

THE ECOCIDE-GENOCIDE NEXUS: A GREEN CRIMINOLOGY PERSPECTIVE

IL NESSO ECOCIDIO-GENOCIDIO. UN APPROCCIO DI GREEN CRIMINOLOGY

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Abstract

The impact and consequences of environmental crimes and harms on a planetary scale are becoming ever more devastating. Pollution, exploitation of species and destruction of ecosystems and landscapes are literally changing the world as we know it. The scale of ecocide is therefore widening to not only include specific territories but the eco-sphere that sustains life as a whole. Nonetheless, specific communities are affected, at least initially, more than others. Indigenous people are finding their culture and livelihoods directly threatened because of corporate exploitation of natural resources and the destroying of habitat. For many, environmental harms of this nature constitute a form of genocide. This article explores where and how the ecocide-genocide nexus manifests by considering factors such as geography, temporality, social status and the role of the nation-state.

Keywords: Green criminology • ecocide • genocide • climate change • Indigenous people

Riassunto

L'impatto e le conseguenze dei crimini e dei danni ambientali globali stanno diventando sempre più devastanti. L'inquinamento, lo sfruttamento delle specie animali e vegetali, la distruzione di ecosistemi e paesaggi stanno cambiando profondamente il mondo in cui viviamo. Specifiche comunità sono colpite, almeno inizialmente, più di altre. In particolare, le popolazioni indigene vedono la loro cultura e i loro mezzi di sostentamento direttamente minacciati a causa dello sfruttamento delle risorse naturali e della distruzione dell'habitat da parte delle *corporation*. Danni ambientali di questa natura costituiscono per molti una forma di genocidio. Questo articolo esplora dove e come si manifesta il nesso genocidio-ecocidio, considerando fattori quali la dimensione geografica, quella temporale, lo status sociale e il ruolo degli Stati-nazione.

Parole chiave: Green criminology • ecocidio • genocidio • cambiamento climatico • popolazioni indigene

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1. A green criminology perspective: a criminology of ecocide?

Over the last 25 years, “green criminology” has become familiar on an international level as a perspective oriented towards the opening of criminological paradigms to issues of environmental harms and crimes. Green criminology allows for the meeting of a wide range of theoretical orientations aimed at connecting a series of issues of crucial importance for today’s world: environmental crimes, harms and various forms of (in)justice related to the environment, plants and non-human animal species, and the planet as a whole. Without becoming a single unity, these approaches come together within an emerging broad perspective (see, e.g., Brisman, 2014; Halsey, 2004; Lynch & Stretesky, 2003; Ruggiero & South, 2013; South, 1998, 2014; South et al., 2013:28; Walters, 2010; White, 2008a, 2011, 2013). More specifically, green criminology represents a “conceptual umbrella” under which researchers and scholars examine and rethink from various perspectives the causes and consequences of different environmental harms, such as pollution, the deterioration of natural resources, the loss of biodiversity and climate change (see South et al., 2013: 28–29). While emerging within the framework of critical criminology, green criminology is marked by a constitutive openness that allows it to extend beyond the boundaries of a specific criminological tradition to become a theoretical laboratory for thinking about environmental issues in the richest and broadest meaning of the word (South et al., 2013). In this sense, green criminology seems to promote new “ways of looking” at the human – environment relationship – a peculiar “green gaze” that can expand the criminological understanding and imagination of environmental crimes beyond the existing criminological frames (White, 2003; see also Brisman, 2015). Following the horizons outlined so far, green criminology has moved towards a critical and original analysis of the multiple modalities of destructive transformation of the environment. This is certainly true as regards ecocide and in the innumerable forms in which it manifests itself in the contemporary scenario.

