

RESEARCH ARTICLE

I am uncertain, but We are not: a new subjectivity of the Anthropocene

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Abstract

The concept of ‘the Anthropocene’ as a new human-induced geological epoch has made its way into IR. Debates have recently arisen between ‘post-humanists’ stressing its destruction of subject-object binaries and ‘New Anthropocentrists’ arguing that it increases the importance of the human being as planetary steward. This article moves beyond these debates to question a strange but unexplored foundation that underlies the basic discourse of the Anthropocene: the assertion that humanity must be grouped together as a collective species, ‘anthropos’, or planetary ‘We’. Using the philosophy of Martin Heidegger, it argues that the Anthropocene reveals a new and deeper shift in human subjectivity, moving from an individualistic Cartesian ‘I’ to a collective and planetary ‘We’. This argument is made in three steps. First, today’s common treatment of humanity as a collective whole in Anthropocene literature is examined. Second, it details how transformations in subjectivity occur by shifting the historical boundaries of our most fundamental notion of certainty – the ‘*subiectum*’ – and how the technologies of Earth System Science (ESS) subtly facilitate this shift today. Finally, the article argues how this subjective transformation from the ‘I’ to the ‘We’ results from the temporal, spatial, and existential incalculability and uncertainty of the Anthropocene, thereby fostering the rise of certainty in new forms of conflictual identity politics.

Keywords: We; Anthropocene; Subjectivity; Earth System Science; Species; Planetary Humanity

Introduction

Meditation on the self certainly knows that something essential is decided if the question of who we are is asked or if it is not only held off but is altogether denied as a question.

Unwillingness to ask this question signifies either a shrinking back from the questionable truth about the human being or a propagating of the conviction that who we are has been decided for all eternity.¹

In January of 2013, *The Smithsonian* published an article that posed in its title two seemingly innocuous questions: ‘What Is The Anthropocene and Are We In It?’² It answered these questions in ways that have since become commonplace in the social sciences and International Relations (IR). First, it described the Anthropocene as a new ‘buzzword’ referring to a profound shift in geological timescales and humanity’s relation to the Earth. Quoting scientist Will Steffen, the article noted that ‘we are now having undeniable impacts on the environment at the scale of the planet as a whole, so much so that a new geological epoch has begun’.³ Thanks to the wanton

¹Martin Heidegger, *Contributions to Philosophy: (Of the Event)* (Bloomington: Indiana University Press, 1989), p. 43.

²Joseph Stromborg, ‘What is the Anthropocene and are we in it?’, *Smithsonian.com* (2013), available at: {<https://www.smithsonianmag.com/science-nature/what-is-the-anthropocene-and-are-we-in-it-164801414/>} accessed 21 February 2013.

³Steffen, quoted in *ibid*.

impact of ‘human-kind’ and ‘human beings’ upon their planet, the safety and stability of the Earth’s Holocene epoch of the past 11,700 years – the period of geological time in which ‘humanity’ thrived and its civilisations developed – is coming to an end. Hence, the combination of ‘man’ (*anthropos*) and ‘cene’ (new) into the neologism of the Anthropocene epoch. Second, the article highlighted the ongoing debates over whether or not ‘we’ are actually *in* the Anthropocene at all. On the one hand, some scientists argue that a new epoch must be established upon clear changes in particular geological and stratigraphic conditions (such as alterations to rock layers).⁴ On the other hand, some scientists argue that a new epoch such as the Anthropocene embodies a far more expansive global transformation than what is captured by stratigraphy, pointing towards the emerging concept and object of the Earth System as a single holistic totality. Far beyond the compartmentalised layers of geology or the isolated environmental systems previously studied by scientists, the Anthropocene, to this latter group, is therefore the story of an emergent and total Earth system that is now changing beyond all recognition.⁵

With its direct emphasis on globality, the fate of the Earth, and the potential self-destruction of the entire human species and modern civilisation as we know it, it is ‘perplexing’ that IR has largely ignored *both* of these questions for nearly two decades.⁶ Only recently is the Anthropocene finding a home in studies of world and geopolitics. Some scholars enthusiastically promote the immediate adoption of the concept so as to reckon with its looming and catastrophic implications.⁷ Others, however, remain cautious about normalising the Anthropocene, questioning whether or not it is a Pandora’s Box that conceals unexamined yet powerful philosophical or metaphysical problems that have not been sufficiently explored before warranting its celebrated use.⁸

What is interesting, however, is not merely the differences between these groups – from stratigraphy to the Earth System, or from post-humanist thought in IR to its critics – but rather, what shared philosophical arguments undergird and support each of these debates and perspectives. Indeed, throughout each is the common and shared assumption that ‘We’ – planetary humanity, the human species, mankind, the West, academia, nation-states, etc. – are a single group or collective, now careening together over the edge of the Holocene’s precipice into the Anthropocene’s future of a shared, planetary, permanent state of crisis and uncertainty. Interestingly, the shared concept of this planetary ‘We’ has gone without sustained interrogation or examination in IR’s recent ‘Anthropocene turn’. Once we are attuned to its presence, however, the use of this concept and discourse of the ‘We’ appears uniformly and ubiquitously across debates and disciplines discussing the Anthropocene and its associated crises such as anthropogenic climate change. If IR scholars are now arguing that ‘We cannot survive without accepting the cosmopolitan and enmeshed nature of this world. We are an array of bodies connected and interconnected in complex ways that have little to do with nationality’,⁹ and if IR is indeed taking its cue from Earth

⁴Mark A. Maslin and Simon L. Lewis, ‘Anthropocene: Earth System, geological, philosophical and political paradigm shifts’, *The Anthropocene Review*, 2:2 (2015), pp. 108–16.

⁵Clive Hamilton, ‘Getting the Anthropocene so wrong’, *The Anthropocene Review*, 2:2 (2015), pp. 102–07.

⁶Cameron Harrington, ‘The ends of the world: International Relations and the Anthropocene’, *Millennium: Journal of International Studies*, 44:3 (2016), pp. 478–98 (p. 479).

⁷See Anthony Burke, Stefanie Fishel, Audra Mitchell, Simon Dalby, and Daniel J. Levine, ‘Planet politics: a manifesto from the end of IR’, *Millennium: Journal of International Studies*, 44:3 (2016), pp. 499–523; Simon Dalby, ‘Anthropocene formations: Environmental security, geopolitics and disaster’, *Theory, Culture & Society*, 34:2–3 (2015), pp. 233–52; David Chandler, *Ontopolitics in the Anthropocene: An Introduction to Mapping, Sensing and Hacking* (London: Routledge, 2018); Frank Biermann, *Earth System Governance: World Politics in the Anthropocene* (Cambridge: The MIT Press, 2014).

