

Neoliberal nature and the nature of neoliberalism

James McCarthy^{a,*}, Scott Prudham^b

^a Department of Geography, Pennsylvania State University, 302 Walker Building, University Park, PA 16802-5011, USA

^b Department of Geography, Program in Planning and the Institute for Environmental Studies, University of Toronto, Toronto, ON, Canada M5S 3G3

Received 27 June 2003

1. Neoliberalism and the environment

Neoliberalism is the most powerful ideological and political project in global governance to arise in the wake of Keynesianism, a status conveyed by triumphalist phrases such as “the Washington consensus” and the “end of history” (Laclau and Mouffe, 1985; Jessop, 1994; Harvey, 2000; Peck, 2001). Yet the neoliberal project is not hegemonic: it has been roundly criticized and attacked, and it has faltered in a number of respects. In fact, the most nakedly extreme forms of neoliberal state rollbacks and market triumphalism may well be past, beaten back in places by virulent resistance (a surprise to those who believed history *was* at an end); undermined by the spectacular failures of neoliberal reforms judged even by the standards of neoliberal champions (as in Argentina, for example); and replaced by “kinder, gentler,” Third Way variants (Peck and Tickell, 2002).

Neoliberalism’s adventures and misadventures are increasingly well-chronicled,¹ and political activism has indicted neoliberalism as both a political economic and environmental debacle (Wainwright et al., 2000). Yet connections between neoliberalism, environmental change, and environmental politics remain under-explored in critical scholarship.² Insofar as a literature on the “geography” of neoliberalism has emerged, it fo-

cuses primarily on issues of scale in governance, often with an urban bent.³ What commentary on neoliberalism and the environment does exist tends to focus on the environmental *impacts* of neoliberal reforms, primarily in the world’s poorest nations caught in the throes of neoliberal structural adjustment programs. These are longstanding themes, for example, in so-called Third World political ecology.⁴ Yet, relatively little has been said about the manifestations of neoliberalism as environmental governance reform per se, nor have the various parallels and tensions between neoliberalism and *environmentalism* as ideologies, discourses, and class projects been sufficiently explored. Little scholarship has explicitly theorized connections between neoliberalism and the environment in the most industrialized nations, despite the fact that neoliberalism emerged largely from class alliances in those nations, particularly the US and the UK.

We contend that these are serious lacunae. Connections between neoliberalism, environmental change, and environmental politics are all deeply if not inextricably interwoven. The links are myriad, and include: (i) neoliberalism, though various and contradictory, tends not only to generate serious environmental consequences, but—drawing on classical liberalism—is significantly constituted by changing social relations with biophysical nature; (ii) neoliberalism and modern environmentalism have together emerged as the most serious political and ideological foundations of post-Fordist social regulation; and (iii) environmental concerns also represent the most powerful source of political opposition to neoliberalism. All of these themes need interrogating. In this special issue of *Geoforum*, we and our co-contributors explore the “nature of neoliberalism” via a set of

* Corresponding author. Tel.: +1-814-863-1782.

E-mail addresses: jpm23@psu.edu (J. McCarthy), scott.prudham@utoronto.ca (S. Prudham).

¹ See variously Harvey (1989), Jessop et al. (1990), Peck and Tickell (1992), Tickell and Peck (1995), Peck (1996), Harvey (2000), Onis and Aysan (2000), Peck (2001), Brenner and Theodore (2002a), Jessop (2002), Jones and Ward (2002), Keil (2002), Peck (2002a,b), Peck and Tickell, 2002 and Swyngedouw et al. (2002).

² Although, for exceptions, see Rees (1998), Haque (1999), Bakker (2000) and Sonnenfeld and Mol (2002).

³ For example, see Peck (2001), Brenner and Theodore (2002a,b), Gough (2002), Jessop (2002), Keil, 2002, Peck (2002b) and Swyngedouw et al. (2002).

⁴ See Hecht and Cockburn (1989), Bryant (1992), Peluso (1992), Peet and Watts (1993), Escobar (1995) and Clapp (2000).

empirically grounded and theoretically provocative case studies of specific neoliberal projects. In this introduction, we attempt to provide some common ground for the various papers by discussing in turn: (i) some thoughts on how, despite its polyvalence, neoliberalism may be understood as a set of coherent ideologies, discourses, and material practices; (ii) ways in which neoliberalism may be understood as a distinctly environmental project, and one that necessarily reprises aspects of classical liberalism; and (iii) points of departure for analyses of neoliberalism and the environment.

2. Liberalism, neoliberalism, and the environment

Despite the familiarity of the term, defining neoliberalism is no straightforward task, in part because the term ‘neoliberalism’ stands for a complex assemblage of ideological commitments, discursive representations, and institutional practices, all propagated by highly specific class alliances and organized at multiple geographical scales. In fact, the notion of a consistent set of defining material practices and outcomes that comprise neoliberalism is problematic. We take the point emphasized by Peck and Tickell (2002), who worry that overly specific analyses of particular neoliberal projects (“neoliberalizations” in their terms) may downplay neoliberalism as an extra-local project. However, as they and others also note (see e.g. Beck, 2000; Jessop, 2002), the hegemony of neoliberalism is made most evident by the ways in which profoundly political and ideological projects have successfully masqueraded as a set of objective, natural, and technocratic truisms. Political resistance gives the lie to such disguises, exposing the political negotiations and myriad contradictions, tensions, and failures of neoliberalizations. Yet, critical engagements that remain abstract and idealist run the risk of playing the “game” by exactly the same rules that help make neoliberal discourses so beguiling.

