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Green Criminology: Its Foundation in Critical Criminology and the Way Forward

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Abstract: This article outlines the field of critical criminology and how its development was essential for the development of green criminology. Through a personal trajectory, I use my experiences first as a student and later as Professor of Criminology at the University of Oslo as an entry point. I draw on my involvement with the European Group for the Study of Deviance and Social Control to explore how critical criminology has influenced green critical criminology. Critical criminology, with its focus on the crimes of the powerful, is concerned with victims of injustice, and a social harm approach was, I argue, a necessary foundation for non-speciesist, green critical criminology. The article concludes by elucidating the challenges for a green critical non-speciesist criminology, which includes a presentation of my current research project, 'Criminal justice, wildlife conservation and animal rights in the Anthropocene – CRIMEANTHROP'.

Keywords: animal abuse; critical criminology; green criminology; non-speciesist criminology; wildlife crime

Part One: Critical Criminology and the Emergence of Green Criminology: My Personal Trajectory

In this article, I explore the development of green criminology and its foundation in, and influences from, critical criminology. In the first part, I start by using my own experiences as a student and scholar at the University of Oslo and with the European Group for the Study of Deviance and Social Control. I use what I learned through these experiences as a framework for the debate between conventional criminology and zemiology (Hillyard *et al.* 2004) which is core to green criminology. In a way, reminiscence on my scholarly upbringing also resembles a semi-autoethnographic intro-retrospective approach (for example, Sollund 2017a) to critical criminology as a field and scholarly social environments pertaining to it. In Part Two, I address the different branches of green criminology, and how the definitions, conceptualisations, and literature in the field intersect with

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my personal dedication to green criminology, which was first inspired by Beirne (1999) and Beirne and South (2007). I argue that while many scholars had previously written on 'green topics', a great benefit came with naming the field as a different school of thought. In Part Three, I outline different subfields that have been encompassed under the umbrella of green and conservation criminology, before discussing through a constructivist approach, the essentialities of wording. The section finishes with a discussion of the need for a criminology that is attentive to the emergent problems of climate change, as well as to the specific challenges of a non-speciesist criminology, including the study of wildlife trafficking. I argue that green critical criminology is vital and urgent in confronting environmental crimes and harms in a world characterised by a nature and extinction crisis.

It was not until I was well into my studies in criminology at the University of Oslo that I realised that not all criminology is critical. As a student of criminology in the 1980s at the University of Oslo's then Department of Criminology and Penal Law, I took in lectures by Professors of Law Johs. Andenæs and Anders Bratholm, Professors of Criminology Nils Christie and Cecilie Høigård, and Professor of Sociology Thomas Mathiesen. We learned about criminology and penal law, but Karl Marx was also on the curriculum. I was astonished that it was possible to study such a revolutionary discipline at university, this being a time of police repression and violence and when the combination of youth and 'hippie clothes' could be cause for arrest, as my own experience attests. We learned about police brutality, the criminalisation of the poor, and oppressive prison systems. The negative aspects of the prison system were not questioned, and the curriculum covered the literature about the effects of imprisonment and institutionalisation (Clemmer 1940; Goffman 1961; Mathiesen 2012; Sykes 2007), labelling (Becker 2003) and stigma theory (Goffman 2009).

I first fully realised that the criminology I was learning was called *critical criminology*, not just criminology, when the department was due to move out of the old Professor building in the University Park. In the debate about where the department should be located, I learned that it was not located on campus together with the Department of Sociology and other social science institutes because its founding fathers wanted it housed with the Faculty of Law. Nils Christie said that it was important we were there to 'hold them by the ear'. Johs. Andenæs founded the department in 1954, and Christie was employed as a docent and later became the first Professor of Criminology (Lomell 2020).

The critical criminology we were taught was not like the mainstream positivist criminology of the US. The divide between mainstream criminology and critical criminology persists, although much of North American criminology is also critical. The divide is rooted in the tendencies of mainstream criminology to (still) 'exclude a diverse range of topics relevant to studying harms and their consequences that ought otherwise to fit within the discipline of criminology if criminology were not so narrowly defined in the first place' (Lynch and Stretesky 2014, p.4).