⁸Madeleine Fagan, ‘Security in the Anthropocene: Environment, ecology, escape’, *European Journal of International Relations*, 23:2 (2016), pp. 292–314; Scott Hamilton, ‘The measure of all things? The Anthropocene as a global biopolitics of carbon’, *European Journal of International Relations*, 24:1 (2016), pp. 292–314; Eileen Crist, ‘On the poverty of our nomenclature’, *Environmental Humanities*, 3:1 (2013), pp. 129–47.

⁹Burke *et al.*, ‘Planet politics’, p. 502.

Systems scientists declaring that we – *humanity* – have ushered in ‘a new phase in the history of both humankind and of the Earth, when natural forces and human forces became intertwined’,¹⁰ then an important and unexamined question emerges: whom or what exactly *is* this ubiquitous global ‘We’ of humanity that is now supposedly planetary in scope and scale? As Nigel Clark¹¹ cautions, ‘who exactly the “we” is in this [discourse] raises questions of its own – inviting us to consider the historical and geographical depth of the human experience of living through environmental extremes.’ It is the goal of this article to answer this question in an exploratory fashion, hoping to shine some light into the cavernous depths of a nascent discourse of planetary humanity, in the hopes that others may explore them in the future.

If ‘We’ are causing climate change and the Anthropocene epoch, then who or what is the ‘We’? This article argues that the omnipresent use of the term ‘We’ in Anthropocene and climate change discourse does not arise automatically from the new spatial and temporal scales these crises reveal as operating beyond the limits of individuality or local geographies. It is not a flippant, vestigial by-product conjured by scholars thinking in international or planetary terms. Nor is the ‘We’ an innocuous or neutral concept or word, serving as a placeholder for ‘humanity’s’ new role in the Anthropocene. Rather, this article argues that the new assertion and inclusion of *all humanity* into a shared planetary ‘We’ indicates something larger and more profound, something that lingers beneath the surface of the Anthropocene’s eminent claims to existential and global catastrophe. Rather than a mere simple word or turn of phrase, the ‘We’ encapsulates a deepening shift in the way that a human self represents itself, ontologically and epistemologically, in the world today. In other words, the planetary ‘We’ points to a transformation in the fundamental historical constitution of human selfhood; a shift away from subjectivity as we know it, into something new: from the subjectivity of the individual, Cartesian ‘I’, to the subjectivity of the collective, planetary ‘We’.

Ontologically, ‘We’ are now all cast into this scenario of future uncertainty as human organisms co-habiting (and co-creating) the crisis of our changing Earth system. In sum, ‘We are no longer insignificant.’¹² In geologic time and space, ‘we’ are making a new origin and ending story for our entire species.¹³ Epistemologically, ‘we have become potent enough to change the course of the Earth yet seem unable to regulate ourselves’,¹⁴ and so in fields such as IR ‘[w]e don’t need more reports or policy debates. We need new practices, new ideas, stories, and myths.’¹⁵ We need, according to these accounts, a new, non-binary, non-Cartesian subjectivity. As Clive Hamilton¹⁶ stresses, if one accepts the basic premise of the Anthropocene – that a profound and unpredictable transformation of an Earth system that ‘We’ have always taken for granted, awaits us – then basic forms of human subjectivity and agency will shift as we enter this uncharted existential territory. The Anthropocene’s ‘injection of human will into the functioning of the Earth System’ means that ‘humankind is no longer the anomaly, the freak of nature. We become *the key to nature-as-a-whole*’.¹⁷

This article explores how the current discourse of the Anthropocene implies this shift in subjectivity, from the Holocene’s individual ‘I’ to the planetary *anthropos* as ‘We’. It proceeds in three

¹⁰Jan Zalasiewicz, Mark Williams, Will Steffen, and Paul Crutzen, ‘The new world of the Anthropocene’, *Environmental Science and Technology: Viewpoint*, 44:7 (2010), pp. 2228–31 (p. 2231).

¹¹Nigel Clark, ‘Geo-politics and the disaster of the Anthropocene’, *The Sociological Review*, 62:S1 (2014), pp. 19–37 (p. 32).

¹²Cameron Harrington and Clifford Shearing, *Security in the Anthropocene: Reflections on Safety and Care* (Bielefeld: Transcript Press, 2017), p. 13.

¹³Kathryn Yusoff, ‘Anthropogenesis: Origins and endings in the Anthropocene’, *Theory, Culture & Society*, 33:2 (2016), pp. 3–28.

¹⁴Clive Hamilton, *Defiant Earth: The Fate of Humans in the Anthropocene* (Cambridge: Polity Press, 2017), p. vii.

¹⁵Burke *et al.*, ‘Planet politics’, p. 500.

¹⁶C. Hamilton, *Defiant Earth*, p. 99.

¹⁷*Ibid.*, p. 141.

steps. First, an overview of the concept of the Anthropocene will be provided, describing why some scholars assert it to be a paradigm shift: because of the technological rigour of Earth System Science (ESS), which ‘replaces our current scientific conception of the Earth as a whole and supersedes traditional geographical, geological and ecological thinking (and all compartmentalised scientific disciplines)’.¹⁸

Second, the philosophical foundations of the ‘I’ and the ‘We’ are considered by analysing the effect of ESS upon subjectivity using Martin Heidegger’s metaphysics of technology.¹⁹ Although some scholars have long criticised the Anthropocene’s portent of a homogenous planetary humanity,²⁰ these critiques focus mostly on the specific ethical, historical, and economic actors that have caused the Anthropocene to occur, aiming to highlight disparities in economic and political power relations and bring guilty parties to account. What the ‘We’ actually *is*, on a philosophical level, remains ignored. Hence, this article contributes a new perspective to IR and the social sciences by describing how this transformation of subjectivity, certainty, and technology was anticipated decades ago by Heidegger as a great metaphysical danger.²¹

Third, using Heidegger’s insights into technology and subjectivity, the article describes the transformation of human subjectivity from the Cartesian ‘I’ to the ‘We’ of *anthropos* by examining the recent work of historian Dipesh Chakrabarty²² and philosopher Clive Hamilton.²³ Each thinker claims that ‘We’ are entering an ‘epochal consciousness’ in which humanity will become reconceived collectively as a geological species stretching across the deep time horizon of the Anthropocene. Importantly, their accounts make explicit for us what lies implicitly in every discussion of the Anthropocene crisis: an unprecedented existential and temporal *uncertainty* concerning the future of human subjectivity, and of the Earth itself. With the future of the individual ‘I’ uncertain, selfhood as a planetary ‘We’ gains in certainty, familiarity, and effect.