This is not to say, however, that neoliberalism lacks identifiable dimensions.⁵ Among its central elements is a near worship of what Karl Polanyi, in reference to classical liberalism, called the “self-regulating market” (Polanyi, 1944). By this is meant a market increasingly wide in its geographic scope, comprehensive as the governing mechanism for allocating *all* goods and services, and central as a metaphor for organizing and evaluating institutional performance. This of course requires the deeply problematic commodification of everything, as Polanyi also noted (see also Watts, 1994). Market enthusiasm goes hand-in-glove with political and ide-

logical antagonism toward state “interference” (i.e. regulation), although this is invariably accompanied by a deeply contradictory endorsement of excludable, private property rights and commodification created and defended by the state (see e.g. Peck, 2001; Jessop, 2002). Neoliberal governance projects have also featured deep cuts to state fiscal and administrative resources and functions. State functions aimed at curbing socially and environmentally destructive effects of capitalist production are “rolled” back, attacked via discourses of national, regional, and urban economic competitiveness, and “restructured” in a variety of ways, including: (i) privatization via putatively market-based schemes seldom untainted by cronyism (Harvey, 2003); (ii) incapacitation via deep fiscal and administrative cuts; (iii) re-scaling of governance and “hollowing out” of the nation-state (Jessop, 1994) (including devolution of regulatory responsibilities to local levels of government without proportional transfers of power or capacity, while also scaling regulatory capacities “upwards” to increasingly international institutions with little to no transparency or accountability) and (iv) shifts from binding to increasingly voluntarist, neo-corporatist regulatory frameworks involving non-binding standards and rules, public-private co-operation, self-regulation, and greater participation from citizen coalitions, all with varying degrees of capacity and accountability. At the same time, neoliberal notions of citizenship and social action are discursively repackaged in the image of homo-economicus, the ideal, entrepreneurial, self-made individual (Barnes, 1987; Barnes, 1988; Barnes and Sheppard, 1992; Bowles and Gintis, 1993). Keynesian narratives of social provisioning and the welfare state give way to neoliberal revanchism (Smith, 1996; MacLeod, 2002), with dire implications for the equitable delivery of public services, from health care to mass transit; collaboration and partnership become the new mantras of regulatory relations between capital and citizen (underpinned by the discursive re-birth of capital *as* citizen), less and less mediated by formal, state institutions.

The origins of these tendencies are complex, yet one focal point is a reaction against Keynesianism in the context of economic stagnation among the world’s richest and most powerful capitalist economies during the 1970s (Jessop et al., 1990; Jessop, 2002). Propounded in the writings of scholars such as Milton Friedman, Frederick Hayek, and Richard Epstein and propagated by a host of neo-conservative think tanks, neoliberalism rose to prominence as a new orthodoxy in the US and the UK during the 1980s under Reagan and Thatcher. It also profoundly influenced international development thinking, again as a reaction to what were represented as the failures of Keynesian state coordinated development (Escobar, 1995; Peet and Hartwick, 1999). Even sustainable development, neoliberalism’s main contender in challenging post-socialist development orthodoxy, could

⁵ Good overviews may be found in Peet and Hartwick (1999) and in Peck (2001).

not seriously challenge the emerging free market juggernaut, collapsing in policy circles into light-green capitalism (see Goldman, 1998; Haque, 1999; Adams, 2001).

2.1. Environmental connections

Such critical characterizations of neoliberalism are by now reasonably familiar in geography and related fields. What is largely absent is a recognition that neoliberalism is also an *environmental* project, and that it is *necessarily* so. We say this is for reasons both deductive and historical.

Contemporary neoliberalism draws fundamentally on classical liberalism. It is therefore salient to remind ourselves of how centrally and explicitly liberal thinking itself turned on restructuring social relations to nature. This process is most infamously associated with enclosing commons to facilitate the development of increasingly capitalist, export oriented farming operations (Williams, 1973; Cox, 1985; Feeny et al., 1990; Thompson, 1991). Such reconfigurations of property relationships amounted to “freeing” up nature, i.e. detaching it from complex social constraints and placing it under the auspices of the self-regulating market (Polanyi, 1944), whilst jump-starting capitalism through primitive accumulation, or what Harvey (2003) has recently termed, “accumulation by dispossession.” In turn, the emergence of new social relations to nature factored centrally in classical liberal ideological, discursive, and material practices, all of which have parallels in and influences on neoliberalism.

The foundational figure here is John Locke, for whom legitimating the enclosure of land and access to natural resources for individual, excludable use was a central preoccupation. Locke provides crucial ideological and discursive foundations for liberal and modernist dispositions toward non-human nature by (i) conferring value on nature *only* through the application of human labor, and conversely, by denigrating “unimproved” nature as value-less; (ii) constructing a moral economy of liberal society based on exclusive control of land by those *individuals* who work it, including enlistment of the state to protect individual land rights; and then, (iii) arguing for the unlimited individual accumulation of land and property, including beyond that which individuals could work themselves (Locke and Peardon, 1952 (1690); Macpherson, 1978). For Locke, property relations over land, and specifically individual, private property rights guaranteed by the state, constituted the foundation of a just and efficient social order (Barry, 1999) that would replace authoritarian ecclesiastical and feudal regimes. This Lockian discourse of an atomistic society of free, equal, landed individuals, governed by a state whose main purpose is the protection of their property rights, resonates strongly with neoliberalism and a host of contemporary schemes for saving or managing nature via its

commodification (McAfee, 1999). These include enclosures accompanying genetic engineering and bioprospecting; the creation of private property rights to pollute; the growth of users fees for “public” nature reserves; and the privatization of all manner of natural resources, from fisheries to forests to water (see e.g. Mansfield, 2001). The important commonality amongst such schemes from our perspective is not the impulse to “save” or use wisely nature, but rather, as in Locke’s work, the way they necessarily imagine and legitimate particular social orders. In this context, it is worth remembering that although Locke presented a compelling, universalist vision of a society better for all, its enactment involved intense, sometimes violent struggles whose outcome was not a society of equals but a new class structure in which position was determined and marked largely by access to land.⁶ Moreover, Locke’s vision of the state as the servant of landed property owners echoes through more contemporary, property-based revolts, including California’s Proposition 13—one of the first signals of the neoliberal counter-revolution.

