

Theorizing Green Criminology

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C5P1 This chapter introduces green criminology, a research tradition that studies crimes and other harms humans commit against ecosystems, nonhuman species, and other humans through our interactions with and exploitation of nature (e.g., Beirne and South 2007; Sollund 2008, 2015; White 2013; Goyes 2019).

C5P2 Green criminologists engage with questions about crimes, harms, victimization, criminalization, and social reactions similar to those asked by other criminologists—but applied to “green” issues, that is, those relating to the natural environment, species other than humans, and the ecosystems they inhabit. Green criminologists are thus inspired by theories broadly used in other branches of critical criminology (political economy, cultural studies, decolonial and Southern approaches, ecofeminism, human-animal studies, and theories of discrimination and harm). The considerable theoretical variety in the field has led authors to characterize green criminology as “a loose framework or set of intellectual, empirical and political orientations toward problems (crimes, harms and offenses related to the environment, different species and the planet)” (Brisman and South 2020, 40). Green criminologists innovate with these approaches, operationalizing theories in distinctive ways and setting out particular ethical commitments.

C5P3 We focus in this chapter on different theories associated with green criminology, approaching “theory” as referring to “a sensible way of understanding something, of relating it to the whole world of information, beliefs, and attitudes” (Snipes et al. 2019, 1). Theories entail “assumptions about the relationship between phenomena” (Johannessen et al. 2020, 30), and in green criminology, theories help explain the causes, consequences, and correlations of harm, crime, and injustice toward the ecological world and nonhumans.

C5P4 We start the chapter with a brief account of how green criminologists came to theorize the way they do. This is followed by an overview of four theoretical bases of green criminology—the treadmill of production, green cultural criminology, Southern green criminology, and speciesism—which includes consideration of areas where these approaches overlap. We explain that green criminology shares theoretical assumptions and concerns with other forms of critical criminology but also advances theorization in the discipline while highlighting the importance of green matters for justice and safety.

C5S1 The Trajectory and Meaning of Green Criminology

C5P5 For decades, green criminologists worldwide have demonstrated the nexus between mainstream criminological topics—such as drug control, incarceration, organized crime—and ecological harms and crimes. They have documented the centrality of environmental concerns for issues of justice, harm, and marginalization (e.g., Sollund 2015; Budó et al. 2022).

Topics that partly originated in green criminology have also gravitated into the discipline's mainstream. For instance, research on drugs—a core criminological concern—had only marginally touched upon the environmental consequences of drug cropping, consumption, and prohibition. By the early 2020s, however, the environmental impact of drugs had become a cornerstone of drug policy debates (e.g., Rhodes et al. 2021; Van Uhm et al. 2021). A similar dynamic is apparent in considerations of the environmental impact of wars (e.g., Rueda et al. 2022; Castelos 2023). Green criminology addresses critical issues concerning environmental injustice, ecological destruction, and victimization of nonhuman species. Yet the development and positioning of green criminology were late, slow, and rocky (Goyes 2022).

C5P6 In the Anglophone world, Lynch's short article "The Greening of Criminology" (1990) and South's "A Green Field for Criminology?" (1998) are credited with being the first exemplars of green criminology. Beirne's 1999 article "For a Nonspeciesist Criminology: Animal Abuse as an Object of Study" is also a critical starting point for drawing criminological attention to nonhumans. Beirne (2014) subsequently introduced the concept of *theriocide* to characterize animal murder. These authors were inspired by critical criminology and the growing environmental and animal rights activism of the 1980s and 1990s (South 2014; Sollund 2015, 2021). However, criminologists in non-Western locations, including Latin America and Asia, have been studying and commenting on green crimes since the 1960s (Goyes and South 2017; Goyes 2019). As Saes (2023, 148) explains, Latin America, in particular, has been fertile soil for the growth of ecological thought due to "the colonial experience, the plundering of natural resources, and the maintenance of core-periphery inequalities," all of which "constitute the basis for the emergence of a 'popular environmentalism' and an autonomous environmental thought when compared to Global North perspectives." Provoked by local realities and inspired by dependency theory and a pedagogy of liberation (Freire 2018), criminologists in Latin America authored a series of valuable green criminological works in the 1970s (see Goyes and South 2017).

C5P7 For a long time, however, scholars in Europe and the United States tended to overlook works within the nascent research program of green criminology. As Potter (2013, 129) documents, green criminology has been sidelined in conferences and symposia with "the argument that environmental harms, especially those *not* legally defined as crime are simply beyond the remit of criminology." In dismissing such works, mainstream criminologists have also accused green criminology of being biased, unnecessary—on the grounds that "established" criminology can research such topics—and less urgent than other human conflicts (see Potter 2013, for a discussion of these criticisms). Stanley Cohen (2001, 289), for instance, wrote, "by looking at [my] own reactions to environmental and animal right issues, I cannot find strong rational arguments against either set of claims. But emotionally, they leave me utterly unmoved." Lola Aniyar, a notable Latin American criminologist, also penned similar criticisms, saying that green criminology is "far from the bloody reality of Latin America, of the prisons' violence, of its youth prey to organized crime and a policy of exclusion" (email exchange with Goyes 2015).

