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Editorial Preface The New Immortals: Immortality and Infinitude in the Anthropocene

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While the fear of capricious immortals living high atop Mount Olympus may have waned, the current age of the Anthropocene appears to have brought with it insistent demands for we mere mortals to once again engage with unpredictable and dangerous beings that wield power over life and death. These 'new immortals' such as plastics, radioactive waste and chemical pollutants have interpellated us into unfathomably vast futures and deep pasts, with their effects promising to circulate through air, water, rock and flesh for untold millions of years. In this way, the finitude of acts of creation, evoked so clearly in Shelley's *Ozymandias*, is no longer as certain as it might once have been. Instead, in specific, but crucial contexts, it is not the dissipation and silencing of our creative and technical works that is feared, but the threat that they might circulate endlessly (Masco 2006; Morton 2013).

Alongside these new forms of persistence, of seemingly immortal presence, the current period is equally one in which many other, perhaps older and even taken-for-granted, constancies and stabilities are breaking down: from the unsettling of the Holocene climate to the unravelling of inter-generational and inter-species relationships in the current mass extinction event. Human time, geological time and a host of other temporal frames and possibilities confront each other in new ways, with little understanding on our part of how to find calibrations that might allow a reconciliation between them (Bastian 2012; Chakrabarty 2009; Farrier 2016; Hatley 2012; Metcalf and van Dooren 2012).

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In these and other fundamental ways, this is a period in which relationships between life and death, creation and decay, have become uncanny; no longer entailing what was once taken for granted. Toxic legacies, mass extinction, climate change: all simultaneously remake both temporal relations and possibilities for life and death. It is this confluence of forces that this special issue seeks to explore and respond to. The papers in this collection come from a workshop held at the KTH Environmental Humanities Laboratory in Stockholm that we organised together in 2014. Under the title "Im/mortality and In/ finitude in the Anthropocene," our focus was on the ways in which relationships between time, death and the environment seemed to be shifting in the context of the Anthropocene.

Finding frames for understanding this context has led to a proliferation of terms and debates that readers will be no doubt familiar with. Our casual reference to the Anthropocene only three years ago is now likely to sound a little unsophisticated given the range of proposals currently in circulation (e.g., Haraway 2015; Malm and Hornborg 2014; Moore 2017). Rather than attempting to discuss these large topics in any systematic way, in this preface we have taken our cue from the Anthropocene, specifically from the invocation of the Ancient Greek world in the use of *anthropos*, to say a little more about (what we surely cannot call) *con*temporary immortals, that is the immortals we now find ourselves sharing time with. The preface concludes with a short summary of each of the six articles comprising this special issue.

What does it mean to live with unpredictable spirits, forces, deities, or heroes? What can be done, if anything, about the disjunctive temporalities between mortals and immortals? How does one respond to forces that are hard to make out or understand, and which might be initially imperceptible or obscure? In all of these questions we find strange resonances between the experiences and insights of the Ancient Greeks and our current condition. Indeed, as Mary Lefkowitz argues, a central theme of Greek myth is "the attempt of mortal beings to understand and come to terms with forces beyond their control" (2003, 10). The Greeks are by no means the sole, or even a privileged, source of insight in this regard. All of the world's peoples have, in their own ways, struggled with these questions—despite the promises of projects of modernity and enlightenment to overcome them. These are, in radically different forms, universal problems. In raising them here, however, we respond to a desire, a whim really, to take a speculative look at what might be gleaned from mythic understandings in the Greek tradition of immortality and finitude. We are not Ancient Greek scholars, but we recognise questions prevalent in these myths that are returning to the scene in new ways.

Perhaps unsurprisingly, the use of Greek myths can already be seen within a range of environmental writing within the Western tradition. In the face of the time- and place-bending powers of agricultural, energy, manufacturing and other technologies, Rachel Carson (2000, 45), for example, turns to the story of Medea's magic robe. Its power to violently kill Medea's rivals provides one way of making sense of the ways that systemic insecticides convert non-toxic plants and animals into poisonous ones. The 'weirdness' of contemporary methods of pest management and destruction seemingly having more in common, for Carson, with myths and fairy stories than everyday understandings of how to deal with insects, fungi and weeds.

The Gaia hypothesis (Lovelock and Margulis 1974) provides a much more influential example of returning gods, though in this case in the form of a selfregulating and symbiotic earth. Breaking out of these orderly patterns, Isabelle Stengers's (2015) recent reworking of the goddess's role perhaps puts us more in touch with the sense of distance and uncertainty that is found in ancient understandings-the potential for Gaia to "intrude" in radically unpredictable ways. Again as Lefkowitz notes in relation to more palatable, and thus in her eyes problematic, modern interpretations, "the Greek gods do not live up to modern expectations because they are not primarily concerned with the welfare of the vast majority of human beings" (2003, 10). Instead as Stengers writes, the less reassuring aspect of Gaia must be brought to the centre of attention "because if she was honored in the past it was as the fearsome one, as she who was addressed by peasants, who knew that humans depend on something much greater than them, something that tolerates them, but with a tolerance that is not to be abused.... It was a matter instead of *paying attention*, of not offending them [the gods], not abusing their tolerance" (2015, 45).