Other liberal thinkers also framed their analyses of, and prescriptions for, the emerging order around social relations to “land”.⁷ Thomas Malthus, for instance, is widely remembered for his thesis on the inevitability of food scarcity due to the “natural” tendency for human population to increase geometrically in contrast with the arithmetic increase of agricultural output. Less commonly discussed are his laissez-faire social policy prescriptions, based on the assertion that any attempt to reduce misery (e.g. food relief, etc.) would have the “perverse” effect of eliminating “natural” checks on population increase (Harvey, 1974; Malthus and Gilbert, 1993). This combination of deep pessimism about absolute environmental limits on population and economic expansion with faith in laissez-faire policies is a curious but intriguing one. Yet, Malthus is joined in his pessimism by the likes of Hobbes, Bentham, and Rousseau, and counter-posed by more Promethean strains running through the liberalism of Locke, Smith, and indeed Marx. The rich debates within classical liberalism on the limits to growth are not, unfortunately, mirrored in the unabashedly Promethean views on technology and economic growth offered by neoliberalism (debate concerning natural limits to growth does remain a principal source of conflict between neoliberals and environmentalists, however).

⁶ This result was embraced by other liberals, including Jeremy Bentham (albeit with reservations and somewhat different justifications) and denounced by Marx and others.

⁷ In a primarily agrarian social context, the connotation of this term in liberal parlance was quite literal, but it also served as a surrogate for natural resources of all kinds, and in significant measure took on the same meaning as “nature” does in contemporary, political economic discourse.

More broadly, however, laissez-faire ideas such as those of Malthus, but also Adam Smith and David Ricardo, link liberalism with contemporary prescriptions for the administrative state as environmental regulator. Liberalism prescribed major political ecological restructurings, including rollbacks in food relief and agricultural trade controls (e.g. the Corn Laws) (Polanyi, 1944). Ricardo's notion of comparative advantage, though laudable as economic theory that recognized ecological differentiation or the "matter of nature" (FitzSimmons, 1989) as a source of economic differentiation, was also pivotal to the emergence of free trade orthodoxy. These dimensions of laissez-faire environmental liberalism have direct descendants under neoliberalism, ranging from contemporary rounds of agricultural liberalization, to neo-Ricardian discourses prescribing Third World staples specialization,⁸ and to recent Bush administration rollbacks in US federal energy regulation.

At the same time, political struggles resisting liberalism represent important precursors to the contemporary politics of neoliberalism. True to Polanyi's dual movement simultaneously propelling *and* resisting market control of nature, early predecessors of environmentalism had some success in resisting liberalism, most notably by expanding the power of the modern state to scientifically administer nature (Hays, 1980; Frank et al., 2000)—hence the birth of new conservation projects and bureaucracies around the world as extensions of the governmentalizing tendencies of bio-power (Grove, 1995; Sivaramakrishnan, 1999; Hannah, 2000). Increasing environmental protection was one of the major achievements of the Keynesian state arising in the wake of classical liberalism, and the proliferation of environmental laws, regulations, constituencies, and norms in advanced capitalist countries, particularly in the post-war period, came to represent a substantial and growing constraint on capitalist accumulation strategies—ripe for neoliberal attacks. In fact, we contend that assaults on Keynesian-era environmental regulation have been as central to neoliberalism as assaults on labor and social entitlement programs that have received far more critical attention.⁹

⁸ This is despite ample evidence that: (i) this has been a social and environmental disaster in many if not most instances; (ii) the contemporary political economic application of "free" trade principles is a far cry from Ricardo's vision or any reasonable notion of laissez-faire, as disproportionately high tariffs on Third World manufactured commodity exports attest (see Porter and Sheppard, 1998); and (iii) the reality of the new international competition, as Jessop (2002) indicates, is a distinctly more Schumpeterian (i.e. competitive and dynamic) form of comparative advantage than metaphors of rising tides and rising boats can possibly encompass. Such "free" trade may be creative, but it is clearly also destructive.

⁹ Under Reagan-era neoliberalism, for instance, environmental regulations were among the first and most central targets of the new administration (Vig and Kraft, 1984; Dryzek, 1996).

Demonstrating the enduring salience of Polanyi's dual movement thesis, if neoliberalism has attacked the Keynesian environmental state, it is also true that contemporary environmental concerns and their politics have been, in many respects, the most passionately articulated and effective political sources of response and resistance to neoliberal projects, contending with neoliberalism as a basis of post-Fordist social regulation. In something of a reprise of environmentally motivated responses to classical liberalism, new environmental social movements have organized around a diverse range of concerns, including health, endangered species and spaces, and threatened amenity values, all questioning and contesting neoliberal attempts to sever social controls and regulations governing environmental transformations. It is a highly telling testament to the power of environmentalism that the "Reagan revolution," the "Contract with America," and the WTO meeting in Seattle in 1999—three defining moments for neoliberalism in the U.S., at least—all faltered badly precisely on questions surrounding environmental regulations and standards. There is some evidence, then, for the view that environmental concerns are at least seen to cross divisions of class, sub-national geography, and so on: American voters who seem comfortable with unraveling the Keynesian net in many areas, apparently convinced that it does not benefit them, have made clear their remaining attachment to certain environmental protections. In this respect, many citizens—at least in the richer capitalist nations—apparently take for granted that environmental risks affect them as individuals, a perception central to Beck's notion of the "risk society" (Beck and Ritter, 1992; Beck, 1999). We believe that these widely held beliefs about scarcity and risk, propagated by environmental groups in significant measure, have acted as significant checks on neoliberal projects, sustaining a much needed and highly compelling alternative subjectivity to homo-economicus, one that challenges unrestrained materialism, rampant instrumentalism and crass utilitarianism.

