Of Theory and Meaning in Green Criminology

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Abstract
In this article, I focus on green criminology's relationship with theory with the aim of describing some of its animating features and offering some suggestions for green criminology's further emergence. In so doing, I examine green criminology's intra-disciplinary theoretical engagement and the notion of applying different meanings and interpretations to established theory. Following this, I explore green criminology's interface with theories and ideas outside criminology – what I refer to as green criminology's extra-disciplinary theoretical engagement. I conclude by suggesting that green criminology has shed light on the etiology of environmental crime and harm (including climate change), and that it will continue to illuminate not only how and why environmental crime and harm occurs, but also the meaning of such crime and harm.

Keywords
Environmental crime/harm; green criminology; green cultural criminology; popular green criminology; treadmill of production.

Introduction
Since the early 1990s, when first proposed by Lynch (1990), 'green criminology' has been concerned with environmental crimes and harms affecting human and non-human life, ecosystems, and the planet as a whole.1 In the 25 years since then, green criminologists have devoted most of their attention to illuminating and describing different types of environmental harm. Or, as White (2013: 27) writes in his chapter The Conceptual Contours of Green Criminology:

Most writers within the green criminology perspective concentrate on exposing specific types of criminal or harmful environmental actions or omissions. In doing so they provide detailed descriptions and analyses of phenomena such as the illegal trade of animals, illegal logging, dumping of toxic waste, air pollution, and threats to biodiversity.

'There is no green criminology theory as such [emphasis in original]', White explains (2008: 14). Rather:
... as observed by South (1998), there is what can loosely be described as a green 'perspective'. Elements of this perspective generally include things such as a concern with specifically environmental issues, social justice, ecological consciousness, the destructive nature of global capitalism, the role of the nation state (and regional and global regulatory bodies), and inequality and discrimination as these relate to class, gender, race and nonhuman animals' (White 2013: 22; see also South 2014, this issue).

Whether green criminology is a theory or contains theory depends on how one understands the term 'theory.' That is the subject of this article.

The first seminar of the Economic and Social Research Council (ESRC) Green Criminology Research Seminar Series took place at Northumbria University in October 2012 and dealt with 'Green Criminology: Theories and Concepts'. I delivered a paper at this seminar entitled Descriptions of and Prescriptions for Green Criminology: A Four-Leaf Clover Analogy. Continuing a practice of employing phytological analogies (Brisman 2010, in press), I likened green criminology to a four-leaf clover, an uncommon variation of the more prevalent three-leaf clover. While green criminology may, at an earlier time, have been a novelty, the recent proliferation of sessions at conferences on green criminology – and, indeed, the very existence of the ESRC Green Criminology Research Seminar Series – is a testament to its growth and vitality. Thus, the analogy of green criminology to a four-leaf clover had nothing to do with the former's rarity. Rather, I called attention to four distinct but connected areas (or leaves) of green criminology: (1) green criminology's substantive engagement with various environmental crimes, harms and issues (which I presented in various typologies); (2) green criminology's engagement with different criminological theories usually employed to explain street-level crime; (3) green criminology's interaction with theories and orientations originating and residing outside criminology; and (4) relationships between (the) environment and other phenomena that could either contribute to its demise (for example, in the case of conflict) or its protection (for example, in the case of rights). While the paper was not intended as an exhaustive account of everything 'green criminological' or as a 'state of the field' – if green criminology can even be referred to as such – its goal was to help kick off the ESRC Green Criminology Research Seminar Series by highlighting its analytical strands and demonstrating its conceptual breadth. I concluded that green criminology had much to contribute to our understanding of environmental crime and harm and that, as an overall project, it had much to offer in furtherance of environmental protection. This, however, would take faith, hope, love and luck, elements which each of the leaves of a four-leaf clover are supposed to represent.

Environmental protection and the health of the biosphere still require faith, hope, love and luck – although it requires a good deal of other things (for example, creativity, ingenuity, sacrifice). The present article seeks not to graft more leaves and further complicate the clover analogy but the opposite: to focus on green criminology's relationship with theory in the hope of describing some of its animating features and offering some suggestions for green criminology's further emergence.

