

International Journal of Heritage Studies



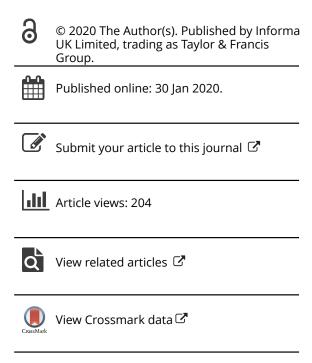
ISSN: 1352-7258 (Print) 1470-3610 (Online) Journal homepage: https://www.tandfonline.com/loi/rjhs20

Critical heritage and the posthumanities: problems and prospects

Colin Sterling

To cite this article: Colin Sterling (2020): Critical heritage and the posthumanities: problems and prospects, International Journal of Heritage Studies, DOI: <u>10.1080/13527258.2020.1715464</u>

To link to this article: https://doi.org/10.1080/13527258.2020.1715464









Critical heritage and the posthumanities: problems and prospects

Colin Sterling (1)

UCL Institute of Archaeology, London, United Kingdom of Great Britain and Northern Ireland

ABSTRACT

This paper outlines the main benefits and drawbacks of a posthumanist ontology for the heritage field. Instead of embracing or rejecting posthumanism outright, the paper considers the transformative potential and key limitations of this framework. Two core themes are picked up on here: the first positions posthumanism as that which comes after humanism, while the second decentres the human altogether. While the significance of the former to critical heritage is relatively easy to establish, the implications of the latter are more opaque. Building on critiques put forward by Indigenous scholars and environmental philosophers, the paper acknowledges the shortcomings of any posthuman political project. To look beyond this, the paper engages with the work of feminist philosopher Rosi Braidotti and political theorist William E. Connolly, who offer a concrete set of agendas for heritage to engage with posthumanist thinking. The essay concludes with a discussion of 'planetary stewardship' - a concept put forward by Earth Systems scientists and others that demands novel reflections on care, governance and responsibility across human and non-human worlds. A strategic alliance of critical heritage praxis and critical posthumanist thinking may provide a valuable counterpoint to some of the more technocratic solutions imagined for the climate crisis.

ARTICLE HISTORY

Received 7 September 2019 Accepted 9 January 2020

KEYWORDS

Critical heritage; posthumanism; entangled humanism; the critical posthumanities; planetary stewardship

Introduction

There is, as Rosalyn Diprose reminds us, an 'irreducible link' between praxis - 'the actions and decisions that characterise politics and ethics' - and 'critical, theoretical consciousness' (2006, 440). Theory after all is 'a matter of understanding' (Dewey [1934] 2005, 11), and this understanding shapes action, attention and analysis. Paradigm shifts often seem to be taken up with breathless abandon or rejected outright for their failure to address what really matters, as if this mattering was not also the result of a certain theoretical outlook. It is therefore vital that the implications of any new conceptual framework are documented and to some extent questioned before the said theory is put into practice. The broad take up of posthuman and more-than-human philosophies across the humanities and social sciences in recent years offers one such opportunity for critical questioning. While heritage has been relatively slow to engage with this 'nonhuman turn' (Grusin 2015), an emerging literature demonstrates the creative and analytical purchase to be gained from the confluence of critical heritage and posthumanist thinking (e.g. Fredengren 2015; Harrison 2015; DeSilvey 2017). Responding to this work - as well as recent contributions from the adjacent fields of archaeology (Sørensen 2013; Boyd 2017; Pétursdóttir 2020), memory studies (Rigney 2017; Knittel and Driscoll 2017), the theory of history (Chakrabarty 2016; Domanska 2018), and anthropology (Kohn 2013; Descola 2013; Tsing 2015; Surrallés 2017) - this paper asks what challenges posthumanism poses to heritage theory and practice, but also what opportunities might emerge for thinking and doing heritage otherwise if we take seriously the various methodological, epistemological and ontological claims made under this banner (e.g. Latour 1999, 2013; Braidotti 2013; Morton 2013; Haraway 2016;). What does it mean to imagine heritage beyond or after 'the human'? What is gained and what is lost in this conceptual reorientation, and what modes of praxis might emerge in its aftermath?

To answer these questions, the paper begins by charting the main fault lines and convergences of posthumanist thinking. Posthumanism here is seen as both more expansive than typically accounted for in heritage scholarship, but also less opaque than many have assumed, with a clear focus on two specific theoretical gestures.

The first of these positions posthumanism as that which comes *after humanism* – an historical-epistemological shift that questions long-held doctrines of Western masculine mastery (Foucault 1973). Here we find close links to postcolonial theory, race and gender studies, and other anti-universalising discourses – all areas that have been influential within critical heritage research since at least the 1990s (Hall 1999; Butler 2007; Winter 2007). Given the strong correlation between humanism, colonialism, nationalism and the spread of various heritage concepts and practices over the past two centuries, this raises the possibility that *critical* heritage thinking, which explicitly challenges many of these trends, is already *post*-humanist in much of its disposition.

The second strand of posthumanism may pose a more significant problem for the field however. Decentring the human altogether, *post-anthropocentricism* emphasises the technological, ecological and biological entanglement of humans and non-humans in every dimension of earthly affairs (Wolfe 2009). This ontological shift focuses attention on things and processes that may transcend or subvert human intervention, whether as individual objects (Harman 2016) or as variegated assemblages (Bennett 2010). Here the obstacle to developing a 'posthuman' critical heritage studies becomes apparent, as this field has typically prioritised 'people-centred' approaches to conservation, preservation, interpretation and care as a direct response to the materialist concerns of 'traditional' heritage practice (Smith 2006; Byrne 2008). Recognising the important strides that still need to be made in this regard, I pay particular attention to the political and ethical claims of post-anthropocentrism over the course of this essay: claims that can be seen to challenge many of the foundational concepts of critical heritage thinking and practice.

Instead of embracing or rejecting the main tenets of posthumanism outright, this paper considers both the transformative potential and key limitations of this emerging framework as it relates to critical heritage studies. Two major concerns are picked up on in this respect. The first relates to the supposed lack of analytical or political consequence in theories that elide nature and culture (Malm 2018), while the second considers the appropriative dimensions of many posthumanist concepts, which often seem to co-opt Indigenous knowledge systems in a dangerous extension of Euro-American exceptionalism (Todd 2016). Taking these criticisms seriously, the second part of the essay seeks to develop a more dynamic model of entangled criticalities across heritage and the posthumanities, based on the work of feminist philosopher Rosi Braidotti (2013, 2016, 2019) and political theorist William E. Connolly (2017). Bringing together Indigenous Place-Thought (Watts 2013), recent conceptions of heritage as a more-than-human 'phenomenon' (Fredengren 2015), and what Braidotti describes as the 'critical posthumanities' (2019), this outlook moves away from a 'people centred' approach to heritage whilst maintaining a clear focus on questions of power and the ethics of critical practice.

My core argument here is that posthumanism matters to critical heritage studies not because the themes and concepts emerging under this banner are especially new or radical, but because the challenges facing the subject can no longer be adequately addressed by theories and methods that take 'the human' to be the centre of all heritage meaning. To this end, the essay concludes with a critique of the heritage-inflected problem of 'planetary stewardship' – a concept put forward by Earth Systems scientists, religious leaders and humanistic thinkers that demands novel reflections on care, governance and responsibility across human and non-human worlds. It is my contention

that a strategic alliance of critical heritage praxis and critical posthumanist thinking may provide a valuable counterpoint to some of the more technocratic solutions currently emerging around this idea, which explicitly seeks to address the ongoing 'climate emergency' through new forms of global governance and sustainable development (see Demos 2019 for a robust critique of this terminology).

The view of heritage that emerges over the following pages represents one possible pathway for a radical expansion of the field. In particular, the framework I sketch out here aims to dislodge a certain hubristic model of heritage as a human-centred project of salvation and stability focused on socially important traditions, artefacts, sites and memories. The technological, biological and above all environmental entanglements underpinning the 'posthuman turn' decentre human systems of value creation and meaning-making, gesturing towards other ways of being in the world. This ontological and epistemological shift disrupts anthropocentric designs on care, inheritance, vulnerability and stewardship: all foundational concepts for the heritage field that seem to require a fundamental rethink in the current era of climate breakdown. To do this means attending to forces, agencies, processes and experiences that may exceed or subvert human command, but it also means engaging with the already non-anthropocentric worldviews of diverse marginalised peoples in a humble, ethical and sustainable manner. This framework is very much challengeoriented, only now the issues to be addressed by heritage research stretch beyond conservation and development to encompass e-waste (Gabrys 2013), forest management (Ricketts et al. 2010), geoengineering (Buck 2019), biodiversity loss (Jørgensen 2017) and economic degrowth (Hickel 2019). If critical heritage is to contribute to these urgent ongoing debates - and many more besides - then it will need to embrace a more varied and potentially unwieldy set of theoretical and empirical concerns. As I aim to show in this paper, the posthumanities offers one way of framing such questions, but this should not be at the expense of continued critical discussions related to power, discourse and the all-too-human politics of heritage making.

