

# Nature on the Move I: The Value and Circulation of Liquid Nature and the Emergence of Fictitious Conservation

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**Abstract:** A rich body of literature investigates the many ways in which nature is impacted upon and transformed by the “endless accumulation of capital.” Much less attention has been reserved for understanding how capitalist actors increasingly aim to profit from the non-extractive use of nature. While recognized as important, the theorization of conservation as a capitalist project has only just commenced in earnest. The paper contributes to this effort by positing that the commodities created through capitalist conservation, so-called “environmental services,” constitute a type of capital that challenges dominant (Marxist) ideas about the links between value, production and nature. Most importantly, this new type of capital, which I call “liquid nature,” necessitates rethinking the relations between circulation and production in contemporary capitalism and how the emphasis in the creation of value is shifting from the latter to the former. Two indications of this shift are seen as key in enabling liquid nature, namely that the valorization of production is increasingly alienated from the act of production and that the value of capital, defined as value in process, increasingly relies on a continuous intensification of capital circulation. The paper concludes that the upshot of attempts to establish “liquid nature” as the new mode of sustainable accumulation under capitalism result in the emergence of “fictitious conservation.”

**Keywords:** conservation, nature, circulation, capital, value, production

## Introduction

This article is part of a broader project to understand the place of conservation in the critical analysis of the relations between nature and contemporary capitalism. While there are vast literatures on how “nature” and “capitalism” interrelate, these are overwhelmingly geared towards the manner in which the latter *uses, transforms* and/or *impacts upon* socio-biophysical natures. A solid theoretical framework for thinking about the place of the *conservation* of nature within contemporary capitalism is still embryonic. This is odd, considering that the fate of modern conservation has been interwoven with capitalist trajectories since its inception in the 18th and 19th centuries (Grove 1995). In fact, the

preservation of the world’s “last wild places” appears as a classic Polanyian double-movement, a direct response to the alienation of humans from nature and massive transformation of nature under capitalist expansion (Cronon 1996). At the same time, by separating rural people from their land conservation aided in the formation of the labour force that industrial capitalism needed (Perelman 2007), while proving a valuable tool in colonial administrative control (MacKenzie 1988). More recently, an intensive and pervasive proliferation of protected areas has accompanied the rise of neoliberal capitalism since the late 1970s (Brockington et al. 2008) while the 1990s and 2000s have given rise to popular paradigms

such as “payment for ecosystem services” and novel approaches such as biodiversity derivatives, wetland credits, species banking and more (Robertson 2004; Cooper 2010; Sullivan 2012). All these are based on the assumption that capitalism and conservation are – can be made – compatible (see Brockington and Duffy 2010), which leads to a pertinent question: how can we understand the conservation of nature as a capitalist project?

This question is the topic of a nascent but swiftly growing literature. Igoe, Neves and Brockington (2010), for example, focus on how a Gramscian hegemonic “historic bloc” intersects with an economy focused on Debordian Spectacle to produce the *idea* that capitalism and conservation can indeed be compatible (see also Fletcher 2010, for a poststructuralist perspective). While these authors convincingly show how in this way the prediction by green Marxists that the “second contradiction of capitalism” would lead people to demand ecosocialism (O’Connor 1998) has been neutralized – or delayed – they leave implicit the question how the conservation of nature actually functions *as capital* in the 21st century global economy. Over the last two decades, this question has become a prominent one, particularly after the recent (or ongoing) financial crisis. Not only has the idea that business should “green” itself received a massive boost, the financial crisis also led to calls for a “global green new deal” and a “green economy” that focus on shifting the global political economy from extractive to non-extractive or non-transformative use and its concomitant valuation of nature and natural resources (Büscher and Arsel 2012).<sup>1</sup> We thus witness the capitalist system increasingly accepting the effects of the “second contradiction,” yet trying to deal with it by making it part and parcel of the system; by giving ‘value’ to the conservation of nature. It does this in the only way it knows how to give things value: by taking them up as commodities in capital circulation, by finding new ways to guarantee “nature on the move.”

Obviously, this makes sense from the perspective of capital. After all, capital, according to Marx, is “money in process,” “value in process” (Marx 1976:256). If anything, the last years have again made

abundantly clear that when capital stops moving, the system in which it thrives is in deep crisis. Hence, all over the world, governments were fixated on getting money moving again and so turn it back into capital. Similarly, in our times of multiple environmental crises, we see many actors working hard to turn the conservation of nature into capital so that it can take its “rightful” place in global markets and no longer be dispensed with as mere “externality.” This leads to a further dilemma: how does “conserved nature” – what I will call “liquid nature” – circulate as capital, as “value in process,” and what does this mean for the value of nature?<sup>2</sup> This is a significant question with potentially quite radical implications for (neo or post) Marxist theory and for conservation.

Let me briefly outline why, before moving on to discuss the question in more depth. Most fundamentally, the commodities “produced” by capitalist conservation (aim to) turn “production” on its head, and hence engrained ideas about (the production of) value. The accepted, Marxist way of thinking about the relation between capitalist production and nature goes something like this:

Human beings exploit nature in all sorts of ways. It hardly seems possible to imagine otherwise. The transformation of nature, though it takes place under all manner of conditions and through all manner of socially embedded practices, is an absolute requirement for the production of anything. [Henderson 2003:77]

Of course this is generally correct, with one major possible exception, *namely when capital seeks to produce the non-transformation of nature*, most especially through its conservation. Now, it has to immediately be added that the conservation of nature does not mean the non-transformation of nature. The opposite is true: nature is actively produced and transformed through its conservation (Brockington and Duffy 2010; Dressler 2011). Yet, the manner of production

1 See: [http://www.unep.org/pdf/A\\_Global\\_Green\\_New\\_Deal\\_Policy\\_Brief.pdf](http://www.unep.org/pdf/A_Global_Green_New_Deal_Policy_Brief.pdf), p. 4. Last viewed: 15 September 2010.

