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Security in the Anthropocene: Environment, Ecology, Escape

Abstract

The anthropocene poses a set of conceptual challenges for the study of security in the discipline of International Relations. By complicating the distinction between human and nature, the concept of the anthropocene puts into question one of the key organizing logics of upon which much security discourse is built; what would a security look like whose subject was not modern man? This paper offers a reading of environmental and ecological approaches to security as two potential avenues for rethinking security in the context of the anthropocene. This is done in order to demonstrate the dominance and centrality of the nature/culture binary for conceptualizing the environment, ecology and security. Such a common philosophical horizon problematizes and undermines the scope for a critical reorientation of security thinking from either perspective. Drawing on R.B.J Walker's concept of the politics of escape, the paper suggests that in attempting to escape the nature/culture binary the move to ecology in fact simultaneously reinscribes and obscures this distinction, thereby limiting the potential of the concept of the anthropocene to offer a critical framework with which to analyze the interplay of nature and culture in contemporary security politics.

Introduction

It is becoming increasingly accepted that humans have become a geological force, a development significant enough that the proposal of a new geological era – the anthropocene – is gaining currency. Coined by Crutzen and Stoermer in 2000 (Crutzen and Stoermer, 2000), the designation of the anthropocene is intended to convey the way in which human existence since the advent of industrial modernity has left geologically significant traces.[1] Crutzen defines it as 'a new geologic epoch in which mankind has emerged as a globally significant – and potentially intelligent – force capable of reshaping the face of the planet' (2002). The insertion of the human into the geological means, argue Crutzen and Stoermer, that there is no 'natural' nature anymore; humans have impacted on it everywhere (Rudy and White, 2014: 128). The advent of the anthropocene then puts into question one of the key

organizing logics of modernity on which much security thinking is built: the separation between human and nature (Dalby, 2009; Dobson, 2006; Latour, 2004; Walker, 2006).

While geological in origin, in the humanities and social sciences it is the broader implications of destabilizing the human/nature dualism implied by the anthropocene which has received most attention; the 'anthropocene' contains the Greek for 'human' and 'new', and the 'anthropic' refers to the role and place of humans. In this context, the anthropocene might be thought of as naming 'the context encompassing all the new demands – cultural, ethical, aesthetic, philosophical, and political – of environmental issues which are truly planetary in scale, notably climate change…' (Clark, 2012: v).

The anthropocene offers a construction of this new (place for the) human as simultaneously central and all-powerful and as fragmented and insignificant. On the one hand, as Tom Cohen has suggested, to think in terms of the anthropocene 'seems the epitome of *anthropomorphism* itself – irradiating with a secret pride invoking comments on our god-like powers and ownership of the planet' (in Clark, 2014: 23). The corresponding 'anthropocene environmentalism' views the solution to climate change not in the reduction of human interference and manipulation of the natural world but its accelerated and more conscious manipulation (Barry, 2013: 370).[2]

On the other hand, as Nigel Clark has argued, by placing the human in a geological timeframe – and so encouraging us to imagine worlds both before and after it – the human begins to seem rather insignificant (2014: 27). Furthermore, the sheer complexity of the conceptual challenges posed by conceiving of the problem of climate change in terms of the anthropocene make the imagination of a world which might be the place of this new human a

very difficult task. One reading of the anthropocene argues that it marks the end of the world as an intelligible whole.[3] As Timothy Clark puts it, 'What if such a "world" had now to be seen as constituted in the denial of a realm of irreconcilable conflicts, scalar disjunctions and imponderable non-human agency?' (Clark, 2013: 5). The planetary problem of climate change poses problems of scale in terms of how we think timeframes, individual and collective action, and responsibility. It also suggests that rather than a symbiotic and co-evolving planetary system of humans and non-humans a more apt characterization might be one of conflict, indetermination, or unstable relation between the human and non-human.

In putting into question the human/nature distinction the anthropocene poses an important challenge to dominant ways in which the concept of security has been approached. It destabilizes the organizing categories that animate much of the literature produced by security studies – in both 'traditional' and 'critical' guises -- in relation to the environment and climate change: the distinction between referent objects, the logics of inclusion and exclusion, the idea of agency and a unified human subject, and not least the imagination of an intelligible world as a whole (Colebrook, 2012; Dalby, 2009; Dobson, 2006; Mitchell, 2014; Walker, 2006).

Despite these potentially far-reaching implications, there has been relatively little engagement with the concept of the anthropocene in security studies broadly conceived. Security studies literature on the environment and climate change focuses in large part on the question of the implications of climate change for existing questions and theorizations of security; its impact on violent conflict (Kaplan, 1994; Homer Dixon, 1991; Klare, 2001), on human security (Barnett, 2001; McDonald 2012); on whether it should be considered a security issue (Deudney, 1990); on securitization theory (Floyd, 2010; McDonald 2012); and

on how it alters security discourse (Corry, 2014; Trombetta, 2008) . These approaches focus either on what we need to do to our security thinking to better understand, mitigate, manage, or map environmental problems, or on the impact of adding environmental concerns to the security agenda.

More broadly, existing treatments of the environment—environmental security, ecological security, green theory—occupy what is often considered to be 'critical' or 'alternative' terrain in security studies; these sub-fields are the dominant intellectual space for attempts at rethinking security in relation to climate change (Dalby, 2009; Elliott, 2004; Eckersley, 2004; Dobson, 2007; Brenton, 1994). Environmental and ecological security are claimed to be 'critical' (Brenton, 1994: 7) 'subversive' (Eckersley, 2004: 226), a challenge to 'dominant political consensus' (Dobson, 2007), and 'ethical' (Elliott, 2004). Such approaches argue for the normative attractiveness of environmentalism or ecologism and for its potential to inform a progressive rethinking of security.

In contradistinction, this paper connects up with existing critical work in International Relations and security studies which seeks to problematize concepts of environment and ecology themselves (Dalby 2009; Dobson, 2006; McDonald, 2012). As Matt McDonald has argued, 'adding' environmental concerns to existing security frameworks is misleading; understandings of environment and climate change are already mediated through security discourse (2012). While McDonald has shown how 'the environment' is produced by discourses of security, the way in which concepts of environment (re)produce foundational assumptions about 'security' has received little attention.[4] To push McDonald's analysis further, this paper argues that an anthropocene perspective illustrates the way in which not only are understandings of environment mediated though security discourse, but that such

security discourse relies itself upon particular renderings of environment, and that both rely on an account of the opposition between human and nature; the relationship is bi-directional, or co-constitutive.

Rather than addressing questions of how we might save the environment, or achieve security, I employ a performative method to explore the effects of the dominance of these questions in demarcating the limits and possibilities of anthropocene thought in relation to security studies. I explore how concepts of environment and ecology, as developed, critiqued and challenged in environmental security literature themselves (re)produce a particular account of security, why this account is insufficient to the demands of the anthropocene, and why it is so difficult to overcome. The paper proceeds conceptually rather than empirically and reads existing work on security and climate change as reflective of the limits of contemporary political imagination.

