

PROPERTY AND COMMODIFICATION

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Introduction

Concern with the interconnections among property rights, commodification (specifically the commercial appropriation of natural resources), and conjoined dynamics of social and environmental change is one of the core features of the political ecology tradition. In this chapter, I discuss some fundamental connections between commodification and property. I start with the enduring legacy of Malthusianism, an approach whose basic premise of an inherent tension between human population growth and natural resource availability (initially food supply) deflects attention from questions of distribution that a focus on property rights brings to the fore. Second, I discuss Marx's analysis of primitive accumulation as a way of approaching the conjoined character of commodifying human "nature" (as wage labour) and non-human nature (primarily as non-human natural resources). From both Malthus and Marx emerges an important and enduring theme: private exclusive property rights link the commodification of means of subsistence with the commodification of labour. Thus, for both thinkers, we can see exclusive property regimes as part of what constitutes a distinct metabolism of conjoined socio-natural relations and transformations, and also as a key feature of a distinct liberal capitalist governmentality, one that continues to echo through natural resource and environmental policy in the neoliberal era. I close by connecting the themes established in the first two sections to contemporary political ecology scholarship as it concerns property, commodification, and governance of socio-natural relations broadly understood.¹

Malthus

Thomas Malthus's (1798) influential and controversial essay on population has had a major impact on contemporary environmentalism and, indirectly, on political ecology scholarship. The primary legacy of the essay is a well-known (and highly problematic) thesis that there is an inherent tendency of human population growth to outpace increases in food production in the absence of "checks" on population growth. Prominent among these checks, according to Malthus, is famine. Malthus was also, however, quite overt in arguing that private property rights and markets should essentially determine who gets food during a shortage (via direct ownership over means of producing food and/or ability to pay for it). He was also explicit

about enlisting the threat of food deprivation to induce the poor to work for wages (a principle motivation of his argument to eliminate food relief programs). The overall thrust, then, is not merely an abstract argument about the inherent tensions between population increase and food supply (as is commonly understood), but a more complex portrait (and conservative defense) of a *metabolic totality* connecting food production and scarcity on the one hand with prevailing institutions of the emerging liberal order on the other, notably private property and the commodification of land and labour.

Malthus's (1798) basic formulation is (in)famous and immediately familiar. He postulated that human population growth had an inherent tendency to increase geometrically (e.g., 2, 4, 8, 16, 32, ... and so on). Food production, he argued, could only increase at best arithmetically (e.g., 1, 2, 3, 4, 5, ... etc.). Obviously, if this were true, then even an initially large supply of food in relation to a small population would develop into a situation of scarcity. Malthus then posited several "checks" on population, classifying these as "normative" (e.g., delayed marriages, religious or other cultural restrictions on reproduction, etc.) and "positive" (chiefly famine and disease outbreaks). "Checks" for Malthus had the effect of attenuating and even reversing population growth, offsetting the threat of scarcity.

Though there are nuances to the actual argumentation, Malthus concluded with the well-known *laissez-faire* prescription that famine and disease had to be accepted as unpleasant but necessary limits on population growth and that relief programs of the day merely made things worse. This argument was the basis of his well-known critique of utopian socialism in general, but also more specifically, of famine and poverty relief programs in eighteenth-century England. According to Malthus, providing food to the hungry meant that they would have the temerity not only to survive, but to breed. One cannot, sadly, make this stuff up.

Of course the original context for the essay has changed, and so too has its application. The basic Malthusian formula is a staple of what Robbins (2004) has called "apolitical ecologies": that is, portraits of environmental degradation and resource scarcity that obscure or ignore their particular social origins. The most widely known neo-Malthusian statement is the 1968 Ehrlich volume *The Population Bomb* (1968), but there are many variants. Neo-Malthusian formulations are often used to justify interventions of various kinds, from forest management to biodiversity conservation, and they remain potent and pervasive in both misreading the causes for scarcity and in providing a foundation (however flawed) for institutional and policy reforms (for analyses critical of the Malthusian and neo-Malthusian paradigm, see e.g. Benjaminsen et al., 2006; Fairhead and Leach, 1996; Harvey, 1974; Turner, 1993).