Posthuman predicaments

It would be wrong to try and claim that there is anything like a single unified theory of posthumanism. Francesca Ferrando's dissection of the term identifies seven distinct 'types' of posthumanism, from transhumanism and metahumanism to new materialism and anti-humanism (2013). The prominent 'Posthumanities' book series from University of Minnesota Press meanwhile includes over fifty titles, from Michel Serres' The Parasite (2007) to Bleak Joys by Matthew Fuller and Olga Goriunova (2019), via influential texts by Donna Haraway (2007, 2016), Timothy Morton (2013) and Jacques Derrida (2014). Some of the more avant-garde titles in this series underline the capacious outlook of the field, from Fuel: A Speculative Dictionary (Pinkus 2016) to Jussi Parikka's Insect Media (2010). To these radically transdisciplinary topics and vocabularies we might add the profusion of terms gathered by Braidotti and Maria Hlavajova in their Posthuman Glossary (2018), which takes readers from the 'affective turn' and 'Afrofuturism' to 'Xenofeminism' and the 'zombie'. Clearly, I do not have space to explore each of these positionalities in this essay. What I do want to highlight here however is the vast range of concepts, methodologies and research agendas currently gravitating towards this term 'posthumanism'. Rather than embrace or reject such ideas outright, this paper argues for a critical engagement with the posthuman from heritage scholars. Crucially, this should look beyond the limited repertoire of names and concepts currently encountered in critical heritage literature to consider the broader opportunities and challenges of the emergent 'posthumanities' (Braidotti 2019). What is at stake in the posthuman turn, and how might heritage studies engage with such thinking in ways that are analytically insightful and sociopolitically transformative? This section addresses the first half of this question, while the second is picked up on in Part 2: Entangled Criticalities.

A useful point of departure here may be found in Franklin Ginn's summary of posthumanism (2017), which identifies three general approaches to the field (if we can call it such a thing). The first considers posthumanism as an epoch or 'historical moment' (Wolfe 2009, xv), one in which novel technological, biological and environmental discoveries have fundamentally altered human life (Ginn 2017, 4; see Hayles 1999). The second treats posthumanism as 'an epistemological style' (Ginn 2017, 5) – a deconstructive approach that builds on feminist, postcolonial, race and queer theory to question normative assumptions about what it means to be human. The third - and perhaps the best known in critical theory - views posthumanism as an 'ontological condition' (ibid, 7), a way of thinking beyond or in excess of the human in the hope of imagining other modes of being in the world. As Ginn notes, this final approach is rooted in 'anti-essentialist, processoriented, and vitalist philosophies' that emphasise 'the mutability of being such that politics becomes a matter of interfering in flows of energy and matter to produce new possibilities for becoming otherwise' (ibid, 7-8). While the entanglement of humans in increasingly elaborate technical, medical, digital and environmental networks underpins much of the research now labelled as posthumanist, it is the status of posthumanism as an epistemological style and ontological condition that primarily motivates the current paper. Drawing on the work of Braidotti (2013, 2019), another way of thinking about these terms is to see the first as post-humanist (after humanism) and the second as post-anthropocentric (beyond the human). Indeed, it is this 'convergence' - between post-humanism on the one hand and post-anthropocentrism on the other that provides the grounding for what Braidotti calls the 'posthuman predicament' (2018). Given the central place these ideas hold in posthumanist theory, it is worth unpacking them here to understand their main contours and effects.

Post or anti-humanist discourse has a long genealogy that includes influential work by Nietzsche ([1887] 2011), Heidegger ([1947] 1977), Foucault (1973), Lévi-Strauss (1987) and many others (see Soper 1986). The main thrust of such thinking is that liberal humanism masks a wide-ranging set of inequities, hierarchies and injustices by placing a certain view of the human - usually white, western, straight, male and able-bodied - as the measure of all things, including all other categories of humanity. Emerging in the Renaissance and Enlightenment, this worldview emphasised the unique capacities of individual humans as rational, critical thinkers able to perceive, understand and shape the world. In particular, the philosophical and ethical project of humanism explicitly sought to reject religious dogma, driving forward scientific and cultural innovations that would improve the material conditions of life without recourse to superstition and myth (Harari 2016). From this perspective, humanism can be seen to have supported 'enormous hopes and aspirations to freedom' for individuals and communities around the world (Braidotti 2013, 16). At the same time, the limited conception of 'humanity' endorsed by classical humanist thinking implicitly strengthened racist and colonialist systems of domination, leading Foucault to argue that humanism provided 'the parapet behind which most reactionary thought hides, the space in which monstrous and unthinkable alliances find support' (in Gnecco 2015, 270). Humanism then must be understood as a 'dialectical concept, generating oppositions it could neither absorb nor avoid' (Mitchell 2005, 462; see Said 2004). This complexity has fed into subsequent post-humanist critiques, which specifically aim to engage with the 'limitations, blind spots, and unacknowledged exclusions at the heart of humanism' (Knittel and Driscoll 2017, 382). While the posthumanities is a relatively recent term, this longer trajectory of post-humanist thinking embraces influential work in race, gender, feminist, queer and postcolonial studies (e.g. Anderson 2007; Chakrabarty 2008): disciplinary histories that are all-too-often erased from febrile discussions of 'the posthuman' (a figure which routinely if unwittingly perpetuates the human of humanism).

While any serious engagement with posthumanism needs to acknowledge this critical ancestry, the notion of being *after* humanism immediately provincialises the concept, highlighting the limited relevance of the term in contexts where humanism remained a marginal or untested theory (most of the world in fact). What also needs underlining here is the centrality of human feelings, sensations, desires and concepts to the humanist worldview (Harari 2016, 280), a narcissism that, in Michel Serres' reading, 'makes us the exact midpoint or excellent culmination of all things' (1995, 33). This ontology separates the human concerns of culture, politics and ethics from non-human questions of



'nature'. In disciplinary terms, the humanities and social sciences study the former, natural sciences the latter. Posthumanism and the posthumanities explicitly seek to dissolve such boundaries – ontologically, epistemologically and methodologically. One of the key strategies deployed to achieve this goal is post-anthropocentrism, which forms the second pillar of Braidotti's posthuman predicament.

If decentring humanistic Man represents the cornerstone of post-humanist thinking, then decentring the human altogether may be seen as the central tenet of contemporary posthuman philosophies. This objective can however look very different depending on the specific location from which a post-anthropocentric worldview is articulated. One strand of posthumanism for example builds on the work of Bruno Latour (1991, 1999, 2013) and related (though not always coterminous) traditions of new materialism (Bennett 2010), object-oriented ontology (Harman 2016) and speculative realism (Bryant, Srnicek, and Harman 2011) to suggest that – as with Latour's formation of modernity - 'we have never been human' (Ginn 2017, 8). The main argument here is that orders of human and non-human life have always been co-constituted, and that agency is distributed across variegated assemblages of human and non-human actors (De Landa 1997). This approach unravels the boundaries established by humanist thinking to focus on nature-culture hybrids across human and non-human worlds. In its most extreme form proponents of this nonanthropocentricism may even insist that the being of a human is no more profound than the being of a paper cup (Morton 2013, 7). Perhaps unsurprisingly, those who remain committed to destabilising the power asymmetries of colonialism, capitalism and other exploitative social systems take a quite different view, notably stressing the continued importance of knowledge production, subjectivities and power relations within posthumanist frameworks (Braidotti 2019). Here we find an indication of the alternative modes of critique possible under a posthumanist umbrella, with Indigenous, feminist, queer and postcolonial scholars often developing a quite different outlook from speculative realists or object-oriented philosophers.

For critics of posthumanism, the suggestion that human agency is not exceptional or even especially distinct from other non-human forces is difficult to countenance. Andreas Malm for example supports a substance monist, property dualist approach derived from historical materialism, which accepts that social and natural phenomena are continuous parts of the overall material world, while insisting that an analytical separation of society and nature (or human and nonhuman) is essential for any political project (2018). Indeed, writing in direct response to the need for clear forms of action and resistance in the face of a rapidly warming world, Malm's thinking is explicitly opposed to hybridisation and the dissolution of boundaries. The problem of climate change according to Malm is 'constituted precisely by how social relations combine with natural ones that are not of their making' (ibid, 74). Global warming in this reading is an example of what Malm calls 'the paradox of historicised nature' (ibid, 76, emphasis in original); paradoxical precisely because 'the more the sphere of social relations has determined that of natural ones, the more the reverse, towards the point of some breakdown' (ibid). If nature and culture were one and the same, as posthumanist thinking contends, then we would have no hope in intervening in the causes and consequences of climate change. Kate Soper puts forward an earlier version of this argument in her essay 'The Humanism in Posthumanism' (2012), which maps out the need to retain some form of human exceptionalism when addressing the current ecological crisis. 'In the last analysis', Soper declares, 'the rhetorical address of the posthuman is always a call that makes sense only as an appeal to those already within the human community, even if it invites a reappraisal of the confined or selfimaging of that community' (ibid, 375). This critique allows for a post-humanist view but stops short at post-anthropocentricism, which is seen to undermine political action in unhelpful ways.