I will argue that the anthropocene presents a dilemma for critical security studies in particular. By analysing environmental and ecological approaches to security as two potential avenues for rethinking security in the context of the anthropocene I will demonstrate the dominance and centrality of the nature/culture binary for conceptualizing environment, ecology *and* security, and argue that because of this commonality the scope for a critical reorientation of security thinking from either perspective is limited. I identify some of the assumptions on which ‘environment’ and ‘ecology’ rest in order to map how they themselves already inhabit the concept of ‘security’ such that any attempt to use them as a basis for a critique or reorientation of security thinking ultimately encounters limits. These are assumptions about the human, nature, and the world, which anthropocene thinking puts into

question. The focus of the article is the impact of the anthropocene on the terms of the dominant debate.[5]

The article is arranged in three sections. Firstly, I discuss the limitations of an environmental security approach that maintains a human/nature dualism as a response to the anthropocene. Secondly, I explore ecological security, an approach which attempts to overcome this dualism, to show that it too struggles to provide an alternative account of security. Drawing on R.B.J Walker's concept of the politics of escape, I suggest that in attempting to escape the nature/culture binary the move to ecology in fact simultaneously reinscribes and obscures this distinction. Finally, I offer a framework for understanding these difficulties as symptomatic of the continued dominance of a fiction of 'the world' and the account of the modern subject that this produces. I argue that to think security in the anthropocene we need not to seek escape, but to re-immerse ourselves in the constructions of this fiction of the world, to be attentive to the 'hairline cracks' in which the anthropocene manifests itself (Clark, 2013: 19) and to refocus on the interplay of nature and culture in contemporary security politics.

Environmental Security

The first iteration of the concept of environmental security was articulated in terms of a concern about potentially violent struggle over scarce natural resources (Klare, 2001; Kaplan, 1994; Homer-Dixon, 1995), and this framing is still central to much current governmental discourse on security and climate change (Selby and Hoffman, 2014: 749). Such an 'environmental conflict' approach does not seek, at least explicitly, to rethink the concept of security itself, but offers an insertion of environmental concerns into a traditional security framework.

However, mirroring the development of security studies more generally, environmental security discourse has broadened. Security studies' move away from narrow state based and military concerns after the end of the Cold War is reflected in the environmental security critique of nationalistic and militarised framings of security as outdated, insufficient to environmental challenges, and in many cases causing such challenges (Deudney, 1990).

These limitations have prompted a number of related moves in the field of environmental security which are broadly 'critical' in orientation – the development of a human security framework for environmental challenges (Barnett, 2001; Burgess, Taylor and Sinha, 2013; Floyd, 2010),[6] and an argument for the relative merits of a desecuritisation of the environment (Floyd, 2010; McDonald, 2010; Deudney, 1990). Common to this literature is an attempt to develop or apply a critical reappraisal of 'security' in the light of 'the environment'. The environment is positioned here as a site of critique of security discourses: the starting point is that a security framework might not be the most appropriate or effective way to counter threats posed by environmental degradation, such that environmental challenges in fact invite us to 'rethink' the nature of security itself (Dalby, 2009; Deudney, 1990; Dobson, 2006).

At stake in such a rethinking of security is most often the determination of the referent object to be secured. As Von Lucka, Wellmann and Dietz (2014: 860) have put it, while environmental conflict approaches retain the state as their referent object, environmental security literature very often takes a human security approach, and planetary or ecological security approaches, to which I turn in the next section, are concerned with the security of the biosphere as a whole.

To focus first of all on environmental security literature, the core concern is *whether we should* link the separate realms of security and environment, and what different conceptualizations of security mean for answering this question (Barnett, 2001; Floyd, 2010). Asking this question creates a distinctive type of approach which places the environment as a discrete issue area with which to assess various permutations of securitisation against a benchmark of human (or environmental) wellbeing. The model assumes that there is an option between linking security and environment, or not, which is of note for my argument developed below.[7] Within this debate the environment as such does not fundamentally alter the framework of security thinking (Floyd, 2010: 4).

In offering a response to the question of whether the environment should be securitized, environmental security literature reproduces a number of organizing distinctions: between the environmental and the normative; between the concepts of security and environment; and between human and nature. The replacement of one referent object (state) with another (human) by and large does not enable a rethinking of security as such. In this type of normatively driven approach, it is not that environmental problems prompt a change in thinking about security, but that a traditional conception of security is shown to be antithetical to particular normative goals when applied to environmental problems (Floyd, 2010). The potentially transformative framing of humans themselves as a geological force is not considered a challenge to their positioning as the referent object of environmental security: in the same way that the logic of security remains fundamentally unaltered in environmental security discourse, the concept of the human also remains unchallenged.

However, as Daniel Deudney has argued, at its most basic level the environmental problem asks us to redefine who ‘we’ are and who ‘us’ encompasses (1999: 200). Deudney situates

this question in terms of political and social groupings, but it is also applicable to the notion of subjectivity itself. By bracketing off 'the human' in environmental security discourse one hugely important facet of what is at stake in environmental concerns is obscured. As Andrew Dobson points out, many environmental concerns can be interpreted as produced by an insecurity about what it means to be human, and in particular about the erosion of the boundary between the human and non-human (2006: 177, 180). By seeking to align environmental and human security this particular facet of environmental insecurity becomes marginalized.

An alternative position is offered by authors attempting to move the environment itself into the referent object position. These approaches have highlighted the limitations of rethinking security by simply replacing its referent object, arguing instead that security logics are sedimented enough that they cannot provide a progressive framework in which to situate responses to environmental challenges. Daniel Deudney's (1990) well-known critique of the securitisation of environment is a key starting point for arguments along these lines.

Taking environmentalism seriously, Deudney argues, means rethinking the assumptions of the state system as an effective provider of an ecologically sustainable future: 'Environmental degradation is not a threat to national security. Rather, environmentalism is threat to the conceptual hegemony of state centred national security discourses and institutions' (1999: 214). The concern here is that the insertion of the environment into security discourse forecloses the more profound reorganization that an environmental sensibility might otherwise demand.

There are some similarities in both approaches to environment and security as outlined so far in that both wish to judge the efficacy of bringing environment and security together with reference to the needs of either 'people', or more broadly of 'the environment'. On the one hand, human security approaches offer an extension of security logic with the introduction of the human as referent object. On the other, critiques of the securitization of the environment articulate the way in which environmental and security frameworks and imperatives are necessarily in conflict.

These similarities result from an approach which separates out environment and security in order to then bring them together, and so from the question of how the environment might enable us to rethink security. Of course, such separation is not unusual – it is in fact central to both environmental and security thinking. However, it leads to problems with attempting to critique security logics and practices from an environmental standpoint.