Usually, critics counter neo-Malthusian arguments with some reference to the basic institutions and power relations that shape who has access to resources. They do this in order to provide more sociologically (and ecologically) specific accounts of the origins of famine and of the institutional rather than purely demographic underpinnings of environmental degradation. These critiques of neo-Malthusianism may be more or less radical, but they certainly animated the environment and development debates of the 1970s and into the 1980s (Dryzek, 1997; Wisner et al., 1982). And these debates helped launch political ecology as a distinct area of scholarship (see e.g., Martinez-Alier, 2002; Watts, 1983).

And yet there is an irony in all this. Specifically, while critics of contemporary neo-Malthusianism often point to specific institutions, including property rights, in structuring resource access and in shaping the dynamics of environmental change, a core and explicit project of Malthus's was defense of the enclosure of means of subsistence in eighteenth-century England, and with it, the commodification of food. More specifically, a close reading of Malthus's entire essay reveals it to be a convoluted, indirect, and somewhat tortured defense of class privilege in early industrial England where private property rights structured

who had direct access to land (and thus the means to produce food) and who did not. In his words:

When an article is scarce, and cannot be distributed to all, he that can shew [sic] the most valid patent, that is, he that offers most money, becomes the possessor.

(Malthus, 1798, p. 24)

The rich might become poor, and some of the poor rich, but a part of the society must necessarily feel a difficulty of living, and this difficulty will naturally fall on the least fortunate members.

(Malthus, 1798, p. 25)

It seems highly probable, therefore, that an administration of property, not very different from that which prevails in civilized states at present, would be established, as the best, though inadequate, remedy for the evils which were pressing on the society.

(Malthus, 1798, p. 62)

The argument is deeply conservative in the sense that Malthus essentially invokes the then prevailing order in England as being more or less inevitable, with private rights to land and uneven wealth the means of determining who should eat and who should starve. He does so without ever interrogating the ethical, political, and historical-geographical dimensions of whether indeed private ownership of the means of subsistence and the means of payment was the best way to settle things. Moreover, he ignored altogether whether or not enclosure might be one of the causes of hunger and poverty, the emergence of which coincided historically with alienation of people from direct access to land (Polanyi, [1944] 2001). Malthus plainly recognized that it was actually private property rights that made access to food a practical question in the England of his day. Moreover, he also understood that access to food for those without rights to agricultural land meant purchase (i.e., the commodification of means of subsistence). In fact, Malthus argued explicitly that the need to buy food might discipline the poor and force them to work for wages, no small problem in the emerging liberal capitalist order of the day.

Why is this still important? A careful reading of Malthus's original 1798 essay as an alternative to warmed over neo-Malthusian variants reveals it to be a trenchant defense of private exclusive property, commodification of the bases of social reproduction and of labour – in short, the emergent capitalist order of late eighteenth-century England. That alone is sobering in thinking about the ideological baggage that lies behind “scarcity talk” (Harvey, 1974). In this respect, Malthus's argument invokes (implicitly) an historically distinct *metabolism* of integrated socio-natural relations whereby private property rights over land as a means of subsistence are seen as an integral dimension of the conjoined commodification of the means of production/means of subsistence and the commodification of labour. All of the pieces move together, with the commodification of food and the means to produce it bound up in the production of the commodification of labour and the emergence of the modern working class. Malthus's politics are quite different than those of Marx, and yet he was no less aware of the far-reaching consequences of what Marx was later to call the process of primitive accumulation (see below).

Marx and primitive accumulation

In his critique of capitalism, Karl Marx also emphasized the historical significance of private claims to land and other resources. For Marx, the establishment of exclusive, private, transferable claims to land is one of the important ways in which capitalism, as the “production of commodities by commodities”, took hold. In this respect, though their politics were certainly in contrast, and while Marx’s analysis goes much further, both Malthus and Marx recognized the broader metabolism with which private property was linked, one as advocate, the other as critic.

