



Article

Ecocide, genocide, capitalism and colonialism: Consequences for indigenous peoples and glocal ecosystems environments

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Abstract

Continuing injustices and denial of rights of indigenous peoples are part of the long legacy of colonialism. Parallel processes of exploitation and injustice can be identified in relation to non-human species and/or aspects of the natural environment. International law can address some extreme examples of the crimes and harms of colonialism through the idea and legal definition of *genocide*, but the intimately related notion of *ecocide* that applies to nature and the environment is not yet formally accepted within the body of international law. In the context of this special issue reflecting on the development of green criminology, the article argues that the concept of ecocide provides a powerful tool. To illustrate this, the article explores connections between ecocide, genocide, capitalism and colonialism and discusses impacts on indigenous peoples and on local and global (glocal) ecosystems.

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Introduction

Let us not, however, flatter ourselves overmuch on account of our human victories over nature. For each such victory nature takes its revenge on us.

(Engels, 1964: 183)

Man has consciously and unconsciously inflicted irreparable damage to the environment in times of war and peace.

(Draft Ecocide Convention 1973, cited in Falk, 1973: 93)

In the past few decades, there has been growing recognition of the long legacy of colonialism in the form of injustices and denial of rights affecting indigenous peoples. At the same time, there has been a more slowly developing articulation of the case for rights to be attributed to non-human species and/or aspects of the natural environment (Berry, 1999; Cullinan, 2011; Sollund, 2012). International law can address some extreme examples of the crimes of colonialism through the idea and legal definition of *genocide* (which, in its original formulation by Raphael Lemkin, reflected a legal and moral critique of colonialism, discussed further below). The intimately related notion of ecocide, however, is not yet formally accepted as a legally defined term within the body of international law (the Rome Statute referring only to widespread, long-term and severe damage to the natural environment within the context of war).

Butt (2013) (quoted in Dunlap, 2018: 553) identifies three

primary characteristics of colonialism: (1) the external domination of one people by another; (2) the imposition of colonial 'culture and customs onto the colonized'; and (3) the exploitation of the colonized (e.g. slavery, natural resource extraction and 'misappropriation of cultural property').

Domination, imposition and exploitation occur in various ways and can result in what Crook and Short (2014) call 'ecologically induced genocide'. Amplifying this point, Dunlap (2018: 557) argues that it is important to recognize the 'relationship and inseparability of Indigenous people and their land'. The ways in which 'ecologically destructive interventions'—for example, killing or destroying animals, fish, crops—are experienced may 'undermine the life, existence and resistance of indigenous populations' and can be identified as an example of 'textbook counterinsurgency "starvation" tactics' that may form a 'part of a larger extermination strategy' (Dunlap, 2018: 557). As argued here, the theft of nature, the over-exploitation of land and water (Brisman and South, 2016; Goyes et al., 2017), and the desecration of connections between people, their cultures and their lands (Samson, 2003), can all have ecocidal and genocidal

consequences for vulnerable indigenous peoples who are materially and spiritually dependent upon endangered environments (Dunlap, 2018: 557).

In the context of this special issue reflecting on the development of green criminology, this article begins by arguing that the concept of ecocide provides a powerful tool for work in this field. It illustrates this through consideration of connections between ecocide, genocide, capitalism and colonialism. The ecocide–genocide nexus is then described in terms of consequential impacts on indigenous peoples and on local and global (glocal) ecosystems.

A green criminological perspective?

Criminology questions ‘taken for granted’ definitions and classifications of crime, deviance and harm, offering alternative proposals about means by which justice and rights can be achieved. Even so, calls for paradigm change and radical re-orientation, such as the Schwendingers’ (1970) pioneering argument for the embrace of a human rights approach, can take time to gather support. Similarly, given the amount of violence, harm and victimization involved in the history of exploitation of colonized lands, it might have been expected that criminology would have taken a greater and earlier interest in such genocidal periods and events. With a few exceptions (Cohen, 1993; Day and Vandiver, 2000), however, this was not the case. As we will see, the history of the concept of genocide is closely intertwined with that of ecocide, yet until recently, the latter was even more unfamiliar in criminology. This has been changing as a green criminology has developed (Brisman and South, 2017a, 2017b) and the idea of ecocide has now been taken up in recognition of the damage being done to the planet (Higgins et al., 2013; Larsen, 2012: 47–52).