Going beyond the theoretical horizon of green criminology, some sociological studies have highlighted how ecocide can be a method of genocide when ecological destruction creates living conditions which threaten and affect directly the cultural and/or physical existence of a particular social group (Crook & Short, 2014). As in the sociological field it seems necessary to make a true paradigm shift so as to start a dialogue between “environmental sociology” and “sociology of genocide”, so in the criminological field it seems necessary to perform the same operation in order to approach the phenomenon of eco-

cide in all its dramatic topicality. This is why green criminology and the so-called “criminology of genocide” (Hagan & Rymond-Richmond, 2008) can find a common ground of exploration, borrowing from each other methods and approaches which might uncover some links that tie ecocide to genocide.

In this respect, some scholars highlight the fact that even though criminology has a (recent) history that shows the growth of studies on state, corporate and state-corporate crimes (Green & Ward, 2000, 2004; Kramer & Michalowski, 2005; Rothe & Kauzlarich, 2014), a “criminology of genocide” is still at the beginning (Rafter, 2016). The exception to this is that criminology dealing with Indigenous people and the devastating impacts that colonialism has had and continues to have on their lives, which in some circumstances can be described as no less than genocidal (Cunneen & Tauri, 2016). However, if criminology can be described as one of the many discourses that try to approach and empirically understand “evil” (Ceretti & Natali, 2009, in press; Merzagora, Travaini & Caruso, 2018), it is surprising that criminology started tackling genocidal phenomena in their different manifestations only so belatedly. This lack in the criminological field is so surprising that it itself requires an explanation. The reasons for this lack may be found partly in the methodological and theoretical limitations that plague our knowledge when it tries to observe phenomena of this complexity – first of all, the scale dimension of the crimes committed. John Hagan and Wenona Rymond-Richmond (2008, p. 897) wrote:

Like Raphael Lemkin, who coined the word *genocide*, Edwin Sutherland argued that it is important to identify white-collar crime as a crime, for purposes of both public discourse and scientific study. [...] Legal reasoning has obscured the recognition of genocidal victimization and allowed an underestimation of the role of the state in its collective racial framing. [...] More than 50 years after Sutherland added white-collar crime to the agenda of public sociology, it is time to do the same with Lemkin’s concept of genocide.

Thus, Hagan and Rymond-Richmond (2009) remind us that criminologists can and must take part in the important role of collecting and analyzing data on genocide and, we add, on the relationship between genocide and ecocide. To this end, the horizon of green criminology seems truly to offer a privileged observation point from which to investigate these phenomena that have now reached a global dimension.

2. The notion of ecocide

As discussed elsewhere (White, 2019), the term “ecocide” emerged in the late 1960s in response to the impact of war on the environment, and since then has been used in reference to the negative impacts on environments under peacetime as well as wartime conditions (Gray, 1996; Zierler, 2012; Higgins, Short & South, 2013). Recently the concept has been used to refer to the extensive damage, destruction to or loss of ecosystems of a given territory, and includes both natural (for example, pest infestation of an eco-system) and anthropogenic (that is, as a result of human activity) causes for the harm (Higgins, 2010, 2012). The concept has also been applied to the global scale insofar the consequences of climate change are planet-wide, transformative and catastrophic (White, 2018a). If such harms occur as a result of human agency (individuals, corporations and/or nation-states) then it is argued by some that these acts or omissions should be defined as a crime against the peace in international law (Higgins, Short & South, 2013). This does not necessarily entail that every individual person who is contributing to climate change should be considered as engaged in a criminal act (or the law should be amended to criminalise such behaviour). Rather, the argument is that those who wield significant power (either governments or corporations) are particularly responsible as they are better placed to make a difference if they change their behavior (White, 2019). Responsibility is or should be proportionate to contribution to harm (MacKenzie, Stobbs, & O’Leary, 2010).

The notion of ecocide is used to conceptualise a harm-defining process, but the causes and content of the harms vary depending upon how the concept is defined and applied; it does not always refer to a crime. For example, ecocide as an *ecological* concept can be used to describe natural processes of ecosystem decline and transformation (Higgins, 2010, 2012). The term ecocide has also been applied, in a *specific legal sense*, to extensive environmental damage during war, as in the case of the use of defoliants (e.g., Agent Orange) in the Vietnam War, and the blowing up of oil wells and subsequent pollution during the first Gulf War in Iraq and Kuwait (White, 2008b; Natali, 2016a). These actions involved intent to actually produce environmental destruction in pursuit of military and other goals. While such actions have been formally criminalised (via international criminal law) prosecution and conviction for them has been difficult to achieve in practice (Freeman, 2015).