This is not to deny that issues of scarcity, distribution, and justice are inextricably intertwined, giving rise to complex politics. Environmentalist discourses of scarcity are highly disciplinary, technocratic, and overly rationalist: their construction of "good" citizenship stresses the regulation of desires and practices according to strict metrics governed by science and the administrative state, with decidedly authoritarian tendencies (Dryzek, 1997; Darier, 1999). Environmentalists have often invoked scarcity without regard to equity (Harvey, 1974, 1996). The resulting universalist pretensions of these constructions are problematic if they fail to address the fact that exposure to even pervasive scarcities and environmental risks in fact varies widely across social strata, while responses are mobilized in ways that reproduce spatially uneven social geographies (e.g.,

disposal of toxic wastes). Such problems are compounded by the rarity of environmental discourses that trace “problems” of scarcity or risk to their origins in the political economy of capitalism (Benton, 1997).

All of this notwithstanding, however, we think there is no way around the need for *some discourse* of restraint as a response to mass consumerism, and the discourse of scarcity is a powerful counterpoint to neoliberal Prometheanism (Benton, 1989). In very simple terms, the conviction that the pie cannot grow indefinitely—whether ultimately theoretically defensible or not—logically points to questions of distribution *and* equity, *precisely* the questions that defenders of neoliberalism attempt to dismiss with assertions of rising tides raising all boats. While many environmentalists have not pursued this line of thinking along what we see as its logical path, the connections between environmentalism and social justice are nonetheless there to be made as a powerful counter to neoliberal agendas.¹⁰

Yet if environmentalism has been a potent source of resistance to neoliberalism, it is also true that environmentalism and neoliberalism have each incorporated elements of the other during their now decades-long engagement. Many environmentalists have adopted elements of neoliberal ideology and discourse, reflecting and reinforcing neoliberal hegemony. “Free-market” environmentalism, once an oxymoron, has proliferated since the Reagan-Thatcher years, in forms such as tradeable emission permits, transferable fishing quotas, user fees for public goods, and aspects of utility privatization. Meanwhile, neoliberal ventures have increasingly assimilated environmentalism through key discursive shifts, such as the growing convergence of sustainable development with green capitalism, the purported ‘greening’ of the World Bank (Goldman, 2001), and a vast tide of corporate green-wash. Such incorporations of ‘environmentalism’ into the heart of neoliberalism’s central institutions has done far more to smooth the ‘roll out’ of neoliberalizations than attempts to dismiss or reject environmental concerns outright.

3. Points of departure

The papers in this collection interrogate, through careful empirical case studies, the politics of transforming and governing nature under neoliberalism. Each of the articles works through environmental aspects of various “neoliberalizations” and the various political and ecological contradictions and tensions that arise in the course of reconfiguring social relations to

nature. In the process, each author uses specific case material as a springboard from which to advance theoretical arguments with much broader implications. As a group, the papers both complement and supplement tendencies in contemporary literatures relevant to this project, in ways that bear some overall comments.

First, the empirical emphasis of the papers is no accident. We (along with the other contributing authors) believe that while certain ideas and practices run through neoliberalism, the best critical engagements with neoliberalism, environmental change, and environmental politics are historico-geographically specific. One reason for this preference, already mentioned above, stems from the growing acceptance of abstract neoliberal discourses as self-evident truths in today’s world. Only specific case studies can unpack the complex interplay between neoliberal projects, environmental politics, and environmental change. Moreover, with attention to context, questions of scale rise to the fore. As numerous observers have emphasized, politics work at and across various scales and in geographically specific spaces (Cox, 1997; Swyngedouw, 1997; Brenner, 1999; Glassman, 1999; Peck, 2001). Neoliberalism entails the construction of new scales (‘the global market’), shifting relationships between scales (‘globalization,’ the alleged hollowing out of the nation-state), and engagement with many scale-specific dynamics, all of which take shape and become tangible in the context of particular cultural, political and institutional settings. Here, the collection echoes a central theme of geographical literature on neoliberalism, namely attention to complementarities and tensions across multiple scales, and the need to evaluate outcomes from specific neoliberalizations ‘on the ground’ (or in the water, as several of our papers undertake). To this, we add simply that the high variability of biophysical nature in space and time only intensifies the need for careful attention to context and scale. The case studies in this respect echo a long-standing emphasis in political ecology: understanding the production of environmental change and risk—and their attendant politics—via the articulation of broad political economic tendencies and the actions of local environmental managers and decision makers in relation to particular biophysical environments (Blaikie and Brookfield, 1987; Bryant, 1992; Watts and Peet, 1996). In this collection, Becky Mansfield’s discussion of the incorporation of neoliberal theories into the management of North Pacific fisheries illustrates such complexity. She demonstrates that neoliberal emphases on markets and privatization are hybridizing with decades of efforts to regulate fisheries as fugitive and highly uncertain resources, and highly specific traditions of property rights in regional fisheries. Gail Hollander’s paper is also exemplary in these respects; she roots a discussion of GATT agricultural policy, and the ideas of ‘multifunctionality’ and ‘green boxes’ as ways to contest

¹⁰ We recognize, of course, that this argument has been made before, by academics concerned with “red-green” politics and by many activists and organizations.

the impacts of neoliberal reforms, in the particular politics and ecology of sugar production and environmental restoration efforts in Florida's Everglades Agricultural Area.