Acknowledgement of the significance of crimes against nature and how these are intertwined with crimes against the dispossessed and colonized (peasants, indigenous peoples and others) has taken time to gain traction in criminology (Lynch and Stretesky, 2014: 6–8, 173–175). This is, in part, a consequence of the northern focus and western orientation of the field (see, for example, Carrington et al., 2016), and, particularly in the USA, of its quantitative bias (see, for example, Lynch et al., 2017), as well as the general epistemic disregard of the social sciences towards other ‘knowledges’ (Foucault, 1989 [1961]). These characteristics are being addressed in the critique expressed as a ‘southern criminology’, as outlined by Carrington and colleagues (Carrington and Hogg, 2017; Carrington et al., 2016, 2018) and in relation to an ‘absence’ within green criminology, by Goyes and South (2017a). This is important because the degree of attention paid to ecocide and genocide reflects the distribution and control of knowledge and power. As Goyes and South (2017a) argue, processes of epistemicide, absences and amnesia have been common within criminology, and this can explain a relative lack of attention to matters such as environmental crime and harm, related abuse of rights and cases of victimization, especially when they affect the Global South, the indigenous and the colonized. And while various writers within green criminology have argued that a global approach is essential (see, for example, Ellefsen et al., 2012; South, 2016; White, 2011), this has not always meant that relevant work in languages other than English or from fields of study other than criminology have been acknowledged (Goyes and South, 2017a).

The first published use of the term ‘green criminology’ can be found in Lynch (1990: 3), where the objective was to reveal and respond to a ‘variety of class related injustices that maintain an inequitable distribution of power while destroying human life, generating hunger, uprooting and poisoning the environment of all classes, peoples and animals’. This was an important statement of a political economy approach. South’s (1998: 215) article proposing ‘a green field for criminology’ adopted more of a ‘rights’ orientation, noting the ‘development of environmental rights and law as a major transnational field of study’ and the emphasis placed by non-governmental organizations (NGOs) on the ‘intimate link between political protest to preserve human rights today and the action required to preserve the environmental rights of future generations’. Hence, this call for a transnationally applicable response to environmental crimes and harms was conceived in terms of shaping, extending and ‘future-fitting’ *human* rights to recognize the intertwined co-dependence of humanity and the global environment—and thus the justice and logic of recognizing rights for both. South (1998: 226) argued that within criminology, the study of environmental violations and threats could be considered alongside ‘other “new” topics of international and global importance, notably crimes of war [...] and violations of human rights’, but no direct link was made to early thinking about a named crime of ecocide. The proposition, although developing and explored in some legal and political quarters (see later), was not yet well known in criminology. The article did, however, note Del Olmo’s (1987) important analysis of the impact of the use of herbicidal chemical sprays against plant-drug crops in various Central and Latin American countries. These actions led to contamination of food and water, and a variety of health problems, and Del Olmo argued this constituted a ‘crime of war’ and a violation of human rights. To describe the multiple harms inflicted, Del Olmo introduced the pioneering concept of ‘eco-bio-genocide’. This was an idea that should have received far greater attention and been developed further, linking, as it did, ecocide, genocide and injuries and injustices caused by the indifference of the powerful as they engaged in ‘a type of crime committed on the pretext of preventing another crime,’ which is, as she wrote:

A crime which has the characteristics of ecocide by virtue of making war with certain methods, systems, or prohibited weapons. Vietnam was a good example, with napalm and Agent Orange. Today the new war is on drugs and its weapons are toxic chemicals, especially herbicides prohibited in their place of origin for causing poisoning, contamination of food, and serious environmental problems, like *paraquat*, *glyphosphate* and *Agent Orange*.

(Del Olmo, 1987: 30)¹

Others began to make similar connections, highlighting the environment as subject to contestation, conflict and commodification (see, for example, White, 2008). Boekhout Van Solinge (2008: 26), for example, employed the concepts of ecocide and genocide in his examination of the exploitation of natural resources and conflicts in several parts of Africa and the ravaging of nature as humans pursued wealth that could be derived from timber and minerals. First, he pointed out that Berat (1993) had called for the ‘right to a healthy environment’ and outlined the basis for a crime of ‘geocide’ that should be recognized in international law. Second, he noted that Gray (1996) had explicitly set out a

case for an ‘international crime of ecocide’. Other relevant studies described the activities of the mega-pharmaceutical, food and chemical companies, their aggressive neo-colonialist pursuit of intellectual property claims and the assertion of ownership of nature (see, for example, Mies and Shiva, 1993; South, 2007; Walters, 2006; Wyatt, 2014). For example, ‘bio-piracy’ has a long history but has been accelerating in a neoliberal, globalized world, with the appropriation of knowledge and redefining of rights leading to the displacement of traditional owners and indigenous people, often facilitated by force (e.g. use of state police, military and private security services (Goyes, 2018; Goyes and South, 2015, 2017b; see also Wyatt and Brisman, 2017)).