**Green criminology's intra- and extra-disciplinary theoretical engagement**

In 1998 – coincidentally the same year as the first full journal issue devoted to green criminology (see Agnew 1998; Benton 1998; del Olmo 1998; Groombridge 1998; Lane 1998; South 1998; South and Beirne 1998) – William Jefferson Clinton, the 42nd President of the United States, responded to a question posed to him during the course of his grand jury testimony on the Monica Lewinsky affair by stating, ‘It depends on what the meaning of the word “is” is’ (The Office of the Independent Counsel). People snickered. Indeed, some derisively
referred to it as the ‘defining moment’ of his presidency (Noah 1998). Even ardent Democrats shuddered, although Clinton’s response did elicit amused smiles from existential philosophers.

Say what you will about Clinton’s politics or his involvement with Ms. Lewinsky, but the man did have a point: our definition of concepts and words not only has a temporal dimension, but also has one that reflects our understanding of them. In other words, how we describe something reveals our comprehension of it, and how we grasp something conditions how we behave and conduct ourselves.

To offer another example: When I was a child, I learned that there were nine planets in our solar system. To remember them, I dutifully learned the phrase, ‘Mary’s Violet Eyes Makes John Stay Up Nights. Period’. The letter of each word of the phrase stood for one of the planets: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune, Pluto. In 2006, Pluto ceased to be a planet in our solar system.

Fortunately, Pluto had not met the same fate as Alderaan, home of Princess Leia and destroyed by the Galactic Empire’s Death Star in *Star Wars Episode IV: A New Hope*. Rather, it was demoted to the status of ‘dwarf planet’ (Overbye 2006; see also Kreider 2006; Lemonick 2012). My mnemonic phrase became meaningless, replaced by ‘Mallory Valerie Emily Mickels just saved up nine hundred ninety-nine nickels!’ (Rabe 2009: 26).

While some lauded the downgrading – an example of science’s cruel self-correcting beauty (see Overbye 2006) – others, including quite a few astronomers, thought the debate was silly (see Lemonick 2012: 221-22). But the wrangling over Pluto’s status struck an emotional chord for many (see, for example, Brown 2012; Kreider 2006) and I would wager that some of the same people who shed tears of laughter at Clinton’s attempt at verbal judo wept at the loss of Pluto, at how the scientific community had defined Pluto out of existence.

What ‘is’ means, what constitutes planethood (and whether Pluto is a planet), and whether green criminology is a theory or contains (a) theory all depend on how one conceptualizes *theory*. If one conceives of *theory* as a group of ideas that purports to offer an overarching *causal explanation* for a phenomenon (see, for example, White 2011: 2; 2012b: 17) – such as why do individuals and groups (for example, state-corporate entities) engage in activities that cause environmental degradation – then green criminology as a *theory* is a bit anemic and its contributions to answer such etiological questions have been minimal. If, however, we consider *theory* as encompassing ideas and tools for describing and analyzing *what and how* things are and who engages in various behaviors, patterns and practices and how; and how do we – or how might we – interpret and ascribe meaning to those behaviors, patterns and practices, and to the consequences thereof; then green criminology is much more elaborate and rich and its influence and impact far bigger.

Let us think of it another way. The anthropologist, Clifford Geertz, famously declared in *The Interpretation of Cultures* that the analysis of culture should be ‘not an experimental science in search of law but an interpretive one in search of meaning’ (1973: 5; see also Yarrow 2006: C21). If we take the analysis of environmental crime to be solely an experimental science in search of law, then green criminology’s ambit is rather limited. If, however, we consider the analysis of environmental crime to include *interpretation*, as well as *explanation* and *prediction*, then green criminology’s scope is much broader, its potential much greater and its significance far more profound.