We think it is also useful to situate the papers in this issue, and our particular emphasis on political economic links between *liberalism* and *neoliberalism*, in relation to several current theories of environmental governance, including: ecological modernization theory; Beck's theory of the 'risk society'; an emerging environmental governmentality literature; and Regulation Theory. Ecological modernization theory highlights the degree to which industrial ecology perspectives point to technological possibilities for eco-efficiency gains—an area of genuine and demonstrated potential to be sure. Ecological modernization tends also toward optimism regarding the capacity of environmental social movements—working in tandem and in tension with industrial nation-states—to drive environmental reform (Buttel, 2000; Mol, 2000). We share this hope. Yet, ecological modernization is diffuse as social theory (having little to say about power, for example), says very little about neoliberalism per se, and seems at times remarkably sanguine about the capacity of liberal markets and voluntarism to redress environmental problems (Hajer, 1995). In fact, faith in corporate cultural shifts and direct citizen pressure to “green” capitalism is suspiciously coterminous with the self-regulation and neo-corporatism characteristic of neoliberalism more broadly (Jessop, 2002). The limitations of increasing technical efficiency alone are laid bare in Laila Smith's paper. She emphasizes the ways in which second-wave neoliberal reforms in South Africa have simultaneously undermined both distributive equity and state accountability in service provision and regulation. Similar criticisms of neoliberal restructurings of environmental regulation and politics motivate James McCarthy's examination of the creation of growing rights to pollute under NAFTA and other multilateral trade agreements. In contrast to a growing literature that treats these multilateral agreements and institutions as new phenomena, McCarthy emphasizes their parallels with foundational moments and categories in capitalist political economy.

Ulrich Beck's notion of the 'risk society' (Beck and Ritter, 1992; Beck, 1999) also offers insights into the social and institutional underpinnings of modern environmental risk and accidents, emphasizing the ubiquity of 'normal accidents' traceable to systemic features of modern society and governance. Beck suggests that the politics of risk now occupy center stage in industrial societies, blurring class divisions as a result of pervasive environmental risks, and at the same time, leading to new social fractures structured by the uneven distribution of such risks. Parallel to and influential on ecological modernization thinking, Beck emphasizes the

significance of social movements in resisting and transforming environmental risks, and in propelling a reflexive modernization. Beck is essential for theorizing the experience and politics of new risks, but he provides little insight into the particular ways in which neoliberalizations accelerate the *production* of environmental risks—a major goal in this collection. Scott Prudham takes precisely this line of argument, tracing the deadly contamination of Walkerton's municipal water supply inexorably back, via the region's hydrology and contingent political factors, to neoliberal reforms of environmental governance in Ontario.

We note also our areas of overlap and difference with governmentality theory (Foucault, 1991), which has grown rapidly in popularity as a framework within which to interrogate environmental governance (Murdoch and Ward, 1997; Darier, 1999; Braun, 2000; Dryzek, 2000; Hannah, 2000; Demeritt, 2001; Goldman, 2001). Emphasizing the proliferation and diffusion of state power through multiple institutional forms, governmentality offers an appealing capacity to address neoliberalism by overcoming false dichotomies between state and market too often accepted even by critics of neoliberalism, and to apprehend neoliberalism as a discourse productive of a particular kind of society and particular kinds of political subjects (Escobar, 1999; MacKinnon, 2000). Moreover, the concept of biopower—originally developed to refer to new ways of producing, knowing, and disciplining human beings central to the development of modern citizens and state power—clearly offers a powerful way to begin thinking about the new forms and scales of control over non-human organisms, species, and assemblages, including reconfigurations of power in the neoliberal era (Watts, 2002, 2003). Such potentialities are central to Ryan Holifield's paper, which explores how environmental justice policies became mechanisms for the promotion of neoliberal programs, including efforts to normalize activist communities.

While recognizing the applicability of governmentality theory, we echo many others in noting that Foucauldian notions of power remain somewhat diffuse for grappling with the class coalitions, interest-based politics, and scale-specific ecological dynamics we see as central to neoliberal experiments in reconfigurations of environmental governance. Inasmuch as Foucault expressed agnosticism about both the implications and foundations of state power cum governmentality (Foucault, 1991), his essay on the subject offers little entree to adjudicating between the politics of *different* governance projects on one hand, and their social and ecological effects on the other. It is essential, in our view, to remain focused on the need to identify specific winners and losers in such reforms.

A final body of theory borders closely on our project here. Regulation theory, somewhat unlike those litera-

tures mentioned thus far, has confronted neoliberalism directly as a so-called post-Fordist mode of social regulation (Jessop et al., 1990; Peck and Tickell, 1992; Tickell and Peck, 1992, 1995). Moreover, Regulationists have done so largely with a view to the articulation of capital accumulation with modes of social regulation, in a rich political economic framing (Aglietta, 1979; Boyer, 1990).¹¹ Thus, regulation theory has both the coherent theoretical architecture and attention to specificity and materiality we see as critical. Yet curiously, among those whose project has been to interrogate neoliberalism as post-Fordist regulation, little or nothing has been said about the significance of environmental governance reform to the neoliberal project. While some significant work in this arena has been undertaken (Altvater, 1993; Bakker, 2000; Bridge, 2000; Bridge and McManus, 2000; Bakker, 2002), only very recently has any research explored the discursive and institutional shifts in environmental policies and regulation that reflect the terms of the neoliberal consensus. Moreover, the significance of neoliberalism per se has been curiously neglected in some of these recent interventions (see e.g. Gibbs, 1996; Bakker, 2000; McManus, 2002). Finally, we note that the turn towards the environment in regulation theory has emphasized research in rural areas and on natural resources industries, neglecting the extent to which changing regulation of the environment has been *central* to neoliberal, capitalist modernity. Morgan Robertson's paper addresses many of these lacunae, using Regulation theory and other sources to examine the growth of wetland mitigation banking as a quintessentially neoliberal project to bring nature into the market, use state power to protect capital accumulation, and restructure relations at and across multiple scales. As with all of the papers, Robertson pinpoints the logical contradictions and material failures of this project and draws out the implications for similar neoliberal reforms.