Finally, the article concludes with a brief warning about the risks of this emerging political subjectivity of the ‘We’. It cautions that, rather than foster any cosmopolitan democracy or planetary stability, moving from the I to the We foments a divisive and exclusionary rationality of *planetary* identity politics. As Amartya Sen argues ‘The implicit belief in the overarching power of a singular classification can make the world thoroughly flammable.’²⁴ And in the case of the Anthropocene, there is no singular classification more powerful than its claim to be an agent encompassing all of humanity itself. The recent ‘flammability’ of global politics is perhaps due, therefore, not only to rising global temperatures wrought by the firepower of fossil fuel combustion,²⁵ but also to an underlying shift in the boundaries of a global-technological political subjectivity that seeks to absorb every human into a homogenous classification. As identity moves upwards from the ‘I’ to larger group identities, it fosters expanding and conflicting tribalisms

¹⁸Clive Hamilton, ‘The Anthropocene as rupture’, *The Anthropocene Review*, 3:2 (2016), pp. 93–106 (p. 93).

¹⁹It is important to note that, as Dreyfus (Hubert I. Dreyfus, ‘Heidegger on the connection between nihilism, art, technology, and politics’, in Charles B. Guignon (ed.), *The Cambridge Companion to Heidegger* (2nd edn, Cambridge: Cambridge University Press, 2006), pp. 345–72 (p. 367)) points out, both Heidegger’s support for Germany’s Nazi party in 1933 and ‘his decisive break’ from the Nazis between 1935–8, came from his changing understanding of the relationship between technology and politics. Thus, ‘Heidegger’s mistake’ should illustrate the absolute necessity today of *critiquing* and *questioning* the philosophical basis of every political claim and the technological guidelines underpinning it (Ibid., p. 371).

²⁰See Timothy W. Luke, ‘Reconstructing social theory and the Anthropocene’, *European Journal of Social Theory*, 20:1 (2016), pp. 80–94; Matthew Lepori, ‘There is no Anthropocene: Climate change, species-talk, and political economy’, *Telos*, 172 (2015), pp. 103–24; Andreas Malm, ‘The Anthropocene myth’, *Jacobin Magazine* (2015), available at: {<https://www.jacobinmag.com/2015/03/anthropocene-capitalism-climate-change/>} accessed 2 August 2018.

²¹Martin Heidegger, *The Question Concerning Technology and Other Essays* (New York: Harper Perennial, 1977); Heidegger, *Contributions to Philosophy*.

²²Dipesh Chakrabarty, ‘The climate of history: Four theses’, *Critical Inquiry*, 35 (2009), pp. 197–222.

²³C. Hamilton, ‘Getting the Anthropocene so wrong’, C. Hamilton, *Defiant Earth*.

²⁴Amartya Sen, *Identity and Violence: The Illusion of Destiny* (London: W.W. Norton & Company, 2006), p. xvi.

²⁵Simon Dalby, ‘Firepower: Geopolitical cultures in the Anthropocene’, *Geopolitics* (2017), pp. 1–26.

in turn.²⁶ Aspiring towards the ultimate certainty of the ‘We’ of humanity, therefore, there exists a danger that must be countered.

I am a person, We are a species

Since its inception by Crutzen and Stoermer,²⁷ the concept of the Anthropocene has exploded across the social and natural sciences. It spreads through what Timothy W. Luke²⁸ describes as its ‘tremendous framing capacity’ to work as an all-purpose noun, verb, and adjective, combining a myriad of places, spaces, times, forms, economies, cultures, nations, political systems, etc., into one unified master-concept. This concept describes the destructive and transformative impact that ‘humanity’ or *anthropos* as a collective whole is now wreaking upon the Earth. The impact of *anthropos* is so extensive that an entirely new geological time period is beginning.²⁹

In IR, the ‘framing capacity’ of the Anthropocene is typically used to upend the tired theoretical paradigms of the discipline. From realism to liberalism, IR theories tend to assume a background condition of stability upon which sovereign states and their international system of relations proceed indefinitely.³⁰ These accounts illustrate how the sovereign state was long ago constructed on Holocene assumptions about (states of) nature and political borders that will be no longer viable in the Anthropocene’s transforming environment of instability and change.

As Eva Lövbrand *et al.*³¹ note, since the Anthropocene emerged in the natural and environmental sciences, it accidentally privileges scientific and quantitative narratives that are at odds with more interpretive and qualitative approaches that are needed to fully understand the sociopolitical behaviour of *anthropos*. As its ‘entangled relations between natural, social and cultural worlds’³² are untangled, they unfurl in disparate and contradictory ways that make the Anthropocene far from a settled scientific concept.³³ It is thus viewed through lenses of global capitalism as *capitalocene*;³⁴ through gendered and toxic masculinities as *manthropocene*;³⁵ and through the eyes of the disempowered victims forced to suffer its early consequences in forced migration as *the Oliganthropocene*.³⁶

Despite these many differences, Lövbrand *et al.* highlight how ‘there is a distinct story emerging from the global environmental change research community that is affecting how the conversation on the future of Earth currently is unfolding.’³⁷ To get at the heart of this story, they isolate three conceptual pillars of the Anthropocene: First, a ‘post-natural ontology’ that posits humanity

²⁶Amy Chua, ‘How America’s identity politics went from inclusion to division’, *The Guardian* (1 March 2018), available at: {<https://www.theguardian.com/society/2018/mar/01/how-americas-identity-politics-went-from-inclusion-to-division>}.

²⁷P. J. Crutzen and E. F. Stoermer, ‘The “Anthropocene”’, *Global Change Newsletter*, 41 (2000), p. 17.

²⁸Luke, ‘Reconstructing social theory and the Anthropocene’, p. 83.

²⁹The Earth’s 4.5 billion-year age is increasingly subdivided by the Geological Time Scale (GTS) into segments. Ranging from largest to smallest, these are: eons, eras, periods, epochs, and ages. Each segment is determined by the International Commission on Stratigraphy (ICS), which declares itself to be ‘setting global standards for the fundamental scale for expressing the history of the Earth’. International Commission on Stratigraphy, available at: {<http://www.stratigraphy.org>} accessed 20 March 2018.

³⁰Harrington, ‘The ends of the world’; Hamilton, ‘The measure of all things?’.

³¹Eva Lövbrand, Silke Beck, Jason Chilvers, Tim Forsyth, Johan Hedren, Mike Hulme, Rolf Lidskog, Eleftheria Vasileiadou, ‘Who speaks for the future of Earth? How critical social science can extend the conversation of the Anthropocene’, *Global Environmental Change*, 32 (2015), pp. 211–18.