As a broad generalisation, ecocide is defined first and foremost by the destruction, degradation and demolition of ecosystems and specific environments, with harmful consequences for the living creatures within these. When this occurs due to particular types of human activity, then ecocide also becomes terminology that describes a particular form of *criminality*. Specific acts of environmental destruction, within particular war-time contexts, are presently officially considered international crimes. For some, however, this particular legal definition is too restrictive, and especially given present environmental trends including global warming, does not address those activities that may have

even greater impact than those associated with military action (Higgins, Short & South, 2013; White, 2018a; Crook & Short, 2014).

Ecocide as a (potential and broad) criminal offence can be conceptualised in several ways (White, 2019). One can distinguish between a perspective that privilege humans and human wellbeing in its definitions of harm (an anthropocentric viewpoint), and a perspective that include the non-human in its conceptualisations (an ecocentric viewpoint). In the first instance, doing wrong and harming others is anthropocentrically framed and its basic considerations stem from and reflect a human rights paradigm (MacCarrick, 2016). Ecocide in this sense complements the existing approach of the Rome Statute of the International Criminal Court (A/CONF.183/9, entered into force 1 July 2002) that deals with genocide, crimes against humanity, and war crimes (including destruction of environments during war). The intent of proponents of this particular conception of ecocide is to extend its reach to include peace-time destruction of environments.

By contrast, discussions of ecocide that are informed by ecocentrism describe an attempt to criminalise human activities that destroy and diminish the wellbeing and health of ecosystems and the species within these, including humans, and for which there are varying degrees of responsibility (Higgins, Short & South, 2013). Ecocentrism views non-human animals, plants and rivers as rights holders and/or as objects warranting a duty of care on the part of humans (Fisher, 2010; Schlosberg, 2007; White, 2018b). Ecocide in this instance is closely aligned with a concept that views the environment as having value for its own sake, apart from any instrumental or utilitarian value to humans (Berry, 1999; Williams, 2013). Ecocide, in this view, is not only a crime against humans but also against non-human environmental entities. Accordingly, since it does not only affect humans, ideally a case should be able to be brought to court on behalf of non-human entities if they are affected by ecocide-related acts and omissions (Higgins, 2012).

The notion of ecocide also invites comparison with other crimes that, at least superficially, bear similarities. For instance, ecocide is not the same as homicide (even though foreknowledge of consequences combined with anthropocentric causation implies preventable death); it is not the same as suicide (even though the agents of harm are themselves included as victims of harm); and it is not the same as genocide (even though there are clear similarities in terms of disregard by perpetrators of the magnitude of the harm and disrespect of specific collectivities/victims) (White, 2015). On the other hand, climate change might well be described as a form of genocide through “geocide”, that is, the killing of people through the killing of the Earth (Brook, 1998).

From the point of view of criminal justice institutions, debates over ecocide could consider whether the crime should be a “strict liability” offence (prosecuted regardless of the intent of the perpetrator due to the seriousness of the harm) or subject to *mens rea* assessment (the mental element of criminal law that speaks to intent, recklessness and

foreknowledge). Commentators such as Higgins argue that ecocide should be construed as a crime of strict liability (Higgins, 2012). The rationale behind this is that the crime of “ecocide” is inherently very serious (it would not be used to describe the harms associated with littering, for example) because it involves harms of considerable scale, and frequently it is states and corporations that are the perpetrators. It is the seriousness of the harm that ultimately counts. For instance, it would be hard to believe that most heads of state or corporations purposefully set out to commit ecocide. Nonetheless, under certain conditions the foreknowledge and intent is in fact there – this is true, for instance, when the destruction of the environment is part of a strategic move to reach some other goal, as in the case of environmental destruction in times of war. More generally though, it has been argued that human-caused ecocide is a responsibility of governments and corporations, and therefore they should be legally bound to ensure that any business practice that causes extensive damage or destruction of an ecosystem is put to an end (Higgins, Short & South, 2013). It is this conception of responsibility that likewise informs discussions of ecocide and climate change (White, 2018a).

