ous organisational forms - those Guattari, and inspirational for olitical and activist contexts - mmodity markets and alliances organisations and foundations, that the '... smooth space and e an irresistible revolutionary offer a multiplicity of vibrant consolidations of power in new ling up the different cognitive aman relationships that I have

re towards affirming a critical ver' of animist epistemologies ty of producing what Deleuze ving an advantage': a call for simal, or -molecular', through r of music, to the machines of pers'. <sup>106</sup> In understanding and worlds, then, there is a relevant reactivate such different and es the discipline of not feeling t step to take, when all around theless, '[f]rom the howling of es'<sup>107</sup> we need now the courage

ism, The Centre for Critical and ber 2009. I thank Mike Hannis ences drawn on in this essay.

# A CONTRIBUTION TO THE CRITIQUE OF POLITICAL ECOLOGY: SUSTAINABILITY AS DISAVOWAL

## Leerom Medovoi

This is now Our doom; which if we can sustain and bear, Our Supream Foe in time may much remit His anger.

John Milton, 1667

#### **DEFINITIONS AND IMPLICATIONS**

What exactly is sustainability? This question is no mere philosophical exercise. Over the last decade, the word 'sustainability' has become a compulsively used word to get at some unspecified but ubiquitous notion of an environmentally ethical and conscious way of life. Businesses, cities, neighbourhoods, buildings, and lifestyles can all be praised as 'sustainable' or criticised as 'unsustainable'. Moreover, there are substantial resources and interests behind the word. Governments, businesses, and civil organisations on all scales are investing heavily in pursuit of 'sustainability,' perhaps because they genuinely believe that this pursuit will improve the quality of life, but quite evidently too because they believe it will give them a competitive advantage vis-à-vis their peers, or perhaps even function as a brand with which they can effectively market their activities. This is not to say that 'sustainability' is not also a principle widely appealed to by both radical environmental and global justice movements. But what makes 'sustainability' interesting and worthy of analysis is precisely its ability to be simultaneously appropriated by corporate and governmental sectors.

My home university, for example, recently elected to make 'sustainability' a central feature of its mission, not least because it had received an extraordinarily large grant from a local foundation to do so. At a recent conference funded by this very grant on 'Sustainability and the Humanities', many scholars proposed that our critical ecological insights, goals or visions are in fact better captured by other words, such as restoration, responsibility, or partnership. Yet one cannot but be struck by the fact that neither the local foundation nor the university would have for a single minute considered funding a program on 'Restoration and the Humanities' or 'Responsibility and the Humanities'. What is it about 'sustainability' that enables the word to mobilise wealth and power so effectively? What does it say that this particular word, as opposed to any other, expresses the ecological hopes and fears of so diverse and typically

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1. I'm thinking here of Nietzsche's investigation of the 'value of values by way of the etymologies of 'gut' and 'schlecht' in On the Genealogies of Morals: A Polemic, Walter Kaufman (trans), New York, Vintage Press, 1967, or Raymond Williams's entire classic lexicography, Keywords: A Vocabulary of Gulture and Society, New York, Oxford University Press, 1984.

2. World Commission on Environment and Development, *Our Common Future*, New York, Oxford University Press, 1987, p. X

3. See http://
dictionary.oed.com.
proxy.lib.pdx.edu/
cgi/entry/50243648/
50243648se1?single
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4. See http://
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ype=word&queryw
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show=10&single=
1&sort\_type=alpha

antagonistic an array of social actors?

Thinkers ranging from Friedrich Nietzsche to Raymond Williams remind us that the present value of words - their connotative tensions and hidden resonance - emerges in striking ways when we revisit their lexical histories and etymologies.1 'Sustainability' is often traced back by its advocates to the 1987 Brundtland Report's definition of 'sustainable development' as 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs'.2 And indeed, if one understands 'sustainability' to designate the quality of 'forms of human economic activity and culture that do not lead to environmental degradation, especially avoiding the long-term depletion of natural resources', then the Oxford English Dictionary can confirm that this meaning does not date much further back than 1980, or perhaps to the 1970s if we consider certain limited references to 'sustainable growth'.3 However, the verb 'sustain' upon which the contemporary notion of 'sustainability' depends, reaches all the way back to Old English, where one finds several meanings that remain active and relevant.

The most expected of these meanings in the OED is to 'cause to continue in a certain state; to keep or maintain at the proper level or standard', a sense that straightforwardly suggests our ecological appropriation of the word. However, to 'sustain' has at least two other clusters of meanings that bear interestingly on what the word has become in the twenty-first century. Firstly, 'sustain' can mean to 'uphold the validity or rightfulness of; to support as valid, sound, correct, true, or just'. 4 We still use this sense of the word when, for example, in juridical contexts we speak of 'sustaining' an argument. It is this meaning cluster, I suggest, that lends the word much of its moral force. It is taken for granted that 'sustainability' refers specifically to the maintaining of something that is humanly valued, whether it be clean air or an eco-system (something valued in 'nature') community bonds and cultural traditions (social values), or the production of wealth (monetary value). To refer to the 'sustainability' of crime, disease, or poverty seems preposterous precisely because it runs counter to the ethical claim of 'right' that the word is meant to invoke. This ethical meaning is in turn framed by yet another meaning in which to 'sustain' is to 'furnish with the necessaries of life'. This is the connotation that sustainability shares with the word 'sustenance'. In alluding to a notion of nourishment, 'sustainability' thus evokes an ethics of 'provision'. Underneath the descriptively neutral sense of maintaining something at a certain level indefinitely into the future, therefore, comes this idea of the rightness of providing or nourishing the indefinite needs of both people and the world they inhabit. Much of the appeal of 'sustainability' to both political progressives and humanities scholars is that it apparently calls for reflection on what is worth sustaining, and hence on the ethical and political stakes of the properly nourished life, one in particular that seeks the best possible balanced diet between the needs of human beings and those of their natural and social environments.