The criminology curriculum at the University of Oslo in the 1980s and 1990s was coloured by the research interests of our professors, as it is

today. When Nils Christie was working on his book *Crime Control as Industry* (Christie 2016), he included postgraduate students in the process, discussing his ideas and findings with us. Through research-based teaching, we learned about the lives of women in prostitution (Høigård and Finstad 1992), the historical oppression of the working class (Johansen 1989), organised crime and illegal liquor production during Prohibition (Johansen 2004), and the social control of girls in institutions for 'rebellious' girls in the 1950s (Ericsson 1997). Of more relevance to my current research in green criminology, was the theory of differential association (Sutherland 1972) and work on illegal fishing and ocean pollution (Johansen and Christophersen 1991). Jan Georg Christophersen studied environmental crimes for decades, as did/does Michael Lynch (2017), a critical criminologist in the US, who coined the name 'green criminology'. Allow me now to highlight the forum where I was further socialised into critical criminology, the European Group for the Study of Deviance and Social Control (EG).

The European Group for the Study of Deviance and Social Control (EG), Zemiology, and the Crimes of the Powerful

My first meeting with the EG was at its 20th conference in Prague in 1993. This was also my first meeting with Stan Cohen. He and other well-known criminologists such as prison abolitionist Louk Hulsman, Barbara Hudson, Vincenzo Ruggiero, Liz Stanley, Steve Tombs, Bill Rolston, Cristina Pantazis, David Whyte, Phil Scraton, the co-ordinator of the group for 20 years, Karen Leander and Paddy Hillyard have been important for the critical criminology of today, and thus also for the development of green criminology. At the time, Cohen's work concerning human rights in Israel resonated well with my own research on female refugees and social exclusion. The issue of human rights was important for the group, as it still is, and the conferences usually ended with the group producing a statement of support for victims of injustice. Political and social struggles were important when we made decisions about the location of the conferences. as in 1995 when the conference was held in Crossmaglen, Northern Ireland, tormented by long-time social unrest and struggle for independence. The conference took place near a military installation, and speakers had to pause in their presentations whenever a helicopter flew over. In the evenings, we socialised in the village pubs with the local population, most of whom had family members who had been killed or were imprisoned due to the conflict or had themselves been imprisoned. This experience and many others with the group over the years socialised me into the role of critical criminologist and provided me with support to pursue my own course of research, whether it was on migration, violence committed by traumatised political refugees, police racial profiling, or my current work on wildlife trade.

Stan Cohen, Mario Simondi and Karl Shumann started the group so that areas of study marginalised by mainstream administrative and conventional criminology would receive scholarly attention, and to establish a network to support and provide solidarity with emerging social movements (Sollund 2016). The foci of the group were, and remain today, the *construction of harm* (Hillyard *et al.* 2004; Hillyard and Tombs 2007), the *construction of crime* (Christie 2007), *social justice*, and how *deviance is socially constructed and controlled* (Scraton 2007), not least, through the judicial and penal systems (Hallsworth 2000; Hulsman 1986; Mathiesen 2014).

The work of the scholars associated with the group is important, whether they focus on the crimes of the powerful (Bittle et al. 2018), organised and corporate crime (Pearce and Tombs 2019; Ruggiero 1996; Tombs and Whyte 2015), or social harm more generally (Hillyard et al. 2004). Their scholarship has strengthened my own awareness of what critical criminology is, why it is necessary, and its future direction. Before I elaborate further on this issue, I want to highlight one of the conferences that took place in Komotini, Greece. It was organised by a long-time member of the group, the late Vasilis Karydis, who was Deputy Ombudsman for Human Rights in Greece from 2010 to 2015. On the long bus ride home following an excursion to a beach, Paddy Hillyard and Christina Pantazis first introduced me to zemiology (Hillyard et al. 2004), and on the bus there was a vigorous discussion about what criminology was and why a disciplinary expansion into zemiology was justified. I share this to illustrate that the group is an impressive forum of support for the development of criminological ideas that have later proved to be crucial for understanding the causes and forces behind crimes and harms, who they victimise, and how and why such harms, whether legal or illegal, need to be addressed.