Marx’s theory of what he called the “so-called primitive accumulation” toward the end of volume I of *Capital* ([1867] 1977) constitutes a rejoinder, in part, to Adam Smith’s (Smith and Cannan, 2003) notion of “original accumulation”. Original accumulation, as the name would suggest, was for Smith an historical precondition for capitalism, one tied to the thrift of certain individuals (the first capitalists), allowing them to build up enough private wealth for the creation of capital to be invested in production for sale. Marx savaged this account and instead posited his own. In his words:

In actual history it is notorious that conquest, enslavement, robbery, murder, briefly force, play the great part. In the tender annals of Political Economy, the idyllic reigns from time immemorial. Right and “labour” were from all time the sole means of enrichment, the present year of course always excepted. As a matter of fact, the methods of primitive accumulation are anything but idyllic.

(Marx, [1867] 1977, pp. 873–874)

Reviewing the significance of Marx’s insight (and associated critique) in detail is beyond the scope of this chapter, but three specific aspects are immediately relevant. First, Marx argued that the emergence of capitalism took place not only via putatively “economic” means alone (i.e., “normal” market forces, buying, producing, selling, working for wages, accumulating surpluses, reinvesting surplus in subsequent production, etc.) but rather also via so-called “extra-economic” means (Glassman, 2006). These extra-economic means include sometimes violent expropriations backed by the power of the state, but also and more generally, via the mobilization of elite authority to dissolve communal and other shared rights of access to land. For Marx, primitive accumulation was not a genteel, historical maturation of economic forms so much as a coercive revolution in land rights.

Marx’s emphasis on the “extra-economic” character of primitive accumulation remains an important reminder to interrogate and examine the contours of political struggle and the exercise of power in “doing” both *political* economy and *political* ecology in general, and specifically in understanding how private, exclusive rights to socio-nature originate and are reproduced. This is true even if, as subsequent scholarship on historical enclosure (including work in political ecology) has shown, the actual extra-economic processes by which enclosure was undertaken may be: (1) quite protracted; (2) at least formally non-violent; and (3) achieved through cultural and political processes in addition to, or instead of, brute force. Nevertheless, the central point is that property rights are not endogenous creations of so-called “market” forces so much as they are exogenous political creations that act as extra-economic preconditions to accumulation.² It also follows that property rights are never politically or ethically neutral. Rather, any form of property, since it involves exclusions (the exception being true open access which is more accurately an absence of property), needs to be defended, by force real or implied, and by some means of discursive legitimation, explicit or implicit (Macpherson, 1978).

In general terms, then, property rights comprise aspects of the irreducibly social and political content of what are generally understood to be economic relations; they are made (and un-made).

A second reason for the enduring significance of Marx's account of primitive accumulation is that it opened a fascinating and highly germane debate about primitive accumulation in the ongoing history (and geography) of capitalism. The question in this debate has been whether or not primitive accumulation is only an historical precursor for capitalism *per se*, or is instead a "permanent" ontological condition and set of material-semiotic processes that must be re-enacted in order to reproduce conditions of accumulation. In the "classical" Marxist tradition, the likes of Rosa Luxemburg and Vladimir Lenin linked primitive accumulation as a capitalist imperative underpinning imperialism and colonialism fueled by a search for new markets, raw materials, and cheap labour outside the formal boundaries of the capitalist powers. Historically, this tendency may be seen as a foundation for commercial extraction of natural resources from imperial colonies (see, e.g., Mintz, 1985), including for instance via the introduction of colonial forest administration in South and Southeast Asia (Peluso, 1992; Vandergeest and Peluso, 2001). Primitive accumulation *qua* colonialism may also have led to the introduction of capitalist social relations more generally, as in the settler colonies. But the point here is that primitive accumulation is seen not so much as an isolated historical incident as an inherent historical-geographical tendency that propels uneven spatial development on a world scale (Harvey, 1982).

A resurgence of contemporary enclosures has helped to renew the salience of Marx's account of primitive accumulation in thinking about historical *and* contemporary relationships between private property forms and capitalism more generally (see De Angelis, 2001; Federici, 2004; Perelman, 1983, 2000). David Harvey (2003) has also helped re-energize and re-shape this debate via what he theorizes as "accumulation by dispossession" in neoliberal capitalism. These debates are highly relevant to understanding the dynamics of so-called "land" and "green" grabbing, and the enclosure of access rights to everything from fish to conservation parks, as I discuss in the third section of the chapter.