2 Neil Smith (2007) has written an extremely interesting and relevant essay entitled ‘Nature as Accumulation Strategy’ that touches on many of the issues discussed in this article. In my view, however, Smith does not give ‘conservation’ a central enough place (indeed, he hardly even uses the concept at all), and so misses some crucial links in explaining ‘conserved nature as capital’ and what this implies for the value of nature in contemporary capitalism. These will be discussed later in the article.

and transformation is rather different from what is generally understood as the “transformation of nature under capitalism.” It is a transformation that aims to leave nature (materially) unexploited and unused, and is as such seen as diametrically opposed to, and – importantly – *fit to off-set* “traditional” production processes that do (materially) exploit and use nature. Phrased differently, the *value* in this product, at least theoretically, is found exactly in the fact that nature is (believed to be) not (materially) used, transformed or exploited.

In contemporary conservation, this idea has become known under the banner of “natural capital,” which provides “environmental services” to humans. Nature-to-be-conserved functions in this rhetoric as a peculiar kind of *fixed capital* whose value circulates through the capital embodied in and implied by its environmental services. This, I refer to as liquid nature – nature made fit to circulate in capitalist commodity markets – the potential for which, I argue, has been made possible within a change in the nature of circulation in contemporary capitalism. Yet, these services, like the land and nature they are derived from, are a form of fictitious capital: “capital without any material basis in commodities or productive activity” (Harvey 2006:95). In Marxist terms, this would also mean they cannot hold any value, as they have not been (directly) produced through human labour. Given this, the question “how does conserved nature circulate as *capital*, as value in process” has potentially fundamental implications for engrained ways of thinking about value, nature and the relations between production and circulation in capitalism. Indeed, a central argument of this paper is that the analysis of conserved nature as capital necessitates a shift in emphasis from production to circulation. *It is (the nature of) contemporary capitalist circulation that enables the circulation of liquid nature as a form of fictitious capital, the ultimate result and consequence of which is “fictitious conservation.”* This, however, is not to discount production. To the contrary: production, as we will see, remains crucial, but quite differently from “standard” Marxist theories of production.

In what is to follow, this argument is approached from two angles. First, I will outline the nature of circulation in capitalism and how this has changed

over the last three to four decades. Next, I will discuss how this transformation relates to attempts to enable the circulation of nature, leading to the argument that to make markets for conserved nature fully liquid – or to create fully liquid nature – capital has had to “elevate” nature from fixed to fictitious capital. The difference is that in the latter case, the link between actual natures and their conservation through digitalized financial mechanisms is severed, so creating “fictitious conservation.” The penultimate section discusses the notion of fictitious conservation in more depth and explores its consequences for Marxist theories on production, circulation and value. The article ends with some brief concluding thoughts.

Before moving on, it is important to emphasize that all of this is not a matter of mere abstract political economy: to make “liquid nature” believable, legitimate and manageable, capital has had to and continues to create particular governmentalities and associated ideological believe-systems. These matters, however, are outside the purview of this article and will be taken up by Jim Igoe in his companion piece. Moreover, it also does not mean that no alternative ontologies and epistemologies exist when it comes to “nature on the move” and that these could potentially provide ways out of the current capitalist deadlock. These will be discussed by Sian Sullivan in her companion piece. The sole objective of this article is a step-wise *theoretical* exploration of how conserved or liquid nature becomes capital that circulates with great speed in our contemporary global economy. It is an exercise in logical reasoning, not an empirical investigation although the potential empirical and practical implications might be considerable.

### **The Nature of Circulation in Capitalism and “Fictitious Capital”**

The ensuing discussion on the nature of circulation in contemporary capitalism will start by going into some “fundamentals” of capitalist circulation based on Marx’s *Capital* (1976) and Harvey’s *The Limits to Capital* (2006). I will then move beyond this “deep structure” of capitalism to incorporate how circulation has changed alongside recent changes in global capitalism. Hence, I explicitly *start* with Marx, not *end* with his work as is sometimes the case

in Marxist-inspired work. I will argue that several aspects of Marx' work will need to be reconsidered and/or expanded in order to fully understand *contemporary* capitalist circulation that has made "liquid nature" possible.

The basis of capitalist circulation for Marx starts when commodities are "sold not in order to buy commodities, but in order to replace their commodity-form by the money-form", and when "the change of form becomes an end in itself" (Marx 1976:227-228). This leads to the famous conversion from C-M-C to M-C-M whereby a capitalist "throws money into circulation, in order to withdraw it again by the sale of the same commodity" (249). Money, thus, becomes "money in process" or "value in process," and therefore capital. This has due implications: "the circulation of money as capital is an end in itself, for the valorization of value takes place only within this constantly renewed movement" (253). When capitalist circulation becomes an end in itself, and under the pressures of competition, the "immanent laws of capitalist production" start confronting "the individual capitalist as a coercive force external to him" (381). A tremendous amount of faith is thus placed in the (seemingly) "exogenous" process of circulation to keep accumulation on track. As even mainstream economists recognize, however, this is obviously incorrect. In the endless complexities of the differentiated circulation and realization times of capital, production, commodities and values, it is clear that circulation in the aggregate is never an even, consistent or automatic process (Marx, 1978). If circulation of capital converged exclusively around commodities, capitalism would quickly become immensely unstable. This imminent instability is, for Harvey (2006:254), why credit is vitally important to the system.

