Aporias of Ecological Thought

Abstract

Debates in ecological social theory are characterised by dualisms of nature and society. I propose the notion of 'ecological aporias' to account for these dualisms, focusing on three landmark examples of ecological thought over the past four decades from Niklas Luhmann, Bruno Latour, and Jason W. Moore. I show the persistence in this work of paradoxes and intractable contradictions revolving around the nature/society dualism. Rather than trying to dissolve these ecological aporias, I draw on recent work in eco-deconstruction to suggest that the ecological is itself an aporetic category and that this enables a new perspective for political ecology in an age of climate crisis. Rejecting Latour's identification of political ecology with the politics of dwelling, I argue that climate change demands we recognise forms of life irreducible to the ontological security on which the concept of the ecological has long been based.

The Bipolarity of Ecology

Ecology's central insight—*the* ecological thought, as Timothy Morton puts it—that 'everything is connected' draws us into certain intractabilities that interconnectedness itself cannot resolve (2010: 1). The major theoretical problems concerning the divide between nature and human society that the environmental humanities and social sciences have repeatedly encountered can be traced back to these intractabilities (Soulé and Lease, 1995; Descola and Pálsson, 1996; Vogel, 1996, 2015; Plumwood, 2002; Heyd, 2005; Nichols, 2011; Malm, 2018). William Cronon, in a famous article, notes the 'dilemma' of

environmental historians in this respect: 'On the one hand, a fundamental premise of my field is that human acts occur within a network of relationships, processes, and systems that are as ecological as they are cultural' (1992: 1349). On the other hand, he continues, historians depend necessarily on narratives, causal sequences that cannot avoid reducing the complexity of ecological interconnectedness and thus removing us from what we call 'nature' altogether: 'When we choose a plot to order our environmental histories, we give them a unity that neither nature nor the past possesses so clearly. In so doing, we move well beyond nature into the intensely human realm of value' (1992: 1349). The very interconnectedness that was supposed to dissolve the dualism of natural facts and sociocultural values instead renders it insoluble, or what I will here call aporetic, both necessary and impossible. Jacques Derrida famously defined his conception of aporia as an 'experience of the nonpassage' in which the impasses of dualisms, oppositions, contradictions, and paradoxes are neither dissolved dialectically nor endured passively, but used to account for ethical and political problems (1993: 12-15).[1] For Derrida, aporias refer in particular to legal, ethical and political questions of boundaries and borders (1993: 17). In what follows, I suggest how the concept of aporia can be extended beyond deconstruction's usual remit to address what Jason W. Moore has succinctly diagnosed as the 'One System/Two Systems' problem, a general tendency of 'Green Thought' to recognise on one level that humanity is a species within 'the web of life' while, on another level, treating human activity as separate to, and often destructive of, nature (2015: 170). While the nature-society dualism can be dissolved at the level of philosophical principle, it is often reinscribed at the methodological or strategic level. Moore calls this tendency the fundamental impasse of environmental studies today (2015: 34). Rather than dialectically dissolving the impasse, however, we can reframe it as an aporia. Doing so, I suggest, leads us into a rethinking of the foundations of political ecology.

When dealing with the dualisms of nature and society that figure so centrally in ecological thought—an admittedly amorphous term to which I hope to give some definition—the concept of aporia grants us a much-needed perspective. By grasping the nature-society dualism (and related dualisms) as an aporia and not as a contradiction awaiting resolution, we can interrogate the role of the ecological more clearly. The word 'ecology' derives from the Greek term *oikos*, meaning house, home, or dwelling place, the same root that gives us 'economy'. Ernst Haeckel's coinage of 'Oecologie' in 1866 was intended to locate the relationships of the organism to the surrounding world via its 'dwelling place' [*Wohnort*] (1866: 286). Ecological thought is, by definition, the thinking of dwelling and not just of interconnectedness, and thus means asking after what Martin Heidegger termed 'the plight of dwelling' [*Not des Wohnens*], though we have to extend this beyond the purely human domain to which Heidegger tried to contain it (1971: 159). The concern with dwelling is a central theme of Bruno Latour's recent accounts of politics in the age of climate emergency (Latour, 2017, 2018). Confronting what he calls, following James Lovelock and Isabelle Stengers, 'Gaia', the planetary horizon of politics, requires reckoning with the Earth as the place of human and nonhuman dwelling. This is the lesson Latour takes from SF blockbusters such as *Avatar* (2009) and *Gravity* (2013): 'The place of the action is here below and right now. Dream no longer, mortals! You won't escape into space. You have no dwelling place but this one, this narrow planet' (2017: 81). This reduction of climate politics to the politics of Earthly dwelling—which for Latour is also a politics of territorialisation, in a neo-Schmittian sense (2017: 232)—should be resisted, I argue, in the name of an *anecological life*, a life lived at the very limits of habitats and territories where interconnectedness is not merely given but destroyed and remade, a life whose relation to dwelling is uncertain and provisional. For this reason, I want to show that the object of the plight of dwelling, the *oikos*, is itself *fundamentally aporetic*—that is, it involves an

experience of its own impossibility. The aporia is a site where 'there is no longer a home *[chezsoi]* and a not-home *[chez l'autre]*' (Derrida, 1993: 20). Indeed, the aporetic site tends towards a dissolution of 'topographical or topological conditions' altogether, such that making place must be said to subsist alongside the impossibility of place (1993: 21). We should think life not just in terms of the *oikos* but in terms of this passage to the impossible.

