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# **Furthering Post-human Political Ecologies**

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#### **Abstract**

This critical review aims to facilitate explicit, ongoing consideration for how post-human geographies and political ecology stand to benefit one another empirically and theoretically. In it, we argue that post-human political ecologies are well-equipped to ensure that the broader post-human turn in geographical thought engages critically with the roles that humans and non-humans play in enactments of injustice — both as subjects of (in)justice and as beings whose actions have justice implications for myriad forms of life. By engaging with empirics drawn from research on tiger conservation in India, we deploy myth as a conceptual tool and as an heuristic device to illustrate how post-human political ecologies might further engage with the politics and power asymmetries embedded in conservation science and practice. To conclude, this critical review summarizes the merits of bringing the 'cutting edge' of post-human geographical literature into dialogue with the traditional concerns of political ecology and recaps the potential power that myth retains as an analytic in post-human political ecologies.

Keywords: post-humanism; human geography; political ecology; myth; tiger; India

### 1. Introduction

Human geography has embraced post-humanist thought. Broadly, post-humanism represents a turn away from human/nature dualisms prevalent in Anglo-European political philosophy. Post-humanism strives to unseat the human as the dominant subject of social inquiry while rejecting onto-epistemologies that render humans as categorically separate from the worlds they co-inhabit with proliferating forms of life – forms of life ranging from megafauna to microbacterium (Barad 2003; Kirksey 2015; Lorimer 2016; van Dooren et al 2016). In human geography, engagement with post-humanism has coincided with the production of knowledge that repositions non-humans as legitimate subjects of social inquiry with the capacity to act, disrupt, and resist in surrounding webs of life (Sundberg 2014).

Drawing insights from post-human geographies, this review aims to advance the critical application of post-humanism in political ecology – political ecology being a community of

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<sup>&</sup>lt;sup>1</sup> The term 'onto-epistemology' attempts to separate the study of being (ontology) and knowing (epistemology): 'the separation of epistemology from ontology is a reverberation of a metaphysics that assumes an inherent difference between human and non-human, subject and object, mind and body, matter and discourse' (Barad 2003: 829).

practice traditionally committed to engaging with the social and political dimensions of environmental inequalities and injustices (Robbins 2012). Recognizing that post-humanist analyses have, on the whole, been critiqued for eschewing matters of everyday politics, we argue that post-human political ecologies can help to ensure that the broader post-humanism turn in human geography is equipped to engage critically with enactments of injustice while drawing attention to human *and* non-human forms of life that are colonized, disenfranchised, or impoverished through unequal relationships of power (Tuck and Yang 2012; Sundberg 2014; Srinivasan and Kasturirangan 2016; Menon and Karthik 2017). In doing so, we deploy myth as an analytical tool and heuristic device to illustrate one way that the goals of post-human and political-ecological analyses might be made commensurable in practice.

The following section begins with an overview of how some human geographers have engaged with post-humanist thought to theorize about non-human subjects. This overview draws attention to how political ecology stands to benefit from an expanded purview that accommodates non-humans as subjects of social inquiry. The subsequent section identifies a few key critiques of post-human geographies and discusses opportunities that exist in post-human political ecologies to address such critiques. Before concluding, we engage with myth underpinning tiger conservation efforts in India to illustrate the value of post-humanist thought in political ecology as well as how post-human political ecologies might contribute to sharpening post-humanism's critical edge.

# 2. Posthuman geographies and political ecology

Given the aim and scope of this review, we avoid rehearsing at length the meritorious contributions posthumanism has made to human geographical thought over the past two decades. Discussions by a number of scholars articulate how post-human geographies help to resolve the false dichotomy of 'socio-nature' in critical geographical thought and to advance non-humans as legitimate subjects of social inquiry whose actions contribute to the co-production of more-than-human worlds (Braun 2004; Castree and Nash 2006; Lorimer 2005; 2012; Whatmore 2006; Panelli 2010; Anderson 2014; Sundberg 2014; Hovorka 2016; and Bastian et al 2016).

By implication, post-human geographies have paved the way for political ecologists to consider why non-humans are subjects worthy of social inquiry rather than just inanimate backgrounds or hapless objects embroiled in human contestations over the environment – the latter being the mainstay in political ecology (Hobson 2007; Srinivasan 2015). Drawing inspiration from post-human geographical work on flora (Head et al 2014; Fleming 2017), fauna (Collard 2012; Barua 2016; Jampel 2016), and microbacterium (Lorimer 2016; 2017), among other non-human actors (Kirksey 2015; Tsing 2015), there is ample scope for political ecologists to consider the contributions they might make to debates about how diverse forms of life behave and misbehave in ecologies that are explicitly political.