Green criminology is now seeing an expansion of work that connects to the ‘southernizing criminology’ project and discovering that various writers have already been using ideas like ecocide, ethnocide and genocide in their work or are now starting to do so. As Weinstock (2017: 147) points out, ‘native communities have previously invoked and employed the concepts of ecocide and ethnocide’, providing the example of Mapuche communities seeking recovery of lands taken by the state. As the Mapuche protestors argue, it is as a result of the ‘expansive logic of the extractivist capitalist model that, through mining and oil exploitation’, communities are being impoverished, face dispossession and desertification of their land, and a lack of drinking water. This, they say, is a “‘planned assassination” by economic power and the state (ecocide and ethnocide)’ (quoted in Weinstock, 2017: 147–148).

Prior to Weinstock’s writing, South (2009, 2010) noted that use of the term ‘ecocide’ was not unfamiliar in environmental commentary and served as a ‘word of warning’ and ‘signal of late-modern awareness of the ecocidal tendencies of advanced (and now many developing) nations’ (South, 2009: 41), while White and Heckenberg (2014: 44–59) devoted a chapter of their book to an elaboration of the concepts of environmental justice, ecological justice and species justice, and the contribution that the idea of ecocide could make if established as a crime that calls for serious response (see also Larsen, 2012). As Higgins and colleagues (2013) argued, climate change and potentially irreversible harms to the planet require radical additions to and revision of human legal systems. A green criminology concerned with the creation of effective systems for the administration of environmental justice should be supporting a proposal to introduce into international law new measures to address contemporary ecocidal trends. In the next section, we say more about what this might mean and how the idea of a named crime of ecocide has developed. This necessarily leads to discussion of the ecocide–genocide nexus.

A time for a law to protect the Earth?

The aim to protect the ecology of the Earth is timely given the threats of climate change, pollution and pressures on food production, and has been receiving recognition in various ways. In 2010, the World People’s Conference on Climate Change and the Rights of Mother Earth, held in Cochabamba, Bolivia, 22 April, proposed a Universal Declaration of Mother Earth Rights (Bolivia, 2010). More recently, in 2017, there were calls to establish an International Court for the Environment to give space to the advancement of ecological justice (ICE Coalition, 2011), and in March of that year, the Whanganui River

in New Zealand was granted legal standing, guaranteeing its own set of rights, similar to those of a legal person (Aljazeera, 2017; White, this issue). Among various expressions of recognition of the urgent need for action has been a campaign to define in legal terms, and to criminalize, ecocide, led, most prominently, by international lawyer and environmental activist, Polly Higgins (see Higgins et al., 2013).

The Eradicating Ecocide (eradicatingecocide.com) campaign draws attention to the numerous examples of ecocide and its human consequences worldwide, at a time when preventing further ecological destruction could not be more pressing. It is one of a number of campaigns that highlights the particularly devastating impact that environmental destruction has on indigenous peoples who depend on the health of their local environment not only for their own physical well-being but also for their spiritual and cultural vitality. This emphasis is important, although of course the concept of ecocide has relevance beyond the plight of indigenous peoples: calling for the end of ecocide is for the benefit of the planet, its ecosystems and all those beings that depend on them. Currently, there is no internationally recognized *crime* of ecocide and hence there is no ecocide-based body of international law to prosecute those who are destroying our environment and ecosystems (Higgins et al., 2013). An international crime of ‘environmental destruction’ exists as a *war* crime, but this has no applicability in times of peace, and ‘environmental destruction’ does not capture the environmental embeddedness of humans and non-humans, nor the full scale of threats to this relationship, or the role of capitalism and resource extraction in generating such threats.

The Eradicating Ecocide campaign may not adopt an overtly anti-capitalist agenda, but in its preference for the concept of ‘ecocide’ rather than ‘environmental destruction’, it invokes a holistic understanding of the problem as an *ecological* crisis, and the concomitant need for the protection of ecosystems, rather than an abstract and external ‘environmental’ crisis. This is important because, as Kovel (in Short, 2016: 62, emphases in original) argues:

the crisis is not about an ‘environment’ outside us, but the evolution, accelerating with sickening velocity, of an ancient lesion in humanity’s *relation* to nature [...] We do not have an environmental crisis, then, but an *ecological crisis*, in the course of which our bodies, ourselves, and the whole of external nature are undergoing severe perturbations. Since production is the key to human nature, the ecological crisis is also about what can be called the *conditions of production*. These include energy resources, technologies, and also the bodies who have to get to work each day.