C5P8 Green criminologists employ many of the same theories and methods used in other criminological fields. For example, Sykes and Matza's (1957) popular theory of techniques of neutralization has been applied to green criminology (e.g., Sollund 2012b). Green criminology also shares mainstream criminology's concerns about the dynamics that lead to crime and criminalization, the characteristics of those who break the law and are victimized, and the diverse impacts of crime and harm on society. Green criminologists have also broadened basic criminological concepts, liberating them from their urban and anthropocentric biases to incorporate a concern with rural and wild spaces and care for the nonhuman world. As

such, the field is not detached from criminology but is moving it forward. Its focus on green matters relating to justice and safety across the globe is more crucial than ever, given the dire state of climate change and the loss of biodiversity (WWF 2022; Core Writing Team et al. 2023; Goyes 2023b; Sollund 2023a).

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Concepts in Green Criminology

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Criminology is built, in large part, on two fundamental concepts: crime and justice. Green criminology embraces a third and overlapping concept: harm.

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Crime and Harm

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In criminology, the foundational conceptualization of crime refers to behaviors that violate the criminal law. Early green criminologists found themselves at odds with that definition, as few acts that threatened nature, nonhuman animals, or environmental rights were criminalized. Consequently, researchers in this emergent field were inspired by the “social harm perspective,” initially proposed by Schwendinger and Schwendinger (1970; see also Pearce 1976) and then developed as an independent field under the name of zemiology (Hillyard et al. 2004; Canning and Tombs 2021). Zemiology is appealing because it dedicates scholarly attention to numerous social harms not traditionally studied in criminology, including unemployment and homelessness (Hillyard et al. 2004).

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Harm is a more open concept than crime since the state sets the boundaries for defining crime. Different behaviors deemed crimes may share little in common apart from being breaches of legislation, with specific criminalized behaviors varying by context, sociopolitical regime, and time (Sollund 2015). As Kramer and colleagues note, certain harmful behaviors “come to be understood as not-crime, either because they are not named as such by law or are not treated as such by those who administer and enforce the law regardless of the social harm these behaviors cause” (Kramer et al. 2002, 266).

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Green criminologists have likewise documented that the state does not criminalize many harms affecting humans, nonhumans, and nature. They also emphasize the much more significant impact of noncriminalized environmental harms, such as those caused by the oil and gas industries, compared to many criminalized harms, such as theft and robbery (Lynch and Stretesky 2016).

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For green criminologists, “harm” encompasses any human act that reduces the well-being and life expectancies of an individual (whether human or nonhuman) or ecosystem. Embracing this broad understanding of harm is essential as it allows analysts to include nonhuman animals and ecosystems in their studies (e.g., Beirne 1999; White 2013, 2018a, 2018b; Sollund 2015, 2019). Moreover, it extends the realm of green criminological interest to encompass acts that are not criminalized and conveys that many phenomena beyond “mala prohibita” cause suffering and destruction (White 2007, 2013; Sollund 2008, 2012a; South 2008).

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Brisman and South (2014, 2020) identified primary and secondary green crimes and harms. The first involves destroying and degrading the earth’s resources via such activities as polluting the air and oceans, deforestation, and abusing nonhuman species. Secondary green crimes are symbiotic with or dependent upon such destruction and efforts to regulate or prevent them. An example would be the breaches of environmental justice that occur when the state criminalizes Indigenous people who protest against the destruction of their territories (e.g., Lynch et al. 2018).

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Justice

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While green criminology calls for an increased focus on environmental harms the state has not yet criminalized, it does not aim to expand incarceration and the associated harms of the prison industry. Instead, it is concerned with heightening attention to legal yet destructive environmental practices to elicit responses that help societies approach environmental, ecological, and species justice (Natali and Hall 2021; Forsyth et al. 2022; White 2022; Sollund 2023a). Thus, a central aspect of green criminology involves reconceptualizing what we mean by “justice” (White 2013), moving from the retributive logic of the criminal justice system to preventive and restorative approaches. This reconceptualization is apparent in the emergence of environmental, ecological, and species approaches to justice.

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Inspired by the 1980s environmental racism movement in the United States (Schlosberg 2007), *environmental justice* focuses on human, environmental, and social rights. The basic observation is that some human populations disproportionately suffer environmental harm. Practitioners advocate for a democratic distribution of clean and unpolluted environments and environmental goods, incorporating the rights of future human populations in their formulations (White and Heckenberg 2011). This conceptualization of justice has mainly been employed by analysts aligned with the “treadmill of production” and Southern green criminology approaches (see later discussion).

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Ecological justice builds upon the deep ecology movement that emerged in Norway in the 1970s. It challenges conceptualizing nature as a tool for human fulfillment. Instead, it understands nature as inherently valuable and an end in itself (Drengson and Devall 2016). It is mainly concerned with ecosystems and biospheres and sees the most crucial agenda as protecting forests, oceans, and other natural formations. Ecological justice has profoundly influenced the cultural theories underlying green cultural criminology (Brisman and South 2014) by reflecting on how humans conceptualize, represent, and understand nature and how such representations prompt consequential socio-environmental activities.