Although political ecology has much to gain from embracing post-humanism; post-human geographies remain plagued by troubling silences and practices that political ecology has traditionally endeavored to speak to and to redirect. While some political ecologists are apt to recognize that there is something theoretically cutting edge about post-human

geographies, some are also apt to question whether this edge is sharp (i.e. political) enough for political ecology (Arboleda 2017). The next section discusses critiques of post-humanism that are likely to resonate with political ecologists while mapping out a few directions that might be pursued in political ecology to ensure that post-human geographies are equipped to wield a critical edge. Specifically, we highlight some of the ways that political-ecological conceptions of time and space might contribute to this task before drawing attention to the power of myth as an analytical tool and heuristic device for post-human political ecologies.

## 3. Time, space, and the power of myth

Braun (2004) raised an essential concern about historicist post-humanism – a concern exemplified in our cumbersome use of the word 'turn' in this review, which fails to signify that humans have always been entangled with non-human assemblages (see also Castree and Nash 2006). Although the exercise of post-humanist philosophy has facilitated recent empirical and theoretical engagement with more-than-human worlds in human geography, the exercise itself did not initiate a more-than-human age. In reality, humans have never existed beyond or before such an age. As Braun (2004, 271) explains:

To talk about the present as a time when the boundaries between the human and the non-human are blurred, to imagine that now, *more than ever before*, our lives are entangled with things, is to produce the historical fiction of the autonomous 'man', the human before its entanglements. In this temporalizing mode, posthumanism *requires* the human, it relentlessly calls it into being.

Thus, our use of the word 'turn' in this review implies that there existed a temporal moment before post-humanism – an age of humanism. This slippage problematically (but not uncritically!) enshrines humans as categorically distinct from non-humans.

The conceptual dilemmas associated with historicist post-humanism also engender ethicopolitical concerns (Braun 2004). One concern is the rise of a 'nihilistic politics of "free play"' – particularly in the fields of bio- and techno-science. Such a nihilism purports that 'any and all experimentation is acceptable' regardless of its ethical or political connotations (Braun 2004: 271). Another ethico-political concern is the propagation of a 'nostalgic politics of purity' that 'fights any and all transformations in the name of recovering a prior essence and a lost unity' between humans and non-humans (Braun 2004: 271). These attributes of historicist post-humanism are problematic, as they depoliticize more-than-human worlds by fantasizing about hypothetical realms that exist free of politics (Braun 2004). When considered in tandem with spatial critiques of post-humanism (below), these concerns necessitate further critical engagement with philosophical exercises or scientific experiments that understand post-humanism as a phenomenon discovered recently by Anglo-European scholars at a specific historical juncture. Like post-colonialism, post-humanism 'better signals a political-analytical perspective than a historic moment even if that theoretical perspective is in response to historical conditions' (Castree and Nash 2006, 502).

With this in mind, spatial concerns about post-humanism also require consideration. Specifically, Sundberg (2014) draws attention to implicit epistemic and geographical silences in post-human geographies about where post-humanist thought tends to originate from, geographically, and the geographies through which post-humanist discourse circulates.

Referencing Kuokkanen's (2007) notion of epistemic ignorance,<sup>2</sup> Sundberg (2014) argues that an unqualified reliance on Anglo-European philosophy in post-human geographies privileges colonial and settler-colonial onto-epistemologies (see also Chakrabarty 2007). When matched by a lack of reflexivity, post-humanist discourse risks re-enacting epistemic violence against Indigenous and other non-dualistic onto-epistemological traditions (Kuokkanen 2007). Accordingly, these silences make post-humanism complicit in reproducing a colonial intellectual tradition that problematically appropriates, erases, or invalidates other ways of being and knowing (Sundberg 2014; Loftus 2017).

Although the temporal and spatial concerns outlined above are by no means exhaustive, they begin to reveal why political ecology is well-positioned to sharpen the cutting edge of post-human geographies. Political ecology has proven to be adept at demonstrating the impacts that shifting ecological, economic, and political relationships have on landscapes across time and space (Robbins 2012). Such analyses are by design historically and geographically explicit, producing situated knowledges about how such landscapes are shaped by and, in turn, shape variegated forms of inequality and injustice. Indeed, the explanatory power of political ecology resides, in part, in its tradition of drawing on feminist, postcolonial, and science and technology studies to unsettle taken-for-granted truths about environmental change (Watts 1983), environmental degradation (Blaikie and Brookfield 1988), and environmental science itself (Forsyth 2003; see also Robbins 2012). Whereas the explanatory power of political ecology stands to be enhanced by conceptions of nonhumans as political subjects that act – rather than simply as material objects that are acted on – post-humanism stands to benefit from the historically and geographically situated analyses of inequality and power at the heart of the political ecology tradition.