As one of the cornerstones of the posthumanities, any claim to post-anthropocentrism as a methodology or mode of analysis thus needs clarifying at every stage. For many advocates of posthumanism, it is precisely the blurred boundaries of a decentred ontological framework that provides the inspiration for progressive and emancipatory policies concerning non-human others and the environment more broadly. Critics on the other hand point to the fact that without

preserving some distinct view of the 'human' there can be no moral discrimination whatsoever, 'no argument even to the effect that animals should be treated on a par with us as subjects, and so forth' (Soper 2012, 371). I think the contradiction here is less clear-cut than Soper suggests, however. As Karen Barad and others have highlighted, notions of co-becoming and distributed agency do not preclude responsible forms of human action and intervention in the world (2003, 827). Posthumanism in this reading does not say that human or social agency is inconsequential, only that such forces are part of a spectrum through which we might capture 'the complexity of ongoing processes of subject-formation' (Braidotti 2019, 6). This understanding of posthumanism is alert to the workings of power that shape any and all definitions of 'the human', including those that seek to flatten hierarchies altogether.

Of the two main strands of posthumanist thinking I have introduced here, it is fair to say that post-humanism has received far less criticism than post-anthropocentrism in recent accounts of the field. There are perhaps two main reasons for this. First, critiques of humanism are able to draw on a long tradition of philosophical and empirical investigation to demonstrate the failings and inconsistencies of the humanist project. Questions of inclusion and exclusion are central to this literature, which interrogates the different ways in which 'the human' flattens difference. The second main reason post-humanism stands on firmer ground than post-anthropocentrism is that the latter seems to demand a cognitive leap that some find untenable: in the words of Wolfe, 'the nature of thought itself must change if it is to be posthumanist' (2009: xvi). The problem here of course is that such a conceptual reframing immediately gives rise to tensions and contradictions in the very notion of thinking beyond the human. As Soper puts it in no uncertain terms, 'posthumanist representations and ontological claims ... are produced exclusively by and for human beings, and no other animal, *a fortiori*, no tree or stone, will ever question its own status as a being, let alone produce a commentary on its observations of Derrida's nudity' (2012, 376).

While this pragmatic assessment undercuts posthumanism in important ways, the picture becomes more complicated when we consider the relationship between Euro-American designs on post-anthropocentricism and Indigenous knowledge systems that follow an outwardly similar path. In particular, where Malm, Soper and others take issue with the critical purchase to be gained from post- or non-anthropocentrism, Indigenous writers raise significant concerns around this very same concept as a (neo)colonising force (Watts 2013; Hunt 2014; Todd 2016). My use of the term 'Indigenous' here inevitably glosses over some of the tensions implicit in defining who is or is not Indigenous – a distinction that may itself rehearse the power asymmetries of colonialism and the Enlightenment – and I remain alert to the dangers of 'ghettoising' Indigenous knowledge as a 'curiosity' (Hunt 2014, 31). Indeed, it is precisely the diversity and dynamism of Indigenous cultures that should force us to rethink the supposedly 'radical' status of posthumanism, which may appear hopelessly staid and reactionary when viewed from a position of marginalised alterity.

One of the key dimensions of this critique is outlined by Juanita Sundberg, who persuasively argues that posthumanist theory too often universalises Enlightenment dogmas, which in fact constitute a 'particular, indeed provincial, body of thought on the question of the human' (2014, 36). This account takes issue with the 'meta-narrative' of a foundational ontological split between nature and culture – a divide which, as we have seen, posthumanism explicitly seeks to overcome. As Sundberg reminds us, this dualism is far from universal: 'Indigenous authors in the Americas... outline complex knowledge systems wherein animals, plants, and spirits are understood as beings who participate in the everyday practices that bring worlds into being. These epistemic traditions are not organized in and through dualist ontologies of nature/culture' (ibid, 35). Taking particular aim at Wolfe's framework for the posthumanities, Sundberg suggests that such thinking risks supporting 'on-going colonial practices that eliminate or erase other ontological frameworks' (ibid, 36). This conceptual colonisation can work in many ways, but perhaps the clearest indication of such epistemic occlusions can be found in the simple practice of citation. As Métis anthropologist Zoe Todd outlines, 'when we cite European thinkers who discuss the "more-than-human" but do not discuss their Indigenous contemporaries who are writing on the exact same topics, we

perpetuate the white supremacy of the academy' (2016, 18). The key problem here as Todd sees it is that posthumanism, Actor Network Theory and the 'ontological turn' more broadly deploy/ appropriate the ideas and worldviews of Indigenous peoples without locating these concepts in the 'embodied expressions of stories, laws, and songs', or the broader politics of Indigenous self-determination (ibid, 9). From this perspective, the theoretical overlaps and convergences between, say, assemblage theory on the one hand and animism on the other are to be seen as less noteworthy than the material-discursive worlds in which these ideas circulate and take hold, perpetuating the dominance of one over the other.

Such concerns are particularly relevant to heritage practice in a globalised context, where different knowledge systems give rise to varied and often conflicting strategies of care, preservation, responsibility and stewardship. While it would be tempting to position posthumanism as a useful bridge between post-Enlightenment thinking and Indigenous ontologies, the work of Todd, Sundberg and others highlights the danger of this approach. As Mohawk and Anishnaabe scholar Vanessa Watts has argued, this is because the translation of Indigenous cosmologies through a Euro-Western frame typically 'necessitates a distinction between place and thought ... where land is simply dirt and thought is only possessed by humans' (2013, 32). Pushing against this mode of colonisation, Watts maintains that it is incumbent upon Indigenous communities to remember that 'our ability to speak to the land is not just an echo or a mythic tale or part of a moral code, but a reality' (ibid). Engaging with such realities is a problem for heritage thinking that insists on a people-centred approach to conservation, but posthumanism should not be seen as a soothing balm that will erase such tensions. As Sundberg contends, the supposed novelty of this theoretical approach must be located in 'biographic, historical, and geopolitical terms' (2014, 42).

Any mapping of an emergent trajectory is bound to be uneven and incomplete. The two main facets of posthumanism I have focused on here cannot capture the full breadth of creative and intellectual outpourings currently gravitating towards this term. Motivated by certain technological, environmental and biological developments on the one hand, and alert to the possibilities of conceptual reframing on the other, posthumanism is both a response to 'real world' anxieties and an aspirational gesture of collective becoming. Although I take very seriously the critiques put forward by Malm, Soper and others (e.g. James 2017; Hornborg 2017) – especially with regards to some of the inherent contradictions and ethical occlusions of post-anthropocentrism – it is this possibility for living and thinking otherwise that underpins my own interest in the posthuman predicament.

Posthumanism can seem radical or even utopian precisely because it seems to ask for an entirely new way of thinking beyond or in excess of the human: this is impossible for some and very much not new to others. Critical thinking in this context needs to maintain a healthy level of scepticism about the agential capacities of non-humans whilst also acknowledging the urgent need for strategic alliances across human and non-human worlds. As Braidotti argues, driven by the logics of insatiable consumption, advanced capitalism is just as liable to blur the boundaries between nature and culture as posthumanist theory, displacing the uniqueness of the Anthropos through 'a functional form of post-anthropocentrism that spuriously unifies all species under the imperative of the market' (2019, 11). New modes of critique and practice are required to confront these excesses, which 'threaten the sustainability of our planet as a whole' (ibid). Crucially, a central principle of such work would be developing links between postcolonial theory, the emerging environmental humanities and Indigenous epistemologies - a convergence that combines 'attention to the Earth with enduring care for the people who live closest to the Earth ... thus raising the ethical and political stakes' (ibid, 20). This model of the critical posthumanities is resolutely concerned with questions of power, exploitation and dispossession, even if rooted in a vital materialist philosophy that sees all human and non-human entities as 'nomadic subjects-inprocess' (ibid, 6). How might critical heritage studies profitably engage with the conceptual and methodological implications of this framework? To answer this question, we need to revisit some of the core principles of 'critical' heritage, which may be seen to overlap with and contradict posthumanism in significant ways.

Entangled criticalities

Over the past decade, critical heritage studies have emerged as a distinct yet varied sub-field that asks 'uncomfortable questions' of traditional approaches to heritage theory and practice (Campbell and Smith 2011). While there are many strands to this interdisciplinary research area – not to mention a much longer genealogy stretching beyond the foundation of the Association of Critical Heritage Studies in 2012 – key concerns relate to the democratisation and decolonisation of heritage concepts, the centring of people over things in the management of heritage sites, and a turn to marginalised narratives, communities and cultures in defining what heritage is and what it does in the world. Criticality in this sense implies a certain interrogatory comportment towards the *work* of heritage, which crosses museology, tourism, conservation, site management, interpretation, archival studies, architectural preservation and many more formal and informal areas of research and practice.