The role of critical criminology is not only to describe and analyse crimes and harms committed by the powerful, whether that be states (Cohen 2001; Goyes 2016), corporations (Pearce and Tombs 2019), penal systems (Christie 2007; Hulsman 1991; Mathiesen 2012, 2014), harms caused by globalisation or the capitalist system (Stretesky, Long and Lynch 2013). I and many other criminologists aim to *change* the current world order by rejecting capitalism and consumerism as the leading values of our time, the unfair distribution of wealth and power, the criminalisation of the powerless, and the exploitation of those who cannot defend themselves and those whom the police and judicial system fail to protect.

While no one spoke of *green criminology* during my first decade with the EG, the perspectives inherent in the group members' research and their commitment to side with the oppressed and bring attention to victimisation and injustice have followed me ever since. The critical criminology of the department in Oslo and of the EG have given me the tools to research the victimisation of those who were, nevertheless, seldom mentioned in the presentations at EG conferences: the non-human victims. For me, the only field that has the perspectives needed and the potency to affect a change that brings attention to this largely unattended part of the world is green critical criminology.

As many green criminologists have experienced, before green criminology coalesced into a field with its own streams and panels, even conferences, we usually presented our research in the 'miscellaneous' category. The first session I attended of the EG that can be described as 'green', albeit only partially, was in Krakow in 2002, which included a session with two

'green' papers. I presented a paper on animal abuse (Sollund 2008) and Tim Boekhout van Solinge (2008a, 2008b) presented his research on illegal logging and state crime. The session was a revelation for me because of the inspiring reception by the audience of my presentation and the vigorous discussion on animal rights that ensued, but also because of the tremendous importance of Boekhout van Solinge's work (2008a, 2008b, 2010).

If Christophersen had started his research on pollution in the seas and fishery crime today, it would have been a perfect fit for green criminology. However, it long remained on the periphery of Norwegian critical criminology, concerned as it was with issues far removed from the focus of Norwegian critical criminology on 'ordinary offenders', prison systems, and other oppressive arrangements. Christophersen's studies of environmental crimes in Norway illustrate that green criminology, or at least topics that usually comprise this field, developed in many different places of the world, more or less simultaneously (Goyes and South 2017; South 2014).

Part Two: What is Green Critical Criminology?

Green criminology arose because of the urgency of the issues:

[But] in an important sense, a green criminology is justified because it was inevitable and necessary. It reflected scientific interests and political challenges of the moment, carried forward the momentum of critical non-conformist criminology, and offered a point of contact and convergence. (South 2014, p.8)

As shown by South (1998, 2014), researchers worldwide had been studying environmental crimes and harms without being positioned in the specific fields of green criminology, as defined by Beirne and South (2007), or eco-global criminology (Ellefsen, Sollund and Larson 2012; White 2013a). Beirne and South (2007) defined green criminology as 'the study of those harms against humanity, against the environment including space, and against animals committed both by powerful institutions (e.g., governments, transnational corporations, military apparatuses) and also by ordinary people' (p.xiii). Researching what was legally understood as crimes, that is, breaches of law, was expanded to include studies of harm. Within the field, it became legitimate to study not only acts that are legally defined as criminal, but also acts that are as harmful as any law-breaching act (Beirne and South 2007; Hillyard et al. 2004; Lynch and Stretesky 2014; Sollund 2008; South 2008; Stretesky, Long and Lynch 2013; Walters 2010; White 2013a, 2013b), whether as part of daily practices (Agnew 2013) or when instigated by organisations like the IMF and World Bank (Brisman 2014; O'Brien 2008). This marked a clear distinction from conventional, or conformist, criminology with its focus on (only) those acts that are criminalised, crime prevention of such acts, individual offenders and punishment (Lynch and Stretesky 2014), rather than on violent structural causes of harm (Galtung 1969).