The third major reason (and most important for this discussion) why Marx's primitive accumulation framework remains germane to political ecology scholarship is because it provides, somewhat in parallel with Malthus's more abstract endorsement, a unified account of the relation between the enclosure of land (and other resources) on the one hand, and the production of a landless laboring class on the other. The primitive accumulation account links property rights to the commodification of the means (and conditions – see McCarthy, 2004) of production, the commodification of the means of subsistence and social reproduction and the commodification of labour. As E.P. Thompson (1975, p. 207) wrote in reference to historical enclosures, their effects on "freeing up" land and labour, and the alienation of one from the other, in eighteenth century England:

In the seventeenth century labour had been only partly free, but the labourer still asserted large claims (sometimes as perquisites) to his [*sic*] own labour's products. As, in the eighteenth century, labour became more and more free, so labour's property came to be seen as something totally distinct, the property of landowner or employer.

Thompson goes on to note that via these processes, complex and overlapping traditional use rights to the land and its products that were constitutive features of the feudal social order dissolved into what we might now call a very different metabolic socio-natural regime, with on the one hand exchangeable rights to land increasingly seen objectively as "things" (rather than

as social relations), and on the other hand, commodified wage labour cut loose from feudal integuments. Of these developments, Karl Polanyi was later to write:

no people could forget that unless they owned their food and raw material sources themselves or were certain of military access to them, neither sound currency nor unassailable credit would rescue them from helplessness.

([1944] 2001, p. 199)

While primitive accumulation remains a powerful lens for exploring the links between property and commodification (including via a resurgence of interest in political ecology scholarship – see below), there are questions and tensions (see Hall, 2012). It is apparent, for instance, that there are sometimes significant differences between the motivations underlying enclosures and their effects. Not all who seek to strengthen property rights do so in the service of capital. To say that the reproduction of the conditions of accumulation relies on historical and contemporary enclosures is not to say that capitalism per se can achieve those same enclosures. Indeed, for its complex portrait of the politics (and specific ecological materiality) of enclosure, the dissolution of communal use rights, and the resulting social implications (including the production of new subjectivities), E.P. Thompson's *Whigs and Hunters* (quoted above) remains something of a landmark.

Indeed, if the enclosers of land are not always the accumulators of capital, not all forms of enclosure are conducive to the commodification of that which has been enclosed, nor to the accumulation of capital at all. Primitive accumulation, as De Angelis (2004) points out, is the active creation of *capital* as a social relation, the ontological pre-condition for the exercise of capitalist power; enclosure per se is then but one moment in this. Moreover, enclosure can occur in ways that actually subvert the accumulation of capital (Rose, 1994). This includes, for instance, the establishment of collective (e.g., communal or state) forms of exclusive property, as well as individual forms of ownership rights that are not saleable.

In addition, those dispossessed and alienated from access to socio-natural means of subsistence or small holder production do not all end up working in industrial resource sectors where accumulation relies on more or less recently attenuated rights of access. Hundreds of millions dispossessed by the enclosure of agricultural and forest lands have fuelled a massive global wave of urbanization during the industrial era, but it is apparent, particularly in the global South, that many of the dispossessed are being rendered as “surplus”, largely excluded from the formal economy and labour markets (Davis, 2007; Li, 2010). That disjuncture is a major contemporary qualifier to the general account of primitive accumulation offered by Marx: more importantly, it is also one of the massive “facts” of contemporary enclosure and commodification dynamics to be confronted.

Property, commodification, political ecology

There are two key themes relevant to political ecologies of commercial natural resource appropriation that emerge from this brief review of Malthus and Marx. First, commenting from very different normative positions, both recognized that private, exclusive rights to land as a means of both subsistence and production is one side of a coin whose other side is the commodification of labour. Using language more familiar in contemporary political ecology circles, we might say each points to what is in effect a metabolic integration of the commodification of specific socio-natures and the deployment of social labour broadly understood. Severing rights to land and other means of subsistence by means of enclosure

“freed” up means of production, while having the dual effect of making means of subsistence available as an exchangeable commodity to an “unfree” labouring class whose lot, as Marx put it, was to sell themselves to live. While Malthus and Marx obviously held starkly different views, their holistic perspectives on the complex and integrated transformations caught up in the enclosure of land serve as important points of departure for thinking about the role of property rights in the commercial appropriation of natural resources today, situated within a broader historical metabolism by which conjoined social and ecological transformations take place.