Adopting a more capacious conception of *theory* – were I an astronomer, I might have defined planethood to include not only Pluto, but Eris (previously and informally known as Xena), Ceres, and maybe even Charon, the largest of Pluto’s moons (see Brown 2012; Overbye 2006) – I turn
now to green criminology's engagement with other theoretical orientations within the larger field of criminology. I refer to this examination as green criminology's *intra-disciplinary theoretical engagement* and it is akin to South's notion of applying "old" theory to "new" circumstances (South 2014: 11). Following this, I explore green criminology's interface with theories and ideas outside criminology, what I label as its *extra-disciplinary theoretical engagement*.

_Intra-disciplinary theoretical engagement_

Certain criminological theories are concerned with micro- or individual-level causes of crime: they attempt to explain how and why individuals engage in crime. Other theories focus on macro- or group-level explanations of crime: they attempt to explicate why certain groups commit certain crimes (Cullen and Agnew 2011). Because both individuals and corporations (or state-corporate entities) can perpetrate environmental harm and deliberately flout environmental laws and regulations (see, for example, Bisschop 2012; Brack 2002), efforts have been undertaken to apply both micro- or individual-level criminological theories and macro- or group-level criminological theories to explain environmental crime and harm.

For example, Agnew (2012a, 2012b) has drawn on criminological theories that are usually used to explain 'street crimes' such as assault, larceny and robbery to discuss the potential impact of climate change on crime. He has argued that climate change will increase strain, reduce social control and increase social disorganization, weaken levels of conventional social support, foster beliefs and values favorable to crime, increase the prevalence and severity of traits conducive to crime, affect certain opportunities for crime, and contribute to or create social conflict, as well as reduce the ability and willingness of individuals and groups to take meaningful action. Elsewhere, Agnew (2013: 58) endeavors to explain 'ordinary acts' or 'ordinary harms' that 'contribute to ecocide – or the contamination and destruction of the natural environment in ways that reduce its ability to support life (South 2009: 41)' with strain, social control, self-control, social learning/rational choice, and opportunity theories. Agnew creatively demonstrates how these social-psychological theories of crime that dominate criminology can explain such 'ordinary acts' or 'ordinary harms' as using automobiles with poor gas mileage for most transportation, living in relatively large homes that are excessively heated or cooled with fossil fuels, and consuming large amounts of meat.

As White (2011: 3, 6) reminds us, much environmental crime and harm is perpetuated by states, as well as by powerful groups and organizations such as transnational corporations. Accordingly, green criminologists have endeavored to understand how and why such entities have engaged in environmentally harmful practices. For example, Stretesky (2006) has drawn on rational choice and deterrence theories of crime to determine the likelihood that regulated entities will discover, disclose and correct environmental violations under the United States Environmental Protection Agency’s (EPA) Self-Policing Policy (formally titled ‘Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations’ and commonly referred to as the EPA’s ‘Audit Policy’). In an effort to understand how environmental-related harms are facilitated by states, Du Réès (2001) has employed Sykes and Matza’s (1957) ‘techniques of neutralization’ – a type of control theory – to analyze Swedish supervisory agencies’ practice of not always reporting suspicions of environmental offenses.

The examples of Agnew, Stretesky and Du Réès represent attempts to explain environmental crime and harm at the micro- or individual-level and macro- or group-level using dominant criminological theories. Other examples abound. Indeed, Stretesky and colleagues (2014: 5-11) provide an overview of five major criminological theories that have been applied to environmental crime and harm: (1) *deterrence theory* (Stretesky 2006), as discussed above; (2) *situational crime prevention* and *routine activities theory* (Lemieux 2014; Lemieux and Clarke
2009; Pires and Clarke 2011, 2012); (3) self-control theory (Ray and Jones 2011); (4) social learning theory (Sollund 2011); and (5) strain theory (Agnew 2012a, 2012b), as illustrated above. But it is important to add that the relationship between green criminology and such mainstream criminological theory has not been unidirectional. For example, Simon (2000) has suggested that environmental crime can serve as a laboratory for testing and refining two theories of organizational criminal behavior – differential association and Messner and Rosenfeld’s (1994) neo-Mertonian anomie theory – while Lynch (2013) has reviewed the ‘ecocity perspective’ that emerged in the 1970s and has examined how that view creates a green criminological extension of social disorganization theory.