The interconnectedness of everything exists in an ineradicable tension with the demand for dwelling, in a double law that cannot be resolved through the *oikos*. This is why the latter cannot have the foundational or grounding role which ecological thought, from Haeckel and Heidegger to Latour and Moore, has so often sought out. There is a *bipolarity* within the ecological, then, which prevents a 'holistic' resolution of the *oikos* with interconnectedness. As I show in the final section of this article, the concept of anecological life can be understood in terms of what Derrida conceives as the double law of hospitality, in which the unconditional welcoming of others can only be practiced on the basis of conditions that impose, with a necessary minimum of violence, a limit between self and other, inside and outside, society and nature. Thus, the anecological thought by which the topological conditions of the *oikos* tend to disappear asserts itself in the very midst of the ecological thought of total interconnectedness. My goal therefore is certainly not to offer a means of overcoming the opposition of nature and society where others have failed nor to accept it as an 'unproblematic' dualism, but to suggest that ecological theory and criticism contain insoluble conflicts that problematise both dualism and holism. By turning to Derrida at the end of this article, I suggest not a definitive answer but only one possible theoretical path.[2] Nevertheless, recent eco-deconstructive accounts are of importance because they make the *oikos* a necessary object of critique (Fritsch, Lynes and Wood, 2018).

In what follows, I present readings of three major interventions in environmental social theory over the past four decades from Niklas Luhmann (1989), Latour (2004), and

Moore (2015), each of which confronts aporias within the ecological as a general framework for thinking about social reality and provides polemical responses to how environmental politics has constructed its aims and scope. Luhmann does this from a conservative position that is sceptical of what was then the relatively new environmental movement. Latour suggests a new form of constitutional liberalism that aims to dissolve the 'bicameral' separation of nature and society to which political ecology has remained captive. Moore, from a Marxist position, attacks what he calls the 'Green arithmetic' by which nature is merely added to the existing concerns of political economy. Each author, then, produces a critique of environmental consciousness in a way that helps clarify the stakes of ecological thought.

Governing the Ecological Paradox

Ecological Communication, first published in German in 1986, applies Luhmann's distinctive interdisciplinary systems-theoretical framework to the ecological question, which he defines as the process by which society as a system, or systemic unity of subsystems, communicates to itself about what lies outside it, i.e. the environment. Society is a 'thermodynamically open system', meaning that it enters into exchange with and is dependent on its external conditions while maintaining its autonomy from them through autopoietic self-regulation and self-reproduction. For Luhmann, who draws on theories of the autopoiesis of living systems (Maturana and Varela, 1980), the environment is what maintains the simultaneous openness and closure of the social totality:

> The dynamics of complex autopoietic systems itself forms a recursively closed
> complex of operations, i.e., one that is geared toward self-reproduction and the

continuation of its own autopoiesis. At the same time, the system becomes

increasingly open, i.e., sensible to changing environmental conditions. (1989: 13)

The environment is both the condition of possibility and external source of constraints and

stimuli for the system called society. Luhmann uses the concept of 'resonance' to describe

the way a system communicates with itself through its own internal differences (interacting

subsystems) and 'coupling' to describe how these differences are aligned with the difference

between the system as a whole and its outside (1989: 16). 'Interconnection' denotes the

resonance of functionally differentiated subsystems—science, economics, law, and so on—

that have evolved under certain environmental constraints. These constraints are, however,

screened off, reduced in complexity and processed very selectively, such that a point-to-point

relationship between society and the environment is impossible. Luhmann insists that there is

never any transfer of information between the system and its environment (1989: 18). Rather,

information (and thus meaning) is generated through the system's internal processes of self-

differentiation. This is where the real import of the ecological lies. The system does *not* react

to the environment but only to changes within the interconnections determining the system's

autopoiesis. Any social theoretical consideration of the ecological question must necessarily

proceed from an engagement with the 'fundamental paradox' of unity and difference, 'the

unity of the ecological interconnection and the difference of system and environment that

breaks this interconnection down' (1989: 6).