There is yet another cluster different direction. To 'sustan withstand it, or even, as the O submit to (evil, hardship, or da formerly also sorrow, death); to of '. 5 We still employ this sens severe injury'. This is a striking valence of the others. Instead instead a suffering unto the elens of this connotation, to spemuch injury we can withstand so much trying to eliminate as

Perhaps the best way to t sustainability discourse is to dr Like sustainability, tolerance is good, naming our capacity to in a pluralist society. However, an ambiguous ideal. Although secondary one that always sup (the right to property in ones forth). So what does tolerance serves to mitigate against discri in a position to actually enjoy the the call for 'tolerance' of peop may often serve to 'circulate rae than to alleviate them precise are some people who must be who need to be tolerated (all t politic).6

In her own turn to the OED of 'tolerance,' which can mean or hardship; (2) 'the action of authority'; and (3) 'the dispos opinions or practices of others' share one important possible m. In its political and ethical sense people (religious or racial others) within your body politic. The people contrast, would refer to suffer or processes that we would ultime or processes that we would ultime.

I would like to suggest that sustainability captures an unce tolerance supplements, and unpolitical liberalism, so sustainate and, ultimately, capitalism itself Raymond Williams remind tative tensions and hidden evisit their lexical histories ed back by its advocates to istainable development' as ent without compromising own needs'. And indeed, if quality of 'forms of human environmental degradation, natural resources', then the is meaning does not date 1970s if we consider certain ever, the verb 'sustain' upon y' depends, reaches all the eral meanings that remain

DED is to 'cause to continue er level or standard', a sense appropriation of the word. ters of meanings that bear twenty-first century. Firstly, htfulness of; to support as his sense of the word when, ustaining' an argument. It ie word much of its moral y' refers specifically to the d, whether it be clean air or munity bonds and cultural ealth (monetary value). To overty seems preposterous aim of 'right' that the word urn framed by yet another ne necessaries of life'. This the word 'sustenance'. In ility' thus evokes an ethics itral sense of maintaining e future, therefore, comes ing the indefinite needs of he appeal of 'sustainability' nolars is that it apparently and hence on the ethical ife, one in particular that ne needs of human beings nts.

There is yet another cluster of meanings, however, that pulls in a radically different direction. To 'sustain' something can also mean to endure or withstand it, or even, as the OED indicates, to 'undergo, experience, have to submit to (evil, hardship, or damage; now chiefly with injury, loss as objective, formerly also sorrow, death); to have inflicted upon one, suffer the infliction of '.<sup>5</sup> We still employ this sense of the word when we speak of 'sustaining a severe injury'. This is a striking definition precisely because it inverts the valence of the others. Instead of suggesting the support of life, it signifies instead a suffering unto the edge of death. Understood primarily from the lens of *this* connotation, to speak of sustainability is in fact to consider how much injury we can withstand or endure. It suggests damage that we are not so much trying to eliminate as to find a way to survive.

Perhaps the best way to understand the work of this dark subtext of sustainability discourse is to draw an analogy with another concept, tolerance. Like sustainability, tolerance is also taken to be an ethical value and a positive good, naming our capacity to accept cultural, religious, or racial difference in a pluralist society. However, as Wendy Brown has argued, tolerance too is an ambiguous ideal. Although it is considered a liberal value, it is a distinctly secondary one that always supplements the primary rights of the individual (the right to property in oneself, to free speech, assembly, the vote, and so forth). So what does tolerance bring to liberalism? The assumption is that it serves to mitigate against discrimination so as to ensure that all individuals are in a position to actually enjoy their liberal rights. In fact, Brown suggests that the call for 'tolerance' of people of colour, immigrants, or gays and lesbians may often serve to 'circulate racism, homophobia, and ethnic hatreds' rather than to alleviate them precisely because it always presupposes that there are some people who must be tolerant (the normative citizenry) and others who need to be tolerated (all those positioned at the periphery of the body politic).6

In her own turn to the OED, Brown finds strong support for this reading of 'tolerance,' which can mean: '(1) the action or practice of enduring pain or hardship; (2) 'the action of allowing; license, permission granted by an authority'; and (3) 'the disposition to be patient with or indulgent to the opinions or practices of others'. Interestingly, 'tolerance' and 'sustainability' share one important possible meaning: sufferance. But there is a difference. In its political and ethical sense, tolerance refers to suffering the presence of people (religious or racial others) you would prefer not to be nearby or included within your body politic. The political and ethical meaning of 'sustainability,' by contrast, would refer to suffering at a withstandable level certain practices or processes that we would ultimately prefer to do without.