Second, Malthus and Marx offer portraits of what Foucault (1991; Foucault et al., 2008) was later to theorize as the distinct governmentality³ of liberal capitalism and of classical political economy, again, with Malthus as champion, and Marx as critic. Foucault was interested, among other things, in the development of ways of governing that would induce in people desired ways of being and acting in the world, particularly as forms of political authority shifted from autocratic modes of governance toward the modern liberal state (see Chapter 36, this volume). Foucault’s interest in understanding the specifics of liberal and subsequently neoliberal modes of governmentality (Lemke, 2001) included tracing the emergence of an approach to governing that would best position the state to encourage disciplined, rational, self-interested utility maximizing subjects, effectively calling forth the *homo economicus* first envisioned by classical political economists as the essence of human nature (Polanyi, [1944] 2001).

Though neoliberalism is a highly contested term used in reference to diverse and sometimes contradictory political economic and regulatory initiatives (Brenner and Theodore, 2002; Lerner, 2003; Tickell and Peck, 1995), one of the core features of projects and processes to which this term has been applied is a renewed emphasis on the establishment of private exclusive and (usually) exchangeable property rights as a means to facilitate renewed or expanded capital accumulation and economic growth, but also as a means of securing governance reforms prioritizing individual decision-making, autonomy, and responsibility in relation to the self and/or to the administration of social affairs more generally (Brown, 2006; Harvey, 2005; Jessop, 2002; Peck, 2008; Peck and Tickell, 2002; see also Chapter 34, this volume). And though not always recognized as such, one of neoliberalism’s primary and arguably constitutive fronts has been the extension of new or strengthened private claims to discrete socio-natures (Heynen and Robbins, 2005; Heynen et al., 2007; McCarthy and Prudham, 2004; Wolford, 2007), from land tenure reforms to genes and genetically modified organisms, and from water resources to rights to emit regulated substances into air and water, and so on. This has led some observers to suggest that, now more than ever, nature is being produced well and truly “all the way down” (Castree, 1995, 2003, 2008a, 2008b).

In this context, one reason Malthus’s essay in particular remains germane is that it spoke on the one hand to property rights as a means to address scarcity questions, and on the other, to the role of property rights in encouraging wage labour with otherwise minimal state intervention; he provide something of a recipe for an efficient and efficacious mode of governmentality. Similar normative overtones run through mainstream prescriptions for the roll-out of new or strengthened exclusive property rights and market relations in contemporary environmental policy, as means by which to exploit resources, but also as approaches to securing conservation objectives and an ostensibly correct social ordering. H. Scott Gordon’s (1954) seminal bio-economic analysis of overfishing, a much more intellectually rigorous and honest appraisal of the problems of open access than offered by Garrett Hardin (1968), provides important intellectual grounding for this paradigm. Also foundational was the development of the so-called Hotelling rule prescribing efficient depletion of non-renewable resources (Hotelling, 1931). In environmental and ecological economics, establishing new and exclusive property

rights over socio–nature also factor into discussions concerning efficient means of regulating emissions of pollutants (see, e.g., Tietenberg, 1980) as well as how to think about allocating rights to resources to ensure intergenerational equity (Howarth and Norgaard, 1990). These ideas continue to influence engagements in the climate policy debate (Bailey, 2007; Bumpus and Liverman, 2008; Ekins and Barker, 2001).