Partly inspired by the prominent 'heritage-baiting' critiques of the 1980s and 1990s (Wright 1985; Hewison 1987; Samuel 1994), much of the work carried out under the banner of critical heritage studies may be seen as fundamentally 'anti-heritage' (Winter 2013, 533). This mode of analysis charts the emergence of heritage as part of a conservative and colonising force, one that has spread from Europe to the rest of the world, draining the past of historical significance and packaging it up for easy consumption (Lowenthal 1998). Angling away from this line of critique, Tim Winter makes the case for a critical engagement with heritage as a key factor in many of the most urgent issues facing contemporary societies, from inequality and climate breakdown to human rights and sustainability (2013). Thinking critically about heritage in this context means moving beyond 'the limited repertoire of epistemologies currently privileged', as 'the multitude of societal challenges to which culture-natures inherited from the past now connect, demand another way of knowing, of talking about and of doing, heritage' (ibid, 542). The posthumanities represents one such pathway for an expansion of the field, but there are significant obstacles to be confronted in mapping out this trajectory.

Perhaps the first point to note here is the barrier that non-anthropocentric thinking offers to familiar notions of critical heritage, which has tended to place humans and social worlds at the centre of analysis. There are two main reasons for this. First, the political agenda of critical heritage scholarship has sought to distance itself from a 'things first' approach to conservation and site management (e.g. Smith 2006; Byrne 2008). Turning away from a detailed investigation of the specific material qualities of sites, objects, buildings and landscapes, critical heritage researchers have instead focused on the social worlds in which such things are embedded and encountered. Working against an essentialising and reifying tendency in conservation practice, this reorientation has proved vital in developing alternative perspectives on the role of the past in contemporary social life. This critical focus has been underpinned by the influence of social constructivism as a theoretical framework for the field (Brett 1996; Waterton and Watson 2010). In its most developed form, this approach views heritage as an intersubjective idea generated through discourse and representation that has no grounding in 'reality'. Criticality from this perspective has focused on the different ways in which heritage value is constructed through human processes of meaning-making, which may empower people on the one hand or create the conditions for further marginalisation and dispossession on the other. The crucial point here is that heritage is seen as a cultural process and practice, not a quality or experience that is inherent to things. In this sense it is profoundly humanist, emerging from and feeding back into an ontological framework that centres human thoughts and desires within earthly affairs. While critical heritage research has done much to challenge the Eurocentric, positivist and universalising roots of heritage practice, the foundational status of the field as humanist remains relatively unquestioned.

In recent years a number of heritage scholars have sought to develop alternatives to this anthropocentric ontology. Drawing variously on Actor Network Theory, Haraway's naturecultures, assemblage theory, and emerging concepts in anthropology and the environmental humanities, this work has taken as its core focus the non-human agencies at play in many - if not all - manifestations of heritage. Rodney Harrison for example has defined heritage as 'collaborative, dialogical and interactive, a material-discursive process in which past and future arise out of dialogue and encounter between multiple embodied subjects in (and with) the present' (2015, 27). Subjecthood in this reading transcends the human to encompass other agential forces and processes, a position also advanced by archaeologist Christina Fredengren, who suggests that instead of viewing heritage as a social construct we see it as a 'phenomenon' crossing human and non-human worlds (2015, 125). From this perspective, the 'concept' of heritage - an intersubjective idea which cannot be anything other than a social construct – is qualified and marginalised as one expression of a much broader set of material-discursive processes of inheritance, transmission, continuity and change, from multispecies gene transfer to new geological formations. This simple gesture radically expands the scope and application of critical research in heritage studies, resituating questions of care, stewardship, endangerment and preservation in a broader ecology of human and non-human relationalities (Morton 2013).

Such themes are currently being debated in adjacent fields in ways that might be productive for critical heritage thinking. STS scholar and feminist theorist Maria Puig de la Bellacasa for example advocates for a renewed conception of caring and being cared for that is not framed through individuals giving and receiving back, but is rather seen as a 'collective disseminated force ... sustained in more-than-human worlds' (2017, 20). Likewise, Thom Van Dooren's formulation of inheritance underlines the inseparability of biological and cultural modes of transmission across 'genes, ideas, practices and words between and amongst generations' (2014, 18). Issues of identity and genealogy meanwhile have been central to microbiome research, which now suggests that humans are not individual discrete entities, but rather complex assemblages of human and nonhuman cells (Gilbert 2017; Rees, Bosch, and Douglas 2018). Given the central role genetics and individualism have come to play in the politics of heritage - including around questions of belonging and intergenerational justice - the leap from a human-centred view of ancestral and familial distinctiveness to a more-than-human understanding of genetic collectivity may have profound implications for the field. If taken seriously, the symbiotic make-up of our embodied inheritance has the potential to re-direct concerns over human subjectivity and identity. This work helps to demonstrate how the modest proposal of reframing heritage-as-phenomenon offers critical heritage scholars the opportunity to revisit some of the foundational concepts of the field.

To my mind, the most developed version of what a post-anthropocentric critical heritage studies might look like can be found in Caitlin DeSilvey's *Curated Decay*, which outlines a 'postpreservation paradigm' where non-human processes of loss and decay are seen as vital to heritage practice (2017, 151). Heritage in this mode

involves a willingness to accept the unsettling of our sense of ourselves as autonomous agents and to think instead about the work of assembling meaning as a collaboration with an array of other materials, forces, and organisms. In this more dispersed and fluid understanding of subjectivity, materiality is not a static field of reference that awaits inscription from an active mind but is itself constitutive of (new forms of) human selfhood, as distributed through intimate relations with other entities – plants, stones, dust. (ibid, 14)

Practically, DeSilvey's approach means turning to objects of study and bodies of knowledge that are quite distant from the traditional purview of critical heritage, including rodent nests, climate patterns and chemical processes of material transformation (e.g. oxidation, biodeterioriation, percolation, cryoperturbation). Although people are not absent from this story (indeed, the most compelling tensions emerge when ecological and human agency seem to be on opposing paths in DeSilvey's narrative), this is a long way from the socially oriented and discourse-centred research that has characterised heritage studies over the past two decades. This mode of analysis and

investigation is also designed to open up new practices of care, curation and preservation for the sector, with a particular focus on developing 'conjoined natural and cultural heritage management' approaches (ibid, 133). Such thinking builds on parallel discussions in archaeology, where morethan-human ontologies of care have motivated a renewed engagement with things and matter (cf. Olsen et al. 2012; Pétursdóttir 2018).

For Harrison, DeSilvey and Fredengren, the main ethical drive of posthumanism can be found in its realisation of an 'ontological politics of connectivity' (Harrison 2013, 216), one in which 'human and other-than-human actors form an emergent collective, oriented toward becoming rather than being' (DeSilvey 2017, 133, original emphasis). Ethics, justice and politics in this framing are less concerned with principles of individual sovereignty, rights and responsibilities than with recognising the different ways in which ecological networks may be redirected towards the 'enhancement of creativity to benefit life' (Bignall, Hemming, and Rigney 2016, 466). Building on this conceptualisation, I would like to suggest that the critical-ethical work of heritage today demands a close consideration of the vulnerabilities, injustices and reciprocal duties permeating nature-culture entanglements at every scale, from microbial life to the deep time inheritances of the Anthropocene. This ethics of relationality must look beyond social systems and human-centred modes of understanding to map out alternative strategies of care, inheritance, preservation and stewardship. Recognising the analytical limits of post-anthropocentricism, my thinking in this regard is inspired by William E. Connolly's notion of 'entangled humanism', which I read in relation to Vanessa Watts' expanded sense of society: a combination of political theory and Indigenous cosmologies that may provide a useful model for critical heritage research moving forwards.

In his 2017 book Facing the Planetary, Connolly argues that it is not enough to 'reject humanism' in the current era of the Anthropocene (2017, 168); instead, it would be 'wise to try to transfigure the old humanisms that have played important roles in Euro-American states into multiple affirmations of entangled humanism in a fragile world' (ibid, original emphasis). Entangled humanism here names a wide-ranging consciousness of 'reflective attachments' (ibid, 119, original emphasis) to human and non-human forces, from microbes and social systems to algorithms and climate patterns. For Connolly an appreciation of such diverse entanglements 'challenges visions of both detached mastery and organic belonging' (ibid). 'Attached entanglement' in this reading 'transfigures the sense of primordial belonging rather than rejecting it out of hand. It involves both extending appreciation of entanglements and speculating upon the cosmic upshot of these imbrications' (ibid, original emphasis). Complementary to the work of Haraway, Bennett, Latour, Braidotti and others from one perspective, Connolly's insistence on critical reflection as a cornerstone of entanglement means that the capacity for human self-awareness and action within more-thanhuman assemblages is retained, echoing Soper's belief that the most persuasive posthumanist discourses 'are those which are prepared to recognise and talk about the lurking humanism of the forms of questioning of the nature and limits of the "human" that are opened up through the posthumanist project' (2012, 375). This approach critiques the humanist subject as an 'epistemologically self-transparent all-knowing, all-seeing agent of history' (ibid, 369) whilst pushing forward alternatives to 'sociocentrism', which 'acts as if cultural interpretation and social explanation can proceed without consulting deeply nonhuman, planetary forces with degrees of autonomy of their own' (Connolly 2017, 10).