I would like to suggest that this close parallel between tolerance and sustainability captures an underlying political logic of our era: just as tolerance supplements, and ultimately makes tolerable the hegemony of political liberalism, so sustainability serves to sustain economic liberalism and, ultimately, capitalism itself. The question I will attempt to answer for

5. Ibid.

<sup>6.</sup> Wendy Brown, Regulating Aversion: Tolerance in the Age of Identity and Empire, Princeton, Princeton University Press, 2008, p10.

<sup>7.</sup> Ibid., p25.

8. See, for example, the various addresses at Day 3 of the 2010 World Social Forum meeting, which was devoted to the theme, 'Earth Can't Sustain Capitalism.' http://www.treehugger.com/files/2010/01/world-social-forum-day-3-earth-cant-sustain-capitalism.php.
Accessed 3/13/2010.

9. The Shell Report, People, Planet, Profit, can be found at http://www-static. shell.com/static/ responsible\_energy/ downloads/ sustainability\_ reports/shell report 2001. pdf. See Wikipedia for the assertion that Elkington is the inventor of triple bottom line accounting: http://en.wikipedia. org/wiki/Triple\_ bottom\_line.

10. The commissioner offered this formulation at the Social Sustainability Forum, Portland State University, May 6, 2009.

11. Thomas N. Gladwin, 'A Call for Sustainable Development', Fathom: The Source for Online Learning, http://www.fathom.com/feature/122214/index.html, 2002, p2.

'sustainability' is therefore parallel to the one that Brown asks of tolerance: how does 'sustainability' stand in as a compensatory substitute for some more profound ethical critique and in lieu of the impulse to a deeper political transformation? To be sure, 'sustainability' can sometimes be used to express that deeper political transformation, as it has for example in its invocations at the World Social Forum.<sup>8</sup> But the word's connotation of tolerating damage permits it to work in exactly the opposite fashion, as a disavowal of that transformation. How exactly might this be so? This question can best be answered by first considering how to interpret the damage that is presupposed by the corporate invocation of 'sustainability'.

#### DAMAGE CONTROL

The damage that 'sustainability' asks us to tolerate is principally environmental, but interestingly the 'environment' in question does not refer simply to the natural world within which human life operates. Sustainability, emerging as it did out of the 'sustainable growth' and 'sustainable development' movements, has always referred quite directly to economic systems, or to be more precise, the system of capital accumulation. In relation to this system, even corporate sustainability discourse is profoundly aware of the fact that the 'environment' necessarily includes both natural (non-human) and human lifeworlds.

Consider, for example, the now widespread concept of 'triple bottom line accounting', first coined in 1994 by corporate responsibility guru John Elkington, which calls on companies to track their practices in the three areas of economic, social, and environmental sustainability, or as Shell Oil referred to them in the title of its 2001 handbook, 'people, planet, profit'. 'Economic sustainability' has always been a concern of capitalists, who seek after all to stay in business and continue to turn their profit. Triple bottom line accounting, however, asks capital to also attend to the costs that might be pushed off onto the natural and social worlds around it.

In essence, then, triple bottom line accounting - the effort to measure sustainability - treats nature and society precisely as 'environments' of capitalism, asking businesses to quantify the costs of their activities: to the air and water, but also to the poverty levels, employment opportunities, perhaps even the quality of schools and transportation. Sustainability claims for itself an ethical high ground compared to other business practices precisely because it recognises that these dual environments must endure if capital accumulation is itself to keep expanding. As the City of Portland's sustainability commissioner recently put this (in a somewhat vampiric aphorism), being sustainable means 'wanting to stay in business forever'. <sup>10</sup>

An even more powerful expression of the 'environmentalisation' of nature and society can be seen in the following diagram, which appears as Figure 1 of an essay titled 'A Call for Sustainable Development' by Thomas N. Gladwin, a prominent business professor at the University of Michigan.<sup>11</sup>

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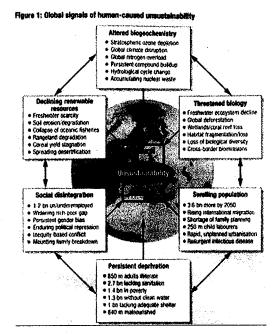
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e litany of damage to which



'sustainability' refers, produces a perfect and frightful symmetry between the injuries inflicted upon 'nature' and humanity. Even as soil erodes, fish stocks collapse, and forests disappear, so too do families disintegrate, acts of political violence accelerate, famine, homelessness, and disease increase. The reason why this chart represents global 'unsustainability' is the unstated yet implicit assumption that these continuously re-inflicted wounds have become excessive, and may soon become too much for either nature or humanity to bear.