³²*Ibid.*, p. 212.

³³See Clive Hamilton, Christophe Bonneuil, and François Gemenne (eds), *The Anthropocene and the Global Environmental Crisis* (London: Routledge, 2015), p. 1.

³⁴See Jason Moore (ed.), *Anthropocene or Capitalocene? Nature, History, and the Crisis of Capitalism* (Oakland: PM Press, 2016).

³⁵Kate Raworth, ‘Must the Anthropocene be a Manthropocene?’, *The Guardian* (20 October 2014), available at: {www.theguardian.com/commentisfree/2014/oct/20/anthropocene-working-group-science-gender-bias} accessed 5 October 2018.

³⁶François Gemenne, ‘The Anthropocene and its victims’, in Hamilton, Bonneuil, and Gemenne (eds), *The Anthropocene and the Global Environmental Crisis*.

³⁷Lövbrand *et al.*, ‘Who speaks for the future of Earth?’, p. 212.

as a global-scale force of Nature. Second, a ‘post-social ontology’ that merges all human difference and plurality into a single notion of planetary *anthropos*. Third, a ‘post-political ontology’ that frames the Anthropocene as an unprecedented crisis of instability and change, moving beyond the purview of normal Holocene politics. Taken together, Löwbrand *et al.* claim that these create the demand for critical social science to analyse the plural relations of race, class, gender, society, economy, etc., that comprise the pages of the Anthropocene’s story, thereby broadening the three narrowing scientific boundaries framing the ‘post’-ontologies.

The danger here is the assumption that the conceptual foundations of the Anthropocene’s ‘scientific community’ are somehow different than those of the social science community. On the explicit surface of research subject matter and technique, this appears obvious. Yet, what if, on a deeper and more implicit level, the emerging story of the Anthropocene is written on the same historical and philosophical level that scaffolds *both* the natural and the social sciences? Will not applying ‘critical’ social science to the scientific Anthropocene crisis, simply add more fuel to the fire?

Although accounts of post-natural and post-political ontologies have been provided elsewhere,³⁸ this article answers this question by outlining the shared metaphysical grounds of the social and natural sciences. It does so by unpacking what Löwbrand *et al.* call ‘post-social ontology’, the flattening of the most distinct features of human beings into the generalised planetary humanity of *anthropos*; what is identified above as the ‘We’. As Andreas Malm succinctly laments, ‘This is one of the most common tropes in the [Anthropocene’s] discourse: we, all of us, you and I, have created this mess together and make it worse each day.’³⁹ Indeed, it is common to read statements such as: ‘Humanity does not act on the backdrop of an unchangeable nature but is deeply woven into its very fabric, shaping both its imminent and distant future.’⁴⁰ Even IR’s most critical manifestos succumb to framing the ‘We’ – planetary humanity – as this planetary agent of change and locus of action in Anthropocene discourse. ‘The planet has long been that space which bears the scars of human will’, note Burke *et al.*, for ‘in transforming *the* world into *our* world, we damaged and transformed it to suit our purposes.’⁴¹ David P. Turner’s recent book sums up this tendency well, capturing the new agency being attributed to the We:

Until very recently, *our species* had only a minor influence on the global biogeochemical cycles of water, carbon, nitrogen, and other elements critical to life. However, in the past century *we* have become one of the dominant forces in those cycles. *We* are increasing the atmospheric carbon dioxide (CO₂) concentration by burning fossil fuels and converting forest land to cropland.⁴²

The point here is that literatures across IR, the social sciences, and the natural sciences embrace this post-social ontology, moving from individual, local, and international society outwards and upwards to the planetary We as the new agent to blame. Notably, in most cases, they frame *anthropos* as a *species*.⁴³ From prominent economists,⁴⁴ to postcolonial historians,⁴⁵ to

³⁸See Simon Dalby, ‘Rethinking geopolitics: Climate security in the Anthropocene’, *Global Policy*, 5:1 (2014), pp. 1–9; Scott Hamilton, ‘Securing ourselves from ourselves? The paradox of “entanglement” in the Anthropocene’, *Crime, Law and Social Change*, 68:5 (2017), pp. 579–95.

³⁹Malm, ‘The Anthropocene myth’.

⁴⁰Christoph Rosol, Sara Nelson, and Jurgen Renn, ‘In the machine room of the Anthropocene’, *The Anthropocene Review*, 4:1 (2017), pp. 2–8 (p. 2).

⁴¹Burke *et al.*, ‘Planet politics’, p. 500.

⁴²David P. Turner, *The Green Marble: Earth System Science and Global Sustainability* (New York: Columbia University Press, 2018), p. 1, emphasis added.

⁴³This tendency should not be conflated with the concept of ‘speciesism’, which pertains to the contentious attribution of moral, legal, social, etc. rights or privileges of the human species over other beings. See Peter Singer, *Animal Liberation* (New York: Random House Inc., 1990).

⁴⁴Jeffrey D. Sachs, *Common Wealth: Economics for a Crowded Planet* (New York: The Penguin Press, 2008).

⁴⁵Chakrabarty, ‘The climate of history’.

philosopher-ethicists,⁴⁶ scholars not only describe the We as the human species, but actively promote and advocate for this interpretation. For instance, famed biologists such as E. O. Wilson assert that '[w]e are smart enough and now, one hopes, well informed enough to achieve self-understanding as a unified species', which is apparently the most 'realistic and pragmatic' approach to the Anthropocene.⁴⁷ 'To call human beings geological agents is to scale up our imagination of the human', notes Chakrabarty,⁴⁸ and yet this imagination is possible across the 'deep' time of the Anthropocene only in one way: as making the human agent akin to other lifeforms on this planet that are traceable and cognisable across geologic epochs and stratigraphic layers as a species. Hence why '[t]he story of humans-as-just-another-species cannot withstand the arrival of the Anthropocene', claims Clive Hamilton, because the 'new epoch is the ultimate demonstration that, however networked into the natural world we are (as the post-humanists have shown), humans do stand out'.⁴⁹ And so, the common 'trope' that *we* are special as a species that has caused climatic change; *we* have caused the Anthropocene; *we* are harbingers of global ecological catastrophe.