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Finally, *species justice* builds on notable philosophical developments (Singer 1975; Regan 2004) to argue that the same conceptualization of justice should apply to all living species. Species justice thus focuses on ensuring the well-being of species and individual beings, for example, wolves and whales. By acknowledging individual and species-level victimization, this conceptualization of justice has been a cornerstone of theoretical developments in animal abuse studies and speciesism analyses (e.g., Beirne 1999, 2014; Sollund 2012a, 2019, 2021; White 2013, 2018a).

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Key Theories in Green Criminology

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Green criminology encompasses many theories and theoretical sub-branches that aim to explain green crime and environmental harms. Four theoretical approaches are particularly prominent: (1) the treadmill of production, inspired by Marxism and political ecology; (2) green cultural criminology, which draws from cultural studies; (3) Southern green criminology, which is informed by decolonial theory, world-systems theory, and dependence theory; and (4) speciesism, which is associated with distinctive branches of philosophy, such as deep ecology (Drengson and Devall 2016), utilitarianism (Singer 1975), and moral philosophy (Regan 2004), as well as linguistics, feminism, and social psychology. Here, we summarize those four theoretical approaches, identifying their conceptual bases, theoretical predictions, and interactions, providing examples of how they have been applied.

C5S6 The Treadmill of Production

- C5P20** The “treadmill of production” concept signals how the capitalist system’s endless manufacturing of commodities devastates ecosystems worldwide (Stretesky et al., 2013, 2014). Analysts focused on the consequences of this process are inspired by Marxism and political economy to examine how economic structural forces lead to environmental harm and crime. At a rudimentary level, Marxism views society as composed of a structure and a superstructure. The structure, much like the columns of a building, determines the shape of everything else in society (the superstructure). However, there has been much debate about the nature and degree of such “economic determinism.” In contemporary society, the capitalist mode of production is the dominant structure, which involves actors striving to increase profit by producing more commodities, decreasing production costs, and augmenting sales (Gould et al. 2008; Stretesky et al. 2014). In such societies, institutions such as religion, education, and the law ultimately serve or are aligned with the dominant economic structure (Gramsci 1971). The perpetual motion of this system explains the appeal of the *treadmill* metaphor.
- C5P21** As Lynch and colleagues (2013) explain, the capitalist system interacts with nature in two highly destructive ways. First, capitalism entails a *withdrawal* process, where raw materials are extracted from the environment to produce commodities. All the goods we use—from foods to clothes to digital technologies—require materials that come from nature. Withdrawal transforms ecosystems by removing a habitat’s essential components and altering its biotic equilibrium, often in a destructive manner. Second, *additions* accumulate because corporations and individuals create waste (additions) at commodity production and consumption stages, which often harm the environment. The main actors on the treadmill of production are corporations, the proletariat, and the state. Consumers also play a part, as capitalism encourages consumerism, which is a crucial driver of environmental harm. Green cultural criminologists (see later) focus on, among other topics, the dynamics through which consumption is transformed from a straightforward transaction to cover fundamental needs into an all-encompassing way of life.
- C5P22** The capitalist imperative to make production cheaper and more efficient increases the impact of withdrawals from and additions to ecosystems. In combination, these two processes contribute to ecological disorganization. In their pristine state, natural systems have a productive function that follows natural laws of energy transformation. Capitalist production alters those natural processes by accelerating entropy, thereby negatively altering the relationship between organisms, their environment, and the self-sufficiency of the biological system (Stretesky et al. 2014). From this perspective, green crimes encompass “acts that cause or have the potential to cause significant harm to ecological systems for the purposes of increasing or supporting production” (Stretesky et al. 2014, 2).
- C5P23** In the capitalist system, corporations (or producers) are pressured to increase production to survive and depend on withdrawals from nature to create products. The proletariat is economically blackmailed to support increased production to promote job creation. To the extent that workers might oppose environmentally protective measures, this can be due to a fear they might lose their (often precarious) jobs (Davies 2014). Finally, the state—which ostensibly can regulate the speed and scope of the treadmill of production—supports the economic expansion of production as the state’s interests often align with those of corporate actors (e.g., Böhm 2018; Tombs and Whyte 2020), contributing to what is called “state-corporate crime” (Kramer and Michalowski 2012; Ruggiero and South 2013; Whyte 2014; Brisman and South 2015; Tombs and Whyte 2020).

C5P24 Much research has examined the environmentally and socially injurious outcomes of the collusion between corporations and states. In such works, the state is understood as a tool or mechanism that advances the economic interests of the bourgeoisie. At least three mechanisms link corporations and states: (1) corporate-state interdependence, in which corporations rely on states to provide security, and states depend on corporations to employ their citizens and provide services (Babic et al. 2017); (2) political commitment to economic growth, in which politicians, seeking to maintain their influence and please the electorate, champion policies that benefit industries (Chambliss 1989; Sollund and Goyes 2021); and (3) corporate cooption of the state, in which the same individuals operate as political *and* economic elites, using political power to advance economic interests (Chaves et al. 2015; Kaltwasser 2018).