A valuable way of thinking differently about this can be found in Watts' work on habitats and ecosystems, which are seen as complex more-than-human 'societies' in various Indigenous cosmologies (2013, 23). In particular, this framework highlights the ethical structures and inter-species contracts that permeate such worlds, directly influencing how humans organise themselves into the broader society of non-humans. As Watts argues, 'Indigenous perceptions of whom and what contributes to a societal structure are quite different from traditional Euro-Western thought' (ibid, 21). As with the humanism/posthumanism dichotomy discussed above, the idea of society and sociocentrism that Connolly critiques is provincialised by this work. Rather than see this as

a negation however I would like to suggest that Watts' reading of habitats as societies is a valuable instance of the possibilities for strategic alliance that emerge across Euro-Western and Indigenous thought when we consider more-than-human questions of care and stewardship. As Connolly puts it, new pluralist assemblages of 'multiple minorities' are required in the era of the Anthropocene, which often impacts on the urban poor and Indigenous peoples hardest, while its 'historical sources emanate from privileged places that must be challenged from inside and outside simultaneously' (2017, 9). Entangled humanism from this perspective offers a grounding for radical work that questions the historical emergence of 'the posthumanities' whilst also forging links with the already non-anthropocentric ontologies of diverse communities around the world. Crucially, looking beyond sociocentrism in this context does not mean discarding the social qualities of human life altogether, but rather opening up the very concept of society at every level to marginalised voices and experiences.

The ideas mapped out briefly here indicate that the emergent and transdisciplinary field of the posthumanities is not something heritage scholars should simply take from, but also something they might help shape. Notably, the anti-universalist stance adopted by many critical heritage projects has for a long time now been alert to the importance of working with rather than against Indigenous knowledge systems in the management and interpretation of sites and artefacts (Mowaljarlai et al. 1988; Byrne 2004; Winter 2007). Critiques of Eurocentric value systems and colonial heritage practices might therefore be aligned with Indigenous philosophies of environmental care and governance, which in many cases precede posthumanism by centuries if not millennia (Bignall, Hemming, and Rigney 2016, 458). What I want to suggest here is that other urgent questions such as the politics of care and the dilemmas of inheritance (Haraway 2016, 221) might also benefit from greater dialogue across critical heritage and the critical posthumanities. Rather than see this as primarily about more-than-human objects of study - whether these be discrete non-human things or nature-culture hybrids - the convergence of post-humanism and post-anthropocentricism is perhaps better seen as an opportunity for renewed alliances across areas of critical scholarship that have remained relatively isolated. Signs of such work include studies across race and the Anthropocene (Yusoff 2019), pedagogy and the posthuman (Bozalek et al. 2018), and literature and environmental justice (Nixon 2013). As a contact zone for various disciplines and research agendas, critical heritage is well placed to become a vital interlocutor in these debates.

The question of whether heritage is a social construct or not depends on whether it is held to be an 'idea' and symbolic practice or a set of phenomena distributed across human and non-human worlds. The case for the former has been well made in critical heritage scholarship, but it rests on the rather trivial observation that all ideas and symbols are products of social processes. Heritage from this perspective will always be anthropocentric - and thus to a certain extent humanist - because it emerges from intersubjective human affairs. Reframing heritage as a more-than-human phenomenon through which different forces and actors are engaged in making and remaking the past in the present to shape new futures opens up the possibility of seeing naturecultures as 'co-workers' in political and bureaucratic practices (Fredengren 2015). The point here is not to eradicate or marginalise human agency completely, but instead to acknowledge that any human action or intentionality is always entangled with other, non-human materialities and capacities; forces which may support, challenge, undermine or fundamentally reverse the work of 'human' actors. Following Connolly, we might therefore say that the task for a posthumanist heritage studies is to 'overcome hubristic modes of explanation, crude doctrines of human sovereignty, naïve philosophies of belonging, and settled systems of ethical judgment' (2017, 83, emphasis in original). Seen in this light, heritage might emerge as something 'we' have only begun to grasp, rather than something 'we' have invented.

On the question of planetary stewardship

To help ground some of the ideas put forward in this paper I would like to conclude by discussing a particular problem that cuts across non-anthropocentric philosophies, Indigenous politics and the

need for critical interventions in more-than-human worlds. This exploratory case study also highlights the potential for an expanded critical heritage studies to engage with some of the most urgent debates of our time, in this case focused on climate action at the planetary scale.

In a recent paper titled 'Trajectories of the Earth System in the Anthropocene', climate scientist Will Steffen and colleagues map out the feedback loops that could push the planet towards a 'Hothouse Earth' state, one that would cause serious disruptions to ecosystems, societies and economies (Steffen et al. 2018). The paper received significant attention in the mainstream press for its dire warning that, even if the Paris Climate targets are met, a 'cascade of feedbacks' could still lead to an irreversible and civilisation altering change in the Earth's climate. To counteract this possibility, the authors argue for a 'Stabilized Earth' approach to global governance that might actively steer the planet away from a 'Hothouse' scenario. Crucially, this future stability is seen to depend on 'human stewardship to create and maintain it' (ibid 8254). Noting the gravity of this task, the authors admit that this form of planetary stewardship would require a 'fundamental change in the role of humans on the planet' (ibid). As the paper concludes, 'effective Earth System stewardship is an essential precondition for the prosperous development of human societies in a Stabilized Earth pathway' (ibid: 8257).

Like inheritance, care, preservation and transmission, stewardship is one of those foundational concepts that may be 'rethought' if we consider heritage from a posthumanist perspective. We can see this clearly by observing the humanist dimensions of the Hothouse Earth text, which relies on a sense of human mastery that now extends to the planet as a whole. Tellingly, The Pope's 2015 Encyclical, 'On Care for our Common Home', similarly advocates for a new model of responsible global stewardship based on Christian values of human dignity and flourishing (Francis 2015). This alliance of theology and science is less surprising than it might seem however. As Dipesh Chakrabarty has recently argued, 'the Biblical question of human dominion has now assumed the shape of secular questions about human stewardship of and responsibility for the planet' (2016, 389). But while the Pope's text admits 'modern anthropocentrism' has fundamentally compromised 'the intrinsic dignity of the world' (Francis 2015, 86), the solution dreamt up by Earth Systems scientists and religious leaders alike is a familiar one: 'Human beings cannot be expected to feel responsibility for the world unless, at the same time, their unique capacities of knowledge, will, freedom and responsibility are recognized and valued' (ibid, 88).

While the notion of planetary stewardship outlined by Pope Francis, Will Steffen and others radically expands the scale and form of care usually imagined for heritage, a familiar discourse of stabilisation, responsibility, maintenance and preservation demonstrates a clear synergy between these imaginaries. What would a critical posthumanist view of the same look like? Returning to the work of Puig de la Bellacasa, a first point to note here would be that the very concept of human stewardship must be called into question, relying as it does on a form of pastoral care that separates the moral human subject from the naturalised object of care. This model gives rise to 'poor generalizations that avoid engaging with actual situated naturecultures and the speculative efforts demanded from ecological thought and practice' (2017, 164). Posthumanist stewardship would be a contradiction in terms in this reading, as the decentred human is no longer afforded a central or primary role as custodian or caretaker. In the shadow of climate and ecological breakdown, we thus find ourselves back at the vital critique of posthumanism put forward by Malm, Soper and others: that the dissolution of boundaries between nature and culture radically undermines the capacity for strategic human action. Without denying the substance of this criticism, I would like to suggest that the critical posthumanities already take us beyond this bind, which we can explore with reference to the other side of the 'planetary stewardship' equation.

The feedback mechanisms of the Hothouse Earth scenario build on Steffen's earlier definition of multiple and overlapping 'planetary boundaries' – limits to the Earth System that – if transgressed – would result in irreversible shifts to the atmosphere, the biosphere, the oceans and other ecosystems (Steffen et al. 2015). This model depends on seeing all aspects of the Earth as fundamentally interlinked. As the study authors write:

The planetary boundaries framework arises from the scientific evidence that Earth is a single, complex, integrated system – that is, the boundaries operate as an interdependent set . . . This has profound implications for global sustainability, because it emphasizes the need to address multiple interacting environmental processes simultaneously (e.g. stabilizing the climate system requires sustainable forest management and stable ocean ecosystems). (ibid, 8).