'If political ecology's central tenet is social justice, and we acknowledge that animals play some role in enactments of injustice, then how animals are constituted as subjects of justice (or not) is an important analytical question' (Hobson 2007: 255). We add to this that the politics enacted by researchers themselves in constituting non-human lives as subjects of (in)justice is of equal importance. Thus, while post-humanist thought presents political ecologists with the theoretical language and tools to conceive of non-humans as subjects of social inquiry and as subjects of (in)justice; political ecology's commitment to the pursuit of social justice cautions post-humanism against leaving unjust politics enacted in the name of non-human life unchallenged. In what follows, we briefly illustrate what such a conception of post-human political ecology might entail in practice using the concept of myth.

We understand myth loosely as stories that explain socio-natural relationships, but especially those that perpetuate established identity categories, knowledge traditions, and normative behaviors (Hirsch 2006). Moreover, myths, as ways of making sense of worlds, are always rooted in specific onto-epistemological traditions; power-laden narratives that work to re-produce particular ways of being and knowing while foreclosing alternative possibilities — often through universal claims that derive power from language that transcends time and space (Gow 2001). By re-conceiving dominant ecological narratives about tigers as myth, the penultimate section of this review begins to reveal some of the

<sup>&</sup>lt;sup>2</sup> 'Epistemic ignorance refers to academic practices and discourses that enable the continued exclusion of other than dominant Western epistemic and intellectual traditions' (Kuokkanen 2007: 60).

politics, power asymmetries, and particularities that trouble claims of objectivity and universality underpinning tiger conservation efforts in India.

## 4. The immutable tiger – a myth untold

For decades, tiger conservation in India has maintained a few basic truths. These are: tigers are territorial, tigers need space, and tigers avoid humans. Accordingly, tiger conservation is based on what ecologists have named the source-sink model (Liu et al 2011). In this model, 'source' refers to high-quality habitat in which tigers are able to live and reproduce successfully. 'Sink' refers to low-quality habitat that, in isolation, is insufficient for the successful reproduction of tigers, but, when connected to source habitat, provides sufficient space for a growing tiger population. This ecological model is replicated across India through the country's tiger reserve programme. Tiger reserves are the strictest designation of national parks in India, in which inviolate core areas (sources) are surrounded by buffer zones outside national park boundaries (sinks) (Narain et al 2005).

Spatial expressions of sources and sinks – of pure and corrupted habitats – are intricately entangled with the myth of 'the immutable tiger'. Essential to the function of this myth is the notion that tigers and humans cannot co-inhabit overlapping spaces in perpetuity – it is believed that this will inevitably lead to the disappearance of the tiger. Interviews with managers, staff members, and naturalists in tiger reserves reveal just how prominent the basic truths are that fuel the myth of the immutable tiger. Such interlocutors routinely affirm that: tigers require a minimum territory of 10-12 km² (although evidence of higher tiger densities exist in India; see Karanth and Nichols 1998; Karanth et al 2006); each male tiger has its own exclusive territory (despite evidence to the contrary; see Karanth et al 2003); and tigers avoid spaces modified by or shared with humans (even though evidence of tigers sharing space with humans at fine spatial scales exists; see Carter et al 2012). Recent evidence of increasing tiger numbers in Biligiriranga Hills Tiger Reserve in Karnataka, where members of the indigenous (adivasi) Soliga community successfully laid claimed to their ancestral land through The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, also questions these basic truths.<sup>3</sup>

Despite evidence that problematizes the logic of the source-sink model, the myth of the immutable tiger continues to justify the displacement of Indigenous communities from spaces demarcated as tiger reserves — as 'inviolate nature' — by the modern state (Rangarajan and Shahabuddin 2006; Bijoy 2011). For example, in Mudumalai Tiger Reserve in Tamil Nadu, efforts remain underway to relocate Indigenous communities from the reserve because no permanent human settlements are permitted inside the inviolate core of any tiger reserve. In this particular case, the tiger reserve's core area was designated despite the fact that communities were already living inside (Taghioff and Menon 2010; Thekeakara 2010). When queried by one of the authors as to what might happen should the relocation take place, a young *adivasi* man, employed by the tiger reserve as a day laborer, suggested that 'the *adivasis* are the only people who really care for and protect this forest. If we go, all the animals will go. The forest will go. The forest department will see to that.' Other *adivasis* present nodded in agreement.

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<sup>&</sup>lt;sup>3</sup> The term *adivasi* translates as 'first people' or 'original inhabitant' in Hindi.