This is not to say that the 'We' is entering our lexicon without protest. Scholars troubled by this planetary species-being have voiced concern. Matthew Lepori lambastes what he calls the 'species-talk' of the 'We', us, humanity, etc., as 'dangerous'. Why? 'In species-talk, all living and dead humans are absorbed into a single body (e.g. humankind) that becomes the universal subject of history.'⁵⁰ This universal not only conceals the complex struggles and uneven power-relations that have shaped contemporary social and political order, but most importantly, it prevents the attribution of *responsibility* to the specific humans, states, corporations, and economies that spawned the Anthropocene in the first place.⁵¹ As Luke argues, 'blaming human species-being in these renewed global histories of excessive greenhouse gassing marvellously mystifies the moves of a few people who accrue great material gain for themselves by blaming all human beings as "the we" responsible for rapid climate change in the Anthropocene'.⁵² Indeed, when viewed through the lens of this type of historical materialism, 'the ecological crisis is not the result of a universal subject (the human species, We) but rather the creation of a universal *object*, the reduction of nature to resource or material to be extracted and manipulated for the sake of the economy'.⁵³ Malm sums up this species-talk well: by framing 'humankind as one big villain driving the train', thinking in terms of the We, humanity, and species, 'only induces paralysis. If everyone is to blame, then no one is'.⁵⁴

In IR, as noted above, Lövbrand *et al.* similarly reject this post-natural and post-social ontology of a homogenous planetary We. Despite this, however, they fail to ask what the 'we' actually *is*, or what effect it might have on us conceptually and subjectively.

The We – planetary humanity conceived of as a species – is thus assumed away as a secondary symptom or vestigial result of a deeper structural and economic malady; one that scholars believe can be cured by paying greater attention to micro-level variables that can link the natural and social sciences together by accounting for agency, economic and social responsibility, ethics, plurality and difference, religion, etc. Yet, if the We is indeed – as these authors imply, but do not explore – *more* than a flippant word or contingent effect of capitalism, but a deeper

⁴⁶C. Hamilton, 'Getting the Anthropocene so wrong'.

⁴⁷Sachs, *Common Wealth*, p. xii.

⁴⁸Chakrabarty, 'The climate of history', p. 206.

⁴⁹C. Hamilton, *Defiant Earth*, p. 96.

⁵⁰Lepori, 'There is no Anthropocene', p. 104.

⁵¹See also Moore (ed.), *Anthropocene or Capitalocene?*

⁵²Luke, 'Reconstructing social theory and the Anthropocene', p. 88.

⁵³Lepori, 'There is no Anthropocene', p. 118.

⁵⁴Malm, 'The Anthropocene myth'; Andreas Malm and Alf Hornborg, 'The geology of mankind? A critique of the Anthropocene narrative', *The Anthropocene Review*, 1:1 (2014), pp. 62–9.

concept packed with hidden meaning, then a more intensive analysis of the increasingly ubiquitous ‘We’ is required.

It is here where Martin Heidegger’s philosophy of technology and subjectivity is helpful. Although little attention in IR has been paid to his *Contributions of Philosophy: (Of the Event)* (1989), it builds a complex philosophical and metaphysical answer to what Heidegger argues is the most dangerous – and hidden – question of contemporary politics: ‘*who are we?*’⁵⁵ Heidegger argues that the We contains within it a new and troubling representation of selfhood, politics, community, and how it is possible for a human being to exist in a shared world. ‘Unwillingness to ask this question’ of who or what ‘We’ are, for Heidegger, ‘signifies either a shrinking back from the questionable truth about the human being or a propagating of the conviction that who we are has been decided for all eternity.’⁵⁶ In other words, the more comfortably and expansively that ‘we’ describe ourselves as a shared global group, the greater this hidden metaphysical danger becomes. Why?

As Richard Polt notes, in the We, Heidegger sees a point of culmination, a bubbling over of the underlying tendency of Western metaphysics to make human selfhood into a subjective Cartesian ‘I’ that calculates and measures itself always in relation to ‘objective’ things and events.⁵⁷ The We remains a subjectivism, but one now turned away from the ‘I’ towards the community or group as the new bedrock for its identity. Hence, the danger here is the same plaguing every modern ideology and worldview, from Liberalism, to Communism, Marxism, and even Nazism: lumping individual subjects together within some type of larger, homogenous, circumscribed whole, as creatures, class, race, nation, etc. ‘The most dangerous [worldviews and ideologies] are those in which the worldless “I” has apparently given itself up and devoted itself to something else that is “greater” than it, and to which it is assigned as a piece or member. The dissolution of the “I” into “life” as people – here an overcoming of the “I” is prepared at the price of the first condition for such an overcoming, namely, reflection on Being-a-self and its essence.’⁵⁸

Is the dissolution of the I into the We of the Anthropocene, precisely this danger cautioned by Heidegger? To answer this question requires a comparison of the way in which the metaphysics of the I and the We are made thinkable today in our (supposed!) Anthropocene condition: through the digital complexities of ESS.

The Earth as system

As noted above, there remains substantial debate concerning how best to approach the role of *anthropos* – humanity – in the Anthropocene: through the stratigraphic approach or the Earth System Science approach.⁵⁹ On the one hand, scientists such as Mark A. Maslin and Simon L. Lewis⁶⁰ emphasise the importance of synchronous global anthropogenic signatures deposited in the geological stratigraphic record. For instance, they identify two potential boundaries for being a Global Stratotype Section and Point (GSSP), or a ‘Golden Spike’ marking a human-induced change that is visible across the Earth’s ice, rock, glacier, or marine sediment. First, 1610 (the ‘orbis’ drop of global atmospheric CO₂ concentrations due to the extreme death of human populations and biota wrought by the colonialisation of South America by the ‘Old World’). Second, 1964 (the global deposition of radionuclide carbon-14 atoms from nuclear bomb tests). However, this emphasis on the formal designation of a globally synchronous

⁵⁵Heidegger, *Contributions of Philosophy*, p. 39; Richard Polt, ‘Metaphysical liberalism in Heidegger’s *Beitrage zur Philosophie*’, *Political Theory*, 25:5 (1997), pp. 655–79.

⁵⁶Heidegger, *Contributions of Philosophy*, p. 43.

⁵⁷Polt, ‘Metaphysical liberalism in Heidegger’s *Beitrage zur Philosophie*’.

⁵⁸*Ibid.*, p. 666.

⁵⁹See W. Steffen *et al.*, ‘Stratigraphic and Earth System approaches to defining the Anthropocene’, *Earth’s Future*, 4:8 (2016), pp. 324–45.

⁶⁰Maslin and Lewis, ‘Anthropocene’.

golden spike is challenged by philosophers and ethicists now viewing the Anthropocene as 'the very recent rupture in Earth history arising from the impact of human activity on the Earth System as a whole'.⁶¹ For this latter group, the environmental conditions determining the stale formality of a rock or sediment layer simply pales in comparison to a 'radically new' and 'paradigm-shifting' form of scientific inquiry: Earth System Science (ESS). ESS, for this latter camp, illuminates a new understanding not only of the Earth, but of reality itself.