While ancient Greek and medieval culture understood the environment in terms of an

encompassing body or cosmos 'that assigned the proper place to everything in it', the

eighteenth century marks a break with these traditions (Luhmann, 1989: 6). Aristotelian

notions of a 'natural' or 'proper' place featured in the medieval and early modern period to

align cosmological with social order (Spitzer, 1942: 9). Modern concepts such as

'environment' and '*Umwelt*' emerge in response to the fact that such social and cosmological order could no longer be taken for granted (Luhmann, 1989: 6). If social systems are autopoietic and self-referential and thus define their own boundaries immanently, then the erosion of older notions of a divinely ordered cosmos causes the environmental question to emerge as a structural problem, and not simply an empirical or ethical one, for modern society. In this way, Luhmann's account frames modern environmental consciousness within the theologico-political terms of social self-regulation rather than in the terms of environmental ethics, which he excoriates as anxious moralising (1989: 130). An older duality of the sacred and profane comes to be replaced with the modern duality of nature and society: 'civilization took the place of the sacred … as the counter-concept to nature' (1989: 2-3). This new duality emerges out of the very same historical movement that displaced the regulating functions of religion.

Framing the question in this way allows Luhmann to dismiss the emerging environmental movement as a symptom of the unresolved problems of modern, secular society. Ecocriticism and the environmental humanities have had little recourse to his work (Bergthaller, 2016: 108). Yet, 35 years on, his anti-Green polemic provides a useful means of assessing the impasses of contemporary environmental politics and the theoretical questions underlying them. We can thus argue that environmental questions are deeply connected to failures of the 'self-observation' of late capitalist societies, the inability of these societies to justify their 'normal' functioning (Luhmann, 1989: 124-5). Environmental ethics cannot and should not avoid confronting the irreducible ecological paradox—or aporia—of a society that speaks about its exterior environment on the basis of terms it generates internally through the requirements of its reproduction (1989: 142). The ecological aporia problematises the representational framework of any presumed one-to-one correspondence between the social and the natural. It also precludes positing society as a system within a larger system called the

biosphere or the Earth. The first point relates to Cronon's dilemma noted above. Ecological interconnectedness must be reduced in order for us to communicate about it. An environmental stimulus can trigger resonances between functionally differentiated and interconnected subsystems that bear no resemblance whatsoever to the original environmental cause (Luhmann, 1989: 50). The second point, following from this, means that the interconnectedness of everything does not compose a unity or totality but makes such totalisation impossible.

Luhmann views this in terms of the paradox of social self-observation. He writes that 'every attempt within the system to make the unity of the system the object of a system operation encounters a paradox because this operation must include and exclude itself' (1989: 113). The whole cannot be a part of the whole.[3] If traditional societies were able to live with this, modern ones cannot, primarily because religion no longer serves as a principle of social legitimation (1989: 122). The environment, meanwhile, is 'the total horizon of information processing', and thus 'an internal premiss for the system's own operations' to the extent that it allows the system to distinguish itself from its other (1989: 22). Society can observe its own observations, can represent itself to itself as a unity *only* via the environment that bounds it externally and prevents the total closure of the autopoietic loop on which social reproduction depends. But the environment cannot observe itself in like fashion, and thus the holistic view of the environment as a larger totality containing the totality of society is always *correlated* with society's own incomplete self-observation (1989: 135). Environmental holism—even Moore's dialectical Marxist version—can be challenged, then, as the ideological image of a society which, because it is both closed and open at the same time, can imagine itself as a totality *only through another, imagined totality*. There is no Nature of nature, no external point from which distinctions between natural and non-natural can be drawn. Luhmann offers no solution to the paradox but counsels a rational directing of

society's 'information processing' in a way that rejects both utopianism and despair (1989: 138). The best way to deal with what lies outside the system is to better govern the system's internal dynamics, but he avers there is 'no "constitution"' that could transform the 'ecological difference' between nature and society into guidelines for a new unification (1989: 137). Any such utopian effort would have to deny the ecological difference through a complete autopoietic closure, an absolute self-justification or self-grounding which, Luhmann warns, would make the paradox ungovernable.

Housing the Collective

As if in a direct rebuttal of Luhmann, Latour's *Politics of Nature* from 1999 lays out a new constitution in which the dualism of nature and society is dissolved into a collective dwelling of human and non-human actors. Within our existing 'modern' constitution, Nature—as described by scientists—and society—as governed by politicians—are like two houses of a bicameral parliament, but they have been organised so as to exclude one another aporetically, in a 'civil war' preventing collaboration (Latour, 2004: 175). The nature studied by scientists comes to occupy an ontologically different kind of reality from society. Ecological problems therefore become intractable. For Latour, Nature is invested by science with the incontrovertible certainties one might associate with the forms of transcendence and divine right opposed by secular liberalism. As long as science remains the custodian of ontological absolutes and society the arena of epistemological contestation, the Revolution will not have finished the job of abolishing the *Ancien Régime* and secularizing politics (2004: 246). Nature remains beyond the reach of public life, which is likewise prevented from engaging with nature, such that the practice of political ecology is *doubly* thwarted. Latour deploys the myth of the cave from Plato's *Republic* to demonstrate the problem:

The Philosopher, and later the Scientist, have to free themselves of the tyranny of the social dimension, public life, politics, subjective feelings, popular agitation—in short, from the dark Cave—if they want to accede to truth. Such is the first shift … But the myth also proposes a second shift: the Scientist, once equipped with laws not made by human hands that he has just contemplated because he has succeeded in freeing himself from the prison of the social world, can go back into the Cave so as to bring order to it with incontestable findings that will silence the endless chatter of the ignorant mob. (2004: 10-11)

The dualism of nature and society is deeply embedded in the history of Western metaphysics, even if it is only modernity that brings it to a crisis point. Ecological interconnectedness presents a range of risk-laden 'tangled objects'—asbestos, viruses, greenhouse gases—which form 'rhizomes and networks' sprawling indiscriminately across social and natural domains (2004: 24). Ecological aporias emerge as symptoms of modernity's inability to negotiate these entanglements. Concepts of 'critique' are useless, here, since they suggest, in line with the myth of the Cave, a real world lying behind the veils of illusion (Latour, 2010: 475). The sciences are likewise politically impotent as long as they move between houses through the 'double interruption' by which they discover their truths only by leaving the penumbral social world behind and deliver these truths to society only in order to put an end to the public life of debate (Latour, 2004: 11). Modernity, in short, grants reality to nature but denies it politics; it grants politics to society but allows it only the secondary reality of 'social construction' (2004: 54). The metaphysics of Nature are thus closely tied to politics since the separation of Nature from society implies a hierarchy of beings grounding social order.

The dualisms of nature and society, realism and constructionism, fact and value, object and subject and so on are symptoms of modernity's double impasse or aporetic

character, which is why they cannot be escaped simply by adding their terms together: '"the" collective, appearances notwithstanding, cannot be achieved by a simple *adding together* of nature and society' (Latour, 2004: 57). Dualism as such is not the issue but the mutual exclusivity of the dualism's terms. To house the collective anew, we need a new inclusive dualism of human and nonhuman 'citizens' (2004: 79). This in turn calls for a new bicameralism in which nature (fact) and society (value) are replaced by powers of 'taking into account' and of 'putting in order' (2004: 165). Taking into account addresses external reality and asks: 'how many new propositions must we take into account in order to articulate a single common world in a coherent way?' (2004: 108). Putting in order concerns instituting and ordering, and asks: 'what order must be found for the common world formed by the set of new and old propositions? (2004: 110). Fact and value are thus replaced with separate powers of accounting for reality and of giving it a social order. The collective's requirement for closure means that it is not possible to admit every entity accounted for, but closure is always provisional and excluded entities have a right of appeal guaranteed by the state.

Interconnectedness marks the end of the 'idea of Nature' as a hierarchy of beings. Latour demonstrates the point through his famous predilection for lists: 'A snail can block a dam; the Gulf Stream can turn up missing; a slag heap can become a biological preserve; an earthworm can transform the land in the Amazon region into concrete' (2004: 25). The end of Nature as a transcendent term granting social order entails that society must now generate its own organization immanently. Latour's name for this process is composition, a concept that displaces critique (2010: 485). Society may rank the beings it has admitted into the collective in order of importance, but this is not a divine or natural hierarchy. From a compositionist point of view, the immanent process of assembly opposes the already-assembled idea of Nature (2010: 482). Transcendence remains, but no longer as a source of ontological certainty. Instead, it designates the 'outside' consisting of beings external to an immanently

composed collective. All of the old ecological aporias are replaced by a new dualism of humans and nonhumans in non-violent association, where a certain margin of the nonhuman always bounds the collective from the outside so that its limits are constantly redrawn. Society is composed by something similar to Luhmann's autopoiesis, then, a 'feedback loop' that passes from humans to nonhumans continuously in order to totalise, provisionally, the 'expanding collective' (Latour, 2004: 125).[4]

But the civil peace achieved through this new, compositionist bicameralism requires an emphasis on dwelling, the *house* as product of environment-making: 'Where does "external nature" now lie? It is right here: carefully naturalized, that is, socialized right inside the expanding collective. It is time to house it finally in a civil way by building it a definitive dwelling place' (Latour, 2004: 127). Housing the collective can only be done by returning to the root of ecology, the *oikos*, the 'common habitat' (2004: 135). The common is not given but results from the experimentation that decides 'its habitat, its *oikos*, its familiar dwelling' (2004: 136). Political ecology grounds human and nonhuman actors together in the *oikos*: 'It is to the *topos*, the *oikos*, that political ecology invites us to return' (2004: 224). Dwelling is not menaced by science, as it was for Heidegger, but rather given new political life by it. Latour ultimately seeks to resolve the common dwelling with 'an ecological way of thinking, a way of thinking rightly persuaded that in the final analysis everything is interconnected' (2004: 199). The fact that no collective can include everything means that scientific experimentation must exclude certain actors while 'assuring itself that the excluded entities will be able to put it in danger and appeal to it in the following phase' (2004: 199). Ecology's bipolarity, the tension between *oikos* and interconnectedness, is resolved here in the name of the *oikos* as a foundation. Latour thus gives the state the Kantian role of ensuring hospitality (a theme we will return to), 'the reception of aliens' or those defined by their position outside the common dwelling (2004: 209). In the 'new climatic regime' the only politics is the