Efforts to forge linkages with other branches or subfields of criminology have not been limited to issues or questions of etiology. The previous examples reflect attempts either to apply mainstream criminological theories (that usually try to explain street crime and/or violent crime) to understand the causes of environmental crime and harm (in the case of Agnew, Stretesky and Du Rées) or to strengthen or extend mainstream criminological theories through a consideration of environmental crime (in the case of Simon) and environmental quality (in the case of Lynch). Scholars, however, have also endeavored to draw on criminology’s insights into the representation and meaning of street crime and/or violent crime to understand the representation and meaning of environmental crime and harm.

As White (2009: 483) explains, ‘Environmental crime is studied for a reason; namely, we need to understand the genesis and dynamics of such crime so that we can adequately respond to it’. ‘More work needs to be done to understand the nature and scope of environmental harm’, White (2009: 483) continues, and to this I add that more research needs to be undertaken to understand the ways in which environmental crime and harm are constructed by and represented in the media and the ways those constructions and representations affect how we ascribe meaning to the environment, to nature, and to harms and crimes thereto.

For example, Brisman and South (2013, 2014) have argued that green criminology must attend to the mediated and political dynamics surrounding the presentation of various environmental phenomena, especially news about real environmental crimes, harms, and disaster, and fictional/science-fictional depictions of human-nature/human-environment relationships and environmental disaster narratives. In order to advance green criminological concern with the mediated representation and/or construction of ‘environment’, ‘environmental crime’, and ‘environmental harm’, Brisman and South have suggested a ‘green cultural criminology’, a perspective drawing on cultural criminology’s concern with the interrelationship of culture and crime in late modernity.

In a related vein, Kohm and Greenhill (2013) have extended Rafter’s (2006, 2007) concept of ‘popular criminology’ to green criminology, in order to better appreciate the emotional, moral and philosophical dimensions of the relationship between crime and the social and physical environments, an undertaking they label ‘popular green criminology’. As Kohm and Greenhill explain, if ‘popular criminology’ is a discourse found in accessible mass-mediated texts exploring issues pertaining to crime and justice, ‘popular green criminology’, then, is a branch of ‘popular criminology’ dealing with environmental harms, issues of space and place, and the oppression of human and non-human animals by people and institutions. For Kohm and Greenhill, British television’s Red Riding Trilogy (RRT) presents a popular green criminology of child sexual abuse, police and government corruption, class warfare, and environmental destruction by powerful corporate interests and private individuals. The trilogy interrogates the causes and consequences of harms to human and non-human animals and communities by linking individuals’ actions to broader social-structural and institutional processes in the imagined world of Yorkshire, England in the 1970s and 1980s. Kohm and Greenhill also demonstrate how the film The Woodsman (2004) offers an ecological parable of the dangers of
modern urban life that problematizes crime’s link to a broader social and physical environment. Both *RRT* and *The Woodsman*, Kohm and Greenhill argue, take up fragments of the familiar characters, imagery, and narrative in order to disrupt conventional understandings of the crimes, offenders, and victims depicted in the films. Paralleling academic criminology, the films present a popular discourse that focuses on the emotional, moral, and ethical dimensions of harm. By making *feeling* central and by engaging audiences at an affective level, these works, Kohm and Greenhill assert, move green criminology forward by reaching audiences rarely exposed to mainstream academic discourses on crime and the environment. Moreover, Kohm and Greenhill maintain, these challenging films can further the cause of justice, whether imagined at an individual level or at a broader environmental level. They open up spaces for affective engagement with (in)justice and simultaneously suggest a re-examination of taken-for-granted assumptions about offending and harm and their connection to broader contexts. Kohm and Greenhill conclude that if green criminology does indeed seek to foster an understanding of the interconnected nature of harm and the broader physical and social environment, a popular green criminology can be a powerful ally.

*Extra-disciplinary theoretical engagement*

According to White (2011: 17; 2012b: 26), ‘environmental harm crosses borders to incorporate all nation-states on planet Earth (as evident in ozone depletion and global warming and the illegal trade in animals)’.