C5P25 While precapitalist societies relied upon natural resources to survive, the emergence of capitalism involved exploiting ecosystems at levels that surpass planetary boundaries or the maximum burdens nature can stand before irreversible and destructive changes occur (Galaz, Biermann et al. 2012; Saito 2024). Because its economic system increasingly depends on pushing nature's limits, environmental harm is structurally ingrained in capitalism (Stretesky et al. 2014). In this theorization, corporations are held primarily responsible for environmental degradation (Whyte 2020). Corporations manipulate state agents to facilitate their actions, exploit workers to reduce production costs, victimize communities in urban, rural, and wild spaces, and destroy ecosystems, all to seek to increase production levels.

C5P26 Focusing on the treadmill of production helps explain and predict the environmental victimization of already marginalized communities. Indigenous communities, for instance, which have already been exploited by colonialism, tend to be further preyed upon by corporations seeking to grab their lands and natural resources. In classical Marxist theory, primitive accumulation occurs through appropriating the means of production. Harvey (2003) updated the terms of this approach by proposing the notion of accumulation by dispossession, which results from the routine functioning of the neoliberal system as it centralizes the means of production, resources, and lands. Green criminologists and political economists have built upon this insight to identify diverse forms of territorial dispossession that support the economic production system's interests. Studies across the globe, for example, have identified "development" projects as key drivers in expelling traditional inhabitants from their territories (Menton and Le Billon 2021). However, even ostensibly elite-led "green" projects can be functional to the economic system and have been criticized as "accumulation by restoration" and "green grabbing" (Huff and Brock 2017). Examples of such destructive processes include governments and international organizations protecting natural environments by tracing the boundaries of natural parks and reservoirs, which were meant to be human-free, and forcibly expelling their original inhabitants (Duffy 2022). Once the original human inhabitants have been removed from such spaces initially designated as nature reservoirs, the state and corporations have often implemented projects to extract natural resources—contradicting the original purpose of removing people from ecosystems. A clear example occurred in Ecuador's Amazon territory, where the state declared the Yasuni region an "intangible zone" in 2006, taking jurisdiction and power from the Indigenous inhabitants. While the professed aim of this initiative was to protect the local natural environment from exploitation, in 2013, the Ecuadorian government backtracked on those promises and allowed companies to drill for oil in the region (Goyes and South 2019; Associated Press 2023).

C5S7 Green Cultural Criminology

- C5P27** Cultural criminology is attuned to the interplay of crime and crime control with representations of nature in popular culture and subcultural artistic practices (Ferrell 2020, 639). Brisman and South (2014) propose what they see as a mutually beneficial cross-fertilization of green criminology and cultural criminology and argue that green criminologists should critically confront the role of culture in green-relevant crime and justice. Toward that end, they introduced the subfield of green cultural criminology. This approach embraces a cultural analysis of how both popular media and science understand and represent nature and the interactions between humans and nature. Green cultural criminology seeks inter- and multidisciplinary cultural engagement (Brisman and South 2014). It can entail, for example, analyzing films and photos portraying natural disasters caused by climate change and pollution, portraying knowledge about climate change derived from other disciplines in the natural sciences, and investigating the representations advanced by social movements protesting climate change.
- C5P28** Ferrell (2020) provides an example, as he outlines an analytic strategy open to exploring a range of harms and consequences anchored in social representations, whether these phenomena are “conventionally criminal” or currently outside the orbit of law and criminality. Ferrell called on green cultural criminologists to situate their subject matter historically in terms of its long-range development and current residency within the crisis of late modernity and late capitalism (Ferrell 2020, 638).
- C5P29** Green cultural criminology is attentive to the fact that what is defined as crime and how such crime is controlled and enforced are cultural processes dependent on collective interpretations—which may also be contested. Ferrell (2020, 639) argues that “cultural dynamics construct the reality of crime, crafting its meaning and consequences and charging crime and crime control with the energy of power, conflict and resistance.” The contemporary preponderance of advertising images, media technology, and manufactured political discourse means that criminology must account for ongoing processes through which criminal events, their mediated images, and public perception of crime are mutually reinforced (Brisman and South 2014; Ferrell 2020).
- C5P30** Brisman and South (2013, 117) propose three ways green criminology may benefit from cultural analyses: (1) by devoting greater attention to how environmental crime, harm, and disaster are constructed and represented by the news media and in popular culture; (2) by dedicating increased attention to patterns and processes of constructed consumerism as they operate in assorted media formats; and (3) by adopting cultural criminology’s concern with the contestation of space, transgression, and resistance to analyze how environmental harms are opposed in/on the streets and in day-to-day living.
- C5P31** Green cultural criminologists pay significant attention to consumerism, which is a crucial feature of modern societies (Miles 1998). While *consumption* refers to purchasing and using goods, *consumerism* transforms a commodity into an economic and cultural touchstone and status symbol (Miles 1998). Consumerist societies, which are now prevalent across the planet, are characterized by processes whereby collective and individual identities are associated with the commodities people consume. Arguably, consumerism is one of the most overarching problems of our times, given how it is integrated into the routines of everyday life as a materially “lived ideology” that encourages environmental destruction (White 2002, 86; O’Brien 2008).
- C5P32** The signifying properties of what one consumes denote the social class or group to which one belongs or aspires to belong. Wearing the “wrong” brand, for example, may be

catastrophic for a youth seeking to access particular social groups. Ferrell (2020, 641) cites the sociologist Torstein Veblen on this dynamic:

- C5P33** Consumption takes on a “ceremonial character”—becoming “honorific”—more a matter of displaying and confirming one’s status than of addressing an innate need for say, shelter, or warmth. With this “conspicuous consumption” [. . .] consumer items come to be purchased and displayed for the status they carry and communicate—and so, once this status evaporates, so does their social and cultural worth.
- C5P34** Kornel (2022) recently provided an environmentally focused example of this process in analyzing how consuming social representations of the “traveler lifestyle” entails influencers visiting sites rich in biodiversity, prompting people to travel to those destinations to engage in consumption. All such practices have ecological impacts, such as increased CO₂ emissions and ecosystems altered to support tourism.
- C5P35** As items and their owners gain and lose status, a cycle is produced whereby consumers must continually purchase new products to maintain their social standing or pursue a different desirable identity. In such a system, products are made, marketed, and advertised not to fill a need but to create one. This dynamic causes extreme forms of environmental harm and animal abuse. One example is carnism, a belief system derived from Christianity and other religions and from philosophers like Aristotle, which established a hierarchy of life values, conditioning people to eat certain animals. Such beliefs contribute to forms of animal abuse that are often deeply culturally engrained (Wyatt 2014; Joy 2020; Sollund 2023b). The specific manifestations of carnism can also follow cultural trajectories, for example, when the consumption of a particular animal becomes popular in specific cultures, as has happened with the consumption of pangolins among Vietnam’s rising middle class (Vallianos 2016). Indeed, advertisers have demonstrated that most things can be relabeled as sought-after luxury products, even something as fundamental for survival as water (Brisman and South 2013, 2014).
- C5P36** The environmentally destructive aspects of consumerism are apparent in the planned obsolescence of objects favored among specific population segments, such as youths who crave particular electronic devices. Planned obsolescence entails designing products to limit their life span and encourage replacement. This standard business practice has far-reaching ecological and social consequences (Bisschop et al. 2022, 271). Mobile phones, for example, are designed to be useless after a few years. At that point, new raw materials must be extracted, including coltan from mines in the Democratic Republic of the Congo, which are the habitats of the last mountain gorillas (Boekhout van Solinge 2008). This process prompts new waves of conflict, human rights violations, and pollution in the countries where the resource is extracted (Sollund and Wyatt 2022). In a direct connection to criminology, the European Parliament (2023) voted to ban such planned obsolescence due to its environmentally damaging consequences.
- C5P37** Cultural theories in green criminology help us better understand the treadmill of production. While the treadmill of production theory emphasizes the “objective” practices of producing and discarding commodities, cultural theories explicate the (inter) “subjective” social representations that enable capitalism. Consumer goods and services, produced in increasing numbers, can be successfully marketed and sold by creating new needs and ensuring the rapid turnover of commodities through fashion trends or accelerated technical innovation.
- C5P38** Green cultural criminology uses diverse methodologies to illuminate how environmental harms and their impacts are socially represented and understood. Visual and sensory approaches are two such key methodologies. As defined by Natali and McClanahan (2020), a visual and criminological perspective emphasizes how the visual representations of phenomena (from commodities, to nature, to environmental crises) prompt responses, or

lack thereof, from the criminal justice system. Likewise, the spectacular aspects of the criminal justice system shape how people see and, therefore, understand the health of the planet. For instance, McClanahan and South (2020) indicate that because people experience harm, justice, and the exercise of power in intensely visual ways, criminologists can benefit from studying how the aesthetics of a case affect the ethics of justice systems. The relevance of the visual for green cultural criminology is attuned to what Carrabine (2012, 463) has called the “ascendant power of the spectacle.”

C5P39

Natali and McClanahan propose *doing green criminology with images* to conduct visual green criminology. This methodological tool entails the researcher sharing photographs with the informant/research participants as a form of photo elicitation that can help create rapport (*verstehen* [understanding]). Such an approach is beneficial as nature is lost bit by bit, meaning that the total picture of the nature crisis is often missing. The failure to contemplate future catastrophes means they “all of a sudden” emerge as contemporary perils, such as climate change and the accelerating loss of species (White 2018a). A visual green criminology focused on images bridges the past, present, and future, which is crucial because it helps to give a concrete vision of what was and what has been lost through environmental destruction (Brisman and South 2014; McClanahan et al. 2017; Natali and McClanahan 2017). Horizon scanning can be helpful in this regard, as it involves using images from the past and present to help visualize and consequently encourage steps to reduce future disasters (e.g., White 2018a; Heckenberg and White 2020). Documentaries, fictional movies, and other forms of representation can help resist and forestall environmental destruction (McClanahan et al. 2017). Appropriately framing such representations through reflection and conversation involving the researcher and the interviewee is important for such a purpose. A visual approach to green crime and harm involves thus the researcher paying particular attention to the power and significance of the image and the visual in conversation with the interviewee who knows the landscape. To analyze the present landscape with reference to its representation from earlier times is fundamental for all seeing people’s interpretation of the world. Similarly, photographs of current environmental destruction caused by, for example, motorways and mining activities can be compared and analyzed together with images of how the landscape was before the destruction to assess how the loss of nature affects people and nonhumans.