While the scientific framework of this model marks it out as a distinctly modern project, the formulation of a planetary imaginary has been a consistent feature of cosmopolitan thought since at least the Ancient Greeks (Jazeel 2011, 76). The planetary however is a highly contested space, marked by material-discursive regimes of oppression and marginalisation as much as utopian aspirations of a 'Whole Earth' society (Cosgrove 1994). 'Planetary stewardship' in this reading may be seen to unite a duplicitous sense of global oneness with a problematic hierarchy where humans have dominion over the Earth System. Heritage is implicated here both as a Eurocentric form of cosmopolitanism and as a distinctive apparatus through which different forms of stewardship are mobilised or prohibited. The mention of 'sustainable forest management' in the above quote is a good example of how these concepts typically play out, with traditional practices of land governance often marginalised in favour of specially protected conservation areas (Tauli-Corpuz 2018). Rather than see 'heritage' as an obstacle in this formulation however it may be more useful to consider the varied strategies of care, responsibility and flourishing that this term gestures towards as a valuable starting point for reimagining planetary stewardship in the context of the critical posthumanities. There are two main vectors to consider here.

The first brings us back to Connolly's entangled humanism, which explicitly responds to planetary forces that lie outside of human control or influence. As Connolly writes:

By "the planetary" I mean a series of temporal force fields, such as climate patterns, drought zones, the ocean conveyor systems, species evolution, glacier flows, and hurricanes that exhibit self-organizing capacities to varying degrees and that impinge upon each other and human life in numerous ways \dots To face the planetary today is to encounter these processes in their multiple intersections and periods of volatility. (2017, 4)

In this sense, planetary stewardship is a clear example of the posthuman predicament, where forces beyond human control are entangled with social and political concerns. To take this further still, we may reconfigure the planetary as planetarity – a term borrowed from Giyatri Spivak that has found considerable traction across the arts and humanities in recent years (see Jazeel 2011; Gabrys 2018). Where planetary perspectives are somewhat burdened by a global cosmopolitanism, planetarity admits that the Earth itself is in a space of alterity, which is to say that it belongs to another system distinct from humans even while 'we inhabit it, indeed are it' (Spivak 2012, 338). As Spivak continues: 'If we imagine ourselves as planetary accidents rather than global agents, planetary creatures rather than global entities, alterity remains underived from us, it is not our dialectical negation, it contains us as much as it flings us away' (ibid, 339). This non-anthropocentric worldview humbles the Anthropos whilst acknowledging the inseparability of humans and the Earth System. Planetarity thus forces us to confront other, more-than-human forces of preservation, transmission and inheritance - heritage processes that are not derived from us, but rather contain us and fling us away, opening out onto forms of being that far exceed the human imagination. In Tariq Jazeel's words, 'the effort of planetarity urges continual hard work to keep on decentring ourselves in the face of ungraspable otherness and other worldings' (2011, 88).

This project of decentring is however fraught with dangers in the shadow of a climate and ecological crisis brought on by all-too-human processes of extraction and exploitation (Moore 2017). The already marginalised voices confronted in the here-and-now by sea level rises, deforestation, wildfires and ocean acidification should not be further 'decentred' in the name of radical alterity. Here it is worth remembering that those communities most vulnerable to shifts in the Earth System are also routinely identified as the 'source' of posthumanist ontologies (Sundberg 2014). Thinking *with* such communities in the framework of the critical posthumanities means recognising the affinities and tensions that may emerge around different articulations of care, custodianship,

responsibility and preservation at the local and the planetary scale, across and between human and non-human worlds. The concept and practice of environmental stewardship for example is one area where humanist notions of dominion and mastery may be contrasted with Indigenous modalities of living with ecosystems (Dove 2006; Ricketts et al. 2010). While the 'Stabilized' Earth model falls back on the figure of a 'universal human-as-steward' (Gabrys 2018), an expanded view of planetary stewardship embracing Indigenous ontologies of care and governance might provide the grounding for strategic more-than-human alliances within and beyond the conservation sector.

The relevance of critical heritage to this picture should now be clear. As a site of contestation and dialogue around core questions of preservation, belonging and custodianship, heritage may be seen as a crucial nodal point in developing alternative models of what Jennifer Gabrys calls 'Hothouse Planetarity' (ibid). While the post-anthropocentric view of heritage-as-phenomenon offers a useful provocation for thinking otherwise about such issues, the broader framework of the critical posthumanities reminds us that such concerns cannot transcend matters of power, ethics and politics. More important still, any claims to posthuman entanglement must acknowledge and 'walk with' Indigenous epistemologies, ontologies and methodologies (Sundberg 2014). Walking with in this context means engaging with Indigenous people as political subjects, and doing so 'in a humble manner' (ibid, 40). Against the backdrop of a rapidly warming world and the criminalisation and even murder of Indigenous environmental activists (Watts 2019), this appeal to humility seems vital for any version of critical posthuman planetary stewardship worth pursuing.

Conclusions, humanly speaking

In the preface to Between Past and Future, Hannah Arendt outlines the workings of tradition as that which 'selects and names, which hands down and preserves, which indicates where the treasures are and what their worth is' ([1954] 2006, 5). Without this process, Arendt argues, 'there seems to be no willed continuity in time and hence, humanly speaking, neither past nor future, only sempiternal change of the world and the biological cycle of living creatures in it' (ibid, my emphasis).

Critical heritage scholarship has focused on this human dimension of 'tradition' for two clear reasons: a desire to move away from object-centred preservation practices, and a theoretical commitment to social constructivism, which views heritage as a socio-cultural process. Although much of the work in this vein may be considered post-humanist in its condemnation of Eurocentric attitudes and approaches, heritage studies (and the wider sector it critiques and develops) therefore remains resolutely anthropocentric. How can it be otherwise if we continue to consider heritage as first and foremost a social construct? As this paper has shown, adopting a post-anthropocentric view of heritage is beset with difficulties, and yet speaking beyond or in excess of the human seems all the more urgent in the shadow of environmental collapse. The work of Harrison, DeSilvey and Fredengren offers us a radical expansion of what heritage is, but this must be combined with an equally expansive view of the critical in critical heritage.

Returning some analytical purchase to the term posthumanism, this paper has focused on the specific value of post-humanist and non-anthropocentric thinking to the field in the context of the broader critical posthumanities. Crucially, it is only in the abstract worlds of object-oriented ontology and some branches of speculative realism that the human is absent altogether, or marginalised to the point where human actions are largely irrelevant. This can be a useful thought experiment when discussing the heat death of the universe (Meillassoux 2010), but it has less direct relevance to the management of a medieval castle. It is incumbent on heritage theorists to develop new epistemological frameworks that might engage with the latter without losing sight of the wider questions that critical heritage can address, up to and including the question of planetary stewardship.

The I who writes these words is already both human and non-human: a composite of cells and organisms, embodied memories and complex algorithms. And - just as important - this more-than -I speaks from a certain location, teetering on the edge of academic privilege and precarity. The politics of entangled humanism resurfaces the need for Foucauldian models of the specific intellectual: those who might 'draw upon their specific expertise, citizenship capacities, and strategic location during a key period to call into question ingrained responses to that occasion' (Connolly 2017, 125). Critical heritage scholars are well placed to disrupt normative ways of thinking around core issues of care, inheritance and belonging, but this expertise needs to be applied through strategic alliances that cross the boundaries of North/South, human/non-human, nature/culture and subject/object. Analytical categories matter greatly to such questions, but so do processes and imaginaries that might track other ways of being and acting in the world. As Braidotti reminds us, becoming posthuman

is a process of redefining one's sense of attachment and connection to a shared world, a territorial space: urban, social, psychic, ecological, planetary as it may be. It expresses multiple ecologies of belonging, while it enacts the transformation of one's sensorial and perceptual co-ordinates, in order to acknowledge the collective nature and outward-bound direction of what we still call the self. (2013, 193)

Just as there is nothing inherently 'good' about heritage there is nothing inherently 'positive' about the posthumanities. The question is not how can heritage become posthumanist, but how can critical thinking in the contact zone of heritage studies engage with the urgent challenges of the present in a way that is analytically insightful and socio-politically transformative? The vibrancy of the posthumanities offers a useful provocation for such work, but the positionalities it suggests should always be met with a critical outlook.

Acknowledgments

The research on which this paper is based forms part of Professor Rodney Harrison's Heritage Priority Area Leadership Fellowship, funded by the Arts and Humanities Research Council (Project Reference: AH/P009719/1). I am grateful to Professor Harrison for supporting this research. I would also like to thank two anonymous reviewers for their insightful comments, the contributors to the symposium Deterritorialising the Future: Heritage in, of and after the Anthropocene for sharpening my thinking around some of these issues, and students on the Cultural Memory course at UCL Institute of Archaeology for questioning and critiquing my thoughts on posthumanism.

Disclosure statement

No potential conflict of interest was reported by the author.