In weaving these threads together, emphasizing the continuities between liberal and neoliberal environmental governance, we find it helpful to return to Karl Polanyi's (1944) critique of liberalism, and related, subsequent theories of ecological crises and their politics. Specifically, we find that Polanyi's theorizing of nature as a "fictitious commodity" remains a powerful ecological critique of liberal and now neoliberal capitalism.¹² Under the self-regulating market of liberal capitalism, market signals alone are *necessarily* insufficient in governing the allocation of nature to meet economic and competing social demands (e.g. for clean

drinking water) because nature in its various forms is not a commodity, that is, not produced for sale. Thus, the penetration of commodity relations and market circulation into the social (re)production of nature is made problematic by the "un-produced"¹³ character of nature. Other recent authors, including O'Connor (1998) and Altvater (1993), have advanced arguments similar to Polanyi's under the rubric of ecological crises. O'Connor, for example, analyzes the systematic or structural "underproduction" of nature by capitalism, and the consequent potential for capitalist crisis. Significantly, for Polanyi it was a specifically *liberal* form of capitalism that most clearly demonstrated these tensions, and gave rise to the dual movement toward and against the self-regulating market. The cases here make concrete these tensions and tendencies in the nature of neoliberalism.

References

- Adams, W.M., 2001. *Green Development: Environment and Sustainability in the Third World*. Routledge, London, New York.
- Aglietta, M., 1979. *A Theory of Capitalist Regulation: the US Experience*. Nlb, London.
- Altvater, E., 1993. *The future of the Market: An Essay on the Regulation of Money and Nature after the Collapse of Actually Existing Socialism*. Verso, London, New York.
- Bakker, K., 2002. From state to market?: Water mercantilization in Spain. *Environment and Planning A* 34, 764–790.
- Bakker, K., 2000. Privatising water, producing scarcity: The Yorkshire drought of 1995. *Economic Geography* 76 (1), 4–27.
- Barnes, T., 1987. Homo Economicus, Physical Metaphors, and Universal Models in Economic-Geography. *Canadian Geographer—Géographe Canadien* 31 (4), 299–308.
- Barnes, T., 1988. Rationality and relativism in economic-geography—an interpretive review of the homo economicus assumption. *Progress in Human Geography* 12 (4), 473–496.
- Barnes, T., Sheppard, E., 1992. Is there a place for the rational actor—a geographical critique of the rational choice paradigm. *Economic Geography* 68 (1), 1–21.
- Barry, J., 1999. *Environment and Social Theory*. Routledge, London.
- Beck, U., 1999. *World Risk Society*. Polity Press, Malden, Mass.
- Beck, U., 2000. *What is globalization*. Blackwell, Cambridge, MA.
- Beck, U., Ritter, M., 1992. *Risk Society: Towards a New Modernity*. Sage, London.
- Benton, T., 1989. Marxism and natural limits: an ecological critique and reconstruction. *New Left Review* 178, 51–86.
- Benton, T., 1997. Beyond left and right: ecological politics, capitalism and modernity. In: Jacobs, M. (Ed.), *Greening the Millenium: The New Politics of the Environment*. The Political Quarterly Publishing Co. (Blackwell), London, pp. 34–46.
- Blaikie, P., Brookfield, H., 1987. *Land Degradation and Society*. Methuen, London, New York.

¹¹ We follow the conventions of regulationist terminology adopted by Tickell and Peck (1992).

¹² Fictitious in that the divorce of markets from social regulation driven by the politics of liberalization schemes create the "illusion" that nature is a commodity, entirely produced and regulated by market forces.

¹³ "Unproduced" that is, in that ecological production remains central, even if mixed historically with social production. That is, no claim to first nature is necessary in order to recognize the significance of biophysical processes to the production and reproduction of environmental conditions (Castree, 1995).