Similarly, Dybing (2012: 279) states that ‘[p]olution and environmental harm have no national borders’, while Hall (2013: 143) observes that ‘environmental harm often knows no borders’. Just as these *geopolitical* borders ‘do not have much material relevance when it comes to environmental harm’ (White 2012a: 3; 2013: 68), *disciplinary* borders should have little bearing on our attempts to identify, analyze, understand and confront environmental harms. In other words, green criminologists studying environmental crime, harm and victimization must look beyond *criminological* theory to ensure that we do not exceed our ‘planetary boundaries’ – those boundaries that ‘define the safe operating space for humanity with respect to the Earth and [that] are associated with the planet’s biophysical subsystems or process’ (Rockström et al. 2009: 472). Many green criminologists already do so, extending their gaze beyond that which is demarcated ‘criminology’. Two examples illustrate this kind of work.

Motivated more by the question of ‘How does the organization of society promote an increasing level of environmental harm?’ rather than ‘What causes an individual (or set of individuals) to engage in acts that harm the environment?’ (Stretesky et al. 2014: 9), some scholars have attempted to explore the political economy of environmental crime – or what some of them refer to as ‘green crime’ (Stretesky et al. 2014: 4) – using ‘treadmill of production’ (ToP) theory, as developed in environmental sociology by Schnaiberg (1980; see also Gould et al. 2008). York (2006: online) provides a nice summary of the ToP theoretical model:

> According to the ToP model, advances in technology, primarily induced by owners of the means of production seeking to increase profits, drive the expansion of production and consumption synergistically. This process leads to a cycle of production necessitating more production, because all sectors of society (the state, organized labor, and private capital) depend on continued economic growth to solve problems, such as unemployment generated by mechanization, which are created by growth itself. ToP theorists argue that environmental problems cannot be solved in such a system, since growth puts ever-increasing demands on the environment by extracting natural resources and generating pollution. Thus, achieving environmental sustainability requires radical restructuring of the political economy and a move away from growth dependence.
Put another way, ToP theory illustrates how political economic forces and relations of production create ‘ecological disorganization’ where humans extract natural resources from an ecosystem and convert them into products through manufacturing and, in the process, generate pollution and release toxic wastes, which disrupts ecosystems by reducing biodiversity and ‘destroys the integrity of nature and its reproductive network (i.e., its ability to produce the conditions for life)’ (Stretesky et al. 2014: 4; see also Stretesky et al. 2013: 234). Seeking to integrate the political economic approach of environmental sociology’s ToP theory with green criminology in order to address green crimes and their control, Long and colleagues (2012) have examined environmental enforcement in the coal industry: specifically, the association between coal company political campaign contributions, corporate lobbying and relative contribution to coal production, and environmental enforcement within companies.5 Stretesky and colleagues (2013) have examined the role of environmental enforcement within ToP theory and have analyzed whether monetary penalties administered by the United States EPA have the potential to reduce ecological disorganization.6 Greife and Stretesky (2013) examine the variation in civil and criminal liability for oil discharges across selected coastal and great lake states within the United States. Relying on ToP theory, Greife and Stretesky derive and examine three hypotheses concerning the relationship between oil production, value added, political resistance and variations in state legislation. They surmise that state laws that specifically regulate oil discharges will make it harder to punish those firms that violate oil discharge laws if those firms operate in states (1) where more oil production takes place; (2) where the oil industry contributes significant value added to the state economy; and (3) where there are lower levels of political resistance to ecological disorganization. Greife and Stretesky find general support for their hypotheses – especially with respect to strict unlimited liability, minimum civil penalties, and prison sentences – and demonstrate how the treadmill of production may shape civil and criminal laws.