Funding

This work was supported by the Arts and Humanities Research Council [AH/P009719/1].

Notes on contributor

Colin Sterling is an AHRC Early Career Leadership Fellow at UCL Institute of Archaeology. His current research funded as part of an RCUK/UKRI Innovation Fellowship - explores the potential for new approaches to immersive and experiential design to contribute to critical heritage thinking and practice. From 2017 to 2019 he was a Post-Doctoral Research Associate on the AHRC Heritage Priority Area project, leading on the 'Nature, Culture and the Posthumanities' theme. He is the author of Heritage, Photography, and the Affective Past (published by Routledge) and co-editor with Rodney Harrison of Deterritorializing the Future: Heritage in, of and after the Anthropocene (to be published by Open Humanities Press in 2020).

ORCID



References

Anderson, K. 2007. Race and the Crisis of Humanism. London: Routledge.

Arendt, H. [1954] 2006. Between past and Future: Eight Exercises in Political Thought. London: Penguin.

Barad, K. 2003. "Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter." Signs: Journal of Women in Culture and Society 28 (3): 801-831. doi:10.1086/345321.

Bennett, J. 2010. Vibrant Matter: A Political Ecology of Things. Durham and London: Duke University Press.

Bignall, S., S. Hemming, and D. Rigney. 2016. "Three Ecosophies for the Anthropocene: Environmental Governance, Continental Posthumanism and Indigenous Expressivism." Deleuze Studies 10 (4): 455-478. doi:10.3366/ dls.2016.0239.

Bostrom, N. 2013. "Why I Want to Be a Posthuman When I Grow Up." In The Transhumanist Reader: Classical and Contemporary Essays on the Science, Technology, and Philosophy of the Human Future, edited by M. More and N. Vita-More, 28-53. Chichester: John Wiley & Sons.

Boyd, B. 2017. "Archaeology and Human-Animal Relations: Thinking through Anthropocentrism." Annual Review of Anthropology 46: 299-316. doi:10.1146/annurev-anthro-102116-041346.

Bozalek, V., R. Braidotti, T. Schefer, and M. Zembylas, eds.. 2018. Socially Just Pedagogies: Posthumanist, Feminist and Materialist Perspectives in Higher Education. London: Bloomsbury Academic.

Braidotti, R. 2013. The Posthuman. Cambridge: Polity.

Braidotti, R. 2016. "The Contested Posthumanities." In Conflicting Humanities, edited by R. Braidotti and P. Gilroy, 9-45. Bloomsbury: London & New York.

Braidotti, R. 2019. "A Theoretical Framework for the Critical Posthumanities." Theory, Culture & Society 36 (6): 31-61.

Braidotti, R., and M. Hlavajova, eds. 2018. The Posthuman Glossary. London & New York: Bloomsbury.

Brett, D. 1996. The Construction of Heritage. Cork: Cork University Press.

Bryant, L., N. Srnicek, and G. Harman, eds. 2011. The Speculative Turn: Continental Materialism and Realism. Melbourne: Re.press.

Buck, H. J. 2019. After Geoengineering: Climate Tragedy, Repair, and Restoration. London: Verso.

Butler, B. 2007. Return to Alexandria: An Ethnography of Cultural Heritage Revivalism and Museum Memory. Walnut Creek, CA: Left Coast Press.

Byrne, D. 2004. "Chartering Heritage in Asia's Postmodern World." News in Conservation 19 (2): 16-19.

Byrne, D. 2008. "Heritage as Social Action." In The Heritage Reader, edited by G. Fairclough, et al., 149-173. London & New York: Routledge.

Campbell, G., and L. Smith. 2011. "Association of Critical Heritage Studies Manifesto." Accessed August 2019. https://www.criticalheritagestudies.org/history

Chakrabarty, D. 2008. Provincializing Europe: Postcolonial Thought and Historical Difference. Second ed. Princeton & Oxford: Princeton University Press.

Chakrabarty, D. 2016. "Humanities in the Anthropocene: The Crisis of an Enduring Kantian Fable." New Literary History 47 (2&3): 377-397. doi:10.1353/nlh.2016.0019.

Connolly, W. E. 2017. Facing the Planetary: Entangled Humanism and the Politics of Swarming. Durham and London: Duke University Press.

Cosgrove, D. 1994. "Contested Global Visions: One-World, Whole-Earth, and the Apollo Space Photographs." Annals of Association of American Geographers 84 (2): 270-294. doi:10.1111/j.1467-8306.1994.tb01738.x.

De Landa, M. 1997. A Thousand Years of Nonlinear History. Brooklyn: Zone Books.

Demos, T. J. 2019. "Climate Control: From Emergency to Emergence." E-flux Journal 104 (November). Accessed November 2019. https://www.e-flux.com/journal/104/299286/climate-control-from-emergency-to-emergence/

Derrida, J. 2014. Cinders. Minneapolis & London: University of Minnesota Press.

Descola, P. 2013. The Ecology of Others. Translated from the French by G. Godbout and B. P. Luley. Chicago: Prickly Paradigm.

DeSilvey, C. 2017. Curated Decay: Heritage Beyond Saving. Minneapolis & London: University of Minnesota Press. Dewey, J. [1934] 2005. Art as Experience. New York: Perigree.

Diprose, R. 2006. "Derrida and the Extraordinary Responsibility of Inheriting the Future-to-come." Social Semiotics 16 (3): 435-447. doi:10.1080/10350330600824193.

Domanska, E. 2018. "Posthumanist History." In Debating New Approaches to History, edited by M. Tamm and P. Burke, 327-352. Bloomsbury: London.

Dove, M. R. 2006. "Indigenous People and Environmental Politics." Annual Review of Anthropology 35: 191-208. doi:10.1146/annurev.anthro.35.081705.123235.

Ferrando, F. 2013. "Posthumanism, Transhumanism, Antihumanism, Metahumanism, and New Materialisms: Differences and Relations." Existenz 8 (2): 26–32.

Foucault, M. 1973. The Order of Things. New York: Vintage.

Francis, P. 2015. Encyclical Letter of the Holy Father: On Care for Our Common Home. Vatican: Vatican Press.



Fredengren, C. 2015. "Nature:Cultures:Heritage, Sustainability and Feminist Posthumanism." Current Swedish Archaeology 23: 109–130.

Fuller, M., and O. Goriunova. 2019. Bleak Joys: Aesthetics of Ecology and Impossibility. Minneapolis and London: University of Minnesota Press.

Gabrys, J. 2013. Digital Rubbish: A Natural History of Electronics. Ann Arbor: University of Michigan Press.

Gabrys, J. 2018. "Becoming Planetary." *E-Flux*, October 2. Accessed August 2019. https://www.e-flux.com/architecture/accumulation/217051/becoming-planetary/

Gilbert, S. F. 2017. "Holobiont by Birth: Multilineal Individuals as the Concretion of Cooperative Processes." In *Arts of Living on a Damaged Planet*, edited by A. Tsing, H. Swanson, E. Gan, and N. Bubandt, M73–M89. Minneapolis and London: University of Minnesota Press.

Ginn, F. 2017. "Posthumanism." In *The International Encyclopaedia of Geography*, edited by D. Richardson, N. Castree, M. Goodchild, A. Kobayashi, W. Liu, and D. Martson, 1–9. Chichester: John Wiley & Sons.

Gnecco, C. 2015. "Heritage in multicultural times." In *The Palgrave Handbook of Contemporary Heritage Research*, edited by E. Waterton and S. Watson, 263–280. Basingstoke: Palgrave Macmillan.

Grusin, R., ed. 2015. The Nonhuman Turn. Minneapolis and London: University of Minnesota Press.

Hall, S. 1999. "Un-settling 'The Heritage', Re-imagining the Post-nation: Whose Heritage?" *Third Text* 13 (49): 3–13. doi:10.1080/09528829908576818.

Harari, Y. N. 2016. Homo Deus: A Brief History of Tomorrow. London: Vintage.

Haraway, D. 2007. When Species Meet. Minneapolis and London: University of Minnesota Press.

Haraway, D. 2016. Manifestly Haraway. Minneapolis and London: University of Minnesota Press.

Harman, G. 2016. Immaterialism: Objects and Social Theory. Cambridge: Polity.

Harrison, R. 2013. Heritage: Critical Approaches. London: Routledge.

Harrison, R. 2015. "Beyond 'Natural' and 'Cultural' Heritage: Toward an Ontological Politics of Heritage in the Age of the Anthropocene." *Heritage & Society* 8 (1): 24–42. doi:10.1179/2159032X15Z.00000000036.

Hayles, N. K. 1999. How We Became Posthuman: Virtual Bodies in Cybernetics, Literature and Informatics. Chicago: University of Chicago Press.

Heidegger, M. [1947] 1977. "Letter on Humanism." In *Martin Heidegger: Basic Writings*, edited by D. F. Krell, 189–242. New York: Harper & Row.