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While vision is a vital faculty for interpreting our surroundings, for nonhuman species, the power of auditory and olfactory senses can far exceed those of humans (Yong 2022). Therefore, the growing field of sensory green criminology (McClanahan and South 2020) provides valuable avenues for contemplating how humans and nonhuman species use an expansive range of olfactory, tactile, auditory, gustatory, and visual senses to experience and make sense of the world. Green criminology can benefit from this orientation because it helps us acknowledge the victimhood of nonhuman species via considering a broader range of human-inflicted harms. A sensory approach to animal victimization might explore noise and light from infrastructure installations, smells from pollution, and visual contamination from the destruction of ecosystems. For example, García Ruiz and South (2019) elaborate on how whales suffer from noise pollution. As they maneuver to a large degree by song, whales’ ability to communicate is destroyed by the noise associated with oil drilling and wind turbine installations, resulting in them stranding themselves and dying on beaches (Tyack and Janik 2013).

C5S8

Southern Green Criminology

C5P41

Goyes (2016, 2019, 2023a) has proposed a Southern green criminology focused on global North–South relations that follow colonial and imperial trajectories. Such work aims to

capture “the historical impact of imperial practices” in instances of green crime and harm (Carrington et al. 2019). Its primary focus is on the legacy of colonialism for present environmental harm. Drawing on developments in Southern theory, which stresses that most theorization comes from the “metropolis,” it is aligned with decolonial efforts to increase the visibility of other knowledge traditions (Quijano 2000, 2007; Connell 2007; Escobar 2007; Grosfoguel 2007; Santos 2014; Mignolo and Walsh 2018). Escobar (2007), for instance, showed—well before the inception of a Southern green criminology—that neocolonial dynamics that divide the world into “developed,” “developing,” and “underdeveloped countries” enable and legitimize neocolonial powers (“the developed world”) to impose extractive policies on the rest of the planet under the guise of helping them “develop.” Southern green criminology also uses insights from Wallerstein’s (2004) world-systems theory that portray the world as an integrated system in which the high living standards of some nations derive from the exploitation of other regions of the world. Additional influences include political ecology (Alimonda et al. 2017), which foregrounds how geopolitical power determines who exploits environmental resources, and globalization studies that focus on the dynamics and paradoxes of economic, political, and cultural globalization (Franko 2019).

C5P42 Southern green criminology starts from the insight that the global structure established by colonial encounters from the fifteenth century onward gave and continues to give the (neo)colonizers extreme political, economic, epistemological, and symbolic capital advantages. Southern green criminologists use the expression “global North” to refer to the colonizers and “global South” for the colonized. As Haug (2021) explains, these are “relational categories that pay attention to links between sites and across time, such as historically (post)imperial trajectories when interpreting the current contours of world politics.”

C5P43 Although both pairs of terms—colonizers/colonized and global North/global South—refer to continuities in geopolitical power since the Americas were colonized, they are not synonyms. The global North continues to exploit the global South, but there have been significant transformations in the operative dynamics of such exploitation. Colonization from the 15th to the 19th centuries referred to “a state’s successful claim to sovereignty over a foreign land” (Mahoney 2012, 2). Since the mid-19th century, we have seen the emergence of neocolonialism, which entails the “de facto occupation of a country via land grabs after the country has gained independence from its colonizer” and the consequential “imposition of colonial ways of interacting with nature” (Goyes 2023c, 8). There has also been the related development of imperialism, which involves indirect control of nations, not primarily through physical occupation but via economic and political manipulation (Goyes 2023c.). Regardless of the century and the proper denomination (colonialism, neocolonialism, or imperialism), interactions between the global North and global South have revolved around the environment since the 15th century and have defaced nature in (neo)colonized locations.

C5P44 Epistemological and symbolic relations facilitate the global North’s ability to plunder and exploit the global South. That is, the designations of North and South refer “not only to systematic inequalities stemming from the ‘colonial encounter’ and the continual reverberations of (mostly) European colonialism and imperialism but also the potential of alternative sources of knowledge” (Haug 2021). Quijano (2000, 2007) uses the concept “coloniality” to characterize the epistemological consequences of colonialism, which entails the tendency to only treat as valid those knowledges created through modern European formulations and practices (see also Dimou 2021). The global North positions its knowledge formation processes as superior and thereby arrogates the role of leading human “progress” and determining the destiny of nations in the global South (Escobar 1995). Boaventura

de Sousa Santos (2014) famously coined the phrase “epistemologies of the South” to foreground the unique knowledge produced by victims of discrimination and marginalization and how they create such knowledge (especially but not only in and for the global South). Global inequalities regarding the value of knowledge also have environmental consequences because the global North—by positioning its intellectual production as superior—can impose its impetus to “develop” and “industrialize” over territories that used to be governed by Indigenous practices attuned to conserve and protect nature.