3. The genocide-ecocide complex/nexus: a hidden relationship

In a recent work, Jobb Dixon Arnold (2018) proposes an interesting linkage between the notion of “bare life” developed by Giorgio Agamben (1998) and that of “bare nature” described by Rob Shields (2012), in order to focus in a new way upon the genocide-ecocide nexus (see also Short, 2016). Arnold effectively describes how “the spreading conditions of bare life are in part being driven by a parallel spread of the conditions of bare nature”. This relationship produces cultural and ecological catastrophes that are often interpreted within the tragic dilemma environment/health vs. economy/employment, which is too easily resolved in favour of the “national interest” and reduces to mere “side effects” the irreparable ecological and cultural loss. These systematic and constant processes of transformation of the environment into forms of bare life happen through the creation of ecological “sacrifice zones” within which the complex and vital relationships of the ecological context are violently reduced until they become real “states of exception imposed upon the land” (Arnold, 2018, p. 21). The distinction between genocide and ecocide will continue to collapse any time the conditions of bare life and bare nature, “epitomized incarnated by states of exception and sacrifice zones”, coincide (Arnold, 2018). This convergence is amplified and spreads itself on the ecological level through the phenomenon of climate change that, together with its disastrous ecological consequences, also brings with it violent social conflicts and various forms of social exclusion.

From this point of view, to analyze the boundaries that make it possible that certain lands and certain populations

can be “sacrificed”, i.e. transformed into bare life and bare nature, is an essential step in responding to them: “as with the production of bare life, the systems producing bare nature are legitimated by policies backed by sovereign force, and presented as desirable and justified in the name of imperative national economic interest” (Arnold, 2018, p. 26). Alongside the described processes, there are also what Arnold (2018, p. 22) defines as the “affective dimensions” of the ecocide-genocide nexus. Referring particularly to the Indigenous perspectives, Arnold states that bare nature and bare life are conditions within which the affective flows that give sense and meaning to life are regulated, controlled, mitigated and suppressed. At this level of analysis it becomes essential to create a conceptual space capable of adequately considering the affective economies that cross the bio-political spaces considered from time to time, describing the dynamic paths through which the emotions circulate and establish the roots of any attachment to a certain territory. This view allows to go beyond epistemologies excessively focused on a rigidly anthropocentric and western view; moreover, making visible the experiences of victimization and deprivation (Natali, 2014, 2015a) directly lived by the Indigenous populations helps one to focus more clearly on the interdependence and continuity which often become established between cultural and ecological destruction and, more importantly, between processes of cultural genocide and ecological genocide. Going back to the notion of genocide introduced by the Polish jurist Raphael Lemkin – derived from the combination of the Greek word *genos* meaning tribe or race and the Latin *cide* meaning killing/destruction – Martin Crook and Damien Short (2014) recall how, for Lemkin, it was essential the vision according to which culture is the necessary condition for the realization of the individual and at the same time for the collective memory that distinguishes a cultural group.

Exploring the genocide-ecocide nexus, Crook and Short (2014) analyze ecocide within a Marxist theoretical framework that starts from the acknowledgement of the co-evolution and of the reciprocal influence between human and natural history (see also Natali, 2013). From this perspective, humanity depends from the natural metabolic processes that govern the exchange of matter and energy. However, still following Marx, they suggest that the metabolic social order imposed by capitalism produces a “metabolic rift” that starts an ever more radical divergence of human production from the natural world in evolution. Ecocide is thus understood “as a function of capital, with its remorseless drive to accumulate damaging and collapsing natural cycles and turning them into ‘broken linear processes’, exceeding the boundaries of nature and causing what Marx describes as a ‘metabolic rift’ between humankind and nature” (Crook & Short, 2014, p. 299). Some examples of these ecocidal processes can be encompassed within “extreme energy”, i.e. those virulent forms of ecologically unsound industrial energy extraction that materialize, for example, in mountain top removal, deep-water drilling and hydraulic “fracking” (Crook & Short, 2014; Crook, Short, & South, 2018). However, the most dramatic

example of this metabolic rift of humans from nature is perhaps represented by climate change.