politics of dwelling places and migrants (human and nonhuman) in flight (Latour, 2018: 11-12). What he elsewhere refers to, following Stengers, as the 'intrusion of Gaia' demands not only an end of the modern constitution and its civil war but a new politics of *territory*. The real problem with Nature is that it resides in the 'global space of nowhere' and thus can never form a territory in which the collective can be composed (Latour, 2017: 166). But Latour's resolution of ecological aporias through a neo-Schmittian politics of territorialization merely leads us to other, deeper aporias belonging to the *oikos* itself, as I will show. The non-violence of the common dwelling's *necessarily exclusionary* character is not as easy to insist upon as Latour believes. We can thus question the necessity of identifying political ecology today—and the entire 'search for the Common' (Latour, 2010: 488)—with the *oikos*.

Revolution of the *Oikeios*

Although it condemns aspects of the Latourian approach, Moore's *Capitalism in the Web of Life* (2015) shares key elements with Latour's argument, namely: that the separation of nature from society is the major obstacle to developing an effective environmental politics, that this separation has been central to the emergence and development of capitalist modernity but has led to crises that modernity itself cannot overcome, and that what is needed is a new configuration of the *oikos* or what Moore, using an adjectival form of this term, calls the '*oikeios*'. It is specifically in terms of a holistic view that he deems the nature-society dualism inadequate: 'The dualist construction of Nature and Society—Green Arithmetic—poses a question it cannot answer: the question of the Whole. Why? Because Nature plus Society does not add up' (Moore, 2015: 22). As with Latour, adding nature and society together does not produce the expected totality.

Since the 1970s, ecosocialist thought has made the case for moving beyond the dualist framework but Moore's polemic is this has been much easier to assert as philosophical claim

than practice as methodology. Discussions of the Anthropocene concept suggest that the problem goes well beyond debates within Marxist theory. Even as we come to recognise humanity's inextricable entanglement in the Earth's strata, humanity seemingly remains exceptional:

> Philosophically, humanity is recognized as a species within the *web* of life. But in terms of our methodological frames, analytical strategies, and narrative structures, human activity is treated as separate and independent: humanity becomes Humanity. There are 'human constructions' and 'natural' constructions—even as humans are recognized as a geophysical force. (Moore, 2015: 170)

This 'disjuncture' by which humanity is both part of *and* additional to nature 'lies at the core of the impasse in environmental studies today' (2015: 34). If the terms of the nature-society dualism cannot simply be added together—if the dualism becomes an aporia—it is because *they were never separate to begin with*. We should begin instead with the 'double internality' of humanity-in-nature and nature-in-humanity (2015: 1). The double impasse here, strangely, becomes its own solution. This is how Moore conceptualises the *oikeios*, a word borrowed from Theophrastus for whom the *oikeios topos* was the 'favourable place' or 'proper country' where a plant can take root (2015: 12). The *oikeios* in Moore's usage is the double relation by which human organisation produces and is produced by its environments and thus the 'bridge between philosophical claim and historical method' (2015: 12).

The separation of nature and society, though an abstraction, has very real historical force and constitutes the *violence* of modernity as such (Moore, 2015: 4). Since the long sixteenth century, the accumulation of capital has depended on representations of nature as something external to society. The Cartesian separation of mind and body is indicative of a

whole metaphysics which, from Renaissance perspective to modern genetics, constitutes an unprecedented mapping, measuring and categorisation of the world. Capitalism needs 'abstract social labour' but also 'abstract social nature', the 'knowledges and symbolic regimes that [construct] nature as external, space as flat and geometrical, and time as linear' (2015: 191). In order for the commodification of life and work (human and otherwise) to remain profitable, capital needs a surplus of externalised, *uncommodified* life and work (unpaid labour) at its disposal. On a world-ecological level, the falling rate of profit at the root of capitalism's woes corresponds to a declining surplus of uncommodified human and extra-human natures within the orbit of accumulation. The vast commodity frontiers opened up by European colonial exploration and exploitation 'extended the zone of appropriation faster than the zone of commodification' and thus established capitalism as a world system (2015: 73). Technological fixes for accumulation crises have generally also been geographical fixes that expanded the ecological surplus and opened up new horizons of appropriation. As a source of work or energy, nature and not just labour produce value, but nature here is to be understood, like labour power, as fully social and as having historical existence *only* to the extent that it is appropriated. This can be seen throughout capitalism's history, from the Spanish silver mines of Potosi in the sixteenth century, to the Caribbean sugar that drove the transatlantic slave trade from the seventeenth, to the grain that poured into Britain from North America in the nineteenth, to cheap Middle Eastern oil in the twentieth. In each case, nature is a historical nature, co-produced by capitalism.