It is not simply that the realities of security logics are problematic for thinking and acting environmentally (in terms of their militaristic logic, for example), but that the conceptual structure of security discourse is problematic too. It is not just that the state may be incapable of providing environmental security (though it probably is) but that the aim of environmental security itself is imbued with statist logics. To argue then that we need to desecuritise the environment potentially obscures the way in which the concept of 'the environment' is produced by security discourses, and the way in which those security discourses are in turn reliant on a particular understanding of the environment. Any approach which asks whether we *should* securitize the environment presumes that there is a matter of choice in the ways in, and extent to, which security and the environment might be brought together, but in fact the

extent of this choice is curtailed if we consider the shared structuring assumptions behind both discourses.

However, as Matt McDonald illustrates, an environmental/human security approach is not necessarily limited to treating security and environment as discrete fields of enquiry. McDonald instead suggests that arguments about environment are often in fact arguments about the meaning of security; about different understandings of a group's core values and threats to those values (2012: 4). Environmental problems are, whether or not there is a specific securitization of the environment, for McDonald, always understood through a security lens; what matters is how security itself is understood, rather than whether or how the environment is securitized (2012: 7). Rather than environmental issues impacting on how we think about security, for McDonald it is the concept of security which determines how we think about environment.

McDonald's analysis demonstrates the way in which security logics pervade social and political life and (re)produce particular accounts of environment. Like McDonald, my argument is that even when security discourses do not seem to be about the environment they are still important in framing environmental issues. However, if such security discourses are in turn reliant on particular conceptions of environment then there is rather less leeway to simply 'reform' security by shifting its referent object in order to develop a progressive treatment of the environment, as McDonald suggests is required (2012: 4). The way in which the concept of 'environment' produces particular logics of security has received little attention; in addition to Deudney's critique of the logic of security a critique of the logic of the environment is required.

The role of nature in logics of environment and security

The range of options for rethinking security from an environmental standpoint is circumscribed because ultimately environmentalism does not, and cannot, challenge the key foundational assumptions of security discourse; both environmentalism and security operate on the same logic. Both rely on the human/nature distinction such that any attempt at critique can only go so far as to overturn this dichotomy. The similarities in security and environmental thought can be illustrated if we turn to the concept of nature.

The importance of the idea of nature for environmental thought is relatively clear. Early environmentalism took nature, its value, and preservation as a central organising theme, and such approaches have offered useful resources for protecting natural resources and endangered species (Rudy and White, 2013: 121). However, even critical work which attempts to problematize an easy reliance on the idea of pristine natural spaces finds it very difficult to delimit properly environmental concerns without recourse to some idea of the natural.

There is a relatively consensual body of work on the ways in which environmental crises in the 20th century posed a challenge (or should pose a challenge) to dominant structures of production and consumption, and to modern narratives of growth and progress (Methmann, Rothe and Stephan, 2013). For critical environmental authors, a critical or politicising approach is one which attempts to destabilize these structures in order to ‘save the climate’ (Methmann and Rothe, 2013: 14); The climate (nature) is something threatened by human activity.

Such an approach produces climate as separate from and subject to control by humans. The climate is something separate from the processes which endanger it. To conceptualize a critical environmental politics that does not treat climate change as a problem of environmental context is a difficult task. As Timothy Morton argues, as soon as we have cause to conceive of 'the environment' we demonstrate how we have separated out from it; 'The environment was born at exactly the moment when it became a problem … In a society that fully acknowledged that we were always already involved in our world, there would be no need to point it out' (2007:141).

Any environmentalism which maintains the nature/culture dualism, even if attempting to reverse it, is limited in its scope for critique, and open to cooption by the very structures which it might otherwise seek to destabilize. The limits of the existing framework are limits to the critical potential of environmentalism. As biopolitical analyses of climate governance have shown, environmentalism itself has become a system of governance within the liberal model (Clark, 2010; Grove, 2010; Methmann, 2011), and this has been enabled in part by the shared reliance on the human/nature distinction.[8] To delimit the environment is very often to position it in terms of nature, or of context or backdrop, and it is for this reason that environmental thinking as such is insufficient to the anthropocene; it depoliticizes the potentially innovative and destabilizing effects of the anthropocene's challenge to the human/nature dualism by replacing them instead with a focus on human and nature as *in relation*. As R.B.J. Walker has argued, to assume any sort of relationship between human and nature is already to reproduce them as separate (Walker, 2006: 190).

Certainly elevating nature from its role as supporting actor or silent partner in constituting the human is a progressive move, but it is one that also fits neatly within existing security logics.

However, to imagine an environmentalism which does not maintain this separation is difficult; to delimit or define the environmental without recourse to the human/nature distinction is deeply problematic. One response to this difficulty is to treat its intractability not as a problem to be overcome but as an indication of the centrality of the nature/culture dualism to ways of ordering the world. In this vein we can see how security and environment are already deeply intertwined such that particular security logics are reproduced by discourses which are ostensibly about the environment. On this reading, the concept of security is not undermined, modified or threatened by an environmental sensibility, but is (re)produced by it.

Although less obvious, nature is also an important organising concept for security thought; to borrow Andrew Dobson's terms, 'it is in theories where nature is most invisible that its necessity is most obvious' (2006: 185). It is for this reason that a focus on the environment as linked to nature is limited in its critique of security; nature does not need to be brought in to security, because it is already an absolutely central part of the concept. As Walker has argued, the possibility of modern political life depends on a rupture between human and nature (2006: 190. See also Dobson, 2006; Latour, 2004), that is, a particular account of the relationship between them. A crucial part of what makes us modern is the assumption of the separation of the human from an external nature which we can both seek protection from and seek to protect (Walker, 2006: 190). Modern man is constituted precisely by his being not-natural, by his separation from the objective world of nature, and the primary subject of security discourse has been precisely the securing of this subject as 'modern and properly human, rather than "merely" natural' (Walker, 2006: 200). Security discourse then has been founded on a separation between human and non-human—those closer or further away from nature—

and in turn this underlying distinction is, according to Walker, what enables much broader sovereign practices of line-drawing (Walker, 2006: 200).[9]

It is because nature is so crucial to our modern self-image that its protection can so easily be framed in the language of human security: we need to protect nature so that, in Dobson's terms, there remains 'a non-human against which we can define the human and their political space' (2006: 185). But this leads, as I have shown above, to a limited and derivative account of securing nature. What is being secured is not nature itself, but the delimitation of the natural as distinct from the human; human security relies (implicitly) on nature to produce an account of the human, which it then seeks to secure from that nature which has produced it. If the modern subject as free, rational, sovereign and autonomous is to be maintained, then securing the human/nature distinction is as much as security can do for nature. Any further acknowledgement of the way in which our conception of the human depends on that which it excludes sets in motion an unravelling of the modern subject that threatens to undermine the edifice of politics, community and security itself. We cannot secure both nature and the human; as Walker argues, 'it will not be enough to think that we can protect nature without also placing our capacity to protect the modern subject into deepest suspicion' (Walker, 2006: 200).