In these proposals, the link between ecocide and genocide assumes a particular importance for those Indigenous populations that still have a strong cultural attachment to the land: environmental destruction, in these cases, produces a genocidal impact that causes a real experience of “social death” (Crook & Short, 2014; Crook, Short, & South, 2018). The questions that arise at this point are: who has the power to impose specific languages and to determine the prevalence of the economic language as the main one (if not the only one) and impose it in an environmental discussion? Who is able to simplify the complexity, disqualifying any other points of view? In answering these questions it is crucial to highlight that the forms of domination become more complex than the traditional dichotomy “dominant/dominated” as described in the Marxist notion of power (see also Halsey, 2004). As Mark Halsey (2004, p. 843) underlines with a Deleuzian vocabulary: “structural economic power relies for its efficacy not simply on the relations between government, law and economy, so much as on the *flows of pleasure* which invest population at any time”. This seems also true for ecocide, which shows itself both as a “physical” event and as a “corporate/state practice” that challenges the traditional levels of analysis rigidly distinguished between micro and macro analysis. For example, the moral and material universe within which climate change is occurring is one that is generally supportive of natural resource exploitation. In other words, the ravaging of nature generally takes place with the *consent* of its beneficiaries, among whom are the general populaces of advanced industrialised countries (Agnew, 2013; White, 2014). It is “ordinary acts” that contribute to ecocide: for many in the West, their contribution to ecocide takes the form of living in large climate controlled homes, using petrol-based cars, having high meat consumption, and continually purchasing consumer products (Agnew, 2013).

The crucial observation is that ecocide is the result of the systematic destruction and diminishment of environments stemming from pollution and the exploitation of natural resources. Ecocide associated with global warming does not occur in a social and political vacuum. Rather it stems directly from the nexus between business and government. It is substantially driven by systemic imperatives within which the state has a central role. For those who study this type of environmental degradation, one that is associated with considerable social and ecological harm, the concept of state–corporate environmental crime is considered entirely appropriate as a descriptor (Smandych and Kueneman, 2010; Kramer, 2013).

4. Ecocide, climate change and Indigenous people

Global warming is rapidly transforming the biophysical world in ways that have massive ramifications for humans, specific eco-systems, and animal and plant species. Conse-

quential changes are already evident in disruptions stemming from record heat waves, altered precipitation patterns, sea level rises and other climate outcomes (see for example, U.S. Global Change Research Program, 2018). Harms associated with climate change are significant criminologically, not least of which because global warming itself is caused primarily by human actions. The social, environmental and economic impacts of climate change are multiple, planet-wide and in some instances catastrophic for human populations, flora, fauna and ecosystems (Watts et al., 2017; Sutherland et al., 2018). The problem is acute and not going to go away, no matter how vociferous the denial or obtrusive the contrarianism (see Brisman, 2012, 2013; Kramer, 2013; Lynch, Burns & Stretesky, 2010).

Narrow sectoral interests embedded in present socio-economic dynamics are driving global warming as well as responses to regulating or taxing the emissions that contribute to it (see Bulkeley & Newell, 2010). Yet, the reality is that those least responsible for, and least able to remedy the effects of climate change, are the worst affected by it (Batz, 2013). For example, Indigenous people reliant upon clean water and arable lands for their livelihoods suffer greatly when large industrial projects – such as the Alberta Tar Sands project in Canada – negatively affect their forests, rivers and soils (Short, 2016). In this particular example, the project also happens to be the largest single contributor to the increase of global warming pollution in Canada (Klare, 2012).