Escaping the nature-society dualism, then, requires the argument that nature has historical existence only through its internalisation by human acts of environment-making. Nature external to these acts is an abstraction perpetrated by capitalism's strategies of appropriation. What really happens in the human relation to external nature is a kind of *self-relating*, since nature only exists as already internalised: 'everything that humans do is a flow

of flows, in which the rest of nature is always moving through us' (Moore, 2015: 7). This holism risks the most audacious anthropocentrism, but it is a price Moore is willing to pay for the elimination of the 'bourgeois representation of nature' as extra-social resource (2015: 196).

The outlines of a post-capitalist *oikeios* emerge from the revolt of human and nonhuman life against capitalism's world-ecological systems. Capitalism is unique in how it subjects the *oikeios* to revolutionary upheaval as a matter of course; it '[compels] all life-activity to work on the rhythms of capital' (2015: 231). The spatio-temporalities of capital accumulation annihilate the *oikeios* as a meaningful dwelling place by making it increasingly homogenous and quantifiable, in what Marx famously called the annihilation of space by time (Moore, 2015: 211). In this sense, under capitalism the *oikeios* dissolves its own basis as a dwelling place and brings about a revolution at the level of life (not nature) in general: 'At some level, all life rebels against the value/monoculture nexus of modernity' (2015: 205). The capitalist *oikeios* is thus, in some sense, necessarily self-dissolving—that is, *it confronts and experiences historically its own impossibility*. Capitalism causes life to occupy an aporetic space. Superweeds, for example, are a revolt against genetically modified monocultures. Capital co-produces historical natures in the web of life in order to accelerate accumulation but it also, unwittingly, produces historical natures that frustrate it, challenge it, and open a path for a post-capitalist *oikeios* in which the human relation to nature is no longer defined by the violence of the nature-society opposition.

For Moore, then, like Latour, the *oikeios* as interconnected whole of human and nonhuman agencies can be posited non-violently once we stop organising society on the basis of nature's externality. Andreas Malm (2018), one of Moore's harshest critics, overlooks a key aspect of his argument, namely that ecological thought in general has reached the same impasse as capitalism, is caught in the very same hesitation between the separation and non-

separation of nature and society. Green Arithmetic thus has the form of capitalism's central ecological aporia. But it does not follow that the *oikos* or *oikeios*, the dwelling place, the co-produced environment, is the category by which the aporia is dissolved. In fact, capitalism's ecological contradiction is aporetic *precisely because* it leads life to demand the 'impossible' path *beyond* the terms of the *oikos* altogether. What I argue in the closing section, with reference to Derrida's ethics of hospitality and recent work in eco-deconstruction, is that the *oikos* is itself an aporetic concept and that ecological interconnectedness requires thinking *an*ecological life.

The Anecological Thought

To think interconnectedness comprehensively, as ecology calls on us to do, we also need to think its limit. Luhmann's ecological paradox rests on this insight. The interconnections of society and its environment can be understood only as a unity that bounds social totality and a difference that precludes totalisation. This offers an ecological understanding of totality as a structural problem for capitalist modernity, which I have shown to be the basis of arguments made by Latour and Moore. They demonstrate persuasively that the theory and practice of environmental politics are marked by the ecological aporias of capitalism. What a critic such as Malm misses is that the dualism of nature and society becomes aporetic precisely at the point where the terms seem least opposed, least different, least problematic. This is because capital accumulation demands that nature be both internal and external to society. Where Latour and Moore should be critiqued, however, is in their recourse to the *oikos* (or *oikeios*) by which a resolution to ecological aporias is sought in the positing of dwelling or environment-making as the absolute horizon of politics. Latour's recent work is emphatic on this:

it is perhaps time to stop using the word 'ecology' except to designate a scientific field. There are only questions of dwelling places inhabited with or defended against other terrestrials that share the same stakes. The adjective 'political' ought to suffice from now on to designate these terrestrials. (2018: 90)

The heating of the Earth is forcing more and more humans and nonhumans into flight, as Latour recognises. The question of nature thus becomes for him the question of relationships to territories, the Earth, and 'land' (2018: 9). This is the defining feature of what he calls the politics of the 'climatic regime', in which a major challenge is the reception of human and non-human migrants (2018: 10). While human populations have lived for millennia mainly within a climatic niche of, on average, thirteen degrees Celsius, we now know that this will change dramatically in the next fifty years, forcing a new geographical distribution of people with their crops and livestock (Xu et al., 2020). To give another example, mass extinctions of parasites are causing surviving parasite species to migrate to new hosts, leading to unpredictable invasions, novel diseases, and processes of co-extinction (Carlson et al., 2017). In such conditions, identifying political ecology with the politics of dwelling (even while including nonhumans) is dangerously narrow because it judges all life on the basis of a political right to territory, in what Graham Harman approvingly calls Latour's 'Green Schmittianism' (Harman 2020: 88). For Moore, life likewise takes on a political and historical existence only via human environment-making, a position which not only cannot avoid anthropocentrism but which ties life inextricably to normative notions of place and habitat.