While full discussion of credit is beyond the scope of this article, some remarks are important for clarifying its focus on circulation. Harvey (2006:285) talks about the "immense potential power that resides within the credit system": "credit can be used to accelerate production and consumption simultaneously. Flows of fixed and circulating capital can also be co-ordinated over time via seemingly simple adjustments within the credit system." Credit, however,

leads to what Marx called "fictitious capital," which Harvey (2006: 95) describes as "money that is thrown into circulation as capital without any material basis in commodities or productive activity." In turn, he argues that "the potentiality for 'fictitious capital' lies within the money form itself and is particularly associated with the emergence of credit money" (267). He explains as follows:

Consider ... a producer who received credit against the collateral of an unsold commodity. The money equivalent of the commodity is acquired before an actual sale. This money can then be used to purchase fresh means of production and labour power. The lender, however, holds a piece of paper, the value of which is backed by an unsold commodity. This piece of paper may be characterized as *fictitious value*. Commercial credit of any sort creates these fictitious values. If the pieces of paper (primarily bills of exchange) begin to circulate as *credit money*, then it is fictitious value that is circulating. A gap is thereby opened up between credit moneys ... and 'real' moneys tied directly to a money commodity. ... If this credit money is loaned out as capital, then it becomes *fictitious capital*.

While arguing that credit can function to stabilize circulation, Harvey adds that this does not mean that credit solves capitalism's inherent contradictions. Indeed, it embodies the contradictions it aims to solve, but on new levels and with new complexities:

What started out by appearing as a sane device for expressing the collective interests of the capitalist class, as a means for overcoming the 'immanent fetters and barriers to production' and so raising the 'material foundations' of capitalism to new levels of perfection, 'becomes the main level for overproduction and over-speculation.' The 'insane forms' of fictitious capital come to the fore and allow the 'height of distortion' to take place within the credit system. What began by appearing as a neat solution to capitalism's contradictions becomes, instead, the locus of a problem to be overcome. [Harvey 2006:288]

Once a process of relying on debt to guarantee and intensify accumulation has been set in motion, there is no way back: accumulation has to

continuously increase in order for “fictitious capital” to retain its “value.” The use of credit thus adds a major impetus to ensure that capital is truly “money in process” or “value in process” and thus that the velocity of circulation must continuously increase. Circulation, Marx remarked in the *Grundrisse*, “has to be mediated not only in each of its moments, but as a whole of mediation, as a total process itself” (Marx 1973:255). What this points towards is that a certain velocity of circulation helps sustain a particular amount of “fictitious capital,” and how with its further institutionalization capitalism becomes progressively dependent on the circulation and proliferation of this type of capital.

Much has changed since Marx’s day, and even since Harvey first published *The Limits to Capital* in 1982. It is thus necessary to account for subsequent dramatic changes in the global political economy and their effects on capitalist circulation. This is crucial since, while Marx’ and Harvey’s analyses point us in the right direction, one thing both these scholars did not foresee is the way in which global capitalism would (try to) adjust in relation to the environmental degradation it engenders. This was obviously not a major issue in Marx’ time but even Harvey does not devote much attention to this in his work and so completely misses the important connections between changes in contemporary capitalism and the energy expanded to finding ways to green capitalism through conservation (Büscher et al. 2012).

The background to these changes are found in a central imperative of capitalism, namely “to reduce the time and cost of circulation so that capital can be returned more quickly to the sphere of production and accumulation can proceed more rapidly” (Smith 2008:126). On a global scale, Castells (2000:136-137) argues, this has truly become possible with the advent of new information and communication technologies: “advanced computer systems” that allow “new, powerful mathematical models to manage complex financial products, and to perform transactions at high speed.” In this process, “the whole ordering of meaningful events loses its internal, chronological rhythm, and becomes arranged in time sequences depending upon the social context of their utilization” (Castells 2000:492).

So far, so good, but an apparently irreducible obstacle to this dream of unfettered hyper-circulation remains. For as Smith (2008:126) further argues, “the circulation of value requires also a physical circulation of material objects in which value is embodied or represented” (see also Henderson 2003:43). Understanding how capitalism may be transcending (or perhaps circumventing) this apparently irreducible obstacle requires further theorization of value and circulation. Let us start with LiPuma and Lee, who make the same point about the central imperative of capitalism as Smith, but draw more radical implications about circulation:

The basic or founding argument is that the internal dynamic of capitalism compels it to perpetually and compulsively drive toward higher and more globally encompassing levels of production. This directional dynamic has engendered such progressively ascending levels of complexity that connectivity itself has become the significant sociostructuring value, leading to the emergence of circulation as a relatively autonomous realm, now endowed with its own social institutions, interpretative culture, and socially mediating forms. [LiPuma and Lee 2004:19]

While the level of “autonomy” can be debated, fact is that connectivity has become a “significant sociostructuring value,” to the extent that Boltanski and Chiapello (2007) have elevated this value to the centre of their analysis of the “new spirit of capitalism.” LiPuma and Lee, however, draw their conclusions about circulation from their analysis of financial derivatives, which they say for most of their history “were production-focused and functionally geared to hedging” (97). This changed in the 1970s with several far-reaching “institutional changes and the liberalization of national capital controls” (98). As a result “the essential movement of the market was away from hedging on production to wagering on circulation” (99). Next, LiPuma and Lee describe how this process started leading a life of its own, to the extent that it has created a system “in which means dominate ends” in that “the goal of financial circulation increasingly shapes the means of its realization” (54).

Again, some elements of LiPuma and Lee’s overall analysis can be debated, most especially the

power they attribute to financial capital in the west (see 179-180) and their “move away from production,” as it is clear that financial capital has recently re-emphasized material production, particularly land and agricultural commodities in the global south, resulting in massive land grabs (Borras et al. 2011). That said, it is undeniable that the direction of change in global capitalism has been towards unleashing financial markets and hence massively increasing the intensity and velocity of capital circulation (Moore 2010; Marazzi 2011). What, then, does this mean for the concept of value?