However, Gladwin is neither an environmental scientist nor a sociologist, but a business professor. His article's principal goal is to indicate the relevance of these conditions for 'those engaged in global business'. To be fair, Gladwin makes a strong ethical appeal, asking his readers to care about the severity of this dual crisis for its own sake, on the grounds of the intrinsic value (or sacredness) of natural and human life. But inevitably, the appeal turns also to that other kind of value, the one signified by the *exchange-value* of natural and human life as mediated by the money-form. As he notes in his wind-down for the section on relevance,

such instability adversely affects the investment climate, furthering the downward spiral in socio-economic and environmental decay. Heavily populated swathes of the planet disappear from the strategic 'radar screen' for business and market development.<sup>12</sup>

12. Ibid., p4.

Implicit in Gladwin's discussion is the presumption that business and investment practices are not *in and of themselves* unsustainable. There is no necessary contradiction between capital accumulation and social and natural well-being. His point is simply that if the natural and social environment of

capital accumulation continue to degrade, they will eventually come back to haunt the economic system.

Ironically, this business-centred logic of sustainability actually agrees with some aspects of certain eco-Marxist positions about capitalism and ecology, especially those of perhaps the single most influential eco-Marxist theorist, James O' Connor. O'Connor has argued that, in addition to the 'internal' economic contradiction once described by Marx between forces and relations of production, capitalism also possesses a second, external contradiction through which it is led to impair 'its own social and environmental conditions'. including natural inputs into production, human labour power, and the social infrastructure that makes it possible for people to work together. 13 Capitalism undermines its own conditions of production precisely because of its 'self-expanding' nature, its ever-increasing need for more natural inputs, labour, and infrastructure. The contradiction lies in the fact that capitalism in general needs these conditions to be met, yet each individual capitalist seeks to avoid paying for them so as to stay competitive, and thus does as little as possible to support their reproduction. As a result of this contradiction between capitalism's systemic need to preserve its preconditions and the aim of individual capitalists to 'externalise' the costs of reproducing them, the natural inputs, quality labour, and social maintenance become increasingly expensive. This 'cost squeeze' eventually leads to a crisis of profitability.

O'Connor's argument bears some striking similarities to Gladwin's. Both consider the growing damage to nature and human life to ultimately threaten the accumulation process, and see capitalism as facing a profound crisis in its underlying conditions. Yet there are important differences as well. Gladwin would not concede that capitalism has in and of itself caused this crisis. The top of his diagram claims to be listing the 'global signals of human-caused unsustainability [emphasis-mine]. The specifically economic system from whose point of view Gladwin writes and to which he urges change appears nowhere in the diagram. It is not profit-seeking corporations, but human beings per se who are inflicting these wounds on themselves for reasons that remain unspecified. Gladwin tacitly includes business practices as part of the problem insofar as he directs his plea to 'industry leaders and management theorists'. Many capitalists surely degrade the conditions of their own production in search of a quick profit. But Gladwin cannot admit to a necessary 'second contradiction' of capitalism precisely because his goal is to imagine and urge the creation of a new kind of capitalism that recognises the long-term unprofitability of depleting nature and humanity, and can find an alternative to doing so.

What persuades Gladwin that this is possible? Unlike O'Connor, Gladwin does not believe that individual capitalists will lose out to their competitors if they increase their costs in order to reduce the amount of social and natural damage their business inflicts. In short, Gladwin does not believe that 'sustainable' businesses are less competitive. On the contrary, he makes exactly the opposite assumption that they will be *more* competitive. Why?

Precisely because he does a production, but rather as formalives off the 'income' general these'. 14 We can therefore even 'manufactured capital' (tools goods) according to their 'comanufactured') ecological, manufactured capital, these organised economically so the capital will necessarily make that squanders and destroys such 'natural capitalism' is a corporations can lead the res

This deeply flawed argur several levels. It presupposes a capitalist reduces the natura practices (polluted water, cle of civil rights, broken families if there were such a gain, the opposed to anyone else (such

Let us consider each of the assume that reduced social and has already decided to describut in what sense is this true? 'the conventional neo-classical different types of capital', he is assumption of all, that capital monetary income. In fact, we different kind of inputs (raw capital is best understood as in a production process that is words, capital is necessarily emoney has bought, and even are put in motion in order to

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13. James O' Connor. Natural

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Julike O'Connor, Gladwin e out to their competitors he amount of social and Gladwin does not believe On the contrary, he makes e more competitive. Why?

Precisely because he does not see nature and humanity as conditions of production, but rather as forms of capital. As he puts it, 'a sustainable society lives off the 'income' generated from its stock of capital, not by depleting these'. 14 We can therefore evaluate the long-term potential profitability of 'manufactured capital' (tools, technology, stocks of producer and consumer goods) according to their 'consequences' for the four other types of ('non-manufactured') ecological, material, human, and social capital. Since, like manufactured capital, these types also produce revenue streams, a society organised economically so that its companies invest in these four types of capital will necessarily make more money and be more profitable than one that squanders and destroys them. By demonstrating to the public that such 'natural capitalism' is more profitable than the old economy, green corporations can lead the rest of us toward a sustainable future.

This deeply flawed argument represents an act of wish-fulfilment on several levels. It presupposes the two following dubious ideas: 1) that when a capitalist reduces the natural and social damage inflicted by his production practices (polluted water, clear-cut forests, expropriated communities, loss of civil rights, broken families), there is actually a gain in *capital*, and 2) that if there were such a gain, the individual capitalist would be its beneficiary as opposed to anyone else (such as his competitors).