Everyone is affected by global warming. As a form of “universal victimization”, climate change means that we all lose out, regardless of class, gender, ethnicity, race, tribe or caste; and regardless of whose fault it is. Yet, there are environmental issues that are specific to particular regions of the world, and the causal processes and effects of climate change will vary according to the peculiarities of each region. For example, huge tropical forests are found in the Amazon basin, an area that encompasses several different countries such as Brazil and Colombia. Such forests also cover parts of South-East Asia, spanning Indonesia, Malaysia, Thailand and Myanmar (Burma), amongst other countries. What happens to these forests is part of the delicate balance of carbon emission and carbon storage that is so central to global warming. Their specific problem of deforestation is magnified into our general problem of climate change. We are all implicated in processes that ultimately have consequences for the planet as a whole.

In a similar vein, the effects of climate change, while felt by everyone, are not however the same for everyone. For example, climate injustice is uniquely experienced by Indigenous communities. That is, the specific material and cultural positioning of Indigenous people within certain landscapes is vital to understanding the nature of their victimisation. Taking into account this specific positioning means rethinking the hierarchy of knowledge itself, critically analysing the purported clear division between knowledge and non-knowledge, between what can be recognized as “scientific”—and for this same reason “real”—and what instead remains at the margins of knowledge. Thus, green criminologists must confront the marginalization of “voices

from below,” recognizing them as “valid forms and producers of knowledge” (Mol, 2013, p. 251; Carrington, Hogg & Sozzo, 2016). As Hilary Winchester and Matthew Rofe (2010, p. 21) suggest, it is important to “give voice to those silenced or ignored by hegemonic (modern, colonial) views of histories and geographies.” By the same token, however,

the voice of the oppressed not only speaks for itself: it is a part of a wider whole. Reality is like an orchestra: post-structural approaches differentiate the instruments and their sounds and bring the oboe occasionally to centre-stage; usually dominated by the strings, the minor instruments too have a tune to play and a thread that forms a distinct but usually unheard part of the whole. It is the voices of the women and children, the colonized, the indigenous, the minorities that, when released from their silencing, enable a more holistic understanding of society to be articulated [...]. (Winchester & Rofe, 2010, pp. 21–22)

The unnatural causes of global warming simultaneously undermine Indigenous existence. The Alberta tar sands in Canada stand as a monument to the scale and impact of harm wrought by ecologically disastrous processes of energy extraction. The project is based upon efforts to extract and refine naturally created tar-bearing sand into exportable and consumable oil. One result of the project is a wide range of different types of harm to the ecosystem, animals and humans. For local Indigenous people, it constitutes a form of genocide, as their life and connection to the lands is severed (Crook and Short, 2014; Short, 2016). In the Amazon regions of Brazil and Colombia, land clearance is happening due to forestry, agricultural exploitation, cattle farming, mining, oil and gas installations, and hydroelectric dams (see Boekhout van Solinge 2008, 2010; Boekhout van Solinge & Kuijpers, 2013). For Indigenous inhabitants, this is having particularly devastating consequences materially and spiritually. What is at stake is fundamental to the identity and social lifeblood of Indigenous communities. This is because of the dynamic and vibrant relationship between local Indigenous communities, and the land upon and within which they live. The special relationship between Indigenous communities and land/Nature finds expression in a number of different places and ways worldwide (Suzuki, 2010). The Earth is experienced as sacred and vital, a source of spiritual strength and wholeness, and part of a harmonious unity between land and human. As Connell (2007, p. 200) comments: “The land is *part of the social order*”. That is, it is not a question of humans owning the land, or the land owning humans – it is far deeper than this. These expressions of connection and interrelationship have profound implications for understanding and responding to desecration of Indigenous lands (see also Dunlap, 2018). The historically and culturally constructed one-to-one identification of land with local Indigenous inhabitants makes them inseparable at both the level of ontology (“ways of being”) and epistemology (“ways of knowing”).