LiPuma and Lee (2004:83), again, take a radical step, arguing that “standard macroeconomic theories of international trade and exchange rates, or Marxist approaches that originate from a labour theory of value, appear to have little to say about circulation.” Technically, this is not correct: many do have many things to say about circulation but they interpret this rather differently. The central question here, at least from a Marxist perspective, is where and how value is produced. In this paper, I follow Phil Graham (2007:174) who argues that while Marx’s theory of value still forms the “deep structure” of capital, contemporary notions of value – for example embodied by financial derivatives – are no longer the ones that Marx first articulated:

Today it is not the muscle-power of people that provides the most highly valued labor forms. Far more intimate aspects of human activity have become technologized and exposed to the logic of commodification. Correspondingly abstract forms of value have developed. Value production, in turn, has become more obviously “situated” in the valorized dialects of “sacred” and powerful institutions, such as legislatures, universities, and transnational corporations. In official political economy, value has moved from an objective category that pertains to such substances as precious metals and land, to become located today predominantly in “expert” ways of meaning and, more importantly, in their institutional contexts of production. [Graham 2007:174]

This has major consequences for the nature of circulation in capitalism. It means that capital increasingly circulates as “expert ways of meaning” and

“institutional contexts of production,” for example through reports, policy briefs, think tanks, brands, marketing, and so on (Goldman and Papson 2006), but also through financial derivatives, futures and other financial constructs (Lee and LiPuma 2002). In other words, what circulate mostly these days are forms of *fictitious capital* – capital that does not directly have “any material basis in commodities or productive activity” (Harvey 2006:95). In addition to credit, this capital takes the form of a whole host of financial and non-financial derivative “products” that – amongst others – focus on institutional or organizational efficiency, management of meaning, technological, informational and communicative “innovation,” or simply speculation. These “products” all crucially depend on a concept of value that is ephemeral and transient. Indeed, Graham (2007:4) argues that “what we call “values” are more or less ephemeral products of evaluation,” which “like all aspects of meaning ... are socially produced and mediated.”

This, it must be emphasized, is not to say that production-based labour is not important. It does mean that its role in the production of value has changed, most notably through a shift in emphasis towards circulation, in that circulation increasingly determines production rather than the other way around (see also Marazzi, 2011: 48-49). LiPuma and Lee (2005: 424), in another article, articulate these changes as follows:

We appear to be ... heading into an era where speculative capital, a socio-historically specific concept of risk and derivatives products have become the centre of the financial clockwork that turns the hands of contemporary capitalism. *There is thus reason to believe that circulation-based risk represents a new self-structuring dynamic that is superimposed upon and structurally supersedes an earlier form grounded in production-based labour.* [emphasis added]

Circulation superseding and determining production, however, is not new, as pointed out for California agriculture in late 19th, early 20th century by Henderson (2003). What has changed over the last decades, or so I argue, is that *the valorization of production is increasingly alienated from the act of production.*

This, of course, has consequences for production in general, and for the “production of conservation” under capitalism specifically. Production in general, in this process, is relegated to producing “underlying assets” for the (financialised) derivative structure that is the prime focus for value creation in contemporary capitalism.<sup>3</sup> In turn, it is in this context that we see global capitalism increasingly directing its attention to dealing with its negative environmental consequences in a way that mediates its worst excesses while opening up new frontiers for capital accumulation (Arsel and Büscher 2012). To enable this process, several fundamental changes in the way capitalism operates and generates value are necessary, most especially to value the non-use or non-extraction of nature (and hence paying for labour that conserves rather than appropriates or destroys nature), while simultaneously trying to reduce the “physical circulation of material objects” that Smith (2008:126) argues is necessary for the circulation of value, and replace these with creating the possibilities for the circulation of “liquid nature” as capital. It is to these changes and their challenges and critiques that we now turn.

### The Circulation of Liquid Nature as Capital

Anno 2013, it is abundantly obvious that our planet’s natural environments are being transformed and commodified with unprecedented intensity and speed. As policy-makers, NGOs, businesses and politicians work to alleviate the growing concerns about capitalism’s negative ecological record, they often do so under the banner of “natural capital” (see Costanza et al. 1997). This (usually) involves bringing nature deeper into contemporary capitalism through mainstream neoclassical economic tactics (Burkett 2005:113). Nature as “capital,” in this discourse, appears to function according to classical forms of *fixed capital*, which “circulate as value while remaining materially locked within the confines of the production process” (Harvey 2006:209). This is achieved in large part through the products it creates, namely a whole host of different “environmental services” (Sullivan 2009).

<sup>3</sup> Note that this is not the same as Marx’ base-superstructure theory in relation to capitalism.

What different variations of the idea of environmental services have in common is their – rather simplistic – presentation of how embedded value is “transported” from the producing entity “nature” to the consuming entity “humanity.” These, according to proponents, could be different categories of services, including supporting, provisioning, regulating and cultural ecosystem services (Millennium Ecosystem Assessment, 2005:vi).<sup>4</sup> The exact nature of these different types of services, however, is not relevant; what matters for the analysis is that a complex array of services is tied to a range of “constituents of well-being” (vi) through a valuation model that relies on *monetary* payments in order to assign quantitatively comparable values to qualitatively incommensurable conditions and relationships (Kosoy and Corbera 2010). Arguably the most important policy result of this thinking is the currently trendy “payments for environmental services” (PES) paradigm.

Of course, the standardization of value measures is an extremely complicated process, requiring a great deal of speculation by those doing the “measuring” and “valuing.” In this section I will not focus on precisely how this is done. Rather, based on the two functions of money, namely “as a measure of value and as a medium of circulation” (Harvey 2006:292–293), my primary concern is, first, to briefly outline the implications and problematic aspects of the monetization of nature, and, second, discuss how nevertheless this monetized nature is supposed to become *circulating* and *valuable* global conservation capital.

Importantly, if nature is expressed in money, we need to first clarify our conceptualizing of “nature,” particularly if some kind of *material, biophysical* nature is to be conserved through some kind of commodified, *abstract* value circulation. Biodiversity conservation is explicitly *not* interested in what Castree (2003:286) calls “internal nature”: nature that has been brought almost entirely under human technological control, like genetically modified seeds.

<sup>4</sup> The category of ‘cultural ecosystem services’ is interesting in relation to Sian Sullivan’s (2009) point that the whole exercise of subjecting nature to capitalist market dynamics is a profound manifestation of ‘cultural poverty’. It almost seems to acknowledge this very point by ensuring that ‘culture’ is giving its appropriate place in an otherwise culturally impoverished framework.