Ecological Security

Of course, many critical scholars are attuned to the limits of environmentalism, and the importance of the nature/culture distinction. Ecological approaches to security propose an alternative by focusing on the close ties between the human and non-human world, tracing the implications of an understanding of the world in terms of the complex interdependence of ecosystems (Barnett, 2001; Cudworth and Hobden, 2010; Dalby 2009; Litfin, 1999;

McDonald, 2013; Pirages 2013; Plumwood, 2002; Von Lucka, Wellmann and Dietz, 2014). On this reading, traditional environmental concerns are of import because 'we' are intimately and inextricably bound up in, rather than separate from or threatened by, them. As Simon Dalby (2009: 100) puts it, 'we are part of nature, it's part of us'.

'Ecological security' might then offer a way forward in the search for a security for the anthropocene. It attempts to develop a strategic redress to the dominance of marketized, top down, depoliticized, and individualized framings of climate change and the range of possible responses to it. However, as I will go on to argue below, if the recourse to ecology found in critical environmental work is translated into a reification of nature, a continued reliance on anthropocentric assumptions, or a collapsing of human and nature into a unified whole then there is a danger of simply reproducing the structuring assumptions from which a departure is sought. Such a reproduction means that the alternative offered by ecological security remains tied to a modern, anthropocentric logic which reproduces the secondary place given to nature in its constitution of the subject. In so doing, it also reproduces the discourse of security as constitutive of that modern subject with its attendant instrumentalist and utilitarian attitudes towards nature.

There are a number of key themes drawn from ecological thought which we can see taken up with different importance and emphases in ecological security literature. The first is an intrinsic valuing of the non-human sphere (Eckersley, 2007: 305; Plumwood, 2002: 9). The value of the non-human develops out of a broader concern with the nature/culture binary, which ecological thought is concerned to disrupt (Cudworth and Hobden, 2011: 48; Plumwood, 2002: 4). Ecological thought diagnoses this binary as having led to the ecological crises in which we now find ourselves, in part because it has enabled and sustained a

worldview in which humans can exert mastery over nature (Plumwood, 2002: 10). In contrast, an ecological approach offers an appreciation of human embeddedness in a broader ecological context (Barnett, 2001; Pirages, 2013). Drawing on earth-systems sciences, the planetary interconnectivity of human and non-human life—or human and 'natural' phenomena—is often conceived of in terms of the 'biosphere' (Barnett, 2001; Cudworth and Hobden, 2011).

For the purposes of the argument being made here it is the translation of ecological thought into a security framework which is of interest, in terms of its potential for transforming that framework. The key move made by ecological security approaches is to reformulate security with the planet, biosphere, ecosystem, or ecological processes as its referent object (Barnett, 2001: 108-9; Cudworth and Hobden, 2011; McDonald, 2013). More specifically, the security of that biosphere is figured in terms of maintaining 'dynamic equilibrium' in the face of challenges posed by political, economic and social structures (McDonald, 2013). The notion of equilibrium is developed in terms of 'balance' (Pirages, 2013: 143), 'harmony', and 'stability' (Barnett, 2001: 109) with respect to the relationship 'between humans and the ecosystems in which they are embedded' (Pirages, 2013: 143). As Barnett argues 'security from an ecological theory perspective therefore involves thinking about the whole rather than the parts' (Barnett, 2001: 111).

Interestingly, however, the biosphere as referent object emerges as something which ultimately must be protected for *human security* reasons; the ecological approach here is driven by and contributes to an awareness of the interconnected and intersectional analysis required in the face of complex environmental risks, *for the purposes of better protecting individuals and communities from their effects* (Cudworth and Hobden, 2011: 55). For

Pirages, this indebtedness to human security logics is explicit; ecological security is a 'logical successor to the human security perspective' (2013: 140) to the extent that the human, rather than the biosphere, remains the referent object. Similarly, for Floyd and Matthew (2013: 9) 'ecological security can be understood as a variant of human security' because it maintains a connection between ecological security and human wellbeing. Even Barnett, who first outlines ecological security as specifically referring to a non-human referent, ultimately shifts back to a primary focus on the human (2001: 108). The biosphere emerges as referent object because its protection is a prerequisite for the security of humans.

These similarities with a human security framework point towards a tension in bringing the 'deep ecological' suspicion of the human/nature dualism into security discourse. The social and natural in ecological security approaches remain separate and distinct, albeit 'co-constitutive, overlapping and intersected' (Cudworth and Hobden, 2011: 53). For McDonald (2013: 48), ecological security is about the need to 'fundamentally rebalance the relationship between people and the natural environment'. Barnett's formulation of ecology is concerned with 'habitat'—the planet (nature) conceived as providing a home for humans (2001: 115). The biosphere is conceptualised here as a more sophisticated mapping of humans-in-nature or humans-in-environment (Pirages, 2013: 140)—ultimately a 'light green' approach (Dobson, 2007). However, recourse to a focus on relations *between* human and nature potentially obscures some of the nuances of ecological political thought.

This tension in ecological security discourse is not easily rectified. In fact, it points towards a very difficult problem. On the one hand, there is a desire to move beyond the human security approach which seeks to value and protect particular facets of ways of life, to reduce structural causes of vulnerability and to enable communities to develop themselves in

resilient ways (McDonald, 2013). Ecological security approaches want to go further than this in motivating structural change (McDonald, 2013). What is needed, an ecological sensibility seems to suggest, is an overhaul in our very concepts of ways of life and what we understand it to mean to be human. There is here an acknowledgement of Walker's observation that we cannot protect nature without putting into question modern man, for it is the ways of life, values, homelands and habitats central to the human security approach which at least partly constitute that modern man, and from which ecological security attempts to extricate itself.

But it is here that ecological security encounters a difficulty. The biosphere as referent object, in practice, means the biosphere as human habitat. If the referent were the biosphere itself the concept of security would become very difficult to apply. What would it be to secure a biosphere? It may be to allow it to evolve without interference (from whom?). For ecological security, the notion of equilibrium offers an answer to this problem. To imagine the natural state of the biosphere as one of equilibrium (Pirages, 2013) which is under threat, one first needs to determine what is natural about this, and so (in the case of anthropogenic climate change) to separate humans out from the biosphere. The biosphere is, in the anthropocene, one in which human involvement cannot be separated out – there is no 'natural' anymore. Even without this complication, to assume the biosphere as tending towards equilibrium is a potentially contentious claim. Well before humans, the biosphere underwent extreme changes. Dynamic equilibrium is a condition in which there is no net change, a type of steady state. But it seems that the variable to be kept in a steady state is that the biosphere can support human life. Modern man as the ultimate *raison-d'être* for the (natural) world remains unquestioned.