ESS studies the Earth as a single integrated planetary system in which 'life' – the biosphere – is an active component, and in which one species in particular – *homo sapiens*, or *anthropos* – has acquired the power to alter and threaten the biotic and abiotic processes upon which all (human) life depends.⁶² ESS has become a powerful and highly interdisciplinary field 'that aims to build a holistic understanding of our evolving planet' by building upon the geosciences and 'recent system-level thinking applied to the climate and the biosphere'.⁶³

In general, ESS synthesises four areas of research: (a) the social understanding of 'spaceship earth' as a self-contained entity; (b) global databases and global scale phenomena that demand collaboration for the integration of data; (c) enhanced computing power, allowing for increasingly complex models to be used and disseminated; and (d) 'global observation systems [that] allow scientists to apply *concepts* there were only previously applicable at sub-system, regional or local scale to the Earth as a whole. The Earth itself *is* a system'.⁶⁴

With the advent of the Anthropocene, stratigraphic and Earth System approaches have become intertwined and today integrate and feed into each other in complex and symbiotic ways.⁶⁵ This article places greater emphasis on ESS than stratigraphy for three reasons. First, although they are intertwined, ESS and its aim at achieving holistic planetary integration remains the more dominant approach of the two. 'It is no accident that the proposal for the Anthropocene Epoch arose out of the Earth System science community, in particular out of the synthesis project of the IGBP [International Geosphere-Biosphere Programme]'.⁶⁶ The initial concept of the Anthropocene itself⁶⁷ first emerged from scholars modelling the complex dynamics of atmospheric and other Earth systems, applying them to *terra firma*. Second, agreeing with Gerard Delanty and Aurea Mota, although geologists insist on identifying a specific Golden Spike in the GST, 'It may be objected that this preoccupation of geologists with pinpointing an exact date for the emergence of the Anthropocene is pointless for purposes other than demarcating boundaries in geological time scales'.⁶⁸ Echoing Chakrabarty, Delanty and Mota note that 'For human history, which does not have the golden spikes of geology, this [precise hierarchical dating] is clearly impossible.' Hence why the so-called 'Great Acceleration' describing humanity's progressively increasing impact upon the entire Earth system after WWII, takes prominence over Maslin and Lewis's attempt to entrench 1610 or 1964 as specific and momentary stratigraphic golden spikes.

This ties into the third aspect that makes ESS highly relevant to the 'We'. As a computerised integration of increasingly complex systems, ESS aims to expand and assimilate every external object into itself, striving for complete totality or holism. It is thus opposed to the maintaining of compartmentalised, plural, fixed, and regimented hierarchical boundaries (including those demarcating sovereign nation states, citizens, and their unique cultures and attributes). As phrased succinctly in 2001's standard textbook for ESS, the IGBP's *Global Change and the Earth System: A Planet Under*

⁶¹C. Hamilton, *Defiant Earth*, p. 9; C. Hamilton, 'Getting the Anthropocene so wrong'.

⁶²Steffen *et al.*, *Global Change and the Earth System: A Planet Under Pressure* (Berlin: Springer, 2005), p. 1.

⁶³Steffen *et al.*, 'Stratigraphic and Earth System approaches to defining the Anthropocene', p. 325.

⁶⁴Steffen *et al.*, *Global Change and the Earth System*, p. 3.

⁶⁵Steffen *et al.*, 'Stratigraphic and Earth System approaches to defining the Anthropocene', p. 340.

⁶⁶*Ibid.*, p. 334.

⁶⁷See Crutzen and Stoermer, 'The "Anthropocene"'.
⁶⁸Gerard Delanty and Aurea Mota, 'Governing the Anthropocene: Agency, governance, knowledge', *European Journal of Social Theory*, 20:1 (2017), pp. 9–38 (p. 16).

Pressure: ‘Science has crossed the threshold of a profound shift in the perception of the human-environment relationship, operating across humanity as a whole and at the scale of the Earth as a single system.’⁶⁹ The point here is to calculate the parameters of a planetary humanity and integrate it with Nature in a new form of unity: not religious or spiritual unity, but scientific and technological uniformity. There is no differentiation under this totalising and collectivising gaze, and hence, as its critics note, the allocation of *responsibility* is subtly cast aside as all humans are included regardless of their actual culpability. ‘If not every human is responsible for bringing on the Anthropocene, every human is destined to live in it.’⁷⁰ With no divisions between nations, cultures, languages, histories, or worlds, the ESS’s ‘paradigm-shifting’ rationality thus works by assimilating everything – from academic disciplines, to modes of economic production, to religions – into the same synthetic and holistic planetary system.⁷¹

What is fascinating here is how the popularity and spread of the ‘We’ and ESS is based so subtly, yet crucially, upon this technological drive for increasing calculation and assimilation. This point bears further exploration, because Clive Hamilton and other ESS advocates confidently assert that it is actually ESS’s drive towards precisely this integrated planetary totality that gives it true novelty. This, however, is misleading in two ways. First, although it is indeed common to read how the Anthropocene is an all-encompassing spatial and temporal force, expanding beyond all previous political and conceptual boundaries – a *hyperobject*, in the words of Timothy Morton⁷² – the expanding planetary scale of this hyperobject depends fundamentally on corresponding advances in ESS technology: ‘the Anthropocene concept cannot legitimately be separated from Earth System science, and that Earth System science represents a recent paradigm shift in the earth and life sciences’.⁷³ Without ESS, the Anthropocene loses its force as a hyperobject.

Second, these emphatic declarations of a new and urgent type of totalising globality are not novel or original. In fact, these claims have been a regular feature of discourses of so-called ‘modernity’ for over one hundred years. As Jo-Ann Pemberton has traced in *Global Metaphors: Modernity and the Quest for One World*, ‘the trend of thought from the early twentieth century onwards was in the direction of a planetary commonwealth’, which reflected ‘a spiritual yearning for wholeness however much it was defended in technical-rational and utilitarian terms’.⁷⁴ Indeed, even a cursory glance into historical literature reveals today’s ‘trope’ of the Anthropocene’s encroaching globality to echo many narratives of the past. For instance, H. G. Wells himself was fond of the concept of a world state engendered by Nature, arguing for an inevitable ‘larger synthesis’ of the world: ‘The whole trend of forces in the world is against the preservation of local social systems, however greatly and spaciouly conceived’, he argued.⁷⁵ Instead, the larger world synthesis was something so spatially and temporally new, that its culmination ‘may work out to its end vastly, and yet at times almost imperceptibly, as some huge secular movement in Nature’.⁷⁶

The twentieth century produced a myriad of similar claims that ‘mankind’ or humanity was moving towards a holistic planetary commonwealth. Some accounts based their world-state on

⁶⁹W. Steffen, A. Sanderson, P. D. Tyson *et al.*, ‘Global Change and the Earth System: A Planet Under Pressure’, International Geosphere-Biosphere Programme (2001), p. 5, available at: http://www.igbp.net/download/18.1b8ae20512db692f2a680007761/1376383137895/IGBP_ExecSummary_eng.pdf.