It *is* explicitly interested in nature that “still retains the independent capacity to act,” or what Castree calls “external nature.” Although most external nature is “inherently social” (Smith 2007:33), fundamentally shaped by human thought and action, it remains far more unruly and encompassing than internal nature. It is precisely this kind of unruly and encompassing nature that biodiversity conservation sets into motion so that it may circulate as a form of fictitious capital.

To theorize this circulating nature, it is necessary to account for both the biophysical and social aspects of nature, and to engage with them as interconnected and mutually constituting realms (Castree 2000; Carolan 2005; Büscher et al. 2012). After all, as argued by Neil Smith (2007:33), “capital is no longer content simply to plunder an available nature but rather increasingly moves to produce an inherently social nature as the basis of new sectors of production and accumulation.” However, as Carolan (2005:400, 409) cautions from a critical realist position, it is also necessary to maintain some distinction between these categories such that they do not wind up simply merging into one another. He thus distinguishes three categories: Nature, nature and “nature.”<sup>5</sup> The first is “the Nature of physicality, causality, and permanence—with flux.” The second is nature as socio-biophysical phenomenon, and the third is “nature” as discursive construction. While all three are important, in this article I am centrally concerned with the latter two categories, their intersections and mutual constitutions, in the circulation of conserved nature as capital. Conservation is always to a large extent a struggle between different “natures”, namely in terms of “discourse, power/knowledge, cultural violence, and discursive subjugation” (Carolan 2005:401). As these discursive regimes influence human action, they play an active hand in shaping biophysical nature (Carrier and West 2009). At the same time, biophysical nature shapes, limits, and defines discursive regimes of “nature,” such that the two are in constant dialogue, as shown by Jim Igoe’s and Sian Sullivan’s companion pieces.

<sup>5</sup> Importantly, Carolan (2005:401) adds that “all three natures – “nature,” nature, and Nature – represent bounded hybrids. In each, sociobiophysical interactions occur, but to various degrees, thereby underlying the need to conceptually stratify reality so as to better understand how those strata interact and the bounded hybrids that result.”

This brief discussion has obvious implications for the circulation of conserved nature as fictitious capital. If it is to circulate in the capitalist economy, conserved nature must be monetized. If monetized, it will be expressed and understood in quantitative terms, which erases the “ontological depth” and qualitative complexity of relationships between Nature, nature, and “nature.” Specifically, as Burkett (2005:122–124) elaborates, it is possible to identify five important problems with the monetization of nature: 1) “unlike money, ‘nature cannot be disaggregated into discrete and homogenous value units’”; 2) a reliance on money leads to “inadequate accounting for the irreversible character of many natural processes” (e.g. there is no reason to assume that the monetary value of an ecosystem will go up before its depletion/extinction is irreversible); 3) monetization involves an absolute “tension between money’s quantitative limitlessness and the limits to natural wealth of any given material qualities”; 4) “the price of a resource stock is not determined solely by its absolute size”, but by many other aspects of how markets work, meaning that “price may not rise as depletion occurs”; and 5) “higher resource prices may actually accelerate a resource’s depletion by spurring technological advances that reduce extraction costs and/or lower the amount of the resource needed per unit of final goods, thereby encouraging its further use to increase total output.” Burkett (2005:115, emphasis added) concludes that even “many ecological economists have resisted it [*natural capital*] on the grounds that it is irreparably anti-ecological” and “lends a spurious legitimacy to the commercialisation of nature and *its reduction to a productive input*.”

These points highlight the problematic and contradictory effects of transforming nature into a quantitative, monetary input – a point I will come back to below. At the same time, these criticisms have not withheld many conservation, business and government actors to try and monetize nature. In fact: it has spurred them on even more (Bracking 2012; MacDonald and Corson 2012). In this endeavour, they have been enabled, I argue, by the contextual transformations in global capitalism laid out in the previous section, most notably the proliferation of complex forms of fictitious capital,



changes in the production of value and how these have influenced interrelated processes of production, consumption and circulation. In other words: while the idea of monetizing ecosystem services as the product of “fixed” natural capital is a problematic, and critics would argue futile and false solution, *it is only the starting point* for those who aim to bring conserved nature into contemporary capital circulation. They need to go further still, and find ways to link up capitalist conservation to a political economy where value has become ephemeral and located “in ‘expert’ ways of meaning and, more importantly, in their institutional contexts of production” (Graham 2007:174).

And this is exactly what has been happening, as shown by recent scholarship on conservation and capitalism. Thus, Garland (2008:67) has posited a “conservationist mode of production,” that “lays claims to natural (and thus fixed) capital” and adds value to it “through various mediations and ultimately transform it to a capital of a more convertible and globally ramifying kind.” Brockington (2008) chronicles the “power of ungrounded environmentalisms” by emphasizing how conservation celebrities enable (mostly western) audiences to re-establish their bonds with the wild through commodified representations of nature. Igoe (2010) records how conservation produces and turns upon Debordian “spectacle” in the “global economy of appearances”; particularly how spectacular media representations of nature are dominating the way environmental non-governmental organizations communicate and “sell” their conservation messages. Dressler (2011), based on research in Palawan Island, the Philippines, notes how “capitalist conservation” shifted from “first to third nature”: a nature that lives up to how tourists would like nature on Palawan to be. Lastly, I have earlier shown how conservation initiatives around the 2010 world cup soccer in South Africa produced and incorporated what I call “derivative nature,” the systemic preference on the side of capital for idealized representations of nature and “poor locals” in order to attract tourists and investment (Büscher 2010). What these disparate examples have in common is that they show how contemporary

conservation fundamentally adheres to and relies on “ephemeral values” to enable the circulation of conserved nature in contemporary capitalism.