Of course, a considerable amount of scholarship and activist writing in green criminology, and more widely, attends to and describes environmental destruction on a large scale, in numerous locations, affecting various groups and ecosystems. Some of this work may employ the term ‘ecocide’ but its meaning for purposes here has a particular provenance. Higgins (in Short, 2016: 63) has defined ‘ecocide’ as: ‘the extensive damage to, destruction of or loss of ecosystem(s) of a given territory, whether by human agency or by other causes, to such an extent that peaceful enjoyment by the inhabitants of that territory has been severely diminished’. This definition is the basis of a proposed amendment to the Rome Statute—the treaty that established the International Criminal Court

(ICC) that entered into operation on 1 July 2002 (Eradicating Ecocide, 2017). In short, it is envisaged that any extensive damage, destruction to or loss of an ecosystem can constitute ecocide. 'Extensive' can be widespread, long-lasting or severe. To define these terms, the Eradicating Ecocide campaign draws upon the 1977 United Nations Convention on the Prohibition of Military or any other Hostile Use of Environmental Modification Techniques (ENMOD): *widespread*—encompassing an area on the scale of several hundred square kilometres; *long-lasting*—lasting for a period of months, or approximately a season; *severe*—involving serious or significant disruption or harm to human life, natural and economic resources or other assets.

Under the Rome Statute, the ICC can investigate and prosecute only the core international crimes where states are unable or unwilling to do so themselves (ICC, 2002). These are the existing four Crimes against Peace (genocide, crimes against humanity, war crimes and the crime of aggression); as such, ecocide has been referred to as 'the missing fifth Crime against Peace' (Higgins et al., 2013).

Higgins outlines two types of ecocide (Short, 2016: 64). First, human-induced or 'ascertainable ecocide' is ecocide caused by human agency, where an individual responsible for the activity can be identified. Usually, Higgins points out, this is corporate-induced ecocide. An example would be 'extreme energy' extraction and the ecological disaster that is the Athabasca tar sands in Alberta, Canada (Short, 2016: 159–184). Second, ecocide by 'other causes' is that which involves catastrophic events (referred to in law as an 'act of God'), such as flooding or an earthquake. These can be termed cases of 'non-ascertainable ecocide' because no single perpetrator can be identified. Of course, this type of ecocide cannot be stopped but when human-induced ecocides, which destroy carbon sinks and create escalating carbon emissions, are prevented, it is possible that this could reduce the frequency of climatic extremes and mitigate the negative impacts of naturally occurring ecocides (although occurrence of the latter is now being significantly influenced by human activity).

The campaign initiated by Higgins continues but has also stimulated the formation of other groups. 'End Ecocide on Earth' (EEE) (endecocide.org) shares the aim of seeing ecocide recognized as a *crime* around the world and incorporated into the Rome Statute as an international Crime against Peace under the jurisdiction of the ICC. According to the EEE, '[i]t is in our collective power to make this change happen [...] This is the radical change we need, and we are building a global movement to make it a reality' (Short, 2016: 64). Through lobbying, information dissemination, civil society mobilization, and in partnership with similar organizations, the EEE has created a transnational advocacy network calling for protection of the ecosystems on which all life depends. Both Higgins and the EEE aim to establish ecocide as an international crime on the grounds that the nature of the crimes currently covered by the Rome Statute—genocide, crimes against humanity, war crimes and the crime of aggression—is clearly anthropocentric, reflecting a concern only with atrocities and actions committed by humans with human implications and impacts (see White, this issue). Including a crime of ecocide in the mandate of the ICC would broaden the Court's scope to include crimes that are *ecocentric* in nature and that affect the ecosystems of the planet. Moreover, by recognizing the kind of *systemic structural* and *cultural* violence (Galtung, 1990) produced by industrial modes of organization, a radical provision of a law against ecocide could help to undercut the

legal-epistemological structures of international law rooted in the western rationalist/enlightenment tradition and would take steps towards *decolonizing* international law (Lindgren, 2018). So far, the system has suppressed legal recognition of ecocide, arguably allowing ecological destruction.²

The EEE has developed the ‘Charter of Brussels’—a document for the creation of a European (as a realistic medium-term goal)—and then an international (the ultimate goal)—Criminal Court of the Environment and Health. The ‘Charter of Brussels’ also calls for the inclusion of ‘environmental catastrophe’ in the definition of ‘crimes against humanity’, thus incorporating an environmental aspect in the already established crimes under the ICC’s mandate. This charter has now been supported by more than 85 organizations globally (End Ecocide on Earth, n.d.) and alongside other organizations and networks, the EEE has engaged in the International Tribunal on the Rights of Nature, established in 2015, which has monitored the United Nations Framework Convention on Climate Change Conferences. A fourth session of the tribunal, held alongside the 2017 COP 23 conference in Bonn,³ saw seven cases brought before it, each one representing indigenous peoples from around the world. Witnesses provided sometimes horrific descriptions of their experiences living close to ‘fracking’ sites or coal mines; others offered first-hand accounts of the destruction of rural and indigenous communities by increasing encroachment of infrastructure projects and industrial agriculture; still others told of being persecuted, attacked and criminalized for ‘defending Mother Earth’. Indigenous peoples were central, as both experts and witnesses, representing those more ecologically embedded peoples living in endangered environments, who are most vulnerable to the effects of ecocide (International Rights of Nature Tribunal, 2017; see also Goyes et al., 2017; for examples of campaigns of resistance by local communities, see, for example, <https://savevirunga.com/>).