Whereas the previous paragraph illustrates the extension of ToP theory into green criminology – or green criminologists’ reaching outside criminology (and into environmental sociology) to offer a political-economic explanation of ecological disorganization – the works of Kane (2012, 2013) exemplify an anthropologically-inspired/oriented and ethnographically-based account of water contamination and other forms of watershed destruction. For example, Kane’s (2012) book Where Rivers Meet the Sea: The Political Ecology of Water describes in lurid detail human-water relationships in Salvador da Bahia, Brazil, and Buenos Aires, Argentina. While the water bodies in the two cities are different (one a lake, the other a river), as are the historical and cultural contexts in which residents interact with, affect, and imagine themselves as part of their aquatic habitats, Kane (2012: 2) teases out similarities in ‘aquatic treachery’. While each locale faces a particular set of ‘aquatic conundrums’ (Kane 2012: 2) – and while each relies on cultural and political forms of (dis)engagement that are shaped by its port city history – Kane demonstrates commonalities in the ways in which people in both places poison their water sources and waterscapes even as they take sustenance and pleasure from them. Kane is especially vigilant with respect to how the streams of culture, art and race in each city flow into and through those (effluvia) of politics, crime and governance. Though attentive to the peculiarities of her two ethnographic sites, Kane does not shy away from making broader observations, indictments and/or recommendations. She begins her book by stating:

Destruction is as diverse as culture and as ubiquitous as biology. From micro to macro, from inconsequential convenience to horrendous warring disregard, we assassinate the living waters on which all depend. The human-water relationship reciprocates such that even as we poison the water, the water poisons us’ (Kane 2012: 2).

She concludes no less polemically, offering practical suggestions for scholarly and social action, such as ‘[e]nforce current national and international law to hold military and industrial forces
culpable for the assassination of world waters while resolving predicaments born of eco-blind jurisdictional constraint’ (Kane 2012: 179).

Here, as well as in a subsequent publication that draws on some of the same fieldwork as for Kane’s 2012 book – her (2013) chapter in the Routledge International Handbook of Green Criminology – Kane highlights ways in which understandings of environmental harm are contested and contestable. In other words, while her work is etiological like those scholars drawing on ToP theory (or those employing mainstream criminological theory) in that she can point to ways in which, and instances where, free market practices trump environmental ideals, laws and regulations resulting in ecological degradation, her scholarship more closely resembles that of Brisman and South or Kohm and Greenhill in that she endeavors to show how people frame and ascribe meaning to environmental harm, as well as represent the relationship of economy and ecology. If we take these examples together, we might conceptualize and represent green criminology’s theoretical engagement as presented in Figure 1.

**Figure 1: Conceptual representation of green criminology’s theoretical engagement (with examples)**

While the preponderance of theoretical engagement is *intra-disciplinary* and focused on issues or questions of etiology, this is unsurprising given criminology’s (and most disciplines’) endogamous practices and interest in or preference for theories of the origin of crime and delinquency. Efforts of green criminologists to conceptualize theory broadly and to look beyond/outside criminology’s borders suggest a burgeoning of green criminological theory – or green criminology’s relationship with theory – however narrowly or widely ‘theory’ is understood.

**Conclusion**

Ten years ago, in a provocative piece entitled Against ‘Green’ Criminology, Halsey (2004: 833) stated:

> Like previous decades, the first few years of the 21st century have heralded the notion that global depletions of biodiversity, as well as human-induced declinations in air, water and soil quality, are chronic processes rather than fleeting events. These are not, it now seems clear, the result of some inexplicable ‘blip’ in (supposedly predictable) weather patterns, breeding cycles, market
forces or the like. Instead, they are fundamentally linked to the ‘normal’ operation of various political, cultural and economic practices [emphasis added].

Halsey (2004: 837 n.6) noted that ‘a key critical criminological task is to bring to light the factors which function to divide criminal from so-called normal, routine or accepted practice’. Taking Halsey’s point a step further, White (2010: 6) observed that this task should be ‘to name these harms as “criminal”, even if not considered illegal in conventional terms. Those who determine and shape the law are very often those whose activities need to be criminalised for the sake of planetary well-being’.