Hewison, R. 1987. The Heritage Industry: Britain in a Climate of Decline. London: Methuen.

Hickel, J. 2019. "Degrowth: A Theory of Radical Abundance." Real-World Economics Review 87: 54-68.

Hornborg, A. 2017. "Artifacts Have Consequences, Not Agency: Toward a Critical Theory of Global Environmental History." *European Journal of Social Theory* 20 (1): 95–110. doi:10.1177/1368431016640536.

Hunt, S. 2014. "Ontologies of Indigeneity: The Politics of Embodying a Concept." *Cultural Geographies* 21 (1): 27–32. doi:10.1177/1474474013500226.

James, P. 2017. "Alternative Paradigms for Sustainability: Decentring the Human without Becoming Posthuman." In *Reimagining Sustainability in Precarious Times*, edited by K. Malone, S. Truong, and T. Gray, 29–44. Singapore: Springer.

Jazeel, T. 2011. "Spatializing Difference Beyond Cosmopolitanism: Rethinking Planetary Futures." Theory, Culture & Society 28 (5): 75–97. doi:10.1177/0263276411410447.

Jørgensen, D. 2017. "Endling, the Power of the Last in an Extinction-prone World." *Environmental Philosophy* 14: 119–138. doi:10.5840/envirophil201612542.

Knittel, S. C., and K. Driscoll. 2017. "Introduction: Memory after Humanism." *Parallax* 23 (4): 379–383. doi:10.1080/13534645.2017.1374507.

Kohn, E. 2013. How Forests Think: Toward an Anthropology beyond the Human. Berkeley: University of California Press.

Latour, B. 1991. We Have Never Been Modern. Cambridge, Mass.: Harvard University Press.

Latour, B. 1999. *Politics of Nature: How to Bring the Sciences into Democracy*. Cambridge, Mass: Harvard University Press.

Latour, B. 2013. An Inquiry into Modes of Existence. Cambridge, Mass: Harvard University Press.

Lévi-Strauss, C. 1987. The View from Afar. London: Penguin.

Lowenthal, D. 1998. The Heritage Crusade and the Spoils of History. Cambridge: Cambridge University Press.

Malm, A. 2018. The Progress of This Storm: Nature and Society in a Warming World. London: Verso.

Meillassoux, Q. 2010. After Finitude: An Essay on the Necessity of Contingency. London: Bloomsbury.

Mitchell, W. J. T. 2005. "Secular Divination: Edward Said's Humanism." *Critical Inquiry* 31 (2): 462–471. doi:10.1086/430975.

Moore, J. W. 2017. "The Capitalocene, Part I: On the Nature and Origins of Our Ecological Crisis." *The Journal of Peasant Studies* 44 (3): 594–630. doi:10.1080/03066150.2016.1235036.

Morton, T. 2013. *Hyperobjects: Philosophy and Ecology after the End of the World.* Minneapolis & London: University of Minnesota Press.

Mowaljarlai, D., P. Vinnicombe, G. K. Ward, and C. Chippendale. 1988. "Repainting of Images on Rock in Australia and the Maintenance of Aboriginal Culture." *Antiquity* 62: 590–596. doi:10.1017/S0003598X00075086.

Nietzsche, F. [1887] 2011. On the Genealogy of Morals. New York: Vintage.



Nixon, R. 2013. Slow Violence and the Environmentalism of the Poor. Cambridge, Mass: Harvard University Press. Olsen, B., M. Shanks, T. Webmoor, and C. Witmore. 2012. Archaeology: The Discipline of Things. Berkeley: University of California Press.

Parikka, J. 2010. Insect Media: An Archaeology of Animals and Technology. Minneapolis & London: University of Minnesota Press.

Pétursdóttir, Þ. 2018. "Drift." In Multispecies Archaeology, edited by S. E. P. Birch, 85–101. London: Routledge.

Pétursdóttir, Þ. 2020. "Anticipated Futures? Knowing the Heritage of Drift Matter." International Journal of Heritage Studies 26 (1): 87-103.

Pinkus, K. 2016. Fuel: A Speculative Dictionary. Minneapolis & London: University of Minnesota Press.

Puig de la Bellacasa, M. 2017. Matters of Care: Speculative Ethics in More than Human Worlds. Minneapolis & London: University of Minnesota Press.

Rees, T., T. Bosch, and A. E. Douglas. 2018. "How the Microbiome Challenges Our Concept of Self." PLoS Biology 16 (2): e2005358. doi:10.1371/journal.pbio.2005358.

Ricketts, T. H., B. Soares-Filho, G. A. B. da Fonseca, D. Nepstad, A. Pfaff, A. Petsonk, A. Anderson, et al. 2010. "Indigenous Lands, Protected Areas, and Slowing Climate Change." PLoS Biology 8 (3): e1000331. doi:10.1371/ journal.pbio.1000331.

Rigney, A. 2017. "Materiality and Memory: Objects and Ecologies. A Response to Maria Zirra." Parallax 23 (4): 474-478. doi:10.1080/13534645.2017.1374517.

Said, E. W. 2004. Humanism and Democratic Criticism. New York: Columbia University Press.

Samuel, R. 1994. Theatres of Memory Volume 1: Past and Present in Contemporary Culture. London & New York: Verso.

Serres, M. 1995. The Natural Contract. Ann Arbor, Michigan: University of Michigan Press.

Serres, M. 2007. The Parasite. Minneapolis & London: University of Minnesota Press.

Smith, L. 2006. Uses of Heritage. London: Routledge.

Soper, K. 1986. Humanism and Anti-humanism. London: Hutchison.

Soper, K. 2012. "The Humanism in Posthumanism." Comparative Critical Studies 9 (3): 365-378. doi:10.3366/ ccs.2012.0069.

Sørensen, T. F. 2013. "We Have Never Been Latourian: Archaeological Ethics and the Posthuman Condition." Norwegian Archaeological Review 46 (1): 1–18. doi:10.1080/00293652.2013.779317.

Spivak, G. 2012. An Aesthetic Education in the Era of Globalization. Cambridge, Mass: Harvard University Press.

Steffen, W., J. Rockströma, K. Richardsonc, T. M. Lentond, C. Folkea, D. Liverman, C. P. Summerhayes, et al. 2018. "Trajectories of the Earth System in the Anthropocene." PNAS 115 (33): 8252-8259. doi:10.1073/

Steffen, W., K. Richardson, J. Rockström, S. E. Cornell, I. Fetzer, E. M. Bennett, R. Biggs, et al. 2015. "Planetary Boundaries: Guiding Human Development on a Changing Planet." Science 347 (6223): 1259855. doi:10.1126/ science.1259855.

Sundberg, J. 2014. "Decolonizing Posthumanist Geographies." Cultural Geographies 21 (1): 33-47. doi:10.1177/ 1474474013486067.

Surrallés, A. 2017. "Human Rights for Nonhumans?" HAU: Journal of Ethnographic Theory 7 (3): 211-235. doi:10.14318/hau7.3.013.

Tauli-Corpuz, V. 2018. Report of the Special Rapporteur of the Human Rights Council on the Rights of Indigenous Peoples. New York: UN.

Todd, Z. 2016. "An Indigenous Feminist's Take on the Ontological Turn: 'Ontology' Is Just Another Word for Colonialism." Journal of Historical Sociology 29 (1): 4–22. doi:10.1111/johs.12124.

Tsing, A. L. 2015. The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins. Princeton and Oxford: Princeton University Press.

Van Dooren, T. 2014. "Life at the Edge of Extinction: Spectral Crows, Haunted Landscapes and the Environmental Humanities." Humanities Australia 5: 8-22.

Waterton, E., and S. Watson, eds. 2010. Culture, Heritage and Representation: Perspectives on Visuality and the Past. Farnham: Ashgate.

Watts, J. 2019. "Environmental Activist Murders Double in 15 Years." The Guardian, August 5. Accessed August 2019. https://www.theguardian.com/environment/2019/aug/05/environmental-activist-murders-double

Watts, V. 2013. "Indigenous Place-Thought and Agency Amongst Humans and Non-humans (First Woman and Sky Woman Go on a European World Tour!)." Decolonization: Indigeneity, Education & Society 2 (1): 20-34.

Winter, T. 2007. Post-conflict Heritage, Postcolonial Tourism: Culture, Politics and Development at Angkor. London & New York: Routledge.

Winter, T. 2013. "Clarifying the Critical in Critical Heritage Studies." International Journal of Heritage Studies 19 (6): 532-545. doi:10.1080/13527258.2012.720997.

Wolfe, C. 2009. What Is Posthumanism? London & Minneapolis: University of Minnesota Press.

Wright, P. 1985. On Living in an Old Country. London: Verso.

Yusoff, K. 2019. A Billion Black Anthropocenes or None. London & Minneapolis: University of Minnesota Press. Zylinska, J. 2018. The End of Man: A Feminist Counterapocalypse. Minneapolis: University of Minnesota Press.