Green criminology is not a homogeneous field, as there are degrees of how critical (radical) scholars are, which is reflected in their research agendas. Further, the interests of criminologists within a critical tradition of green (Beirne and South 2007) or eco-global (Ellefsen, Sollund and Larsen 2012; White 2011) scholarship are as diverse as are the criminologists themselves. White (2013c) categorises the different branches of green criminology as radical green criminology (Lynch and Stretesky 2014; Stretesky, Long and Lynch 2013), eco-global criminology (White 2011), conservation criminology (Gibbs *et al.* 2010), environmental criminology (Wellsmith 2010), constructivist green criminology (Brisman 2012), and non-speciesist criminology (Beirne 1999; Sollund 2019; White 2013b, pp.23–4). Other branches of the critical green tree are historical criminology (Beirne 1994; Ystehede 2012) and green cultural criminology (Brisman and South 2014; Ferrell 2013). Yet another fast developing field is green southern criminology (Carrington, Hogg and Sozzo 2016; Goyes 2019; Goyes, Sollund and South 2019; Vegh Weis 2019).

Different Paths within Green Criminology and to the Study of Crimes against Nature

The concept 'green criminology' holds a specific meaning. Intrinsic to the word 'green' is its association with nature, and therefore it is readily assumed that green criminology has something to do with environmental crimes. Other meanings of 'green', to which I will return, have also developed over time. The variety of terms used for the study of environmental crime, whether green criminology, eco-global criminology, or environmental criminology, attests to the variations in how this field is defined and named (Larsen 2012; White 2013c).

Eco-global criminology, as its name suggests, concerns criminology that focuses on the transnational and global nature of environmental harm against humans, ecosystems, and animals (White 2007, p.24; White 2011). As observed by White (2018), powerful corporations and states cause climate change. Norway is an example of that. In 2020, the Norwegian government defended its intent to drill for (more) oil in the Arctic in the Supreme Court, after the state was accused by Greenpeace and other nongovernmental organisations (NGOs) of breach of Section 112 of the Norwegian Constitution, when it gave permission to drill for oil in the Barents Sea north of Norway. The case concerns Norway's responsibility for carbon emissions and global warming, and whether the oil is sold for export or used domestically. Section 112 of the Norwegian Constitution dictates the right of citizens to a healthy environment in which diversity is preserved, and thus environmental rights, which are important concerns in green criminology, not least from the perspective of the situation for children and future generations living with the threats and consequences of global warming (White 2018). However, the Supreme Court in Norway did not want to overrule the decision of the Norwegian parliament, Stortinget, concerning further drilling. By a vote of eleven to four, the Supreme Court decision ended in favour of the state. Anthropogenic-caused climate change, entailing natural catastrophes, desertification, water shortages, and migration as islands and coastal areas become inhabitable, loss of habitat for many species, and species loss are all urgent matters, and have consequently

received their own denomination: Climate Change Criminology (White 2018). The decisions of the Norwegian Supreme Court and parliament to permit further expansion of oil drilling are representative of an important perspective in climate change criminology, one that views criminality in terms of 'criminal and/or harmful behaviour that contributes to the problem of global warming and that prevents adequate responses to climate change related consequences' (White 2018, p.11). From this perspective, Norway's oil extraction is also state-produced harm.

Conservation criminology is more anthropocentrically oriented than green criminology through its concern for the conservation and management of 'natural resources', environmental law enforcement, and legally-defined environmental crimes (White 2013c). Conservation criminologists may hesitate to be included within the framework of green criminology. Important theoretical approaches in conservation criminology are, for example, routine activities theory (for example, Gibbs *et al.* 2010; Warchol and Harrington 2016). The field is close to *environmental criminology*, which also deals with legally-defined environmental crimes and draws on placebased ('environmental' as more narrowly defined) crime, and consequently on situational crime prevention (Hill 2015; Lemieux 2014).

However, harms that have hitherto not been of concern for conservation or environmental criminologists may *become* central for these subdisciplines given that there is a trend towards criminalising harmful acts against the environment and freeborn animals in the wake of the accelerating destruction of nature and the extinction of species. Acts that are criminal and punishable today, for example, killing brown bears or wolves in Norway without state authorisation, were awarded with bounties just a few decades ago (Sollund 2017b). This development is similar to the situation in an increasing number of countries and follows the establishment of international nature conventions and national legislation. In Norway as well, a growing number of environmental regulations and legislation as well as public documents pay more attention – at least on the surface – to such harms and their prevention (for example, St.meld.19 2019–2020).