More recent forays into the conceptually messy world of payments for ecosystem services (Dempsey and Robertson, 2012; McAfee and Shapiro, 2010) rely on similar lines of reasoning when it comes to managing socio–nature as a form of stored wealth or what some call (problematically) “natural capital” (Costanza et al., 1997). Morgan Robertson’s (2000, 2004, 2006) work on the important US wetland banking program, for instance, lays bare how vibrant (if problematic) the enclosure–commodification rubric remains as a form of environmental regulatory discourse. What is perhaps most remarkable is that this program’s very foundational principles are those that lead to the greatest scepticism. That is, the wetland banking program, among the earliest institutional expressions of a payment–for–ecosystem services approach, and one that takes the commodification–as–conservation logic about as far as it can go, posits that an acceptable way to ensure no net loss of wetlands in the US is to allow investors to literally and intentionally produce new wetlands as exchange values (i.e., *for sale*) by means of securing credits for the new wetlands from the state regulator and then selling those credits to other developers looking to meet mitigation requirements. The basic premise is that one wetland can indeed be treated as both the functional and commercial equivalent of another; the commodification of wetlands demands no less. The idea is deceptively simple yet is haunted by disquieting ontological dilemmas. Among these is the precise articulation of science and capital in rendering equivalence between discrete wetlands, including for instance, when the two wetlands are not in the same watershed.

Other fronts likewise advance the privatization–conservation–commodification triad. For example, contemporary uptake of Individual Transferrable Quota (ITQ) systems in fisheries demonstrates that the basic parameters of H. Scott Gordon’s aforementioned “no one’s property is everyone’s property” critique is a powerful ideological force helping to legitimate a globe spanning neoliberal re–regulation of wild fisheries (Mansfield, 2001, 2004a, 2004b; St. Martin, 2005). In all of this, Marx’s account of the role of enclosure in capital formation (along with subsequent debates) constitutes an important historical and conceptual resource for those critics who are suspicious of contemporary enclosures, including in domains of interest frequented by political ecologists. Kloppenburg (2004), for instance, draws explicitly on the concept of primitive accumulation in tracing a long American century of converting seeds for agricultural production from a public to a private good through a combination of technical means (e.g., trade secrets and/or the use of technologies such as development of hybrid plant varieties) as well as regulatory and legislative ones (notably via roll–out of expanded plant patent rights).

In the US, these shifts have been marked by important legal and administrative decisions extending the boundaries of private property and the scope of the commodification of nature, including for instance, issuance of the Cohen–Boyer patent on rDNA technology in the 1970s, the 1980 *Diamond v. Chakrabarty* (447 U.S. 303 (1980)) US Supreme Court decision, and the 1987 US Patent Office decision regarding the Harvard oncomouse (Hughes, 2001; Kenney, 1998; Krinsky and Wrubel, 1996; Thackray, 1998). Internationalization of the US model of private rights to genes and GMOs has been a significant front in the uneven geography of neoliberal globalization (Featherstone, 2003; McAfee, 2003; Prudham, 2007; Prudham and Coleman, 2011; Schurman, 2004; Stone, 2007). Property rights (particularly patent rights) have been integral to shaping the contours of multinational firms in the biotechnology sector (Boyd, 2003). And while enclosure, transformation, and consolidation of access rights to land have

been central, for instance, to the Green Revolution and the spread of capitalist agriculture during the latter half of the twentieth century (Bernstein, 1997; Bernstein and Byres, 2001; Ross, 2003), neoliberal enclosures in the food system represent an intensification of capitalist agriculture and an important expression of contemporary agrarian questions (Buck, 2007; Friedmann, 1993; Goodman and Watts, 1994, 1997; Kloppenburg, 2004; Mann, 1990; McMichael, 1997).

More generally, there is renewed interest in primitive accumulation *per se* in the context of so-called contemporary “land” or “green” grabbing (Bumpus and Liverman, 2008; Corson and MacDonald, 2012; Edelman et al., 2013; Fairhead et al., 2012; Leach et al., 2012; Snijders, 2012; Sullivan, 2013; White et al., 2012). Yet, it bears emphasizing that what is at stake, as discussed in McCarthy’s important paper (2004), is not only enclosure and commodification of the *means*, but also the *conditions*, of production, including for instance, rights to use environmental milieu as dumping grounds for waste products from industrial processes. This is about more than accounting for externalities; it is about the relationship between primitive accumulation and the production of nature, and about examining how dynamics of primitive accumulation are constituted by specific socio-natural metabolisms.