C5P45

Southern green criminologists acknowledge that the world is in constant flux, with emerging powers exerting increasing political and economic influence (Bull 2021). China and India, for example, have become stronger in recent decades, challenging the dominance of Europe and North America and blurring the clear divide between the global North and global South (Escobar 1995). Consequently, the world is better understood as entailing a polycentric global order (Galaz, Crona et al. 2012), with core countries having quasi-monopolies of financial institutions, media, and communication systems and technologies (Amin 1997) and peripheral nations generating raw materials and supplying an “unqualified” labor force (Wallerstein 2004). Northern countries are still understood as “core” in such a formulation due to the significant political, economic, epistemological, and symbolic power they accrued through colonization (Goyes 2023c). However, there is a recognition that some Southern nations, such as India, are emerging as part of a new “core.” The emergence of these “new core” nations nonetheless follows the script of Western civilization, and thus, their contributions to environmental disorganization increase as they seek to elevate their geopolitical positioning.

C5P46

Southern green criminology investigates how the dynamics of colonialism, neocolonialism, coloniality, and imperialism facilitate the global North’s exploitation of the global South and the related production of environmental harms. This framework generally identifies how the global North extracts and disposes of environmental products from Southern countries, producing localized ecological destruction and social conflict (Saes 2023). The global North also imposes environmental practices on the South to the detriment of local knowledges (Goyes 2019), continuing the logics of coloniality and neocolonialism. In part, the global North’s plundering of the global South is facilitated by the ability of corporate and governmental actors to use and manipulate international legal instruments to regulate human interactions with nature in a manner that favors their interests (Goyes and South 2016; Goyes 2017).

C5P47

Southern green criminology is strongly connected to the treadmill of production theory, as it acknowledges that capitalist imperatives drive the devastation the global North imposes on the global South in the former’s quest for increased profits (Stretesky et al. 2014). Consequently, Southern green criminologists denounce (Northern) corporations as the foremost perpetrators of environmental depletion and harm through processes of ecological extraction (Böhm 2018). However, analysts also criticize governments in the global South, as they are often the accomplices of Northern corporations, facilitating the ecological victimization of their citizens (Böhm 2018; Bahar 2023; Namusanya 2023, and, in general, Goyes 2023c). This approach connects with the cultural analyses of green cultural criminology by foregrounding consumerism as creating Northern countries’ global thirst for resources, which takes its most significant ecological and social toll on the global South (Brisman and South 2014; Lessenich 2019). It also foregrounds concerns that other theories largely ignore, most obviously the unequal distribution of environmental conflict and destruction between the global North and South and the overrepresentation of Indigenous populations and non-human species as the primary immediate victims of ecological devastation (de Carvalho et al. 2020; Goyes et al. 2021).

C5S9 Speciesism and Animal Abuse

- C5P48** The fourth theoretical strand in green criminology focuses on explaining humans' differential and adverse treatment of other animals. Studies of animal abuse draw from a complex set of theories developed initially within linguistics (Stibbe 2001; Derrid  2002), social constructivism (Berger and Luckmann 1966), eco-feminism (Donovan and Adams 2007; Kheel 2007; Sollund 2012b), social psychology (Cohen 2013), and philosophy (Singer 1975; Regan 2004). All of these theories are employed in green criminology to critique current human–animal relationships and raise questions about their legitimacy. Peter Singer's (1975) philosophical insights have been profoundly influential in this regard, with his book *Animal Liberation* being one of the first to set out a theory of animal oppression. His focus on the meat industry helped spark the modern animal rights movement.
- C5P49** Scholars working in this tradition often refer to "speciesism," a term Richard Ryder (2010) first coined in a pamphlet at Oxford University in 1970 to characterize both the ideology and practice of normalizing the human repression of nonhuman animals. Ryder presented this as a sister-"ism" to racism and sexism and saw all these as interrelated and similar to other forms of oppression and discrimination (Nibert 2002; Donovan and Adams 2007; Sollund 2012b).
- C5P50** Peter Singer (1975), who was at Oxford with Ryder, further developed the conceptualization of speciesism through a utilitarian-philosophical approach, emphasizing that human and nonhuman animals share the ability to feel pain. He compared harmful actions when carried out against humans to similar ones carried out against animals, concluding that producing and tolerating such acts against animals is illogical and discriminatory. Moral philosopher Tom Regan (2004) continued this tradition by characterizing animals as "subjects-of-a-life." By this, he refers to all individuals with beliefs and desires, a sense of the past and the future, an emotional life, and a preference for well-being. Most people ascribe value to all human beings regardless of their capacity to be rational agents. As such, Regan argues, we must also assign the same value to animals because they, too, suffer and have the same interest in a life free from human-inflicted pain.
- C5P51** As an anthropocentric ideology with deep historical and cultural roots, speciesism draws upon strands of religion and philosophy that place the human animal above others (Singer 1975; Cazaux 1998; Nibert 2002; Sollund 2008, 2012a). Examples of speciesist practices are hunting, meat eating, animal experimentation, and the use of animals for entertainment, such as in rodeos, circuses, and zoological gardens. Speciesism and animal exploitation were also fundamental in colonizing the Americas (Nibert 2013) and in ongoing processes of neocolonialization through which corporations deforest Indigenous lands in the pursuit of financial gain.
- C5P52** Scholarly focus on speciesism borrows from but also lends theoretical insights to the other three significant approaches in green criminology: the treadmill of production, green cultural criminology, and Southern green criminology. Maher (2017), for example, applied elements of the treadmill of production in her analysis of "puppy mills," where so-called pet dogs are produced in a manner akin to a capitalist factory. Hallsworth (2011) and Lie (2017) have used analytical tools characteristic of green cultural criminology to conduct complementary analyses of how some dog breeds are socially constructed to be "dangerous." Inspired by Southern green criminology and cultural criminology, Goyes and colleagues (2021) have explored representations of nonhuman animals within Indigenous communities in the global South.
- C5P53** Animal abuse, driven by speciesist ideology, is pervasive. In animal experimentation and factory farming, nonhuman animals remain caged and subjected to procedures that people would regard as abusive and painful if they knew they were being inflicted on a human. Such speciesist practices usually involve or lead to theriocide (the killing of nonhuman animals)