The contradictions outlined above are not simply the result of a widespread misunderstanding or systemic failure to disseminate information between conservation scientists and managers about how best manage tiger conservation in India (Athreya 2006). Rather, upholding the distinction between pure and corrupt nature – between sources and sinks – requires adherence to myth about how tigers behave and, therefore, what tigers require if they are to live and to reproduce successfully. Put differently, the tiger's immutable qualities demand that tiger conservation in India *must* be exclusionary. This universalizing myth about the immutable tiger obliterates the possibility of tigers as individuals capable of acting and adapting in bio-geographies – it obliterates the notion that tigers, too, might be political subjects (Hobson 2007). Yet, if we consider these relations 'kaleidoscopically' (Law 2004), a twist towards posthumanism in political ecology opens up the myth of the immutable tiger to multiplicities of human-tiger relationships.

Consider the first-person narration below written by one of the authors, based on observations recorded during fieldwork carried out in 2016:

The second time I see a tiger in India, I am on a jeep safari in the popular Ranthambore Tiger Reserve in Rajasthan. I am standing in an idling jeep, surrounded by other loud, idling jeeps, full of tourists gazing through binoculars and cameras with large lenses at a tiger some 20 meters away. The tiger is basking in the sun along the edge of a lake.

Suddenly, the jeep lurches into motion. I am surprised – surely this is as close as anyone would wish to safely encounter a tiger, especially in an open-air jeep. According to the National Tiger Conservation Authority's protocols, it is also the closest anyone is legally supposed to get to a tiger in a tourist zone. The jeeps descend *en masse* on the tiger, stopping about 10 meters in front of her. She looks at us. The tourists (myself included) become tense; some gasp, others nervously laugh, or murmur expressions of disbelief or fear. After several more minutes, the tiger stands up and begins to walk towards the jeeps along a line of trees near the jeep trail. Everyone, save the driver, is noticeably fearful. Then, the tiger turns towards us. She weaves her way through the vehicles while the drivers jostle for position to offer their riders the best and closest view, the most affective experience. At one point, the tiger walks within two meters from where I am standing inside the open-air jeep.

Soon after, the tiger begins to assess a spotted deer grazing at the edge of a nearby lake. 'This tiger uses the jeeps to stalk prey,' the driver of the jeep explains. 'This is what she always does,' he says. It is clear that the driver is familiar with the behavior of this particular tiger.

It is not the first time I have seen such a large animal appear entirely unconcerned with the din of engines, the shouts of children, the throngs of pointing hands, and the sounds of snapping camera shutters. However, this lack of concern does not align with my understanding of how tigers are supposed to behave. In fact, this tiger's (mis)behavior stands in stark contrast

to stories I have been told by conservation managers and biologists about the shy and elusive nature of the tiger as a singular species.<sup>4</sup>

Importantly, *this* tiger appears not to care about the myth of *the* immutable tiger perpetuated by conservationists. Moreover, it appears that this tiger has adapted her hunting strategies as a result of her entanglement in the material culture, ecology, and economy of wildlife tourism. It is worth noting that, this tiger's indifference to the presence of humans means that the jeep drivers left work that day with substantial tips from satisfied tourists. Still the tiger in this story has also done something else. She has broken rank from the category of population to the less certain – for conservation biology – terrain of individual. In doing so, she has acted out against a myth perpetuated by a transnational assemblage of actors as to what a tiger is capable of being, a myth that is necessary for upholding tiger reserves as authoritarian governance structures in the name of saving the tiger.

## 5. Concluding discussion

This review aimed to further the development of post-human political ecologies. By bringing post-human geographical literature into dialogue with that of political ecology, we have advocated for the ongoing pursuit of political ecologies that engage with the roles that humans and non-humans play in enactments of injustice - both as subjects of (in)justice and as beings whose actions have justice implications for myriad forms of life. We have used the myth of 'the immutable tiger' as an illustrative example of what post-human political ecology might entail in practice.

Through this exercise, we use myth as analytic to investigate dominant ecological narratives that frame 'the tiger' as a known and static category of life. This form of post-humanist critique unsettles these narratives by revealing how tigers, as individuals, act out against mythic claims about what a tiger is or what a tiger should be. The result is a messier, less certain, and explicitly political configuration of tiger conservation in India. Thus, as critical scholars across the geographical tradition increasingly attune their work to more expansive notions of what kind of beings are political subjects, we conclude that political ecology need not lose sight of its traditional commitments to social justice, material embodiments of power, and the effects of categorization.

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<sup>&</sup>lt;sup>4</sup> Visual materials hold great promise for furthering more-than-human geographies and supplementing text-based scholarship. To this end, we have posted a video of the tiger encounter available through this permalink: <a href="https://wp.me/a57IJf-4J">https://wp.me/a57IJf-4J</a>

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