As green criminologists continue to investigate and study ‘those harms against humanity, against the environment (including space) and against non-human animals committed both by powerful institutions (for example, governments, transnational corporations, military apparatuses) and also by ordinary people’ (Beirne and South 2007: xiii), we can play a role in how we respond to those harms through existing appendages of and new features within the criminal justice system (see, for example, White 2009, 2011). In so doing, however, we need to be conscious of and sensitive to Halsey’s (2004: 839) warning that ‘criminalizing a behaviour is a very poor way of reducing its occurrence’.

I leave for another day a consideration of the difficulties of and opportunities for using criminal law to deter, prevent and punish environmental harm. Rather, my point now is that criminalizing heretofore ‘legal but evil’ activities – or ‘legal but environmentally harmful’ practices – is not the only goal of green criminology or its only (or even best) ‘tool’.

For example, we, as green criminologists, can play a vital role in how we label and frame harm (and how harm is socially and historically constructed), an endeavor that White (2013: 25 Box1.1) has referred to as constructivist green criminology. If we do so thoughtfully and effectively, we can help contribute to ‘creating a culture in which certain business activities, methods, and practices become culturally unacceptable, publicly shamed, and shunned by all self-declared “responsible” organizations and actors’ (Snider 2010: 573). We can publicize the dangers of various environmentally degrading and damaging activities, behaviors, customs, patterns and practices, make them visible, and introduce them as markers of individual, corporate and state social irresponsibility (see Snider 2010: 573-574).

Earlier in this article, I suggested that green criminology can help uncover the etiology of environmental crime and harm. But this is not its raison d’être and elsewhere I have argued that understanding the causes of crime is not and should not be criminology’s sole endeavor (Brisman 2012a, 2012b). ‘Science’, writes Hulme (2009: 325), ‘may be solving the mysteries of climate, but it is not helping us discover the meaning of climate change’. I hope that the same would not be said about green criminology. Rather, I consider green criminology as having shed light on some of the mysteries of environmental crime and harm (including climate change), and my aspiration is that it will continue to illuminate not only how and why environmental crime and harm occurs, but also the meaning of such crime and harm. For if we do not apprehend which entities, people or groups of people commit which harms and why and what these harms mean (or what these harms do not symbolize and signify) to them and to all of us, we will be powerless as a species to have much of an impact on them.

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In this study, Stretesky and colleagues (2013:2) hypothesized that (1) the threat of enforcement against coal companies is associated with an increase in political donations by those companies; (2) the threat of environmental enforcement against coal companies is associated with an increase in lobbying efforts by those companies; and (3) of the coal companies that have received an environmental violation of environmental laws, they are more likely to receive a violation during periods when they produce less coal relative to overall coal production. Long and colleagues found that: (1) coal companies expanded/increased their donations during the years immediately preceding the adjudication of an environmental violation; (2) lobbying does not appear to change in response to or to matter as much as changes in political donations when companies suspect that their violations of environmental laws will result in an enforcement action; and (3) coal company production and receiving an environmental violation are not associated at all (2012:337, 338). Despite the lack of support for the second and third hypotheses, Long and colleagues concluded that ‘the profit-oriented goals of capitalism are tied to the need to extend the exploitation of nature in order to produce commodities for consumption to increase profit’ and that ‘the analysis of the interaction between the state and coal industry demonstrates that ToP is operating efficiently in the coal industry’ (2012: 339, 341).

In this study, Stretesky and colleagues (2013) examined the effect of EPA enforcement on the level of toxic releases by companies over time. More specifically, the authors investigated whether economic penalties handed down by the state are slowing the treadmill of toxic releases and decreasing ecological disorganization among ‘treadmill actors’. Based on data collected on the twenty-five entities most heavily penalized by the EPA during the years 2006 and 2007, Stretesky and colleagues (2013:243) found that ‘relatively large monetary fines do not [emphasis in original] reduce toxic releases among treadmill actors ... even the most severe state intervention has little impact on how companies operate within the current political economy and treadmill of production’. While they concluded that penalties are more likely to legitimate the treadmill of production, rather than limit its environmental impacts, they did note that ‘there is some potential that very large [emphasis in original] fines, up to 10 million dollars, may reduce pollution by small amounts’ (Stretesky et al. 2013:243).

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