Let us consider each of these in turn. The only reason that one would assume that reduced social and natural damage yields capital is because one has already decided to describe humanity and nature as forms of capital. But in what sense is this true? Although Gladwin claims to have abandoned 'the conventional neo-classical assumption of near-perfect substitution for different types of capital', he in fact subscribes to the most basic neo-classical assumption of all, that capital is simply anything that helps you generate monetary income. In fact, while a production process may require many different kind of inputs (raw materials, machinery, labour, infrastructure), capital is best understood as the store of value that confronts the labourer in a production process that is bent on producing even more value. In other words, capital is necessarily either money or the means of production that money has bought, and even then, these things only become capital if they are put in motion in order to generate profit.

The salmon in the river, the oil reserves under the ground, the knowledge in my head, the communication infrastructure in my town, are at first not even money. They are, initially, natural or social phenomena, things that perhaps belong to other kinds of systems (ecological systems, systems of knowledge). From a human viewpoint, they are usually also forms of wealth (that is to say, they are useful to us). They can also be made part of production processes to which they are indispensable. But it is only when they are enclosed (turned into private property) so as to become saleable inputs in a capitalist production process that they interact for the first time with capital. The money for which they are exchanged can now indeed become capital. But at no point are they themselves capital because in no sense are they self-expanding forms of value.

14. Gladwin, op. cit., p4.

Fish may breed more fish (though oil will not breed more oil), but outside of a production process they cannot play a part in the accumulation of capital. To call them 'capital' is therefore to engage in an obfuscating metaphor. While it is true that capital is accumulated through production processes that absolutely depend upon natural and social elements, those elements are not therefore themselves capital. Rather, they must be 'mixed' with capital in order to breed more capital. Gladwyn clearly thinks that, by preserving more of nature and society, we create a larger income stream for ourselves. in the future. But this is a strange argument for someone who claims to have emphatically rejected the neoclassical doctrine that these alleged kinds of 'capital' can be easily substituted for one another. If the fish stock that we save will yield an income stream in the future (natural capital converting to money capital), then presumably we will also be able to replace the depletion of any particular natural capital with money capital. Either they are convertible, or they are not. One cannot say that they are not convertible for 'unsustainable' companies, but convertible for the 'sustainable' ones. The real problem here is that Gladwyn is calling nature and society a form of capital when it is convenient for imagining the future profitability of green capitalism, but admitting nature and society as radical different from capital to the extent that he needs to criticise the damage to people and the planet (as opposed to profit).

To further analyse the oxymoron of 'sustainable capitalism,' consider that the recycled toilet paper of a company like Seventh Generation can meaningfully reduce the aggregate amount of deforestation, yet there is no reason to assume that, because part of the planet's forest thereby escapes damage, extra profits will accrue to Seventh Generation. On the contrary, the fact that they choose not to 'externalise' the cost of growing replacement trees means either that they must charge more for their toilet paper, or else that their profit margin will have to be lower than their less 'sustainable' competitors. A company like Seventh Generation can only sell its toilet paper because a fraction of the consuming population wants to pay a kind of 'forest protection' tax. Recycled products thus become a niche market in a larger system of production that probably does only marginally less damage than before.

In the long run, it is likely that all toilet paper companies will be pushed to use recycled paper as Seventh Generation does now. But the damage to forests could likely continue apace for a very long time before this point is reached. One might even argue that the 'green alternative' intensifies the problem by presenting the voluntarism of consumer choice as an acceptable alternative to the legal protection of people and planet. Like 'tolerance', the weak gesture of 'sustainability' may be prolonging rather than alleviating the damage it claims to address.

One of the few scenarios that would lead one to expect Seventh Generation to profit directly from its early conversion to recycling, of course, would be if they actually owned the forest that would otherwise be getting chopped down. If companie production process needs, the end up having lower costs rethis to be true, we must intro and social production input form of private property.

### PROGRESSIVE NEOLIBER

Ultimately, the corporate sus needs to be understood as a conseem very strange to refer to without doubt what I am sugapolitical phenomenon than I account for what might be done are several strong reaso in this way: its conversion of creating a 'market-based solemphasis on the discourse of

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one to expect Seventh in to recycling, of course, ald otherwise be getting chopped down. If companies generally own the parcels of nature that their production process needs, then down the road the 'sustainable' ones might end up having lower costs relative to their competitors. But notice that for this to be true, we must introduce a different reason for referring to natural and social production inputs as 'capital': namely that they appear in the form of private property.

#### PROGRESSIVE NEOLIBERALISM

Ultimately, the corporate sustainability discourse that I have been critiquing needs to be understood as a certain version of neoliberalism. It might initially seem very strange to refer to any advocates of 'sustainability' in this way, and without doubt what I am suggesting is that neoliberalism is a much broader political phenomenon than has been previously acknowledged. We need to account for what might be described as neoliberalism's 'progressive' wing. There are several strong reasons for interpreting the sustainability movement in this way: its conversion of humanity and nature into capital, its goal of creating a 'market-based solution' to capitalism's destructiveness, and its emphasis on the discourse of responsibility.