The ecocide–genocide nexus

We adopt here a broader sociological understanding of genocide than that which often, and reductively, equates it with ‘Nazi-like extermination policies’ or mass death (Shaw, 2007: 48). Indeed, it is vital to understand genocide as a structure or process which foregrounds culture as the key concept, where culture is the glue that holds the group together and secures its structural integrity and ultimately its physical well-being (Schaller, 2008; Van Kreiken, 2004). For this reason and given the territorially bounded nature of many indigenous groups, ecocide (or the purposeful destruction of a multitude of ecosystems) can lead to genocide via the essential conduit of culture (Abed, 2006: 326; Brisman, 2013: 263).

In the view of Polish jurist Raphael Lemkin, the originator of the concept of genocide, culture is key to collective memory and each unique and distinctive cultural group is a *genos* deserving protection (Crook and Short, 2014). Thus, for Lemkin, it is culture that animates the *genos* in genocide. The social collective is ‘organic’, with biological, cultural, social and economic levels, all of which symbiotically depend on each other. Consequently, an attack on any level against what Lemkin (1944: ch. 9) termed the *essential foundations* of a group could cripple fatally the entire edifice of the group and

cause 'social death' (Card, 2003; Short, 2010a: 48). Forms of cultural destruction can result in the liquidation of the social group, just as surely as physical destruction.⁴

Unfortunately, during the protracted political wrangling over the drafting and ratification of the United Nations Convention on the Prevention and Punishment of the Crime of Genocide 1948 (the 'UN Convention'), the issue of 'cultural' genocide proved to be an insoluble problem leading to its bowdlerization, references to culture being left in only vestigial form (Curthoys and Docker, 2008: 14; Kuper, 1981: 31; Moses, 2004: 542).⁵ As Powell (2007: 532) argues, '[t]he wording of the Convention was shaped by the desire of its framers not to criminalize their own behaviour' leaving the defence of cultural groups to other international conventions on human rights and minority rights (Morsink, 1999). 'Social death' (Card, 2003), then, is the *sine qua non* of the crime of genocide that allows it to be distinguished from crimes against humanity or mass murder (Short, 2010b: 840). It is central to the evil of genocide, *even* when mass murder is the principal technique—and when land and ecosystems are bound up with the culture of a *genos*, ecological destruction drives 'social death' and therefore should be understood as *ecologically induced* genocide (Crook and Short, 2014).

Lemkin's understanding of genocide brought into sharp focus the nexus between genocide and colonization, showing genocide to involve a two-fold process of destruction of the group life of indigenous populations and their replacement by what Lemkin (1944: 79) called the 'national pattern' of the colonizers. In fact, his seminal book *Axis Rule in Occupied Europe* (1944), where he first coined the word genocide, and his unpublished magnum opus 'History of genocide', were both consciously structured to be positioned firmly within the long intellectual tradition of European legal and moral critique of colonialism dating back to the Spanish conquest of the Americas in the 16th century (Moses, 2008: 9–10). Thus, the neologism of genocide, contrary to popular opinion, did *not* stem from his treatment of the Holocaust or the Armenian genocide.⁶

Unfortunately, the long shadow cast by the UN Convention, the political expediencies of the Cold War and the impact this had on scholarship, more generally, and genocide studies, in particular, served to occlude this critical cultural dimension of the genocidal process. Yet, it is precisely the overlooked and misunderstood categories and properties of genocide—the key concept of culture and the insoluble link with colonization, *that are pivotal in capturing both the historical and lived experience of culturally vulnerable groups like indigenous peoples around the world*. In fact, the contemporary eco-destructive processes that help sever the relationship to the land that is key to the indigenous *genos* (e.g. processes manifest in industrial, agricultural, extractive and other projects) are necessarily preceded by a history of forceful and violent colonization of indigenous land by colonial-settler states, sometimes understood as 'accumulation by dispossession' (ABD) (Harvey, 2003).