One way to interrogate this tension is to suggest that the persistence of the human/nature distinction and the reversion to human security imperatives in ecological security are due to the shared concept of *security* rather than the concept of *ecology* as such. That is, ecological security is potentially a properly 'security' framing, but not properly 'ecological'.[10] The questioning of the nature and place of the human attempted by ecological security is limited by its commitment to undertaking such rethinking within a broader conceptual framework—that of security—which produces and relies upon the very construction of modern man from which a departure is sought.

With this in mind, rather than offering resources for rethinking security in progressive directions, an ecological sensibility can also be read as disrupting the grounds of security thinking to the extent that it is no longer sustainable. An ecological approach to security might require more than simply adding yet another referent object into the security mix, because we encounter extreme difficulties doing this when that referent object is the biosphere or ecosystem; to distinguish what is to be secured, and from what, in such an interconnected web begins to look nonsensical.

The human cannot straightforwardly be a source of threat to a biosphere (Barnett 2001: 109, 130) of which it is an integral part, or even, as the anthropocene suggests, constitutive. Nor can that biosphere be considered something from which the human requires protection, as in Pirages' argument that nature 'threatens' human wellbeing (2013: 140, 142). If it is, it is a threat which cannot be protected against without harming the very body which is threatened; the biosphere threatens itself. If we are to truly move away from concepts of a natural order, balance, or harmony (Pirages, 2013; McDonald, 2013) which is distinct from, and subject to

threats from, mastery or protection by humans, or one which sustains humans in a supporting role then to talk about security and ecology becomes very difficult.

If, as Dalby suggests, security thinking is characterised by an interest in making things stay the same, then the challenge to security thinking posed by environmental change is fundamental (2009: 4). A logic of stasis cannot assist us in seeking the radical overhauls to societal frameworks demanded by an environmental sensibility; for Dalby, security secures precisely the consumer society that is part of the problem (2009: 4). Moreover, that security has been built on, and sustained by, a particular ecological basis which has allowed for the emergence of the 'secure' (for some) modern order (Dalby, 2013: 233). We might then characterize the ecological crisis as the modern order, which has provided security, now threatening its own (ecological) conditions of possibility. For Dalby, the extent of this challenge to security logic suggests that we may need to jettison the framework of security entirely (2009: 4). However, as I will outline below, such a diagnosis can also be read as a potentially fruitful way of reengaging with the politics of that security.

One response to Dalby's critique of the logic of stasis can be found in work which argues that ecology offers the impetus and resources with which to reformulate concepts of security. Specifically, the alternative model of security put forward is security as resilience (Barnett, 2001: 110; Corry, 2013). This is intuitively appealing as an approach because the concept of resilience as used here is drawn originally from ecological theory, referring to a system which can 'retain its organisational structure following perturbation' (Barnett, 2001: 111). Security thus refigured potentially offers an alternative to the logic of stasis above; rather than avoiding change itself, resilience focuses on reducing vulnerability to change (Barnett, 2001: 112). Resilience in the ecological context is figured in terms of stability and coherence, the

co-evolution of human and natural systems (Corry, 2013), and adaptability in order to be able to cope with environmental pressures (Barnett, 2001: 134).[11]

Ecological security understood as resilience mirrors the concern with complex, interconnected equilibrium discussed above. The referent remains the human-in-biosphere with a focus on the relationship between human and nature. While resilience offers an approach to security which allows for (and manages) change it does this within the framework of the separation of human and nature, and the reproduction of the modern subject. It is precisely this framework which establishes the 'coherence' (Corry, 2013) of the system to be maintained. While resilience then potentially offers an alternative logic to that of stasis, it is not clear that a reframing of security in terms of resilience escapes the problem of separating human and nature, nor the difficulties of establishing a referent object—a concern to which I return in the following section.

Although not articulated in terms of resilience, Dalby also ultimately argues for a new approach to security in light of the 'new ecological context for humanity' (Dalby, 2013: 233) which has elements in common with the resilience approach. To recognise that speaking of the mastery of nature in the anthropocene is nonsensical, he argues, in turn demands that we reconceptualise the modern subject; 'Ecology ... is about challenging the production of the modern identity of the autonomous knowledgeable subject, one free from the constraints of an external nature' (Dalby, 2009: 168). The key implication here is that political assumptions of autonomy at either the individual or state level are untenable, such that any concept of security built around such autonomy is thrown into question.

The alternative to the modern autonomous subject proposed by Dalby is one who is more closely attuned to the ecological context of their subjectivity; ‘a postmodern subject who is conscious of the contingencies and connections of contemporary life … more likely to understand their own existence as dependant on the flows of resources and materials from distant places’ (2009: 169). In place of autonomy, security for Dalby needs to be built on vulnerability, context, and interconnectivity. Careful historical and economic contextualization must be the grounds of security thinking, entailing the primacy of ecological principles of change, rather than stasis or universalization; ‘universal political strategies are not what is needed in a world of great diversity ... where one is situated in the flows should suggest which priorities are most pressing’ (2009: 165).

As the above discussion has shown, important aspects of ecological thought are very different from neoliberal ideas of autonomy, self-governance, international efficiency and ecological modernization. But while we might be able to wrestle the concept of security free from a specific neoliberal set of foundations (Corry, 2013), is it possible to free it from the broader modern project with which it is so closely entangled, which has arguably caused the ecological crisis to which it seeks to respond, and which is potentially undermined by anthropocene thinking? If, as Walker argues, security is about securing the modern subject, then the very suggestion that ‘we’ can rethink security outside of a modern framework becomes problematic. To propose a rethinking such as this already presupposes a form of autonomy and separation out from context: security thinking is arguably the context of all of our political imaginations. What would a security look like whose subject was not modern man?

Ecology as Escape

The ecological critique relies on the idea that to move beyond our current crisis we need to depart from a dualistic understanding of the interior, active, progressive, differentiated, plural, morally countable human (subject) and the passive, singular, static externality of nature (object). The move posited is to interconnectivity. However, it is this approach to ecological thought which allows for the move back to an ultimate focus on the security of the human discussed above. To claim ecology as an 'alternative' (Barnett, 2001: 120; McDonald, 2013: 48) to the nature/culture dualism and its attendant violences then begins to look problematic.

Attempting to escape a dualistic framework though a focus on relationship is problematic partly because, as outlined above, to think in terms of relationship is to reinscribe two separate elements. But more importantly, to posit a focus on the relation between nature and culture as an *alternative* to the human/nature binary is to underestimate the complexities of the operation of that binary in thinking about security. It is not as simple as suggesting that an appreciation of the relationship between human and nature has been absent from security thinking, such that focusing on it allows us to rethink security. One particular account of the relationship between human and nature is already central to security thinking. The demarcation, exclusion and rendering insecure of that aligned with or closer to nature has arguably been a central feature of security organization. The human/nature dualism relies already on a series of assumptions about the interconnections of human and nature, and on the resulting exclusionary accounts of that relationship. The possibilities and limitations of the modern subject are in fact, as Walker has shown, determined by its *relationship* to a sphere of nature rendered 'outside' (2006: 191). Many dominant frameworks for thinking security are premised already on precisely this relational account of inclusion and exclusion.