Having stated this, it is crucial that we do not take the argument too far: just as a rapidly circulating and speculative financial realm ultimately still depends on a more “mundane” production, distribution and consumption of asset streams (Leyshon and Thrift 2007:98), so is contemporary conservation still deeply intertwined with the material realities of socio-biophysical nature. This, for instance, is clear from work by Katja Neves (2010:721) who shows that the commodity fetishisation of whale watching is not as diametrically opposed to exploitative whale hunting as it imagines itself to be. In fact, she argues that the “transition from one to the other is more closely related to transformations in the global capitalist economy than to enlightened progress in human–cetacean relations.” The new production of conserving whales through ecotourism, then, precariously links making audiences – literally – buy into commodified and romanticized whale encounters and shielding them from the negative material sides of the same, for example the disturbance of whale ecology and carbon-packed air travel. This poses a more general problem, namely that the circulation of conserved nature as capital has to be achieved through creating “derivative” ephemeral value while at the same time remaining inextricably linked to material (socio-biophysical) nature.

In other words, for conserved nature to truly function as capital, it has to go beyond environmental services. After all, the generally accepted definition of PES talks about a “well defined environmental service” that is sold by a particular provider to a buyer “if and only if the ES provider secures environmental service provision (conditionality)” (Wunder 2005:3). The “problem” here is that this does not necessarily involve competitive markets, and indeed often comes down to mere “compensation schemes.” True capitalist marketization of conserved nature would need to go far beyond this in order to link material nature with ephemeral values. In business terms, most environmental services markets lack sufficient “liquidity.” Liquidity is business lingo for a market with an ever-ready supply of sellers and buyers where

assets can easily be bought or sold with little effect on price-levels. It means that commodities need to be fully “alienable” and/or fully transferable at minimum transaction cost. This presents fundamental problems for markets of “environmental services,” as their liquidity is usually circumscribed in space and time (see also Fletcher and Breitling 2012). Thus when the rather naive idea of PES has scarcely become popular in mainstream conservation, it is already being overshadowed by a host of much farther-reaching proposals to turn conserved nature into circulating capital. We are currently witnessing the creativity at work of those who push the frontiers of capitalist commodification ever further, as conservation derivatives, “sustainability enhanced investments,” wetland and mitigation banking, biodiversity offsets and other schemes are rapidly making headway in conservation and extra-conservation arenas.

While an extensive discussion of these separate schemes is neither possible nor necessary here (see Sullivan 2012), what they have in common is that risks related to, impacts on and incentives towards biodiversity (conservation) are financialised and subjected to market exchange. Mandel et al. (2010:45–46), for example, promote “conservation derivatives” as hybrids of “two types of financial instruments,” “in which an insurance derivative is issued with modifications to allow responsible action to decrease the likelihood of the insured event.” Wetland and mitigation banking and biodiversity offset schemes, in contrast are geared towards offsetting the impact of development projects by (at least) restoring or reviving the same amount of biodiversity that was destroyed by the project (see, eg. <http://bbop.forest-trends.org/>; Robertson 2000 for a critique). Taken together, the goal of all these mechanisms is to make markets for conserved nature more fully liquid, which indeed is how it is referred to in practice.<sup>6</sup> Let us now look at the implications of this development on Marxist theory and conservation in more detail.

6 For ‘entrepreneurs’ making the market liquid, see [http://www.ecosystemmarketplace.com/pages/dynamic/article.page.php?page\\_id=7682&section=news\\_articles&teod=1](http://www.ecosystemmarketplace.com/pages/dynamic/article.page.php?page_id=7682&section=news_articles&teod=1). Last viewed: 21 September 2010. Important to add is that the degree to which this ‘rendering liquid’ varies greatly in practice.

### The Emergence of Fictitious Conservation

The *ultimate* objective of getting market liquidity right is of course the lubrication of producing greater surplus value or profits.<sup>7</sup> The *immediate* objective of liquidity is facilitating faster and/or smoother turnover of capital, and thus to increase the velocity and/or stability of capital circulation. The Platonic ideal of liquid nature is one in which monetized forms would be completely free from the material contexts and relationships that produced them. In reality, of course, “financial superstructures” are always entangled in material realities (Leyshon and Thrift 2007:98). Neoliberal conservation’s entanglements with material realities are the topic of another emerging body of literature, and need not detain us (but see West 2006; Neves 2010; Büscher, 2010). What is important to note here is that these entanglements occur in “a world that can no longer be directly grasped” (Debord 1967:11), in which production and consumption have become so separated that “their relationship becomes all but unfathomable, save in fantasy” (Comaroff and Comaroff 2002:784).

Accordingly, the connections and disconnections between consumers of liquid nature and the conditions and relationships that produced it, have become so complicated that they are, for most intents and purposes, severed. It is not just that individual producers, consumers and natures are no longer directly in touch, though this is often certainly the case. The point is that the various products derived from many distinct natures have to become standardized and utterly abstracted in order to be exchangeable. This is not just a *strategic* process, as Smith (2007:29) has it; it is a *necessary* one. This is achieved in large part through *securitization*: the standardization and rationalization of “nontransparent and localized commodities ... so that different buyers and sellers in different places around the globe can understand their features and qualities and exchange them easily” (Gotham 2009:357).

Hildyard (2008: 4–5) takes the idea of securitization one step further, arguing that it is:

7 Note that it is generally accepted that ‘more’ liquidity is not always the best for market stability, and thus for profits, hence the phrasing ‘getting market liquidity right.’

Figure 1: The “new face of nature” or a typical index for pricing (here carbon). Source: [www.ecosystemmarketplace.com](http://www.ecosystemmarketplace.com), viewed: 22 September 2010.



A process whereby assets that generate regular streams of income ... are sold to a newly created company (a Special Purpose Vehicle [SPV]). ... The SPV then issues derivatives ... that give investors the right to the income stream from the assets.

As these highly complicated processes are stacked on top of one another, one can immediately see how they completely erase any local, qualitative, spiritual properties and contexts around an “environmental service” through their subjection to utterly abstract numbers on marketized value indices. This has resulted in profoundly “new face of nature,” depicted in figure 1.