A genealogy of genocidal structuring dynamics

The nature and form of what Crook and Short (2014) have previously called 'ecologically induced genocide' and, more precisely, the nexus between the capitalist mode of production (MOP), indigenous and place-based peoples at the frontiers of the capitalist MOP, and ecological destruction has morphed and mutated in history. In the post-Second World

War period, and more recently in the period of ‘recognition politics’ (Coulthard, 2014) and ‘reconciliation’ (Short, 2007) in various sites of settler-colonialism, the ‘logic of elimination’ (Wolfe, 2006) that underpins colonial settler land grabs, may involve industrial mining, farming and even national park schemes (Goyes et al., 2017).⁷ It is this nexus, which in the current phase of late capitalism has, according to Earth scientists and geologists, fundamentally altered the nature–society relationship causing an ‘anthropogenic rift’—a rift because the geological phase known as the Anthropocene (Brisman and South, 2018; Zalasiewicz et al., 2008) and its most immediate and pressing expression (climate change) mark a radical and dysfunctional shift in the interface between human civilization and nature. The cause is ‘growth-driven capitalism [which] is antithetical to a physical reality of finite resources. As the natural world is finite, capitalism is inherently ecologically unsustainable and “sustainable development” a dangerous oxymoron’ (Short, 2016: 188). The capitalist mode of organizing social (re)production is inherently anti-ecological and necessarily eco-criminogenic. In fact, in the age of climate crisis and the Anthropocene, ecocide (both ‘natural’ and ‘human-made’) will become a primary driver of genocide.

The structural mechanisms that account for the eco-destructive properties of capitalism can be illuminated by considering the pivotal role played by the appropriation of ‘use values’ from nature. In other words, we must study ‘human history from the standpoint of the social production of wealth which includes basic requirements of food, shelter and clothing, in addition to cultural and aesthetic needs’ (Crook and Short, 2014: 299). From here, we can proceed to identify the productive forces which include inter alia, tools, techniques inherited from the past, labour power and the *natural conditions* for its reproduction, natural resources and raw materials. These are necessary for the generation of wealth. But they also condition the corresponding relations of production that embody inequalities of (‘race’, class, caste, species) power, and the architecture of exploitation housed within those social relations.

The eco-destructive properties of the capitalist ‘treadmill’ violate everlasting nature-imposed conditions of production (Marx, 1976: ch. 7) and natural metabolic cycles. For the capitalist mode of production, use values, understood as (biologically and historically constructed) social needs, are produced solely to further the accumulation of capital and profit. Therefore, use values are produced as commodities for exchange on the market, embodying *both* use *and* exchange value, the latter being determined by the socially necessary labour required for its production. It is in the contradiction between these two that the source of the anti-ecological characteristics of capitalism can be found. In other words, the commodification of nature leads to an *undervaluation* of nature’s contribution to wealth creation, given that the sole measure of value is socially necessary labour time. Moreover, the value contradiction drives the artificial *homogenization* of nature and the *fragmentation* of local ecosystems in the production of commodities for sale because these are both properties of the commodity in a system of assumed universal equivalence and generalized commodity production. ‘Nature’ is reduced to being of importance only as a source of ‘natural resources’ (Vetlesen, 2017).

The remorseless focus on exchange value in the pursuit of endless capital accumulation and expanded reproduction, properly understood as an ecological process, requires more and more of what ecologists term ‘throughput of materials and energy’ (Burkett, 2014: 112), exacerbating the strains on the social metabolism of the capitalist system and

therefore on nature and the biospheric web—all of which eventually leads to *metabolic rift* (Burkett, 2014; Foster, 2000, 2005; Stretesky et al., 2013).⁸ Social formations are just as much a part of nature as any community of organisms and thus subject to the same natural and ecosystemic laws. Crucially, capitalism assumes the social separation of producers from the natural conditions of production that make possible a compulsion to perform surplus labour beyond immediate needs, to ignore natural limits and, crucially, to ensure dependence on the market.

As we shall see below, it is this alienation from nature (or ABD), and the compulsion to expand into what Anderson (2016) calls the ‘margins’ between the ever-enlarging capitalist world and the ‘social vitality’ of the non-capitalist world, inhabited by socially and culturally distinct indigenous and territorially bounded peoples, which underpins the political economy of the ecocidal-genocide of indigenous peoples.

Extreme energy and the metabolic rift

To give one modern example of a metabolic rift that is driving ecologically induced genocide of indigenous peoples, consider the process of ‘extreme energy’, whereby energy extraction methods grow more intense, unconventional and riskier over time as the easier to extract conventional sources are depleted (Short, 2016: 52)—all of which is associated with the insatiable demand for fossil fuels on the global markets, rooted in a system of ‘fossil capitalism’ (Angus, 2016; Malm, 2016). The Athabasca ‘tar sands’ in Alberta, Canada, noted earlier, can be viewed as an acute example of the extreme energy process. In this case, there has been an artificial division and fragmentation of the local ecosystem in order to extract oil, regardless of the anti-ecological effects that the resultant unnatural throughput and transfer of energy and materials has on the local environment and, critically, on the local *indigenous* population. The environmental externalities, for instance in the local waterways, have had a crippling impact on both the physical and *cultural* well-being of the local indigenous population (Huseman and Short, 2012) and have been associated with significant levels of colon cancer, leukaemia and lymphoma (Peterson, 2007). The struggle against industrial mining is de facto a struggle for survival. As George Poitras, a Mikisew Cree First Nation member in Fort Chipewyan, has observed:

If we don't have land and we don't have anywhere to carry out our traditional lifestyle, we lose who we are as a people. So *if there's no land*, then it's equivalent in our estimation to *genocide of a people*.