⁷⁰C. Hamilton, *Defiant Earth*, p. 77.

⁷¹See Amy Dahan, ‘Putting the Earth into a numerical box? The evolution from climate modeling toward global change’, *Studies in History and Philosophy of Modern Physics*, 41 (2010), pp. 282–92.

⁷²Timothy Morton, *Hyperobjects: Philosophy and Ecology at the End of the World* (Minneapolis: University of Minnesota Press, 2013).

⁷³C. Hamilton, ‘The Anthropocene as rupture’, p. 93; Clive Hamilton and Jacques Grinevald, ‘Was the Anthropocene anticipated?’, *The Anthropocene Review*, 2:1 (2015), pp. 59–72.

⁷⁴Jo-Ann Pemberton, *Global Metaphors: Modernity and the Quest for One World* (London: Pluto Press, 2001), p. 6.

⁷⁵H. G. Wells, *Anticipations of the Reaction of Mechanical and Scientific Progress Upon Human Life and Thought* (New York: Harper & Brothers, 1902), p. 270.

⁷⁶*Ibid.*, p. 268. For more on Wells, see Duncan Bell, ‘Pragmatism and prophecy: H. G. Wells and the metaphysics of socialism’, *American Political Science Review*, 112:2 (2018), pp. 409–22.

fears of a post-Second World War nuclear holocaust,⁷⁷ while others made prescient bio- and geo-physical claims for globality.⁷⁸ This is interesting because Clive Hamilton and Jacques Grinevald⁷⁹ berate *any* contemporary scholar that likens the Anthropocene to bygone concepts or precursors, such as Vernadsky's or Pierre Teilhard de Chardin's *noosphere*. For Hamilton and Grinevald, these comparisons suffer from '*precursitis*', a scholarly disease that entails symptoms of seeking illusory historical precursors to modern crises. By mistakenly privileging past semantic and historical concepts, *precursitis* deflates the power of the Anthropocene by reading it as a progressive and continuing development or stage of humanity, rather than the Anthropocene's sudden rift or rupture in the Earth System that is revealed only through ESS.⁸⁰

Despite Hamilton and Grinevald's claim of ESS and the Anthropocene as a complete paradigm shift or rupture, it is disconcerting how some of the 'precursi' they debate echo the Anthropocene nearly verbatim. For example, made more than eighty years ago, W. I. Vernadsky's comments on the *noosphere* (1945) as a geological planetary totality are at times eerily similar to contemporary Anthropocene discourse. 'The noosphere is a new geological phenomenon on our planet', Vernadsky declared. 'In it for the first time man becomes a *large-scale geological force*.' With this geological force, '[t]here arises the problem of the *reconstruction of the biosphere in the interests of freely thinking humanity as a single totality*. This new state of the biosphere, which we approach without our noticing it, is the *noosphere*.'⁸¹ Vernadsky also asserts that 'the face of our planet, the biosphere, is being sharply changed by man, consciously, and even more so, unconsciously', through the process of humanity discovering newfound agency as a geological, 'single totality'.⁸² It is ironic that these claims so closely resemble much of Clive Hamilton's many assertions of the We's totality as species, writing, for instance, that 'humanity' is now fostering 'the arrival of a new stage in geohistory, blending human will with geological processes, ... The fact that we are now able to recognize this implicates us and our world-making capability more deeply in the totality.'⁸³

Hamilton and Grinevald are indeed correct to note clear differences between the Anthropocene and the noosphere. First, Vernadsky was referring to a teleological state of progress where mind (*noos*) and biosphere fuse, creating a new stage of cosmic evolution. Second, there was obviously no ESS in 1938 at the time of Vernadsky's writing, so Hamilton and Grinevald repeat *ad nauseam* the fact that 'there were no precursors to the notion of the Anthropocene and that there could not have been because the concept [ESS] (put forward in the year 2000) is an outgrowth of the recent interdisciplinary understanding of the Earth' revealed as '*the Earth system*'.⁸⁴ However, in their quest to cure the Anthropocene of its *precursitis* by reifying ESS, these authors ignore the many clear similarities that should warrant more attention, and could yield interesting insights into the conceptual foundations of the Anthropocene that are otherwise taken for granted.

What is therefore novel in ESS and Anthropocene discourse is not, as these scholars currently claim, a holistic and totalising geological, spatial, and temporal scope. As past literature ranging from Vernadsky to Pemberton makes abundantly clear, the absorption of individuality or plurality into a planetary totality is nothing novel.⁸⁵ While Vernadsky lamented the fact that 'the

⁷⁷Dexter Masters and Katherine Way (eds), *One World or None: A Report to the Public on the Full Meaning of the Atomic Bomb* (New York: Whittlesey House, 1946).

⁷⁸See V. I. Vernadsky, *Scientific Thought as a Planetary Phenomenon* (Moscow: Russian Academy of Sciences, 1997 [orig. pub. 1938]).

⁷⁹C. Hamilton and Grinevald, 'Was the Anthropocene anticipated?'

⁸⁰*Ibid.*, p. 62.

⁸¹V. I. Vernadsky, 'The biosphere and the noosphere', *American Scientist*, 33:1 (1945), pp. 1–12 (p. 9), emphasis in original.

⁸²*Ibid.*, p. 9.

⁸³C. Hamilton, *Defiant Earth*, p. 142.

⁸⁴C. Hamilton and Grinevald, 'Was the Anthropocene anticipated?', pp. 59, 60–1.

⁸⁵See Rens van Munster and Casper Sylvest, *The Politics of Globality since 1945: Assembling the Planet* (London: Routledge, 2016).

natural laws of the biosphere' were intruding into the free, 'everyday life' of the individual,⁸⁶ sixty years later Chakrabarty repeats this combination of history, geology, biology, and humanity, merging it once more into totality: 'Climate change is an unintended consequence of human actions and shows, only through scientific analysis, the effects of our actions as a species.'⁸⁷ So, what is it that now motivates the Anthropocene's portent of totality and catastrophe to revolve around this new discourse of humanity, the species, or the 'We'?