What is dangerous here specifically is the insistence that there is life only through the foundational role of the *oikos*. This entails that anecological life—life, human or otherwise,

that cannot presume the security of dwelling or a right to territory—is an *aberration*, or worse, politically incomprehensible. Anecological life is lived at the very limits of territories and habitats, in spaces of displacement, uncertainty, and endangerment but also of survival and creative becoming in which interconnectedness is both destroyed and remade. These spaces have been richly documented in a recent book by Sonia Shah. Through meticulous research on the history of science and the politics of migration, Shah shows how a 'sedentist paradigm' has led to consistent underestimations of life's propensity to move beyond its usual ranges (2020: 223). Sedentist biases are only now being discarded within the sciences, as researchers come to recognise the extent to which movement is a central evolutionary adaptation across species of many kinds (2020: 242-3). That life should be defined in terms of a more or less unchanging, normative relation to a 'proper place' is a myth (often racially motivated) that has sustained ecology from Theophrastus to Haeckel and twentieth-century population biology. The migration of peoples has thus come to be seen as an aberration rather than a long-established way of surviving, and often flourishing, that humans share with many other species. The unprecedented rate at which border walls have been built recent years shows just how deeply contemporary politics is dominated by a horror of life in movement (Shah, 2020: 290). The insistence that only an *oikos* can save us also stems from these kinds of sedentist biases. Recognising anecological life by no means downplays how climate change is displacing humans and non-humans or how the results of this can be cataclysmic, quite the contrary. But to regard life in flight merely as the expression of cataclysm rather than part of long-standing evolutionary strategies of survival and innovation offers a restricted (and strangely anti-Darwinian) view of what life actually does in times of crisis (2020: 267).

Recent work on Derrida and ecology suggests ways of making anecological life part of our ecological thinking. From an eco-deconstructionist perspective, the *oikos* can be

approached through the *différance* that disrupts its self-presence or *logos*. It is true that

Derrida rarely spoke of ecology, but the frequent focus on economy in some of his major

texts arises from a concern with the *oikos* as the terms' shared root. It is well known, for

example, how he defined *différance* as a relation between the 'economical' and the

'noneconomical' or aneconomic in the circulation of the signifier as an infinite deferment or

irrecoverable loss of self-present meaning (Derrida, 1982: 19). An economy of signs is

always also in some sense an expenditure without reserve, a 'general' as well as a 'restricted'

economy in Bataille's sense (Derrida, 1978: 341). The economic and the aneconomic

dimensions exist in tandem—a text is both the sameness and the difference of signs

composing it, the dynamic retention and loss of its meanings—but they are not mere

oppositions or conflicts to be resolved. Rather, their coexistence is processual. As Derrida

puts it:

> differ*a*nce is not a distinction, an essence, or an opposition, but a movement of
>
> spacing, a 'becoming-space' of time, a 'becoming-time' of space, a reference to
>
> alterity, to a heterogeneity that is not first a matter of opposition. Hence a certain
>
> inscription of the same, which is not the identical, *as* differ*a*nce. At once economy
>
> and aneconomy. (Derrida and Roudinesco, 2004: 21)

Différance is not an opposition of identity and alterity to be dialectically mediated, nor a

relation of inside and outside to be distinguished by a boundary, but a sameness differing

from itself. Derrida's concern with economy and aneconomy can, as Philippe Lynes

demonstrates, be translated into the terms of ecology and anecology (Lynes, 2018: 113). Life

can be thought both as *oikos*, inscription in a proper dwelling, the regulation of the ecological

interconnectedness of the common world *and* as the anecological movement by which life

departs from, or is in excess of, its own ecological networks, proper dwelling places and regulatory systems. The central ecological aporia, then, is not fundamentally that of nature and society but relates to the ecological and anecological spacings through which life necessarily moves.

A politics and ethics of dwelling can be maintained, but only as long as the *oikos* itself is thought as aporetic. Michael Marder suggests that Derrida's general avoidance of the word 'ecology' in favour of economy is not without importance in this regard, since it signals the Heideggerian sense of dwelling that Derrida deconstructs:

> 'Eco-' is the way we have inherited the Greek word *oikos*, meaning 'house' or 'dwelling.' And Derrida's deconstruction has never been of anything but the dwelling. That is one of the things the French thinker took from Heidegger's famous dictum 'Language is the house of being. In its home man dwells.' Derrida's style of inhabiting this house was by deconstructing it (Marder, 2018: 141)

The supremely sedentist notion of dwelling that Heidegger called for as the remedy for modernity's deracinated and errant forms of life invests the house or *oikos* with ontological security. For Derrida, however, dwelling in the house of being is of necessity a deconstruction of the security of its presumed *logos* or truth. Ecological thought, if it is to avoid the sedentist paradigm, must reflect, self-critically, on the presumption of the *oikos* as an ontological foundation.