Donna Haraway too makes reference to mythic Greek heritages in her notion of the Chthulucene which "entangles myriad temporalities and spatialities and myriad intra-active entities-in assemblages-including the morethan-human, other-than-human, inhuman, and human-as humus" (2015, 160). Importantly she is cautious in her invocation of Chthulu because of the way it is "burdened with its problematic Greek-ish tendrils" (ibid.).¹ In invoking the Greek notion of the "chthonic ones"-ancient entities, elements, critters, forces of the deep, of the earth; diverse beings, living, dead and otherwise, human and not-Haraway explicitly notes the many other cultural forms these beings have and do take, as well as their capacity to exceed any and all forms of knowing: "the tentacular Chthulucene of a Thousand Names" (2016, 90). In so doing she also notes that "renewed generative flourishing cannot grow from myths of immortality or failure to become-with the dead and the extinct" (2015, 160-161). However, while Christian stories of immortality and the temporality of human capacities present the possibility of salvation from the vicissitudes of earthly life, where it is possible to "store up for yourselves treasures

^{1.} Specifically its link to the Greek word *chthonic* meaning subterranean or under the earth.

in heaven, where moths and vermin do not destroy, and where thieves do not break in and steal" (Matt. 6:20), Greek stories and myths offer more conflicted accounts of the human condition and any desire to escape it. Immortality is a much more complex, fraught, earthly, affair.

Famously, Odysseus rejected the immortality offered by Kalypso which "amounts to a nonlife" (Zeitlin 1991, 13). While Sisyphus's trick of chaining up Death, leading to its temporary interruption, is not seen as a good, but as disrupting the proper order of things, leading to his own punishing immortality. As Ankaret El Haj suggests (personal communication) immortality could be seen as inherently destructive for humans. She suggests Achilles as an example, where his mixing of mortal and immortal "and the internal battle between being human and more-than-human that this provokes makes him depressed and volatile" (ibid).² The uneasiness expressed here about those humans that threaten to exceed the boundaries of human mortality perhaps chime more familiarly with concerns now expressed over the seeming immortality of mortals' acts and creations. But they also remind us that mortality/immortality is never really a black and white condition. The immortals, in their Ancient Greek or their "new" forms, are never actually eternal. They are shifting, elusive, transformed through relating-and ultimately, one way or the other, they too, eventually, pass out of existence. What is so compelling about them, therefore, is not simply their incredible endurance over time, but the particular ways in which these entities become bound up with, intersect with, others' life processes and possibilities—for good or ill, often a bit of both.

The untimeliness that is so central to many accounts of the Anthropocene contrasts with the transitory nature thought to be proper to humans, plants and animals. As Jean-Pierre Vernant argues, human beings are "the creatures the Greeks have named 'the ephemeral ones,' in order to contrast them with 'those who exist eternally'" (1991, 32). That is, "Man and his body are embedded in the course of nature, *phusis*, which causes all that is born here below to rise, mature, and disappear according to the rhythm of the days, seasons, years, and life space proper to each species" (1991, 31). Or as Homer puts it, "Men come and go as leaves year by year upon the trees. Those of autumn the wind sheds upon the ground, but when spring returns the forest buds forth with fresh vines. Even so is it with the generations of mankind, the new spring up as the old are passing away" (1988, 115).

The strange bodies of the Anthropocene's new immortals also find potential elaboration in this mythic framework. For Vernant, the ephemeral human body not only keeps humans in their proper time, but also "precisely positions every individual, assigning him (or her) one and only one location in space"

^{2.} See also Daly Pulkara's sharing of the Yarralin story of the Moon and the Dingo (Rose 2000, 104).

(1991, 46). However, "as well-camouflaged as a god may be in the skin of a mortal, there is something 'off,' something in the otherness of the divine presence that remains strange and disconcerting even when the god is in disguise" (Vernant 1991, 43). Such a description captures well the work of artist Julia Barton, for example, who focuses on 'plastiglomerates' (Corcoran, Moore, and Jazvac 2014). She describes these as "'rocks' made from burning our discarded plastic waste" and argues that "camouflaged within the beach substrates, they chillingly link us to distant geological times both in the past and future" (Barton 2016). These rocks often look familiar, but can feel strangely light when picked up. Perhaps a new immortal then? Or, perhaps they are more like the demi-god and other monstrous offspring of peculiar couplings, not quite mortal or immortal, escaping easy categorisation.

While a mortal's body might bind them to time and place, the gods, although not omnipotent, are capable of "travelling at a speed as swift as thought, [thus] the constraints imposed by the externality of the divisions of space are child's play to them, just as, through the independence they enjoy from natural cycles and their successive phases, they do not know the externality of the divisions of time as they relate to one another" (Vernant 1991, 46). And yet, despite this seeming incommensurability, the possibility of exchange between mortal and immortal is still retained. There is no absolute rupture, rather immortals both old and new intervene into particular places and particular times (Vernant 1991, 47). We might see this in Elizabeth Deloughrey's (2013) devastating critique of the 'myth of isolates' in relation to nuclear testing in the Pacific, where colonial notions of isolated ecosystems and communities failed to take into account, both the specific violences wrought on particular people in particular places, and the lack of constraints over the dispersion of nuclear fallout.