(Short, 2016: 181, emphases added)

To indigenous and place-based peoples, ‘Land is life’ (Wolfe, 2006: 387).

Discussion: The architecture of dispossession and the political economy of ecocidal-genocide

To link ecocide with the genocide of indigenous peoples around the world, we need to understand the *political economy of genocide*. In addition to the aforementioned

value-contradiction intertwined with the various industrial processes operating *within* the expanded reproduction of the circuits of capital, there also exist *extra-economic* processes of plunder or theft that alienate social groups from their lands through processes such as ‘enclosures’ or imposed private ownership.

These central economic mechanisms of invasion and annexation of indigenous land are ‘settler colonial expansionist land grabs’ (Short, 2010b: 837), expropriations otherwise known as *primary accumulation*: the violent and predatory process that originally transformed feudal relations of production into market relations (Glassman, 2006; Marx, 1976: chs 25–32). This process of primary accumulation is *the essence of colonization*. In other words, ‘territoriality is settler colonialism’s specific, irreducible element’ (Wolfe, 2006: 388). In terms of a green criminological (and moral philosophy) analysis, it is also important to point out that the invasion and destruction of land also means the colonization and destruction of non-human animal populations and their territories; it is not only the human species that is colonized (see, for example, Donaldson and Kymlicka, 2011). Essentially, the political economy of genocide involves a process of, first, primary accumulation, which facilitates and consolidates *de facto* and *de jure* control of indigenous land by creating the necessary legal and institutional architecture in the form of private property regimes and asserting the legal and political jurisdiction of the relevant settler-colonial state. The various eco-destructive industrial processes referred to earlier, then follow. For indigenous peoples living under settler-colonial states, which have still not decolonized their relationship to the indigenous First Nation populations, in legal, political and territorial terms, such as Australia (Short, 2007, 2010a, 2010b, 2016), or Canada (Crook and Short, 2014; Huseman and Short, 2012; Samson, 2003), this is a *contemporary, ongoing* lived experience. In the past, ABD meant both extra-economic dispossession *and* the process of proletarianization. In the modern context of ‘internal colonialism’, however, proletarianization is not the motive. Rather, the imperative to expand means expropriating indigenous *territory* and incorporating it into the normalized sphere of capitalist production, circulation and exchange.

Many have argued that the focus should, therefore, be not on the ‘capital relation’ but on the ‘colonial relation’ (Coulthard, 2014: 11). In the age of ‘recognition politics’, the ‘modus operandi’ of colonial power has taken on a new form, recasting settler-colonial–indigenous relations and effecting ABD through forms of *discursive* and *administrative genocide* made possible by the colonial-settler state (Alfred, 2009; Povinelli, 2007). Taken together with the ecocidal practices of capitalism operating within the realm of expanded reproduction, these sometimes naked, sometimes veiled, forms of ABD constitute *relations of genocide* (Barta, 1987) or a *mode of eco-genocidal destructive production*.

Conclusion

In late 2016, further progress was made towards facilitating the ultimate aim of the EEE campaign to make ecocide an international crime. Together with experts from all over the globe, the EEE announced its proposed amendments to the Rome Statute—the charter that, as noted above, established the ICC and defined its functions and mandate. The EEE contends that recognition of a *crime* of ecocide in peacetime would enable the effective

application of a set of principles and emerging norms through the establishment of an international criminal legal framework likely to ensure the safety of the planet, by protecting the global commons and ecological systems necessary to maintain living conditions on Earth, in compliance with the known planetary boundaries (End Ecocide on Earth, n.d.). On a more modest but significant and encouraging level, in September 2016, the Office of the Prosecutor at the ICC in The Hague announced it would, for the first time, concern itself with crimes that drive land grabbing and environmental damage. This is reflected in the ICC 'Policy paper on case selection and prioritisation', which notes in paragraph 41 that:

the Office will give particular consideration to prosecuting Rome Statute crimes that are committed by means of, or that result in, *inter alia*, the destruction of the environment, the illegal exploitation of natural resources or the illegal dispossession of land.