While researchers in eco-global criminology, conservation criminology, green criminology, and environmental criminology may study the same topic, projects are designed according to the values and foci of the different fields. For example, in studying the wildlife trade, a conservation criminologist will be concerned about 'poaching' (a term implying this is a crime because humans lose their 'resources', not because of what is done to the animal) and take an anthropocentric approach (Gore *et al.* 2016; Pires and Clarke 2012), while a green criminologist may rather take a species justice approach (Sollund 2019; Van Uhm 2016, 2018; White 2013c).

Using different names – eco-global, conservation, or environmental criminology, all said to fall under the umbrella of green criminology (White 2013c) – for fields that cover many of the same issues, whether wildlife trade, waste trafficking, or deforestation, can lead to confusion, although the naming also signals perspectives and conceptualisations. The different names and their orientations make it possible for readers, students and

researchers to identify the value-laden approaches of the researchers, and, consequently, position themselves accordingly.

Green criminology benefitted tremendously by being named because it allowed researchers to identify with a common agenda and for the field to be visible in broader critical and mainstream criminology. Without a name, there was no field, only fragmented studies that were overshadowed by the continuous output of conventional criminological publications. The identity that the name established was necessary for the researchers in the field to unite and for their research to count as a field.

Green criminology is a concept that has been criticised for being 'fuzzy' (Larsen 2012). Larsen argues that, by virtue of its name, green criminology can be associated with the very actors that researchers in the field seek to reveal, namely powerful corporations that greenwash their environmental crimes and harms. In Larsen's view, the ideological connotation of 'green' in relation to 'green movements' has given rise to a backlash. To greenwash or 'welfare wash' (concerning animals, see Aaltola (2012)) is exactly the opposite of what a green criminologist intends. Halsey also critiqued the term for not adequately capturing the inter-subjective, inter-generational, or inter-ecosystemic processes that combine to produce scenarios of harm (Halsey 2004, p.835). According to Larsen (2012), the term 'eco-global criminology' is much clearer as it connects nature and societal processes at the global level. However, the strength of the term 'green' is exactly that it has connections to green movements, protests and activism. The role of an academic is not just to document what is wrong, but to facilitate change and improve living conditions for all. It is, therefore, right to claim the word 'green'. Being a green criminologist is for me a statement: I take a position and aim not to be neutral regarding environmental harms and animal abuse (Ellefsen 2017; Sollund 2017a).

Words Are Not 'Just Words'

How we name things is crucial for the way in which we understand and interpret them (Christie 2007). Words create our world and shape our perceptions. Wording affects our moral judgment. If an act is a crime, one may think the act must be very harmful, and when an act is not a crime, one may think it is not so bad. However, there are plenty of examples of very harmful acts that are not criminalised, for example, various forms of pollution and emissions that are often accepted up to a certain level (Long, Stretesky and Lynch 2014).

There are multiple euphemisms that refer to humans' harmful acts against other animals that disguise the mutilation, incarceration, solitary confinement, over-crowdedness, physical and mental injury, and ultimately killing that is done to them. For example, in the fur industry, 'furring' refers to the killing and skinning of minks and foxes. This, after they have been caged for life and then have suffered a painful death by carbon monoxide (Sollund 2008). To compensate animals somewhat for the harms humans have done to them, Beirne (2014) created the word *theriocide*, or animal murder.

The word 'animal' is also misleading and anthropocentric because it implies that humans are not animals and are distinct from other animals in ways in which they are actually similar. It creates a bifurcation between humans and all other animal species as one other category. One needs only to take note of all the other animals with which we share the planet to acknowledge the failure of this assumption. For example, the word 'animal' is used for an iguana, a bison, or an elephant, and implies that they are similar, despite their striking differences. While humans, orangutans, and chimpanzees are far more closely related, they are still categorised differently, the latter two being 'animals' and the first being human (homo sapiens). The animal-human distinction implies that humans are the vardstick by which all other animals are measured, rather than, for example, cats or geese. It allows human animals to measure all other animals' capacities as less than human animal capacity. This is speciesism, discrimination based on species (Lie and Sollund 2018). Instead, we could highlight the overwhelming skills of other species, such as the navigation ability of migratory birds and monarch butterflies, the knowledge, experience and leadership of the elephant matriarch who leads her herd to water during drought, or the incredible olfactory sense of wolves.