Proponents of the marketization of conserved nature usually argue that securitization helps stabilize and balance markets and prices. Yet, examples from other markets that depend on the “liquidization” of fixed capital commodities reveal this is not the case. Taking the housing market that had such a major role in the financial crisis as an example, Gotham (2009:357, 368) contends that “the housing finance sector is permeated by significant contradictions and irrationalities that reflect the disruptive and unstable financial process of transforming illiquid commodities into liquid resources” and that this “conceptualization of securitization as a process of creating liquidity out of spatial fixity dovetails with theoretizations that emphasize the conflictual, contested and deeply contradictory nature of uneven geographical development.” This is a stark warning for ecosystem markets. Most fundamentally it points to the ways in which securitization artifices have sys-

tematically transformed homes and neighbourhoods into fictitious capital that can circulate in the global economy without concern for, or even knowledge of, the material and social conditions that produced them. I am arguing, by extension, that similar securitization artifices are systematically and fundamentally separating liquid forms of conserved nature from the material and social conditions that produced them. The upshot is the full-fledged conversion of conserved nature into capital, so enabling its ultimate purpose: becoming a new vehicle for money in process, or value in process. Conservation, in other words, has become fictitious capital, which leads to what I call “fictitious conservation”: conservation without any direct basis in material, socio-biophysical nature.

Fictitious conservation has not displaced or subsumed more traditional forms. Rather it accompanies them, intertwines with them, and infuses them with its logic in ways remarkably analogous to interactions between “nature” and nature as outlined above. Traditional forms of conservation may continue to protect animals, landscapes, and eco-systemic processes. Increasingly, however, *the valorization of these activities is alienated from them and subject to broader processes of the circulation of liquid nature*. At the same time, the logic of fictitious conservation is increasingly geared toward the production of liquid nature *tout court*. In losing much of its basis in socio-biophysical nature in favour of liquidity, the idea of “fictitious conservation” can almost be taken literally; after all, how can conservation alleviate the “second contradiction” of capitalist expansion if it is capital-

ist expansion that is the ultimate objective to begin with?

The implications of all this are legion. For one, it adds an additional layer of complexity to Smith's (2007:33) cogent discussions of "nature as accumulation strategy," in which he argues that the "horizontal integration of nature into capital" (the exploitation of material nature) is now being complimented by the "vertical integration of nature into capital" through the "production of nature 'all the way down'" and "its simultaneous financialisation 'all the way up.'" A focus on the circulation of liquid nature further complicates this picture. Liquid nature, I have argued, depends on a conceptualization of ephemeral value that blurs Smith's horizontal and vertical axes of nature-as-capital beyond recognition. It moves through these intermittently and simultaneously, as a frenzied circulation of a seemingly integrated "nature" and nature.

The analysis also complicates Smith's (1996; 2007:25) discussions of the "production of nature," as well as Garland's (2008) concept of "the conservationist mode of production." While I agree with Smith's epistemology behind the idea of the production of nature as taking both material and discourse serious, I believe that conserved nature as capital in the context of contemporary capitalism emphasizes that "formerly distinct spheres of analysis" – production, distribution, consumption and circulation – are converging more than this thesis can give credit for (Graham, 2007: 7). Being overly "productivist" can blind analyses for "other processes that simultaneously socialize nature" (Castree 2000:285) while it also obscures the ephemeral and hybrid character of value in contemporary hyper-capitalism.<sup>8</sup> Likewise, the concept of a "conservation mode of production" cannot do justice to the ways in which nature and conservation are increasingly becoming "valuable" in the global economy, namely as fictitious capital, which depends on the ever-increasing velocity of circulation.<sup>9</sup> Nature is not only produced. It is constantly

on the move, along with fictitious versions of the very forces that produced it, through simultaneous and intertwined processes of circulation, consumption, distribution, and production.

Yet, while having said this, the analysis at the same time leads us to the argument that the emphasis in the creation of value has shifted from production to circulation. The Marxian theory of value would stress that value is ultimately produced through the surplus extracted from labour in production, which in turn happens through the appropriation of nature. This becomes problematic, of course, when environmental services circulate as fictitious capital without having been produced by human labour. In fact, the idea of capitalist conservation says that humans should be paid to *forego* the creative appropriation of nature. As such, capitalist conservation is at the same time an acknowledgement of production and its role in the transformation of nature, as well as its (hoped for) negation. These two opposites, in turn, are brought together in the idea that natural capital commodities (seem to) skip the phase of material production to focus on the *production of circulation*. Central in all of this is the elimination of the (traditional) role of labour, and hence the questioning of what Hannah Arendt referred to as "the glorification of labor as the source of all values" (1998:85). In other words, the point of capitalist conservation becomes giving (ephemeral) value to the elimination of labour's appropriation or transformation of nature.

Interestingly, Hannah Arendt, in the 1950s, already criticized Marx in a similar way. In *The Human Condition* she argues that Marx' conceptualization of labour as being directly embedded in the life process through the metabolism of nature leads to a "fundamental and flagrant contradiction" in his value theory (1998:103-104). She argues on the one hand that "when Marx insists that the labor 'process comes to its end in the product,' he forgets his own definition of this process as the 'metabolism between man and nature' into which the product is immediately 'incorporated,' consumed, and annihilated by the body's life process." On the other hand, she insists that "while it was an 'external necessity

8 Although obviously not for all – many people in the world are still clearly caught in capitalist relations that are not all that hybrid as conceptualized here.

9 Moreover, the term is actually confusing as it seems that the 'conservation mode of production' is somehow different to the 'capitalist mode of production,' while Garland (and others, see Brockington and

Scholfield, 2010) indeed argue that conservation is a capitalist mode of production, and not a self-standing mode.

imposed by nature' and the most human and productive of man's activities, the revolution, according to Marx, has not the task of emancipating the laboring classes but of emancipating man from labor; only when labor is abolished can the 'realm of freedom' supplant the 'realm of necessity.'" Interestingly, the capitalist system is now trying something similar: to emancipate capital circulation from labour and its role in the transformation of nature as a way of "off-setting" other labour processes that do (need to) continue to transform nature. This, of course, is inherently contradictory, showing again how fictitious capitalist conservation is becoming.