- Bowles, S., Gintis, H., 1993. The revenge of Homo-Economicus: contested exchange and the revival of political economy. *Journal of Economic Perspectives* 7 (1), 83–102.
- Boyer, R., 1990. *The Regulation School: A Critical Introduction*. Columbia University Press, New York.
- Braun, B., 2000. Producing vertical territory: geology and governmentality in late Victorian Canada. *Ecumene* 7 (1), 7–46.
- Brenner, N., 1999. Globalisation as re-territorialization: the rescaling of urban governance in the European Union. *Urban Studies* 36, 431–451.
- Brenner, N., Theodore, N., 2002a. Cities and the geographies of “actually existing neoliberalism”. *Antipode* 34 (3), 349–379.
- Brenner, N., Theodore, N., 2002b. Preface: from the “new localism” to the spaces of neoliberalism. *Antipode* 34 (3), 341–347.
- Bridge, G., 2000. The social regulation of resource access and environmental impact: nature and contradiction in the US copper industry. *Geoforum* 31 (2), 237–256.
- Bridge, G., McManus, P., 2000. Sticks and stones: environmental narratives and discursive regulation in the forestry and mining sectors. *Antipode* 32, 10–47.
- Bryant, R., 1992. Political ecology: an emerging research agenda in Third-World studies. *Political Geography* 11 (1), 12–36.
- Buttel, F., 2000. Ecological modernization as social theory. *Geoforum* 31 (1), 57–65.
- Castree, N., 1995. The nature of produced nature: materiality and knowledge construction in Marxism. *Antipode* 27 (1), 12–48.
- Clapp, J., 2000. The global economy and environmental change in Africa. In: Stubbs, R., Underhill, G. (Eds.), *Political Economy and the Changing Global Order*, 2nd ed. Oxford University Press, Oxford, New York.
- Cox, K. (Ed.), 1997. *Spaces of Globalization: Reasserting the Power of the Local*. Guilford Press, New York.
- Cox, S., 1985. No tragedy on the commons. *Environmental Ethics* 7, 49–61.
- Darier, É., 1999. *Discourses of the Environment*. Blackwell, Malden, MA.
- Demeritt, D., 2001. Scientific forest conservation and the statistical picturing of nature’s limits in the Progressive-era United States. *Environment and Planning D—Society and Space* 19 (4), 431–459.
- Dryzek, J., 1996. *Democracy in Capitalist Times: Ideals, Limits, and Struggles*. Oxford University Press, New York.
- Dryzek, J., 1997. *The Politics of the Earth: Environmental Discourses*. Oxford University Press, Oxford, New York.
- Dryzek, J., 2000. *Deliberative Democracy and Beyond: Liberals, Critics, Contestations*. Oxford University Press, Oxford, New York.
- Escobar, A., 1995. *Encountering Development: The Making and Unmaking of the Third World*. Princeton University Press, Princeton, NJ.
- Escobar, A., 1999. Discourse and culture in the undoing of economism and capitalocentrism. *Rethinking Marxism* 11 (2), 58–61.
- Feeny, D., Berkes, F., McCay, B., Acheson, J., 1990. The tragedy of the commons: twenty-two years later. *Human Ecology* 18 (1), 1–19.
- FitzSimmons, M., 1989. The matter of nature. *Antipode* 21, 106–120.
- Foucault, M., 1991. Governmentality. In: Burchall, G., Gordon, C., Miller, P. (Eds.), *The Foucault Effect: Studies in Governmentality*. University of Chicago Press, Chicago, pp. 87–104.
- Frank, D., Hironaka, A., Schofer, E., 2000. The nation-state and the natural environment over the twentieth century. *American Sociological Review* 65 (1), 96–116.
- Gibbs, D., 1996. Integrating sustainable development and economic restructuring: a role for regulation theory? *Geoforum* 27 (1), 1–10.
- Glassman, J., 1999. State power beyond the ‘territorial trap’: the internationalization of the state. *Political Geography* 18, 669–696.
- Goldman, M., 1998. *Privatizing Nature: Political Struggles for the Global Commons*. Pluto Press in association with Transnational Institute (TNI), London.
- Goldman, M., 2001. Constructing an environmental state: eco-governmentality and other transnational practices, of a ‘green’ World Bank. *Social Problems* 48 (4), 499–523.
- Gough, J., 2002. Neoliberalism and socialisation in the contemporary city: opposites, complements and instabilities. *Antipode* 34 (3), 405–426.
- Grove, R., 1995. *Green Imperialism: Colonial Expansion, Tropical Island Edens, and the Origins of Environmentalism, 1600–1860*. Cambridge University Press, Cambridge, New York.
- Hajer, M., 1995. *The Politics of Environmental Discourse*. Oxford University Press, New York.
- Hannah, M., 2000. *Governmentality and the Mastery of Territory in Nineteenth-Century America*. Cambridge University Press, Cambridge, UK, New York.
- Haque, M., 1999. The fate of sustainable development under neoliberal regimes in developing countries. *International Political Science Review* 20 (2), 197–218.
- Harvey, D., 1974. Population, resources and the ideology of science. *Economic Geography* 50, 256–277.
- Harvey, D., 1989. *The Urban Experience*. Johns Hopkins University Press, Baltimore.
- Harvey, D., 1996. *Justice, Nature, and the Geography of Difference*. Blackwell Publishers, Cambridge, MA.
- Harvey, D., 2000. *Spaces of Hope*. Edinburgh University Press, Edinburgh.
- Harvey, D., 2003. The new imperialism: on spatio-temporal fixes and accumulation by dispossession. *The Socialist Register* 2004, 63–87.
- Hays, S., 1980. *Conservation and the Gospel of Efficiency: The Progressive Conservation Movement, 1890–1920*. Atheneum, New York.
- Hecht, S., Cockburn, A., 1989. *The Fate of the Forest: Developers, Destroyers, and Defenders of the Amazon*. Verso, London, New York.
- Jessop, B., 1994. Post-fordism and the state. In: Amin, A. (Ed.), *Post-Fordism: A Reader*. Blackwell, Oxford, Cambridge, MA, pp. 251–279.
- Jessop, B., 2002. Liberalism, neoliberalism, and urban governance: a state-theoretical perspective. *Antipode* 34 (3), 452–472.
- Jessop, B., Bonnett, K., Bromley, S., 1990. Farewell to Thatcherism? Neo-liberalism and new times. *New Left Review* (179), 81–202.
- Jones, M., Ward, K., 2002. Excavating the logic of British urban policy: neoliberalism as the crisis of crisis-management. *Antipode* 34 (3), 473–494.
- Keil, R., 2002. Common-sense neoliberalism: progressive conservative urbanism in Toronto, Canada. *Antipode* 34 (3), 578–601.
- Laclau, E., Mouffe, C., 1985. *Hegemony and Socialist Strategy*. Verso, London.
- Locke, J., Peardon, T., 1952 (1690). *The Second Treatise of Government*. The Liberal Arts Press, New York.
- MacKinnon, D., 2000. Managerialism, governmentality and the state: a neo-Foucauldian approach to local economic governance. *Political Geography* 19, 293–314.
- MacLeod, G., 2002. From urban entrepreneurialism to a “revanchist city”? On the spatial injustices of Glasgow’s renaissance. *Antipode* 34 (3), 602–624.
- Macpherson, C.B., 1978. *Property, Mainstream and Critical Positions*. University of Toronto Press, Toronto.
- Malthus, T., Gilbert, G., 1993. *An Essay on the Principle of Population*. Oxford University Press, Oxford, New York.
- Mansfield, B., 2001. Property regime or development policy? Explaining growth in the US Pacific Groundfish Fishery. *The Professional Geographer* 53 (3), 384–397.
- McAfee, K., 1999. Selling nature to save it? Biodiversity and green developmentalism. *Environment and Planning D—Society and Space* 17 (2), 133–154.
- McManus, P., 2002. The potential and limits of progressive neopluralism: a comparative study of forest politics in Coastal British