In order not to perpetuate word speciesism, many scholars use the terms 'non-human animals' or 'animals other than human animals' (AOTAs) instead of 'animal'. Both designations are inadequate in my opinion, since the problem remains: humans are still positioned vis-à-vis all the others. Another way round the problem is to name the animals in question by their species affiliation. However, it is impossible to name them all when all are being referred to, and it can draw attention to particular species when, in fact, all species are being discussed. Elsewhere (Sollund 2011), I have used 'compan', an abbreviation for companion animal. 'Companion' has a positive value; it signals mutuality and is less reductionist than the word 'pet', which indicates that the animal is there only for the human. It is possible to create other designations for animals for simplicity, but often words used to describe animals are based on their instrumental value for the human animal, for example, 'production animals', which denotes animals bred and killed for their flesh. However, this only contributes to speciesism, since such wording is even more reductionist than the more neutral 'animal'. Other words and phrases referencing animals are far from neutral and are used to belittle humans, such as 'bitch', 'beast', or 'dumb cluck'. After several years writing about animal abuse. I have still not come up with a good alternative to the word 'animal', which is why I regrettably continue using it for simplicity's sake.

'Wildlife' is another speciesist term that regards all freeborn animals en masse, rather than as individuals. Their only value as wildlife, from the human perspective, is how they benefit us, for example, for their fur or meat or in the pleasure they provide as trophies. Seeing animals as 'wildlife' situates them as 'part of nature', thereby enriching the aesthetic value of nature (CITES 2020). Our concern then is not to kill too many so that the species goes extinct, since this would be our loss, as well as a loss to their ecosystem (Sollund 2019).

'Nature management', a term used by the Norwegian state to describe the legal killing of critically endangered animals such as wolves, is another example of euphemistically describing animals en masse rather than as individuals (Sollund 2017b, 2019). Individual animals of endangered species are ascribed value only insofar as their death would increase the threat of the species' extinction. However, when they are 'managed', some can be 'taken out', or killed, to put it more bluntly, even when the species is threatened.

Critical, or radical, green criminology requires a critical *victimology* (Sollund 2016). There is considerable conceptual overlap between green criminology, with its focus on harm against the environment and animals, and victimology, with its focus on the perpetration and consequences of crime for victims more generally. It is crucial, when taking a critical and reflective approach, to understand conceptualisations of victims and victimhood, and how these are contested and culturally and historically embedded (Fitzgerald 2010, pp.132, 134). While historically animals have to very little degree been accorded victim status, with a green critical victimology, this is starting to change.

Part Three: Challenges for a Non-speciesist Criminology

Animal abuse has become an important part of green criminology (for example, Beirne 2014; Beirne and South 2007; Maher, Pierpoint and Beirne 2017; Nurse 2015; Sollund 2019). Non-speciesist green critical criminology acknowledges that animals suffer from the actions of humans, whether in industrial complexes (Agnew 1998; Beirne 1999; Sollund 2008; Taylor and Fraser 2017; Wyatt 2014), laboratories (Goves and Sollund 2018), wildlife trade (Maher and Sollund 2016; Sollund 2019; Wyatt 2013), or the multiple other ways in which humans physically and psychologically torment animals (Maher, Pierpoint and Beirne 2017; Nurse 2015; Sollund 2021; White 2013b). A non-speciesist criminology follows from the philosophical foundation that speciesism is unjust, like racism, sexism, or disabilitism (Nibert 2002: Nussbaum 2009). A non-speciesist criminology relies on the principles outlined by animal rights philosophers Peter Singer (1995) and Tom Regan (2004) and accepts that human and other animals share a capacity of suffering and joy and have interests in living their lives unharmed (Beirne 1999; Sollund 2008); they are subjects-of-a-life (Regan 2004).

Most animal abuse is legal, and therefore cannot be researched through a conventional criminology lens. Animals are killed in their billions for meat in the corporate food industry, and millions of animals are also killed in their natural habitats every year. This is a challenging area to study since it includes taken-for-granted, institutionalised, and systemic harm to which researchers can be denied access, such as to abattoirs. For example, in the Norwegian egg industry, the majority of male chicks are killed as soon as their sex is determined (within two days of their hatching). They are ground alive without anaesthesia and disposed of as garbage, while the females may live to produce eggs. Because such harm is condoned by state policy, green criminologists studying the abuse and killing of animals

cannot only focus on illegal harms, since that would leave unattended a large amount of harm done to animals.