The turn to the language of 'capital' for talking about both nature and humanity should be read for the important work that it performs. Perhaps the most obvious place to start is to see how committed 'sustainability' is to market-based solutions to the dual forms of environmental damage. Perhaps the most important consequence of rejecting O'Connor's 'second contradiction' is that there is no longer any need to require a non-economic agent, like the state, to step in and regulate the effects of capital accumulation on social and natural life. It is a very common argument that the state's strong role in Keynesian-Fordist capitalism derived from the assumption that the unregulated market has pernicious social effects (low wages, hazardous work conditions, degraded health and education) which government must seek to counteract by extracting taxes from capital and providing the services and protection that it would avoid paying for if it could. 'Sustainability' is therefore emphatically post-Fordist in its insistence that the market itself offers the solution to its own problems.

One of the signature features of neoliberalism, according to Michel Foucault in his recently published lectures *The Birth of Biopolitics*, is that it fundamentally changes the meaning of market society and its principal subject, homo economicus, from one modelled on the act of exchange (the producer who trades a good with another producer) to one that is instead defined by the act of competition (the entrepreneurial subject who seeks to corner a market). Understood in this way, 'sustainability' names an almost paradigmatically neoliberal project whenever it takes the form of an enterprise that makes itself competitive in the marketplace by prudently investing in its store of natural and social capital. As Foucault also notes, neoliberal economic thought insistently converts the traditional category of labour into

15. Michel Foucault, The Birth of Biopolitics: Lectures at the College de France 1978-1979, Graham Burchell (trans), New York, Palgrave McMillan 2008, p223-224. one of human or social capital. From the viewpoint of the worker, according to neoliberal arguments, work is actually a means of improving yourself, acquiring capacities that promise an 'earnings stream' for the future. <sup>15</sup> In this sense, neoliberalism also returns to the idea of the moral economy because personal responsibility is a key concept for the accumulation (as opposed to the squandering) of one's own human capital.

It isn't hard to see that 'sustainability' extends this principal to the social level, demanding that we invest in both the 'human capital' of the population and the 'natural capital' of a region's physical resources because, if not wasted and destroyed as they are now, sustainable businesses will provide their society with an invaluable, long term revenue stream. If nature and society endure, in short, our 'manufactured capital' can grow in an enduring way too. Not only does the language of 'sustainability' ask us to think about 'nature' and 'humanity' in solely economic terms, but even its narrowly quantitative economic analysis offers no critical perspective from which to consider whether the expansion of money or manufactured 'capital' might require the exploitation of nature and humanity. Since those latter categories are also forms of capital, all we ever need to worry about is whether we are expending them at a rate that is out of synch with our 'manufactured capital', and that therefore calls for some harmonisation.

Now, in analysing how 'sustainability' obscures what capitalism actually does to nature and humanity by calling both of them 'capital', I might seem to contradict my earlier assertion that the very definition of 'sustainability' alludes to the damage inflicted by capital. I would suggest, however, that the contradiction lies not in my analysis, but in the language of sustainability itself, which seeks both to point toward the 'structural cause' of its own emergence - the serious injury that capitalism wreaks on the very social and natural systems upon which it depends - while also seeking to deny this causality, so that capitalism can save the day, if not by healing the damage, at least by reducing it to a level that can be endured. To put this point another way, 'sustainability' discourse functions according to a classically Freudian logic of disavowal: it is a split discourse that, in a single symptomatic gesture, both denies and refers to a painfully traumatic reality.

If 'sustainability' indexes nature and humanity's depletion only to convert them back into 'capital,' the very force that depleted them in the first place, then the remaining goal of this essay will be to run a critical analysis in the opposite direction by converting 'nature' and 'humanity' into that which lies on the other side of capitalism's dialectic, labour. O'Connor does not help us all that much since, unfortunately, he treats both of them as 'externals', as conditions of production, but not themselves as integral parts of production. In so doing, he loses a powerful opportunity to explain the 'political ecology' of capitalism's destructiveness through an analysis of what is unique to its production process, namely the extraction of surplus value.

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# THE REPRODUCTION OF EXPLOITATION

In her later writings, the late Teresa Brennan offered a fascinating alternative suggestion as to why capital accumulation may potentially require damage to nature. By contrast with O' Connor, who locates nature as extrinsic to the accumulation process, as part of the conditions of production, Brennan views labour and nature as equivalent factors of production that help to constitute a single basic contradiction in capitalism between what she calls 'substantial energy' and 'artificial speed'. Although her larger analysis cannot be dealt with adequately here, Brennan's basic point is that labour power constitutes only one important source of what she calls 'living energy' that can add value in production. In her view, Marx was so focused on the 'subject' of the worker that he tended to assume that all other inputs in production - land, natural resources, technology - were equally 'dead', adding nothing to the production process other than their inert matter, to which the 'living energy' of labour then added value as it fashioned out of these materials a new product. At stake here is the form of wealth that is specific to capitalism. For Marx, wealth was anything considered of use to human beings in any historical epoch. Like many naturally appearing phenomena (air, water, edible plants and animals), commodities have use-values too and are therefore also a form of wealth. But Marx stressed that what distinguishes the commodity-form from natural use values is that it has a two-fold character, in which its use-value is combined with another kind of value (its capacity to be exchanged for other commodities) that becomes symbolised by the money-form.