A focus on interconnectivity might be read as an acknowledgement of this difficulty and an attempt to offer a different *type* of relationship; an account of the relationship between human and nature which is developed in the context of the planet or biosphere. The ecological move then is to attempt to displace the human/nature opposition by showing how both terms are part of a larger whole, through moving to the planet or biosphere as referent object. However, attempting to escape the human/nature dualism is more difficult than this move to a third term might suggest, and, perhaps more importantly, as I will revisit below, is not necessarily a desirable end. To show this, I draw on Walker's argument about the politics of escape.

Walker (2010) has argued that the desire to escape the system of exclusions central to the politics of the state system is manifested in claims about the need to progress from a politics of the international to a politics of the cosmopolis, globe, or planet. This move entails a commitment to projecting the model of progress, security, and moral community that is possible within the state, beyond the state (Walker, 1997: 74). To escape the problems of the state system is, on this account, to move from fragmentation to integration (Walker, 1997). Walker's critique of this equation of escape and integration shows how rather than offering an alternative to the inscription of limits at the boundary of states it simply extends these boundaries outwards (Walker, 1997: 75). The goal of integration is an imagination of extending the realm of progress, security and community as developed within the state, beyond the state to the world. This does not extend imagination beyond already existing accounts of inclusion and exclusion, but attempts to extend inclusion, to transform states into the world, to move from particularity to universality.

Such a move is problematic because, as Walker shows, the modern states system already articulates an account of the relationship between particularity and universality (1997: 74).

To then attempt to map a path from one to the other and claim it as progress, and especially to claim universality as an *alternative*, is to misrecognise the great achievement of that system, which is to enable simultaneous claims to both universality and particularity. The modern state system offers a resolution of competing claims to particularity and universality, which is precisely why attempts to articulate progress in terms of moving from the particular or plural to the singular or universal are so limited: that ground for critique is already occupied by the system. I suggest that this pattern operates also in the attempt to transcend the human/nature binary by the ecological move of shifting focus to the planet or biosphere, an attempt which is also articulated in terms of escaping dualism by moving to interconnectivity.[12]

We can see the ways in which the inside/outside framing maps on to the human/nature binary in the claims made for ecological security above. The ecological move assumes that to think progressively about the environment what is required is a shift away from an understanding of the world as fragmented by the partitioning of human and nature to an understanding of the world as comprising a single, universal, system which integrates human and nature: the biosphere. What is to be protected in ecological security is the wholeness of the whole, the concept of the planet, of the earth as homeland or habitat. It is only within this whole that the concepts of balance, equilibrium, co-evolution and harmonious coexistence can have meaning. Progress is articulated in terms of extending the realm of security concern from the human to the biosphere. The move posited is one from the claim that humans are separate from nature, special, or different (fragmentation) to the claim that they are part of a larger whole *with* nature (integration).

However, to claim this move as progressive is to misrecognise the way in which the human/nature binary already depends on an account of both a prior whole and a secondary

distinction between human and nature. There is work done by the binary to separate human and nature precisely because it relies on a prior assumption that they are not necessarily separate. The move to integration then does not expand or escape the logics already contained within the human/nature binary which already maps out an account of both fragmentation and integration such that shifting between the two still operates within its terms.

As discussed above, the dominant conception of nature is as original, pristine, and to be protected. Conversely, the human, or culture, is secondary, derived from and separated out from nature; a potential threat to nature. It can be argued that it is the secondary place given to culture which has allowed it to dominate that rendered natural, as in need of protection and without agency.[13] To focus on nature as primary then does not necessarily offer a way out of its human domination. The human is already thought as *of* nature in terms of being developed or derived from it. It has a supplementary role suggesting both that it is secondary and that nature is deficient, incomplete, insufficient, on its own. The human/nature dualism, through this supplementary logic, offers an account of both particularity and universality. To claim that a move to the universal, singular, biosphere offers an escape from the human/nature dualism, and in particular from the dominant modern conception of humans as separated out from nature then is problematic.

Ecological security then becomes entangled in a tension relating to its treatment of singularity and plurality. Interconnectivity offers an attempt to acknowledge the differentiation between human and natural systems whilst also seeking to dismantle the hierarchical opposition between them. In contrast to an imagination of the human as originally part of the whole of nature—a prior singularity from which plurality is derived—interconnectivity relies on an

account of the planet or biosphere in terms of discrete elements which are then gathered together: an originary plurality which forms a singularity.

As the work of Jean-Luc Nancy has shown (1996), these two accounts mirror one another in their treatment of relation, in that both rely on a first place being given to *either* singularity or plurality. The first—deep ecological—account seeks to move beyond nature as constitutive outside by projecting the subject *into* that outside, while the second—interconnectivity—seeks to bring that outside within the logic of subjects-in-relation by imagining it as a product *of* that relation. Both of these approaches try to escape from the human/nature dualism by subsuming one side into the other, offering an account of originary singularity or originary plurality.

However, equating progress with a move to the primacy of either singularity or plurality is, as Walker has illustrated, problematic because it does not move beyond existing accounts of inclusion/exclusion; In this case, the biosphere is an expanded realm of inclusion. This is shown by its conception as a realm of coherence, harmony, and equilibrium: such features are characteristic of the modern imagination of the human 'inside' of which it is a product. Perhaps more importantly the prominence of such features is also indicative of the difficulties of escaping an anthropocentric logic in which the survival of the human species is the context for understanding the natural world. The anthropocene, however, as discussed above, confronts us with the unsettling notion that harmony, equilibrium and coherence are no longer (if they ever were) appropriate ways to characterise planetary systems. Moreover, the anthropocene places into question the role of the human as organising logic around which the world might make sense. The biosphere then seems insufficient to the anthropocene challenge to anthropocentric modes of organising thought.

The problems encountered in formulating an ecological approach which succeeds in escaping the human/nature opposition are symptomatic of a broader framework within which ecological thought operates. This difficulty is an indication of the way in which such thinking is bound up already in security logics. The modern world, Walker argues, has been shaped by desires to 'move beyond', but, he continues, there can be no simple move beyond a structuring of 'here and beyond' (2010: 5-6). While Walker's argument is a critique of claims that we need to move from a politics of the international to a politics of the world, the structure of his argument offers useful insights with which to analyse claims made in ecological security approaches. It is not only that the attempt to move beyond ultimately fails, but that the very *desire* to move beyond is itself bound up in the logics which it attempts to exceed.