Often killing an animal can be legal in one form but illegal in another. In Norway, a hunter who kills a wolf without a licence commits a serious crime and can be sentenced to up to five years' imprisonment; typically, offenders may receive up to one year in prison for such a crime (Sollund 2017b). However, the government policy of nature 'management', in which it licenses the killing of half of the Norwegian wolf population, is not defined as serious environmental crime (Sollund 2017b; Sollund and Goyes forthcoming). Currently, wolves and other large predators in Norway are unwelcome; they are criminalised simply for being alive and given the 'sentence' of the death penalty.

From a non-speciesist critical green criminology perspective, such acts can be defined, not only as serious crime and theriocide, but also as organised state theriocide (Sollund 2017b) and are thus a research focus ideally suited for green critical criminology. These acts are committed by a powerful state against innocent victims who cannot defend themselves or their offspring, in the case of wolves, from the bullets fired from state helicopters or by hunters, who once a year are allowed to kill animals of critically endangered species with impunity.

An issue of importance for green critical criminology is overconsumerism (O'Brien 2008: Stretesky, Long and Lynch 2013). This perspective is also important in the study of wildlife trade, through which animals are abducted and traded, whether dead or alive, as specimens for collections, 'exotic' food, medicinal products, and fashion items such as brand bags (Sollund 2019; Wyatt 2013). There is a large and increasing market for traditional Asian/Chinese medicine, the production of which entails harms to animals. Tigers are bred and caged for body parts, and bears pass decades in cages so small they can barely move so that their bile can be extracted from their gall blathers (Ellis 2013). Wildlife trade drives species to extinction, based on dubious proofs of medicinal value, and cause zoonosis, such as the Covid-19 pandemic. The pandemic has actualised the terror of the legal and illegal 'wildlife' trade for many people, but primarily because now animal trafficking has resulted in widespread harm to humans with, at the time of writing, over 3.14 million human deaths. The virus has allegedly spread from a wet market in Wuhan where live, captured animals were commercialised and killed (Mackenzie and Smith 2020). It is therefore positive that on 24 February 2020, the Standing Committee of the National People's Congress of China adopted an urgent decision to expand the scope of China's Wildlife Protection Law to ban the consumption of almost all wild animals (Koh, Li and Lee 2021). However, the consumption of wildlife in China is deeply culturally rooted and animals are widely used as food and in traditional medicine as well as patent medicines in the 2020 Chinese Pharmacopoeia (Koh, Li and Lee 2021). Traditions are hard to combat and both strong political will and resources are needed to combat wildlife trafficking (Sollund 2019; Van Uhm 2016). The Covid-19 pandemic and the harms and crimes inherent to the 'wildlife' trade are salient examples of issues that need to be addressed from a green critical non-speciesist criminology approach (Beirne 2021; Van Uhm and Zaitch 2021). Powerful actors are involved, the trade has worldwide consequences in terms of the health and well-being of humans and animals, species are driven to extinction, and there are huge economic consequences and social repercussions as people die, lose their work, businesses go bankrupt, and people are driven into social isolation. Animals are still commercialised in markets around the world, whether in auctions, on the Internet, and in local villages or larger cities, particularly in Africa and South East Asia, as 'bushmeat' (Angelici 2016), for their value in the medicinal, fashion, and home décor industries, and for the pet trade and the zoo industry (for overviews, see Sollund (2019); Van Uhm (2016); Wyatt (2013)).