(Beirne 2014). Yet societies tend to accept these practices as they are understood to connect with human interests in developing medicines, foods, and clothing. Scholars of animal abuse theorize other dynamics, including consumerism (Sollund 2008, 2012b) and social movements championing animal rights. For example, Ellefsen (2012, 2016) analyzed the strategies of anti-vivisection social movements in their efforts to resist animal abuse. The state often responds to such protests through criminalization and antiterrorist legislation (Ellefsen 2016).

C5P54 Speciesist practices are supported and facilitated by conscious and unconscious aspects of group and individual psychosocial patterns, such as techniques of neutralization (Sykes and Matza 1957) and mechanisms of denial (Sollund 2012a; see also Presser's 2013 chapter on meat eating, with a focus on discourse/language forged by institutions). Humans often consider the abuses involved in meat production and animal experimentation as "necessary" and "unavoidable," thereby denying or neutralizing the harms involved. Institutions conceal and legitimize oppressive acts against nonhuman animals through comparable processes of neutralization and denial (Nibert 2002; Sollund 2012a). An example would be welfare washing (Björkdahl and Syse 2021), which is apparent in advertisements portraying "happy" cows, pigs, and hens in green fields—representations that mask the reality of animals forced to live out their lives in dirty pens and cramped cages.

C5P55 A basic tenet of social constructivist theories (e.g., Derridá 2002) is the need to understand how language works to construct social reality. Authors have singled out several terms that carry problematic assumptions. For instance, the term "animal" is deemed by many to be anthropocentric as it marks an artificial divide between humans and all other animals. Not only does the word construct social distance, but it lumps together the massive variety of nonhuman animals. "Pet" implies that the purpose of the animal's existence is to produce companionship and comfort to a human.

C5P56 Analysts have problematized other terms-cum-discourses, including "sacrifice," which is frequently used to characterize the dynamics involved in killing animals used in experiments. Another example is "lab rat," which creates social distance by implying the justifiable exploitation and killing of the "lab" animal. Such language builds a world order where humans are encouraged to perceive animals as existing for their use.

C5P57 Other social psychological phenomena contribute to the abuse and exploitation of animals, notably physical distance. As Cohen (2013) pointed out, the emotional effect of suffering is blunted when it occurs far away or is sustained by those perceived to be very different from oneself. Such distance reduces our inclinations to acknowledge or empathize with such beings. These observations are particularly relevant regarding animal suffering (Sollund 2008), given how humans have psychologically and culturally distanced themselves from the diverse animal world. By separating us as "humans" from those that are "animals," we create a distinction that helps inadvertently facilitate forms of animal abuse.

C5P58 Finally, eco-feminism has also played a prominent role in green criminological approaches to speciesism. Eco-feminism emphasizes the need for political activism founded on an intellectual critique of patriarchal and capitalist societal structures that entail ecological destruction and oppression based on gender (e.g., Mies and Shiva 2015). Such theories and concepts are helpful, for example, in comparing human and animal trafficking (Sollund 2012b, 2019), as both are shaped by andro-anthropocentric structures that facilitate such oppression and objectify the many victims of these harms.

C5S10

Conclusion

C5P59 The theoretical bases of green criminology have individual, social, and global dimensions. These theories derive from eco-feminism economics, linguistics, political ecology,

psychology, philosophy, sociology, and more. This chapter presented four macro theories foundational to green criminology: the treadmill of production, green cultural criminology, Southern green criminology, and perspectives of speciesism. These approaches are used to understand how nature, humans, and nonhuman beings are victimized.

C5P60

Green criminology significantly advances the discipline by challenging the Northern and anthropocentric biases that have historically constrained criminologists' willingness or ability to examine crimes and harms relating to nature and the environment. It has helped broaden the field of criminology by embracing "harm" as a central concept and phenomenon worthy of scrutiny, independent of the legality or illegality of individual human or state-corporate acts. As such, green criminology has put on the political agenda an expanded notion of victimization encompassing the silent and often invisible harms and crimes perpetuated against the natural environment and nonhuman animals. Green criminology challenges the anthropocentrism of both criminological and popular thought that has helped devastate the natural environment and nonhuman species. As we live in a historical moment characterized by global climate change and rapid species loss, green criminologists help provide new analytical tools to understand and respond to such urgent developments.

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