The ecological critique of liberal modernity as detached and ecologically unsustainable leads to an attempt to move outside of its organising logic. The ecological criticism that we 'misrecognize' (Plumwood, 2002) human embeddedness points to a solution in terms of 'some alternative outside, some world that is somehow more natural, more authentic, more real' (Walker, 2006: 192). But this move outside is, Walker argues, a very difficult task for modern man 'who certainly knows well enough the outside he has himself produced but also too easily assumes that to escape to this outside is to escape himself, his own limits, his own responsibilities' (2006: 199).

Escaping to nature, or to claims about the cosmopolitan world, clearly fall into this trap, but so does escaping to the singular interconnected biosphere The aim of reconceptualising humans as of the biosphere is to escape the constitution of the modern subject as one who

subjugates nature; to escape the limits of that modern subjectivity by recognising instead the true (natural, authentic, real) nature of being human. We know, Walker continues, how to travel from the domestic to the wild, but not how to think differently about the 'domesticated opposition between the domestic and the wild' (2006: 199). This domesticated opposition is what is at play in the claims about singularity and plurality highlighted above; the shift to interconnection moves between the two registers but does not escape their opposition.

Ultimately, an ecological approach cannot escape the logic of 'here and beyond', because in seeking the beyond it effectively relies upon the recreation of the world, or planet, as a whole; the recreation of a 'here'. Ecology offers a logic of the cosmos and an account of the modern subject's place within it. It offers an account of the world which determines once again the proper place of the human, albeit it in a more embedded way. It is, as eco-*logy*, bound up in those patterns of knowledge which it wants to critique. As Claire Colebrook argues, ecology is the logic of the earth considered a homeland, 'the epitome of all logics, all systems that claim to express the truth of the world they order' (2012: 199). Whether as part of nature, the planet, or the biosphere, ecology offers an account of the proper place of the modern subject; it relies, Colebrook continues, on 'the notion that we might overcome our *narrow* boundedness and self-enclosure and once more find our place in the unified cosmos' (Colebrook, 2012: 198). An eco-logy is an attempt at unification and making sense, and so it cannot escape the structuring logics discussed above. This is also why ecology is insufficient to the anthropocene challenge to the world understood as an intelligible whole. Ecology offers a re-ordering of the world, a recreation of the world as a whole, a neutralizing of the threat to logic and sense posed by the anthropocene.[14]

This matters for thinking about security because to give the modern subject a home is to secure it; it is to reproduce the claims about universality and particularity which constitute the modern subject. Ecological security cannot offer an alternative to the account of security whose subject is the securing of the modern subject. The segue into human security approaches from ecological starting points can be achieved so seamlessly precisely because the logic of ecology is premised upon articulating a place for the human. Discourses of ecological or planetary interconnected unity are predicated on the illusion of a planet operating in a mutually caring symbiotic relationship with humans; they remain anthropocentric and fail to undo the human as the logical cause for the earth's existence (Cohen, Colebrook and Hillis Miller, 2012). To think interconnectedness without starting points of human or nature, of plurality or singularity, is a very difficult task indeed.

Conclusion: Security in a Fragmented World

The inability of ecological security approaches to break free from dualism is telling. It points to the enduring power of a particular way of ordering the world in terms of problems and solutions, with those solutions framed in terms of escape to an outside (Walker, 2010). However, I have argued that for both environmental and ecological approaches to security the move to this outside fails to escape the dualist logic of the human/nature, and other, related, oppositions. Moreover, in the ecological case, in explicitly claiming to move away from such binary thinking, its reinscription is particularly problematic because it is obscured.

We must be wary of treating ecological security as offering an escape from the problems of modern politics. Wary, that is, of the temptation to respond to the demands of the anthropocene by seeking a simple transcending or erasure of the boundary between the human and natural which might finally allow us to escape the violences entailed by such boundary drawing. The desire for a non-violent security politics cannot be fulfilled by attempting to transcend the violent system of oppositions and exclusions inscribed in the

human/nature dualism, because to theorise an outside to this is to inscribe an oppositional system once again; to posit an interconnected whole as an alternative is itself a violent move. Rather than seeking a more inclusive and differentiated account of security, on the basis of a biosphere with harmonious interests, the anthropocene might be better engaged by a return to the contestations of politics and a foregrounding of the *negotiation* of representation, equality and domination, among an expanded constituency. One example of such an approach can be seen in Latour's (2004) argument for an expanded understanding of political representation in which the non-human can be included.

Without the assumption of ecological symbiosis and its underlying anthropocentrism, claims that security thinking can adapt to the demands of a world understood in terms of the anthropocene become rather difficult to sustain; security understood in terms of protection or stasis no longer makes sense, but nor does security as resilience. As I have shown above, discourses of environmental and ecological security are in fact one mechanism by which dualist accounts of human and nature are reproduced. What is being secured here is precisely the human/nature binary, and the corresponding accounts of inclusion and exclusion, inside and outside, that this relies upon. The whole of a shareable world underpins all attempts to think outside, and it is this one, whole, shareable, world which the anthropocene puts into question. In putting into question the human/nature distinction, the anthropocene also puts into question the possibility and desirability of security.

Rather than seeking a new—ecological—logic by which to domesticate the fractured world of the anthropocene, an embrace of its reframing of our concepts of the 'world' might be a fruitful way with which to engage it. There can be no simple erasure or transcendence of the organizing logic which has allowed us to conceive of ourselves as inhabiting an anthropocene era. Rather than attempting to escape such a logic we might consider the anthropocene instead to offer a framing of our political landscape which offers scope for a re-immersion in

analysis of it. The anthropocene might remind us that our assumption of a world as a condition of meaningful life and communication is, in Derrida's (2009) terms, a fiction, and so allow us to be attentive to the construction of that fiction and to the papering over the fissures and disjunctures within it required for its sustenance. As discussed above, it is precisely within such 'hairline cracks' that the anthropocene can be argued to manifest itself (Clark, 2013: 19). By way of conclusion, I want to suggest two possibilities by which these hairline cracks might be recognised, inhabited, and opened up for political debate, through conceiving of them as cracks in the contextual field in which security and ecology operate.

Firstly, while the central contention of the article has been that employing the framework of security offers a very limited engagement with the challenges of the anthropocene, there may still be a strategic, or pragmatic, case for pursuing the route of ecological security. The logics of security and the modern subject that I have identified as common to ecology and security are dominant, rather than necessary logics. Ecological thought offers compelling resources for theorising complexity, a lack of human mastery of the world, and a critique of anthropocentrism.

However, as a logic, and especially when paired with security discourses, ecology/security also operate under a broader framework which acts to domesticate such complexity, to secure ecology as the logic of earth as homeland. Such a securing might well be considered a desirable – or at least a strategic, interim – aim, despite the fact that in and of itself it does not offer an alternative security logic. More broadly however, the tension *within* ecology between its content (complexity, lack of mastery) and form (logic) is precisely the type of hairline crack whose exploration might prove productive. If ecological security is successful in engaging security debates more broadly, then its dislocations and fractures may offer some

starting points for changing the contextual field within which security logics need to make sense.