Another area of wildlife crimes and harms is recreational fishing and hunting. People fish and hunt, even when, in many Western states, the principal goal is not to put food on the table. Rather, killing is used instrumentally for purposes of leisure, to spend time in nature, and to foster comradeship (Bye 2003; Presser and Taylor 2011). In Norway, the state encourages the killing of freeborn animals by financially supporting the education of children in 'harvesting natural resources', through teaching them about shooting and trapping animals (Sollund 2021), and children in kindergarten are brought to witness the killing and dissecting of the animal victims (see http://www.naturoggardsbarnehager.no/Innhold/Nyhet/80916 (accessed 8 May 2021)). In this way, children are socialised into brutalisation towards animals, rather than being taught to show care and concern. Such education in violence is taking place in the face of a world crisis, as documented by the last Living Planet Index, in which an astronomical number of freeborn animals are lost: 'The population sizes of mammals, birds, fish, amphibians and reptiles have seen an alarming average drop of 68% since 1970' (WWF 2020), and it is increasing. It is, therefore, urgent to study the causes for such rates of extinction, whether on individual, societal, political, or other structural levels and to find ways of preventing such harm. Green critical criminology provides tools for such research, as in CRIMEANTHROP.

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While efforts are made to revive extinct species, because there are many scientific and ethical issues involved for this to succeed, the extinction of a species must still be regarded as final (Brisman and South 2020). Rather than resurrection, one should aim for conservation of those species that are still with us. The existence of international conventions that can stop the loss of freeborn animals and species extinction is crucial in this regard, but such conventions need scrutinising to ensure that they actually serve the intended purpose (Goyes forthcoming; Sollund 2019; Wyatt 2021). This is also one of the challenges of a green critical criminology. Therefore, a research project I currently lead, Criminal justice, wildlife conservation and animal rights in the Anthropocene – CRIMEANTHROP, studies the implementation of two such conventions, the Bern Convention on the

Conservation of European Wildlife and Natural Habitats (Bern Convention) and the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). We are exploring the implementation and enforcement of the conventions in Norway, the UK, Spain and Germany. While the Bern Convention is a nature conservation convention, CITES is a trade regulation convention whose purpose is to secure the 'sustainability' of 'wildlife' trade. Wildlife is regarded as a 'natural resource' that can be exploited for human benefit. These conventions are based on Cartesian theorisation and prioritise economic concerns (Goyes forthcoming).

So, although such conventions can appear to be protecting the environment and non-humans, an important aspect of this function is purely symbolic. How the conventions work and whether they actually protect animals (and other 'wildlife') depend on the way in which they are enforced. Norway is repeatedly accused of breaching the Bern Convention because the state regularly licenses the killing of critically-endangered large carnivore species, such as wolves (Sollund 2017b; Trouwborst, Fleurke and Linnell 2017). However, since Norway remains a party to the Bern Convention, and the secretariat of the Convention does not reprimand Norway for its killing policy, this may mislead people and the governments of other convention parties that have conflictual human-predator relationships into believing that Norway is actually complying with the Convention. Annual killing sprees including half of the wolf population of nearly 100 wolves are thus regarded as being within the limits of protection, and Norway becomes an example to follow. This results in further vulnerability for endangered animal species (Sollund 2020). It is urgent now with the current nature crisis and our knowledge of the capacities and interests of animals, that state authorised killing of wildlife, whether endangered or not, be further included in the agenda of critical, green criminology and also in the agenda of the EG, with its history of siding with the victims.

Conclusion

Critical criminology with its focus on the crimes of the powerful is concerned with harm as much as with crime, and critique of consumption and capitalism was fundamental to the development of green critical criminology. By encompassing the non-human world, it has significantly increased the importance of critical criminology. While traditional critical criminology is anthropocentric, in this era of environmental crisis, climate change and pandemic, it is urgent to expand the moral circle to include the natural environment and animals. To do this, we must question taken-forgranted truths and traditions – the fabric that supports human life – such as our reliance on the over-exploitation of animals whether in the wildlife trade, on factory farms, for research experiments, or for entertainment and the fashion industries. Through its interdisciplinary horizon and foundation, a non-speciesist, green critical criminology is urgently needed to address harms and acknowledge the victimisation of those who are different from us, while also fundamentally the same in their capacity to suffer. Like racism, speciesism should be rejected. Not only would this serve other species, the natural environment, and the ecosystems on which our existence depends, but also ourselves and future generations of humans and animals. Green critical criminology must continue to scrutinise the harms and crimes of the powerful, zero in on the core issues, question what we take for granted, and include in our research victims who, for too long, have not been recognised as such; and not least, we must disseminate the results of our research to our students, the general public, and back to those who themselves authorise environmental harm and animal abuse.

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