(Vidal and Bowcott, 2016)

It should go without saying that such action is needed. The Stockholm Resilience Centre (the 'Centre') (2017) identifies nine boundaries for the sustainability of life on this planet,⁹ and four of these are so vital they cannot be breached without catastrophic results. Despite this, the Centre reports that four of the nine boundaries have already been breached—by climate change, land-system change, loss of biosphere integrity and altered biogeochemical cycles. As the Centre points out, 'transgressing a boundary increases the risk that human activities could inadvertently drive the Earth System into a much less hospitable state, damaging efforts to reduce poverty and leading to a deterioration of human wellbeing' (Stockholm Resilience Centre, 2017). Pursuing preventative and deterrent actions against legally designated *crimes* of ecocide is one method of addressing the breaching of these boundaries. Dunlap (2018: 558) observes that '[t]he genocide–ecocide nexus is a long-term, continuous and coercive process operating by various means and methods'. Colonialism, imperialism and early 18th/19th-century 'transnational' commercial enterprise were built on claims regarding the benefits of external financial investment and the superiority of western/white scientific knowledge, often with appalling human and environmental costs (see, for example, Davis, 2001). The international legal order aided and abetted plunder and destruction through epistemic violence (Lindgren, 2018). Today, the interests of post-colonialism and modern corporate imperialism align in asserting that continual economic growth is sustainable and essential, and that scientific and technical solutions will overcome natural limits and human-constructed risks.

Although a 'post-colonial' world now sees indigenous peoples supported and represented by a number of international organizations, such as the United Nations Permanent Forum on Indigenous Issues, Assembly of First Nations, Survival International, the World Council of Indigenous Peoples, Indigenous Environmental Network (see Mowforth, 2014), and in Latin America, various nation states have incorporated multicultural citizenship and indigenous groups into laws and constitutions, nonetheless, as Mowforth (2014) argues, the increased rights granted to indigenous populations are more matters of paper than of real substance:

It is clear that indigenous peoples have been recognised; but it is also clear that legal recognition does not mean that the rights, territories, resources and cultures of indigenous peoples are respected. Governments, corporations, loggers, campesino farmers, cattle-ranching companies and many others still covet their land and resources, and continue to find ways to acquire them.

To return to our earlier themes of knowledge and power, it should appal us all that, as Smith (1999: 1) says, ‘the West can desire, extract and claim ownership’ of indigenous ‘ways of knowing, [...] imagery, the things we create and produce, and then simultaneously reject the people who created and developed those ideas and seek to deny them further opportunities to be creators of their own culture and own nations’. Law may serve humans, but history shows it does not serve the planet, nor does it serve all humans equally. The challenge for laws against ecocide and genocide must be to do better.

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Notes

1. Connections between similar issues have also been explored in the work of ecofeminists; see, for example, Mies and Shiva (1993).
2. Resistance to such recognition comes in many forms. For example, Greenpeace and other environmental organizations lost a recent lawsuit in Norway accusing the state of breaching §12 of the Norwegian constitution which grants all (humans) rights to a good and clean environment. The case relates to Norway’s oil extraction activities, but the argument was made that it is only emissions and harms caused in Norway that should count, not what Norway causes abroad. The case has been appealed to the Supreme Court.
3. The ‘COP’ is the ‘Conference of Parties’ to the UN Framework and is the supreme decision-making body for the Convention.
4. Short (2010a: 49) argues that despite the assertion by some genocide scholars that cultural genocide was always a part of a broader offensive on the essential foundations of the life of a group, a careful reading of the original Secretariat’s draft on the UN Convention which Lemkin supported, shows that cultural genocide is a standalone crime, implying Lemkin thought genocide could be exacted through cultural destruction alone.
5. On the social construction of the UN Convention and the vexed question of cultural genocide see Van Kreiken (2004, 2008). For a fascinating intellectual biography of Raphael Lemkin, see Irvin-Erickson (2017).
6. For a fuller discussion of this tradition and Lemkin’s place within it, see Fitzmaurice (1984).
7. In Kenya, indigenous groups the Sengwer, and Ogiek, have suffered corporate-driven, state-directed violence and forced evictions from their forest dwellings to make way for national parks and carbon offset schemes as part of the larger carbon markets. In this respect, the political economy of climate governance can be understood as a genocidal structuring dynamic (Ahemd, 2014).

8. Marx first developed his concept of the metabolic rift in the midst of the crisis of soil erosion in England in the 19th century (see Foster, 2000: ch. 5). The same model of industrial farming is driving a multitude of ecological crises. A recent UN report has shown that at current rates of social degradation with current industrial agricultural methods, we have only 60 harvests left (Arsenault, 2017). The same farming practices can account for what Monbiot (2017) has called 'Insectageddon', leading to a crisis in pollination.
9. See <http://www.stockholmresilience.org/research/planetary-boundaries/planetary-boundaries/about-the-research/the-nine-planetary-boundaries.html>.

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