Secondly, questioning the possibility -- but more importantly the desirability -- of escape opens up space to try to think within and at the limits of the problematic oppositions identified here, rather than attempt to transcend them. The anthropocene does not offer an escape from, or alternative to, these problems, it rather opens the possibility of thinking creatively within them; to return to Walker's terms, to think the way in which we are located always already within a relation between here *and* beyond, rather than to posit the beyond as escape. The anthropocene shows us that we cannot escape the violences of oppositions and exclusions by moving to a shareable world. Rather than overcoming the human/nature binary, an anthropocene sensibility highlights instead the way that that boundary is multiplied, reinscribed, magnified, produced, obscured, and, most importantly, mobile. It tasks us with inhabiting and re-examining its operation and the outsides that it (re)produces rather than trying to escape it.

With this in mind, while the failure of ecological security to transcend the anthropomorphism associated with the human/nature opposition is problematic on ecological security's own terms, it can also be reframed as an invitation to reconsider anthropomorphism itself. Rather than offering an account of the changing context (or relationships) in which the human operates, there is scope for the anthropocene to offer a vantage point from which to draw resources to reimagine the very notion of 'human-in-relationship'. To return to Nancy's formulation, this might enable instead a consideration of the human *as* relation. As the etymology of the 'anthropocene' suggests, the human might be new, open to change and negotiation, (re)produced by its 'new place'. Emerging work on animal studies,

posthumanism, cyborgs, and new materialisms offer some routes that such a reimagining might take.[15] Jane Bennett (2010), for example, has urged an attentiveness to nonhuman forces both within and outside the human body—to our own foreignness. This is in stark contrast to the modern subject of security, even that subject considered as in relation.

By putting into question the whole on which the human/nature divide relies the anthropocene does not so much offer an alternative to it as loosen its anchor points, allow us to explore how its contours shift, and uncover the work that goes into stabilising them. We might consider, for example, the power practices that different iterations of the human/nature distinction make possible in the context of what Coole (2013) has identified as an extension of the commodification of nature to include elements *within* the human body—bacteria, genes, DNA—in such a way as to enable novel modes of intervention and management of that subject.

Refiguring the world in light of the anthropocene makes it very difficult to relate to the planet, biosphere, or ecosystem as a whole, but offers the opportunity to bring into focus instead the 'radical fragmented dissymmetry' between, and amongst, nature and humanity (Cohen, Colebrook and Hillis Miller, 2012). To start from the position that we do not inhabit the same worlds as one another, that each living thing is finite, its world inaccessible to any other,[16] might then allow us to conceive of relation in a way which is not subsumed under, or determined by, a prior unity. There is certainly nothing secure about such relation; its negotiation is inherently political. The anthropocene offers a potential opening to this risky venture; to rethink politics as something other than security politics, as a politics of vulnerability.

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Notes

[1] Crutzen dates the anthropocene from 1800 with the advent of fossil-fuelled industrial modernity and the population explosion this made possible. There is however debate over the appropriate starting date for the anthropocene (Szerszynski, 2012: 171).
[2] This seems to be the way that Crutzen intends the implications of his neologism to be understood (Crutzen, 2011).
[3] See Audra Mitchell (2014) for an argument developing security thought in terms of Jean-Luc Nancy's concept of a 'world', which offers an excellent engagement with some of the themes developed in terms of 'the anthropocene' here.
[4] There is some literature on the way in which security discourse has changed as the result of the insertions of environmental or ecological concerns onto the security agenda (Trombetta 2008; Corry 2014). The concepts of environment and ecology however, are not the substantive focus of these works. My approach differs in attempting to trace the ways in which all of these concepts – environment, ecology and security – rely on a *shared set of assumptions*, which their bringing together does not move beyond. So while we can certainly see some changes in security discourse, away from the logic of defence and towards a logic of resilience, in the case of Corry's work, or away from state based and friend/enemy distinctions in Trombetta's analysis, these alternative security discourses continue to operate on the basis of common assumptions about the nature of referent objects, the definition of the environmental, the human/nature distinction, and most importantly for the purposes of my argument, modern man as the subject of security. These points are elaborated in the argument below specifically in relation to human security approaches to environmental security, with which the discursive shifts outlined by Trombetta share much common ground, and in relation to ecological security approaches, within which Corry's work might be situated.
[5] This is not to suggest that the anthropocene era is novel in respect of challenging dominant ideas of the relationship between human and nature. To call upon the anthropocene as a marker of change is itself to reinscribe modern accounts of temporal and spatial differentiation and progress to which the concept of the anthropocene purports to offer an alternative. The paper treats the anthropocene not in terms of a new historical era, but a conceptual configuration which highlights some features of contemporary political organisation and offers avenues for engaging with them.
[6] It should be noted here that some of the critique to follow develops along similar lines to the existing broader critique that human security is 'problem solving' rather than critical (see for example Christie, 2010; Mitchell, 2014; Newman, 2010; Browning and McDonald, 2011), but in addition I show that this limitation is particularly pervasive and problematic in the context of environmental debates.
[7] That is, to suggest that concepts of security and concepts of the environment can be easily separated is to obscure the way in which they are closely linked through the operation of the human/nature binary.
[8] For example, the role of nature in constituting the modern subject as the subject of security also enables the framing of the problem of climate change as one of individual consumption and recycling in contrast to a structural problem of late modern capitalist society.
[9] The human/nature distinction then is not only the enabling condition for the particular constitution of the modern subject in such a way that it has been able to cause climate change, but also for drawing hierarchical distinctions between populations, races, nations and so on.
[10] I am grateful to an anonymous reviewer for this formulation of the problem.

[11] There is significant debate regarding whether thinking about security in terms of resilience in fact offers an alternative to neoliberal logics of security governance, the extent of which falls outside the scope of the argument being made here. See for example Aradau and Van Munster, 2011; Corry, 2013.
[12] The argument here is not that Walker's inside/outside problematique, nor his analysis of the state and states system maps directly onto the human/nature binary. These dualisms operate in different ways in different contexts. Rather, it is the *pattern* and *method* of Walker's critique, and his broader claim that there is a problematic desire to 'escape' various violent oppositions in contemporary political thought which I am attempting to apply to the ecological approach to the human/nature binary.
[13] See Jacques Derrida's argument on speech and writing in *Of Grammatology*.
[14] In more concrete terms this naturalises a potentially problematic planetary perspective when dealing with climate change. Such a perspective tends towards abstraction and homogenisation, and obscures variation, localisation and geocultural specificity. Moreover, such a planetary perspective tends also towards a macro analysis which, as Diana Coole (2013) has argued, obscures the importance of consumer habits, material needs, and daily routines in analyses of climate politics.
[15] See for example Bennett, 2010; Braidotti, 2013; Haraway, 2015; Lundborg and Vaughan-Williams 2012; Wolfe, 2012.
[16] See Derrida, 2009; Nancy, 2005.

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