If dwelling has no natural, ontologically secure foundation, then it is necessarily provisional and thus, in some sense, always imposed with some minimal degree of violence. Latour's confidence, shared by Moore, that a common world or *oikos* can be established non-violently, and that elements foreign to the common world can somehow be peacefully

excluded, should be questioned. When Thom Van Dooren describes the conservation of critically endangered whooping cranes, he evokes the idea of a necessary minimum of violence. Care for one species necessarily 'sits alongside the domination, coercion, and abandonment of others' in what he calls a 'violent-care' (Van Dooren, 2014: 92). In addition, caring for endangered life can involve doing a certain amount of violence (through captivity, and so on) to the life in question (2014, 104). Conservation in the midst of the ongoing sixth mass extinction event can thus be regarded as a key example of anecological life. Within these conservation practices, care and violence are intimately entwined.

Derrida's ethics of hospitality allow us to think this violence through the aporetic form of the 'antinomy' as 'a divided law, a double law or a double bind' in which an absolute hospitality is both necessary and impossible (Derrida, 2004: 168). The *oikos* can be thought in terms of this double law which maintains it as divided, open and closed at the same time. Derrida conceives of hospitality as simultaneously an unconditional and a conditional openness of the house to the arrival of the other:

> there would be an antinomy, an insoluble antinomy, a non-dialectizable antinomy between, on the one hand, *The* law of unlimited hospitality (to give the new arrival all of one's home and oneself, to give him or her one's own, our own, without asking a name, or compensation, or the fulfilment of even the smallest condition), and on the other hand, the laws (in the plural), those rights and duties that are always conditioned and conditional. (2000: 77)

The law of unconditional hospitality, the *absolute* ethical demand to welcome the other (strangers, aliens, migrants) is *above* the laws that condition hospitality in its customary forms, but it must also be maintained in coexistence with them as their outermost possibility.

The aporetic *oikos* of hospitality is thus governed by a double law that splits it from itself and makes dwelling both absolute and conditional at once. If the conditions of hospitality involve a certain violence, such as a right to exclude or expel or to demand something in return, then it is, Derrida argues, a necessary one if we are to avoid the 'worst violence', namely, a final and absolute calculation of the house and thus the relation between self and other, which would be stasis, silence, nothingness, and nihilism (1978: 162). The worst violence in the ecological sense would be an Earth on which every relationship, every form of life, is made calculable or quantifiable in advance, where the otherness of those others with whom we share the Earth through a myriad of interconnections has been abolished through technological and economic systems implemented to secure certain, narrowly defined forms of human dwelling. Capitalism views the Earth as the 'host' of economic life in this way and seeks an absolute hospitality, a global *oikos* in which all life works to the rhythms of capital accumulation. Against this, the lesser violence of a dwelling that is always provisional and conditional should be asserted.

The aporia of the *oikos* can be embraced, then, in a deconstructive and ethical mode that allows ecological and anecological life to be reckoned alongside one another in a relationship that is impossible to fully calculate or mediate. The worst violence of biological annihilation and environmental destruction wrought for the sake of capitalist and imperialist forms of human dwelling must be countered through the lesser violence of a life irreducible to its dwelling places, a life that constantly confronts the conditions of dwelling at the very limits of terrestrial hospitality, a life lived in the dangerous and precarious spaces beyond any ontologically secure relationship to an *oikos*. Despite their obvious dangers, such spaces are also vital arenas of care, survival, and experimentation.

Notes

1 Derrida notes that the term 'antinomy' might suggest itself here, but that it is too closely tied to the Kantian notion of 'transcendental illusion' and to the dialectical solutions of Marx and Hegel (Derrida, 1993: 16). Nevertheless, Derrida often retains 'antinomy', especially when emphasizing the conflict of two equally legitimate regimes of the law, as occurs with the demand for conditional and unconditional hospitality (2000: 77).

2 Another would be Deleuze and Guattari's critique of the sedentary paradigm within ecological thought and criticism. For an example of work in this mode, see Tynan (2020).

3 For Cary Wolfe, it is precisely this emphasis on the paradoxes of self-reference that puts Luhmann closer to Derrida than to comparable thinkers such as Žižek, Foucault, Deleuze and Guattari, or Latour (Wolfe, 2010: xix-xxi).

4 Latour rejects Luhmann's approach as an attempt to 'naturalise' or 'biologize' the social, presumably because of its debts to Maturana and Varela (Latour, 2004: 269). But Luhmann states explicitly that such a naturalising metalanguage is not possible as a principle of self-observation, which is why modernity's self-descriptions are fraught with paradox and 'strange loops' (1989: 24).

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