Unfortunately, it is difficult to see this contradiction for what it is, which leads me to a second reason why it is important to emphasize circulation. This is because of Marx's argument that circulation develops into a "coercive external force" that becomes "an end in itself" (Marx 1976:253; 381, see above). Of course, production, distribution and consumption can also become "ends in themselves," yet it is only their converging totality aimed at accumulation *through circulation* that becomes a "coercive external force." Hence, while circulation itself is indeed (continuously) produced, distributed and consumed, as a totality it seems to have become an external force that affects us all – albeit in highly differentiated ways.

This, in turn, is further intensified in the context of hyper-capitalist circulation, a maelstrom that moves at incredible speed and velocity, continuously taking on (and shedding) bodies, information, technologies, natures, relations, spaces and time as it proceeds. Hyper-capitalism, as Graham (2007:1) stresses, is "hyper" indeed, creating the possibility that its circulation has significant potential to be used and abused as a seemingly external force that magically creates value for those who can step in and out of this circulation when they want to (see also Marazzi 2011). While we see the evidence of this all around us, particularly in the financial sector, we again immediately have to stress the limits of circulation as an "external force" since the growth of the circulatory circuit of production, distribution and consumption of capital and values can absorb only so many "free-riders." In other words: somewhere, someone still has to produce, distribute or consume something, or,

paraphrasing Leyshon and Thrift (2007), speculative structures can only be build on more mundane structures, and these are interwoven in complex ways.<sup>10</sup> Similarly, fictitious conservation has its limits, and is thus never truly free from more traditional forms, even though these limits are always continuously pushed under capitalism.

## Concluding Thoughts

Conservation, it seems, is increasingly becoming its own negation. Where once it might have been a Polanyian counter-movement against the ecological contradictions of capitalism, this is no longer the case (Igoe et al. 2010). Capitalist conservation has become an important instrument for the production of surplus value on its own, and a way to "off-set" and so seemingly legitimate more conventional methods of producing capital. This has meant that conserved nature itself needed to become capital, to become "value" and to be able to circulate within the ephemeral hyperspheres of contemporary capitalism. Marx, while recognizing that the soil was one of the "original sources of all wealth," believed that capitalist commodities could only ever have value if they incorporated the interaction between labour and material nature (Marx 1976:638; see also Arendt 1998). These days, we see something different. Humanity has become so fearful of its own capability of destroying all this wealth that it is increasingly "willing to pay"<sup>11</sup> for its value to be recognized on the explicit condition that it does not incorporate the interaction between labour and material nature. Characteristically, it does so by further bringing inherent contradictions in capitalism to new heights and levels, in this case to what I have called "fictitious conservation."

Fictitious conservation precariously tries to link the conservation of material nature via its "environmental services" to contemporary hypercapitalism and its emphasis on the circulation of ephemeral values. Occasionally it might succeed in doing so

<sup>10</sup>The simplistic way in which Mandel et al. (2010: 49) argue that "short-term volatility in the price of the derivative does not affect the underlying asset" is therefore wholly unfounded and a disturbing act of wishful thinking.

<sup>11</sup>Finding out people's 'willingness to pay' for conservation is one of the favorite subjects of much mainstream ecological economics literature, as though this is synonymous with 'legitimacy.'

and indeed “save” some material nature from the onslaught of more “traditional” capitalist expansion. This, however, cannot be concretely verified if, for all intents and purposes, the link between consumers of liquid nature and the conditions and relationships that produced it, has been severed. But this is hardly the point. The central paradox of fictitious conservation is not that it has little chance of not “working,” but rather that it ultimately is not really about conservation at all. It is first and foremost about capital; generating value that is of use in and to contemporary capitalism. This is, I argue, what the severing of the link between material natures and ephemeral values signifies. Ironically, conservation’s latest financialised products, such as conservation derivatives, “sustainability enhanced investments,” mitigation banking, biodiversity offsets and others, are still “marketed” under the heading of “environmental services,” to try and emphasise direct links with material, biophysical natures. But it is the attempt at delinking that made these schemes attractive to capitalists, and this should therefore be the starting point of their characterisation.

If this sounds “cynical,” I would argue that it is – unfortunately – only the start. Truly cynical is that it no longer matters that in the complexity of turning conserved nature into capital, conservation has become fictitious; it can still sell. All that it needs is a compelling brand: a memorable logo, some catchy slogans, smooth marketing campaigns, visually captivating websites, celebrity spokespeople, and a take

home message that “everybody wins.” It can make people “feel good” in the face of serious problems that seem to be going out of the rational, technical control capitalism thrives on. No wonder, then, that Sian Sullivan (2009, and companion piece) talks about a profound manifestation of “cultural poverty” through the seeming incapacity to think of nature as anything in any other but capitalist terms.

Yet none of this is unforetold. Fictitious conservation is but one manifestation of the *intensification* of capitalism – rather than its *extensification* (Smith 2007) – and in line with Carolan’s critical realist distinction between Nature, nature and “nature”, the point for capitalist expansion is to penetrate *deeper* into rather than merely wider across reality. Hence, the uptake of conservation into the capitalist system signals that the hegemony of neoliberal capitalism is strong indeed, despite, or perhaps because of the recent crisis (Igoe et al. 2010; Büscher and Arsel 2012). Indeed, the incorporation and celebration of its own contradictions may well be the basis of our current hegemony’s perhaps unprecedented strength. To believe that nature can be conserved by increasing the intensity, reach and depth of capital circulation is arguably one of the biggest contradictions of our times. The only way, then, to confront the contemporary contradictions around conservation is by working from and acknowledging both the “deep structures” and the contemporary dynamics of capitalism, lest we continue to have conservation politics and policies based on symptoms rather than real causes.

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