In playing around in these spaces of im/mortality and in/finitude, our hope is to enrich Anthropocene talk with new imaginative possibilities. Doing so is about situating ourselves within complex, multivalent, temporalities. Thinking through the Anthropocene requires much more of us than a simple "zooming out" to explore the larger scales of spacetime often associated with "the geological." In addition, the Anthropocene is about foldings and pleatings, about simultaneous and contradictory temporalities, about the breakdown and (re) formation of new multitemporal relations (Bastian 2011; 2012; 2017; Rose 2012; van Dooren 2016). Life and death are at stake here; not just in their organismic manifestations, but as processes and possibilities—as, for example, in processes of mass killing in which death shifts from being a partner of life toward the 'double death' that amplifies mortality until it overruns life altogether (Rose 2004).

In this way, alongside new forms of attention to those that endure in novel ways, we are asked to be attentive to the long lasting heritages that are breaking down. To be mindful of mortality is, for example, to marvel at the incredible achievement that is a species: a living form stretched over millions of years, pieced together out of the fragile and fleeting lives of so many innumerable living beings (Hustak and Myers 2012; van Dooren 2014, 21–44); ways of life evolved and evolving through deep time, being blotted out *en masse* in the blink of an eye. It is to be captivated by the immensity of the oil, coal and other fossil fuels, laid down over millennia, only to be brought to the surface and consumed by fire in the lifetimes of a few generations of humans. Here, and in numerous other ways, temporal patterns of life and death, of being and becoming, are being remade within our own "geological moment" (Bastian 2017). Through these processes, new forms of uncertainty are being ushered into our world. As Isabelle Stengers notes: "The intrusion of this type of transcendence, which I am calling Gaia, makes a major unknown, which is here to stay, exist at the heart of our lives. This is perhaps what is most difficult to conceptualize: no future can be foreseen in which she will give back to us the liberty of ignoring her" (2015, 47).

This collection brings together six papers that draw on philosophical, anthropological, and historical approaches to think through the strange new possibilities for immortality and infinitude that are taking form in this Anthropocene era.

Joseph Masco explores the complex possibilities for visualising the Anthropocene. Reflecting on the works collected in the exhibition "Suicide Narcissus," curated by Hamza Walker, he asks about the futures that we are able to imagine and work towards; how might complexity, multiplicity, and the seemingly impossible be brought down to earth, rendered relatable and meaningful in the ways that they seem to need to be if they are to summon up alternative responses to a period of escalating ecological crisis?

Monika Bakke investigates metabolic processes as a way of bridging the timescales of human and geological time. Challenging the bias towards biological metabolisms, she draws together theoretical and artistic works that show the ways that the geologic is intertwined in the evolution of life. Analysing works in mediums such as coral, human-produced phosphorus, in-vitro produced artificial membranes and bacteria, Bakke argues that these decentre and transform what we mean by the human and our wider environments and shows how they participate in a wider 'cosmic recycling' of elements and energies.

Elaine Gan troubles the notion, mentioned above, of a 'proper time to a species' through her case study of 'miracle rice.' Tracing the various rice varieties bred for increased yields and pest resistance, Gan leads us into a contest of speeds between plants, insects, agricultural research laboratories and others through the figure of the 'unintended race.' Arguing that this figure helps to undermine modernist conceptions of a single, all-encompassing and forward moving time, she instead artfully focuses our attention on 'polyrhythmic ordering[s] across incommensurability.'

Sabine Höhler draws us into the fascinating world of "artificial ecosystems," exploring diverse imaginations of, and concrete efforts to foster, life beyond the earth. From the Biosphere 2 project, to proposals to terraform Mars (both fictional and all too real), she investigates the notions of environment that underlie these efforts, drawing particular attention to the way in which the living world becomes a life support system for humans, grounded in "a minimalist principle of survival through infinite metabolic conversions."

Emily Thew tackles the topic of de-extinction, in itself full of resonances with mythic accounts of hoped-for returns from the dead. Taking note of the way these experiments are justified as a kind of redemption of the human species, Thew instead argues that a reading in terms of 'narcissistic attachments' will prove more able to deal with the complex drivers behind this work. Nevertheless, she also uncovers within de-extinction debates a latent radical potential for rethinking human-animal relationships through the underlying assumption that the fates of humans and animals are irrevocably intertwined.

Finally, Dolly Jørgensen takes us into the difficult space of extinction through the figure of the 'endling,' that last being of a living kind whose life and death are often rendered almost mythic, told and retold, in an effort to capture something of the magnitude of what is lost in extinction. She charts the history and diverse uses of this term, exploring some of what it both offers and obscures in our approaches to this challenging topic.

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