- Columbia and South East New South Wales during the 1990s. *Environment and Planning A* 34, 845–865.
- Mol, A., 2000. The environmental movement in an era of ecological modernisation. *Geoforum* 31, 45–56.
- Murdoch, J., Ward, N., 1997. Governmentality and territoriality: the statistical manufacture of Britain's 'national farm'. *Political Geography* 16 (4), 307–324.
- O'Connor, J., 1998. *Natural Causes: Essays in Ecological Marxism*. Guilford Press, New York.
- Onis, Z., Aysan, A., 2000. Neoliberal globalisation, the nation-state and financial crises in the semi-periphery: a comparative analysis. *Third World Quarterly* 21 (1), 119–139.
- Peck, J., 1996. *Work-Place: The Social Regulation of Labor Markets*. Guilford Press, New York.
- Peck, J., 2001. Neoliberalizing states: thin policies/hard outcomes. *Progress in Human Geography* 25 (3), 445–455.
- Peck, J., 2002a. Labor, zapped/growth, restored? Three moments of neoliberal restructuring in the American labor market. *Journal of Economic Geography* 2 (2), 179–220.
- Peck, J., 2002b. Political economics of scale: fast policy, interscalar relations, and neoliberal workfare. *Economic Geography* 78 (3), 331–360.
- Peck, J., Tickell, A., 1992. Local modes of social regulation? Regulation theory, thatcherism, and uneven development. *Geoforum* 23, 347–364.
- Peck, J., Tickell, A., 2002. Neoliberalizing space. *Antipode* 34 (3), 380–404.
- Peet, R., Hartwick, E., 1999. *Theories of Development*. Guilford Press, New York.
- Peet, R., Watts, M., 1993. Introduction: development theory and environment in an age of market triumphalism. *Economic Geography* 69 (3), 227–253.
- Peluso, N., 1992. The political ecology of extraction and extractive reserves in East Kalimantan, Indonesia. *Development and Change* 23 (4), 49–74.
- Polanyi, K., 1944. *The Great Transformation*. Rinehart & Company, Inc, New York.
- Porter, P., Sheppard, E., 1998. *A World of Difference: Society, Nature, Development*. Guilford Press, New York.
- Rees, J., 1998. Regulation and private participation in the water and sanitation sector. *Natural Resources Forum* 22 (2), 95–105.
- Sivaramakrishnan, K., 1999. *Modern Forests: Statemaking and Environmental Change in Colonial Eastern India*. Stanford University Press, Stanford, California.
- Smith, N., 1996. *The New Urban Frontier: Gentrification and the Revanchist City*. New York, Routledge, London.
- Sonnenfeld, D., Mol, A., 2002. Globalization and the transformation of environmental governance. *American Behavioral Scientist* 45 (9), 1318–1339.
- Swyngedouw, E., 1997. Neither global nor local: "glocalization and the politics of scale. In: Cox, K. (Ed.), *Spaces of Globalization: Reasserting the Power of the Local*. Guilford Press, New York, pp. 137–166.
- Swyngedouw, E., Moulaert, F., Rodriguez, A., 2002. Neoliberal urbanization in Europe: large-scale urban development projects and the New Urban Policy. *Antipode* 34 (3), 542–577.
- Thompson, E., 1991. *Customs in Common*. New Press, New York.
- Tickell, A., Peck, J., 1992. Accumulation, regulation, and the geographies of post-fordism: missing links in regulation research. *Progress in Human Geography* 16, 190–218.
- Tickell, A., Peck, J., 1995. Social regulation after Fordism: regulation theory, neo-liberalism, and the global-local nexus. *Economy and Society* 24 (3), 357–386.
- Vig, N., Kraft, M. (Eds.), 1984. *Environmental Policy in the 1980s: Reagan's New Agenda*. Congressional Quarterly Press, Washington, DC.
- Wainwright, J., Prudham, W., Glassman, J., 2000. The battles in Seattle: microgeographies of resistance and the challenge of building alternative futures. *Environment and Planning D—Society and Space* 18 (1), 5–13.
- Watts, M., 1994. Development II: the privatization of everything. *Progress in Human Geography* 18 (3), 371–384.
- Watts, M., 2002. Green capitalism, green governmentality. *American Behavioral Scientist* 45 (9), 1313–1317.
- Watts, M., 2003. Development and governmentality. *Singapore Journal of Tropical Geography* 24 (1), 6–34.
- Watts, M., Peet, R., 1996. Conclusion: toward a theory of liberation ecology. In: Peet, R., Watts, M. (Eds.), *Liberation Ecologies: Environment, Development, Social Movements*. Routledge, New York.
- Williams, R., 1973. *The Country and the City*. Verso, London.