Brennan's argument that nature too contains 'living energy' capable of producing surplus value in the production process thus runs directly counter to Marx's own argument that only labour power produces value. Marx certainly reckoned with capitalism as destructive of nature and thus of the sources of wealth, as he indicates in relation to agricultural capitalism, which he famously called a 'progress in the art, not only of robbing the worker, but of robbing the soil', a process that simultaneously undermines 'the original sources of all wealth - the soil and the worker'. But under capitalism at any rate, the labour theory of value is absolute: the value (or prices) of products do not quantify nature's contribution.

Brennan argues against this position on interesting grounds. Marx sees surplus value (or profit) as being made possible by the difference between the cost of labour power that a capitalist must pay (determined by the amount of abstract labour time that goes into producing it) and the value that is produced by the actual labour that the capitalist has purchased. Brennan implicitly revises this to say that surplus value is in fact made possible by the cost of living energy of any kind that a capitalist must pay (determined by the amount of abstract living energy that goes into producing it) and the value that this living energy in turn produces. This argument clearly requires an account of the 'abstraction' of living energy, which Brennan delivers through a discussion of the 'reproduction time' of various kinds of living energy: the 'social necessary' time it takes for

16. Karl Marx, Capital Volume One, Ben Fowkes (trans), New York, Vintage Press 1998. a forest to grow back, for a tomato to grow on a tomato plant, for the soil to be rejuvenated, and so forth. Capital will use up these energies as quickly as it can manage to do so, since the more such energy released, the more surplus value or profit is created. As she puts it,

There is no real check on the speed with which variable capital can be used up, apart from whether a particular form of variable capital can be replaced, meaning that its reproduction has to be guaranteed.

Brennan's theory is not entirely fleshed out, but the thrust of her argument would be that there is a kind of 'quantification' based on replacement time that capitalism performs on natural wealth so as to render it commensurable with its value system, and so that it can then seek to exploit all forms of 'living energy' that bear the capacity to produce more value than they need for their reproduction: from commodity crops to fossil fuels. Part of the brilliance of Brennan's analysis is the observation that capital can trade off between the exploitation of labour power and the exploitation of nature, acting on what she calls the 'law of substitution':

All other things being equal, capital will take the cheapest form of energy adequate to sustaining production of a particular commodity at the prevailing level of competition ... If certain natural forces capable of adding value within the sphere of industrial production are interchangeable, then capital's range of cheap options is greatly extended. It has in its back pocket not only Marx's 'reserve army' but Heidegger's 'standing reserve' of nature.<sup>17</sup>

17. Teresa Brennan, p. 269-270.

While much of standard environmental economics has argued that the path to a more 'sustainable' future will require us to have capitalism assign monetary value to nature so that the natural 'costs' of its activities can be calculated ('cap and trade' for instance), Brennan's argument implicitly suggests that this is always already taking place at a deeper level. To be sure, capitalism may assign to much of nature a reproduction cost of zero, based on the presumption that there is an effectively unlimited supply, or at least a substitute, for that form of living energy. Or if no ready substitute is at hand, it may well take the risk of 'discounting' its value, assuming that a replacement source will be found before the moment of truth arrives. But these are simply forms of hyper-exploitation of nature. The most that environmental economics asks for when it calls for the marketised 'internalisation' of the costs of natural depletion is the kind of exploitation that exists for labour, where the 'wage' is typically always paid at the minimum level necessary to reproduce that resource (labour power) for the purposes of capital accumulation.

Brennan's thesis can be readily transferred from the natural world to social human life. Most obviously, labour power itself must be nourished by a great number of sources, including (as feminist analysis teaches) the unremunerated physical and emotional labour but surely also including any to support (culturally, politic the capacity of wage labourer these relations as embodying this is to say that capital extrapolations in order to add their we would expect to see social whouseholds, weakening states and the like. One interpretations thirty years would be a caccumulation processes, a 'di so as to increase the rate of p

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he natural world to social t be nourished by a great ches) the unremunerated physical and emotional labours and activities of the household and family life, but surely also including anything and everything in human life that serves to support (culturally, politically, ideologically, educationally, emotionally) the capacity of wage labourers to return to work. We can choose to consider these relations as embodying human labour too, but another way to put this is to say that capital extracts living energy from a wide range of social relations in order to add their value to its products. If it can discount these, we would expect to see social depletion and thus disintegration: fragmenting households, weakening states, declining schools and transportation systems, and the like. One interpretation of the neoliberal anti-tax movements of the last thirty years would be a deliberate effort to extract, as part of capital's accumulation processes, a 'discount' on the value of human social relations so as to increase the rate of profit.