And there are nuances. Clearly some enclosures, e.g., protected area creation, emphasize retention of socio-natural features for direct use or aesthetic appreciation (whether by elites or for more widespread enjoyment) and may be set up explicitly to impede certain kinds of commodification, including natural resource extraction. Yet even in these instances, complexities and contradictions may be involved as, for example, when protected areas have their amenity value come to underpin ostensibly non-extractive or non-consumptive forms of exchange-based production, e.g., international tourist travel and associated services. Moreover, some enclosures initially set aside for elite enjoyment, as in the case of colonial hunting preserves, are now the foundations of conservation areas increasingly commodified as “spectacular” natures or retained by states, including for the purposes of controlling access to and commodification of valuable natural resources (see, e.g., Brockington et al., 2008; Igoe et al., 2010; Neumann, 1998, 2001; Peluso, 1993).

While attending to the socio-ecological dynamics of contemporary enclosures, it bears remembering some of the core strengths and emphases of political ecology scholarship. One of these strengths and emphases is engagement with the specific institutions of property as they are being transformed (crudely, from what, to what, by whom, and why). Political ecologists have documented and attended to specificity in property regimes. They have shown repeatedly that, while there may well be explanatory power in broad classifications of property types (e.g., exclusive and transferable, communal, open access, state, public, etc.) as concrete abstractions, it is also the case that actual property rights are typically much more complex and hybrid in character, and that the more closely we look, sometimes the more complex the situation becomes. Communal rights and an un-extinguished messy “public” continues to haunt even modern, liberal property regimes emphasizing private, exclusive rights more generally (see, e.g., Rose, 1986). Political ecology scholarship tends to affirm in particular the insight that property in the form of “individual absolute dominion” (Gordon, 1996) is more market fundamentalist fantasy than fact, particularly (but not only) in those parts of the world where traditional and/or subsistence rights are prevalent in practice (see, e.g., Carney, 1993; Schroeder, 1993).

A second major theme in the political ecology literature is attention to both formal *and* informal claims. Commercial pressures and processes of commodification are often driven by formalization or hardening of exclusive property claims. And yet the specific trajectory of formalization may draw upon prior informal property regimes, including non-codified traditions and customs. Moreover, social struggle and conflict over contested rights of access may arise

when attempts to develop more formal property rights eliminate or weaken traditional or customary claims (see, e.g., Peluso, 1995; Thompson, 1971, 1975). These dynamics continue to play out in the context of intensifying commercial pressures and, while they are certainly evident in parts of the global South where subsistence and/or peasant production regimes remain in place, contested “traditional” claims informed by distinct and stubborn “moral economies” (Scott, 1976) are also expressed, for example, in conflicts over access to public lands in the American west (McCarthy, 2002; Sheridan, 2001), in the context of intensifying claims on rural lands in Europe (see e.g. Benjaminsen and Svarstad, 2008; Lem, 1999), and in the transformation of post-socialist rural economies (Sikor, 2001; Sikor et al., 2009; Sturgeon and Sikor, 2004).

A third hallmark of the political ecological “take” on the property–commodification nexus is focus on the articulation between small-holder and sometimes subsistence and/or “traditional” production and resource management regimes on the one hand (often in some of the world’s poorest countries), and broader political economic relationships of production, exchange, and social regulation on the other. The chain of explanation’s critical ethos (Blaikie and Brookfield, 1987; Robbins, 2004) and methodological paradigm is motivated in part to capture these articulations via relentless contextualization. And while the integration of local production regimes into wider networks of social claims, including far-flung relations of commodification, may not be new or even unique to capitalism per se (Mintz, 1985; Peluso, 1992, 2012; Taussig, 1980), such dynamics are ongoing and shape life circumstances and the production of environmental change across the globe. Research continues to document how historically and geographically specific property regimes are displaced or subsumed, or conversely, how property rights and access regimes become sites of political struggle and resistance (see, e.g., Sikor and Lund, 2009).

This last point directs attention to a fourth key feature of the political ecology tradition; property is never just about rights to or ownership of “things” or “stuff”. Many political ecologists have taken heed of the insight offered by Ribot and Peluso (2003) that questions of property sometimes emphasize rights at the expense of sufficient attention to *access*, as in who actually has the ability to derive benefits. And, influenced by the critical legal studies tradition and neo-Marxist perspectives (Blomley, 2003, 2005; Macpherson, 1978), political ecologists have recognized that property rights are social relations between people. This can be crucial in understanding how property and commodification are linked and speaks to a broader architecture of social power and control that can actually be obscured by a focus on rights per se.