One hallmark of the colonial other is dispossession (of

land, of knowledge). The other is disregard for welfare and well-being (Cunneen & Tauri, 2016). Consider, for example, that the Arctic region is inhabited by some four million people including more than thirty different Indigenous groups. Eight states – Canada, Denmark/Greenland, Finland, Iceland, Norway, the Russian Federation, Sweden and the United States – have territories in the Arctic region. While ostensibly a pristine environment, and while local peoples rely upon traditional food sources, numerous pollutants have been impacting upon the Arctic and the people and animals that live there for decades (United Nations Environment Programme 2007; European Environment Agency 2010). This pollution originated elsewhere, especially in industrial heartlands such as the US, but the effect has been devastating. In some parts of the Arctic, for example, breastfeeding mothers have been advised to supplement breast milk with powdered milk in order to reduce exposure to noxious chemicals. All of this is compounded by the effect of melting Arctic ice and permafrost, as food sources and long established traditions become that much more difficult to sustain. In a similar vein, rising sea levels are posing immediate problems for Indigenous and traditional peoples across the Pacific and Indian oceans. The swamping of island homes is in essence a form of genocide – the whole scale destruction of a people through the destruction of their land and life. Relocating people away from their ancestral homeland is not the answer, for Indigenous peoples depend on their land for spiritual wellbeing (Tekayak, 2016). To separate the people from their country is in effect to kill both.

Indigenous people are not passive in the face of such atrocities. For several decades now they have been fighting back, with both local resistance and active participation at international forums on climate change (Etchart, 2017). Among the demands of Indigenous people are assertions of their choice not to allow unfettered “economic development”, especially when the costs are so high. Understanding fully the impacts of climate change involves diverse ways of seeing the world, including through the eyes of Indigenous people. There is much to learn from those whose Earth connections date back long generations. Responding to the causes and consequences of climate change must also involve supporting Indigenous efforts to “speak truth to power”. Let Indigenous people speak for themselves and respect them when they do. Fundamental to this support is also the idea that research and action must contribute to community empowerment if it is to be real and meaningful (Cunneen & Tauri, 2016). Schneeberger (2011), in discussing the reverence afforded the Earth by Indigenous cultures and their strongly embedded equity considerations (related to the passing on of environmental goods and services to the next generations), suggests that this can be linked to climate science and climate modelling into the next few centuries. Here, the issue of intergenerational equity is relevant. For if intergenerational equity is indeed the goal then action is justified now in addressing cumulative emissions. Failure to enact scientific and evidence-based policy relating to carbon emissions is a failure to protect present and future generations. Present day scientific evidence also provides the objective basis for charges of eco-

cide, that is, demonstrable long-lasting serious environmental harm. This is particularly relevant to island communities such as Tuvalu, the Maldives, Kiribati and the Marshall Islands, where the consequences of climate change are both present and dire. This is precisely where the nexus between ecocide and genocide is most manifest.

Conclusion. A more-than-human criminology?

State sanctioned genocide and ecocide seem to be hallmarks of the present era. Typically, genocide refers to intentional and targeted destruction and displacement of peoples, based upon their social characteristics. It is associated with settler colonialism, ethnic/religious conflict, and systematic policies of “extermination” (as with the Holocaust). Ecocide refers to actions (and omissions) that regardless of intent have the consequences of social and environmental harm on a large scale, whether this is due to natural causes (e.g., over-population of animals/plants) or human causes such as anthropogenic climate change. Ecocide is not “intentional” (that is, corporations and nation-states do not set out to destroy the planet) – it is a by-product of intentional activities designed to enhance profits (such as cutting down forests, using coal-fired electricity plants and so on). As part of the profit-making intent, Indigenous people may be cleared off their lands and in some instances this may in fact be directly genocidal (that is, the intent is to kill off the particular group). In other cases, the impact of land grabs may not be to wipe out a population, although the result or consequence is to separate the group from their “land” (or “country”) and thus this, too, constitutes a form of genocide (albeit indirectly – as consequence, not intentionally).