Brennan's work greatly advances a critique of the political ecology of capitalism, yet she is less helpful with the question of what is so emphatically political about capitalism's sped-up (hence artificial) ecology. We can address this by considering the fact that Brennan asks us to expand Marx's notion of 'labour power' into what she might well have chosen to call 'biopower,' were it not for the fact that this term already carried the rather different theoretical content developed by Michel Foucault. But is Brennan's emphasis on 'living energy' ultimately so distinct from Foucault's attention to how the 'administration of life itself' becomes a preoccupation for political modernity? For Foucault, the concept of biopower delineates the regime of power that emerged in Europe alongside industrial capitalism, including both the microtechniques of institutions and the macro-techniques of the state itself as they came to regulate the human body.

These political technologies enabled an accumulation of bodies to occur in conjunction with the vast accumulation of capital that commenced in the early nineteenth century. Foucault puts it like this:

It is as though power, which used to have sovereignty as its modality or organizing schema, found itself unable to govern the economic and political body of a society that was undergoing both a demographic explosion and industrialization. So much so that far too many things were escaping the old mechanism of the power of sovereignty, both at the top and at the bottom, both at the level of detail and at the mass level.<sup>18</sup>

Given that 'power' is a term that, in the modern era, crucially brings together the sphere of the economic ('power' as that which fuels the production process) and the political ('power' as that which organises and regulates the social field), the concept of biopower can be extended via an ecological reading far beyond Foucault's own intentions. It is only due to another residual humanism that Foucault presumed that the state's absolute authority over 'life and death' was limited to the human population. Certainly, the modern state has historically understood itself as authorised to manage life in all its

18. Michel Foucault Society Must Be Defended, Picador 2004, p249. forms within its borders.

We might say that 'power' is nothing other than the organisation of 'capacity' itself, whether in the sphere of the economic or the political, and therefore represents, in a broad sense, the mobilisation, concentration, and deployment of living energies. Since certain living energies are capable of releasing more energy than is needed to reproduce that capacity, these are the forms of living energy that must be governed and administered for the maximisation of their productive power, and hence for the potential surplus value that they can produce: human populations and social organisation, land, plant and animal life, and stored energies from the past (fossil fuels, for example). There is no question that the modern state, along with the wider system of regulatory institutions and practices that are its political environment, has sought to govern all of these sources of 'living energy' so that the accumulation of surplus power can in turn allow for the continued expansion of capital accumulation. What Michel Foucault termed 'biopower' must therefore refer to several things at once: to the managing of life as well as to the extraction or deployment of life energy. It must also indicate the willingness to mete out whatever death proves necessary to allow for ongoing capital accumulation.

How does this theoretical excursus reflect back on the meaning of sustainability? One interpretation would be that the discourse of sustainability is a new intensification in the exercise of biopower, a refined version that demands a continuous accounting (the triple bottom line) of what is the value of what we kill when we extract value from what remains living. Its purpose would be to ensure that we do not, for the sake of short-term profitability, discount the value of nature and society to the point where we undermine the very viability of what biopower judges to be 'life worth living'. In short, sustainability seeks to gauge the kind and amount of life that must not be killed now so that the process of surplus value extraction can continue indefinitely into the future.

Sustainability discourse also asserts that this accounting process ultimately (long-run) increases profitability, that, in the mantra of the movement, sustainable capitalism will generate a larger profit if for some strange reason it does not seem to do so already. Part of what this move accomplishes is to assert capitalism's moral capacity to self-regulate, a claim that presupposes as common sense the absence of any contradiction between the expansion of capital and the preservation of natural and social life that might necessitate state (or popular) intervention. In this sense, sustainability can again be seen as a specifically *neoliberal* exercise of biopower. Brennan's argument suggests that there is indeed a contradiction at hand, and thus that the biopolitics of sustainability is itself ultimately unsustainable as currently formulated.

Earlier in this essay, I suggested that the discourse of sustainability is structured according to the logic of disavowal, at once admitting and repudiating the potentially mortal damage that capitalism inflicts on nature and human life alike. Psychoanalysis teaches us that disavowal is itself a

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kind of psychic splitting that serves the purpose of allowing the ego to be preserved in the face of a deeply traumatic reality, one that it can neither ignore nor fully admit. It might seem on first glance that the traumatic reality engaged by sustainability would be the injury itself, the mortal wounds inflicted upon the planet and humanity by the ever-expanding process of capital accumulation. In fact, this is a reality to which the corporate discourse of sustainability readily admits. One need only glance again at the diagram that appears earlier in this essay for confirmation of this. In point of fact, sustainability typically advances a narrative that introduces the damage (the 'inconvenient truth' of the narrative's dark first half) before the moral call to action (launching sustainable practices and natural capitalism) is proposed with the aim of averting crisis and recuperating the future. What corporate sustainability discourse cannot admit, therefore, and what the word 'sustainability' unfortunately helps it to disavow, is the prospect that such injury is a necessary and 'sustaining' feature of capital accumulation. What then is the 'traumatic reality' that animates such versions of sustainability? Not the damage itself, not even the fact that capitalism inflicts this damage. The reality that traumatises is the unwaivering desire for capitalism itself when faced with what this damage portends. Lurking behind these invocations of sustainability is the horrifying reality that, if forced to choose between the death of planetary and human life as we know them and the death-of-capitalism, we might actually choose the former. Until sustainability discourse has traversed this desire, it will tend to abet the very horrors that it alleges to confront.