridge University Press, Cambridge, UK.
- Park, J., Conca, K., Finger, M. (Eds.), 2008. The Crisis of Global Environmental Governance. Routledge, London.
- Peet, R., Watts, M. (Eds.), 1996. Liberation Ecology: Environment, Development, Social Movements. Routledge, London.
- Raffles, H., 2005. Comment on "Environmentality: community, intimate government, and the making of environmental subjects in Kumaon, India" by Arun Agrawal. Curr. Anthropol. 46 (2), 183–184.
- Raymond, H., 2007. The ecologically noble savage debate. Annu. Rev. Anthropol. 36, 177–190.
- Rodriguez de Francisco, J.C., Boelens, R., 2014. Payment for environmental services and power in the Chamachán watershed, Ecuador. Human Organ. 73 (4), 351–362.
- Rose, N., 1999. Powers of Liberty. Cambridge University Press, Cambridge.
- Rose, N., 2007. The Politics of Life Itself. Princeton University Press, Princeton, NJ. Rose, N., O'Malley, P., Valverde, M., 2006. Governmentality. Annu. Rev. Law Soc. Sci. 2, 83–104.
- Rutherford, P., 1999. Ecological modernization and environmental risk. Discourses Environ. 95–118.
- Rutherford, S., 2007. Green governmentality: insights and opportunities in the study of nature's rule. Prog. Hum. Geogr. 31 (3), 291–307.
- Rutherford, S., 2011. Governing the Wild: Ecotours of Power. University of Minnesota Press, Minneapolis.
- Salafsky, N., 2001, Community-based approaches for combining conservation and development. In: Novacek, M.J. (Ed.), The Biodiversity Crisis: Losing What Counts, The New Press. New York.
- Salafsky, N., 2011. Integrating development with conservation: a means to a conservation end or a mean end to conservation? Biol. Cons. 144 (3), 973–978.
- Scott, J.C., 1998. Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed. Yale University Press, New Haven, CT.
- Sennellart, M., 2007. Course context. In: Davidson, A. (Ed.), Security, Territory, Population. Picador, New York, pp. 369–391.
- Singh, N.M., 2013. The affective labor of growing forests and the becoming of environmental subjects: rethinking environmentality in Odisha, India. Geoforum 47, 189–198.
- Sponsel, L., 2012. Spiritual Ecology: A Quiet Revolution. Praeger, New York. Sullivan, S., 2006. Elephant in the room? Problematising 'new' (neoliberal) biodiversity conservation. Forum Develop. Stud. 33 (1), 105–135.
- Terborgh, J., 1999. Requiem for Nature. Island Press, Washington, DC.
- United Nations Environment Program (UNEP), 2011. Towards a Green Economy: Pathways to Sustainable Development and Poverty Reduction. UNEP, Nairobi.
- Youatt, R., 2008. Counting species: biopower and the global biodiversity census. Environ. Values 17, 393–417.
- Youdelis, M., 2013. The competitive (dis) advantages of ecotourism in Northern Thailand. Geoforum 50, 161–171.
- Wynne-Jones, S., 2012. Negotiating neoliberalism: conservationists' role in the development of payments for ecosystem services. Geoforum 43, 1035–1044.