The judgment that allows us to define an event as “ecocide” (and as “genocide”) does not take place in a social, economic and political vacuum. Like any other process of definition, it develops within a context that is already socially, juridically, and scientifically constructed (Natali, 2017). More importantly, ecocide is not socially (or, indeed, ecologically and species) neutral. It is the poor, the marginalised, the dispossessed and the vulnerable that bear the brunt of environmental destruction. In this, the victims are human and non-human, living and non-living, as human rights are ignored and landscapes devastated. Any definition of “ecocide” is rooted in the environmental sensitivity typical of the time defining it; insofar as it concerns our late modern times, it will come to further maturity following new experiences of destruction and vulnerability linked to human manipulation of the environment. In this sense, from an eco-global criminological perspective (White, 2011), considering the issues of environmental (and global) harm does not only mean looking at specific cases of environmental destruction; it also, and above all, means building new knowledge bases for reading the world in which we live (Natali, 2017). In this way, an analysis of ecocide builds upon new theoretical perspectives that promote complex thoughts that are in tune with the new (environmental) needs of a changing world (South, 1998, 2010, 2014).

Furthermore, green criminology has highlighted that

criminological accounts have tended to privilege the human realm. The incapacity of criminological knowledge to ask the decisive question, “what distinguishes and at the same time unifies the social with the natural sphere?”, comes mainly from the difficulty of approaching the dichotomies between culture and nature, between technology and society, between human and non-human, that ground the conceptual structure of traditional criminology. In this sense, to develop a “criminology of hybrids” (Brown, 2006) or what may be defined as a “more-than-human criminology” (see also Pyyhtinen, 2016) able to weave these polarities, not as binary contradictions but as a complexity, becomes extremely important in order to understand and formulate preventive measures adequate to the new hybrid forms of sociality and domination that produce ecocide (Cianchi, 2015; Natali, 2013, 2015b; Larsen, 2012). As Arnold (2018) observes, in today’s scenario the conditions of “bare life” and “bare nature” present a global danger that extends the scope of Lemkin’s concept of “global transnational danger” to a truly planetary level in form of the genocide-ecocide nexus (Short, 2016). If it is true that the states of “bare life” and “bare nature” are the new *normal*, one of the ways of challenging this normal will be creating new stories about how we can live together and collaborate to expose the genocidal and ecocidal systems as illegal, useless and unacceptable. Making visible the genocide-ecocide nexus means contributing to its recognition, especially when there are powerful interests in play that “work” to make the image “confused” (Natali 2010, 2016b, in press; Natali & McClanahan 2017; Natali & Budó, 2018). To construct a visibility intended as recognition also means to engage in a long-term struggle, culturally and politically.

Finally, from a criminological perspective, the issue of ecocide fits directly into the patterns set out, through time, by economic-productive processes, and cannot therefore be judged on the basis of traditional notions of crime. This particular point of view challenges the common idea that the “real” issues of crime and society pertain only to the lowest social levels, and instead gives new importance to political economy in the analysis of criminal behaviours (Lynch et al. 2013; White 2018a). To this is added another level of complexity: the importance of probing the intricate tangle of the social, cultural and ecological worlds called into question by the empirical dimension of ecocide. In conclusion, a criminological approach aimed at carrying out an in-depth analysis of the phenomenon of “ecocide” will have to tune into and synchronize with the rising importance of these criminal scenarios, until recently largely overlooked. A work of this kind will help to collect the traces of an ignored geography and to imagine policies that take into account its complex physiognomy. If we can promote a rich and interdisciplinary dialogue between different fields of knowledge – particularly between green criminology, criminology of genocide, environmental sociology and sociology of genocide – we will be better able to make visible the multiplicity of ecocide phenomena that are emerging at different times and speeds over the planet. Doing so promises not only better understanding but also the possibility of robust responses and alternatives to environmental destruction.

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