In fact, situating property within a broader social field in understanding the dynamics of land-use change (including under the influence of commercial and non-commercial activities) reflects constitutive themes in political ecology scholarship. In an introduction to a collection of essays on socio-economic change in the European Alps, one of the first scholars to deploy the term “political ecology”, Eric Wolf, stated it thus:

The property connexion in complex societies is not merely an outcome of local or regional ecological processes but a battleground of contending forces which utilize jural patterns to maintain or restructure the economic, social and political relations of society.

(Wolf, 1972, pp. 201–202)

And though he does not use the language of “metabolism”, it is clear in the same essay that Wolf viewed claims to the land as fundamental to what we might now call the integrated socio-ecological order, namely the specific sets of relations and processes comprising and governing

conjoined social and biophysical transformations (Swyngedouw, 1995, 1999). As Blaikie and Brookfield (1987) argued in their seminal volume, there is a local specificity to claims on and relations to land and other natural resources, including locally specific ways of understanding and representing “nature”. Indeed, property rights governing access to and control over specific socio-natures are caught up in, and are constitutive of, the content of “society” more generally (see, e.g., Carney and Watts, 1990). These metabolic relationships and transformations help make “us” who we are but also help define important differences across space and time.

The particular meanings associated with institutions of access and control as well as the trajectories of commodification and socio-environmental change also lend – or should lend – the *materiality* of work in political ecology an inexhaustibly ethico-political dimension (Mann, 2009). And the long-standing emphasis on a knowledge–power nexus in political ecology scholarship points to the ways in which the power to *name* is bound up in the power to *claim* (and vice versa). Perhaps in no domain is an understanding of this dimension of the property–commodification nexus more pressing than in the aforementioned struggles over who owns life and its constituent parts in the ongoing commercialization of new biotechnologies. As Kaushik Sunder Rajan (2005, 2006) argues, material and semiotic transformations are so entwined in this arena that the commodification and redefinition of life go hand in hand; struggles over control are inevitably struggles over meaning, and vice versa.

Conclusion

These, then, are some of the main ways in which the nexus of property, commodification, and socio-environmental change have been and continue to be interrogated. The intensity of contemporary struggles over rights to land and other resources, whether those claims are animated by commercial claims or otherwise, and the diversity of settings and actors involved, means there is much left to do. As the chapters in this collection attest, political ecology is indeed a diverse, sprawling, and sometimes incomprehensible field defined sometimes by method, sometimes by themes, sometimes by questions and sometimes not at all! But a review of the evolution of the field over time shows that property rights have consistently provided a crucial lens through which to understand the complex socio-ecological, material and semiotic processes involved in propelling locally specific and conjoined environmental change and social differentiation, particularly in the context of articulation with broader commercial networks of commodity production and exchange and their social regulation. And political ecology scholarship reminds us that a focus on property rights is never merely about the allocation of “stuff”, as important as that may be, but also provides a window through which to understand the specificity of relations between the human and the non-human world and how these comprise the conditions under which life is lived (or not lived) and what it means to live it.

Notes

- 1 Throughout this chapter I attempt, with admittedly uneven success, to move past a language reflecting commonly understood dualistic ontological notions of “nature” and “society”. I do this by referring whenever possible to *socio-nature*, and by using the language of metabolism, to try to capture the conjoined, co-produced, and historically contingent character of integrated social and biophysical transformation. I draw inspiration for the terminology and the concepts from various sources including not only Smith’s (2008) production of nature thesis, but also work by Swyngedouw (1995, 1999, 2004), Haraway (1991, 1997), Moore (2011), Foster (1999), Williams (1973), Latour (1993, 2004) and others.

- 2 For his discussion of the extra-economic as well as other aspects of primitive accumulation, I am grateful to Jim Glassman not only for his excellent article (Glassman, 2006) but also for conversations on the topic that helped me immensely.
- 3 As Lemke (2001) explains it, the term is best understood as a kind of mashing together of the terms “governing” and “mentality”, pointing to how styles of governance and a rationality of governance are tied to particular kinds of subjectivities, ways of thinking and being.

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