It is not simply the presence of ESS, nor the concepts of systemic and/or planetary species or totality, that makes the discourse of the Anthropocene so effective. As we know, 'To portray certain social relations as the natural properties of the species is nothing new.'⁸⁸ 'Dehistoricizing, universalizing, eternalizing, and naturalizing a mode of production specific to a certain time and place – these are the classic strategies of ideological legitimation.'⁸⁹ Rather, what is new is the underlying manner in which the *technologies* of ESS shape, delimit, and construct the concepts of climate change, Nature, and humanity as thinkable; not simply as 'species', but the even more subtle collective 'We' that is now brought together and made intersubjective through computerized algorithms integrating every quantified system of Nature.⁹⁰ What is new is the increasingly technological foundation of the concept of the Anthropocene.

We begin to recognise this digital totality by outlining the history of the concept of the Anthropocene. In the 1980s, IGBP scientists realised that the global form of knowledge required to understand the entire Earth as one single integrated system did not yet exist. Thus began 'one of the largest scientific projects ever undertaken, one that require[d] us to think about our planet in an entirely new way'.⁹¹ Indeed, what plagued and hindered climate scientists throughout the 1970s and 1980s was not only rudimentary computer technologies, but a lack of international *integration* of the data these technologies produced.⁹² Hence, the IGBP embarked on 'the largest, most complex, and most ambitious program of international scientific cooperation ever to be organized', fostering 'a revolutionary shift in the scientific view of Earth, comparable to the sixteenth-century discovery by Copernicus that the Earth orbits the sun'.⁹³ The 'revolution' emerged here not from the holistic aim to cover the globe – as noted, an ancient aspiration – but in its unparalleled *integration* of international computational systems now using coeval forms of data. In other words, what was novel in this new study of the Earth system was its use of a single form of technological representation that could finally be disseminated to, and thought by, all involved.⁹⁴ This was the new quantitative mathematical language of Nature upon which the ESS was built. Paul N. Edwards hits upon a key point in his claim that '[v]irtually everything we know about the Anthropocene as a geophysical, ecological, and social phenomenon', 'comes to us from scientific knowledge infrastructures built in the 20th century'.⁹⁵ The infrastructure of ESS is that of computer data generated from a wide variety of systematic monitors – ranging from in-situ observations and measurements, to Global Climate Models (GCMs)

⁸⁶Vernadksy, 'The biosphere and the noosphere', p. 4.

⁸⁷Chakrabarty, 'The climate of history', p. 222.

⁸⁸Malm, 'The Anthropocene myth'.

⁸⁹Ibid.

⁹⁰Peter H. Verburg *et al.*, 'Methods and approaches to modelling the Anthropocene', *Global Environmental Change*, 39 (2016), pp. 328–40.

⁹¹Ian Angus, *Facing the Anthropocene: Fossil Capitalism and the Crisis of the Earth System* (New York: Monthly Review Press, 2016), p. 29.

⁹²Paul N. Edwards, 'Global climate science, uncertainty, and politics: Data-laden models, model-filtered data', *Science as Culture*, 8:4 (1999), pp. 437–72; Paul N. Edwards, *A Vast Machine: Computer Models, Climate Data, and the Politics of Global Warming* (Cambridge: The MIT Press, 2010).

⁹³Angus, *Facing the Anthropocene*, pp. 30, 32.

⁹⁴Peter Haff, 'Humans and technology in the Anthropocene: Six rules', *The Anthropocene Review*, 1:2 (2014), pp. 126–36.

⁹⁵Paul N. Edwards, 'Knowledge infrastructures for the Anthropocene', *The Anthropocene Review*, 4:1 (2017), pp. 34–43 (p. 36).

and Integrated Assessment Models (IAMs) – being combined into a form of ‘infrastructural globalism’.⁹⁶ Without this technological globalism of computerised data, there would be no ESS.

The tension produced in ESS is that its technological ‘datafication’⁹⁷ excludes the social and qualitative facets of human existence; traits such as history, culture, language, religion, politics, and anything unable to be calculated within ‘macroeconomic optimization paradigms’.⁹⁸ It then doubles-down on predicting the future behaviour of *anthropos* based on macroeconomic models, creating a basic but important problem: ‘Associated problems of parameterizing social dynamics, such as individual behaviour, governance and macro-economic shifts are profound and probably intractable over the near future. Complex dynamical systems are inherently unpredictable – especially when they include humans.’⁹⁹ In other words, the more ESS calculates the future behaviour of *anthropos*, the more uncertain *anthropos* actually becomes, since humanity’s agency as the We is not easily amenable to quantification in the present, let alone decades and centuries into the future.¹⁰⁰

This places ‘uncertainty’ front-and-centre in attempts to predict the future behaviour of the human species and the Earth System. Explicitly, we see it in the famous Planetary Boundaries model: ‘Much of the uncertainty in quantifying planetary boundaries is due to our lack of scientific knowledge about the nature of the biophysical thresholds themselves, [and] the intrinsic uncertainty of how complex systems behave.’¹⁰¹ Implicitly, this uncertainty goes even deeper,¹⁰² gluing the pieces of the global ‘We’ together using the technological infrastructure of ESS as a new form of certainty: ‘we must embrace a multi-species, multi-disciplinary action plan. And we must do it now. We cannot unravel time and restore lost species to life, but we can fight for this planet we call a home. What other choice do we have?’¹⁰³ The collective planetary ‘We’, in other words, appears as a new object of certainty in the unpredictable globality of ESS and the Anthropocene. As this article will now argue, the certainty of the ‘We’ is no mere discursive invention. It represents a metaphysical and technological understanding of the Earth and humanity – replete with a new representation of *selfhood* – that moves the ‘We’ beyond previous understandings of the world state, planetary commonwealth, or spread of Western modernity.

The metaphysics of our planetary (un)certainty

It is becoming certain in IR and the social sciences that ‘We’ are destroying the Earth. That we are causing climate change, and now, that we are entering the Anthropocene epoch. Important

⁹⁶Edwards, *A Vast Machine*; Edwards, ‘Knowledge infrastructures for the Anthropocene’.

⁹⁷This process of reducing every cognisable referent to data has recently been described as ‘datafication’ (see Sarah Pink and Debora Lanzani, ‘Future anthropology ethics and datafication: Temporality and responsibility in research’, *Social Media + Society* (April to June 2018), pp. 1–9), while the integration of data with the large-scale material technologies and knowledge infrastructures of the Anthropocene has been argued by Haff in ‘Humans and technology in the Anthropocene’ to be an entirely new ‘sphere’ of the Earth, known as the ‘technosphere’.

⁹⁸Jonathan F. Donges, Wolfgang Lucht, Finn Muller-Hansen, and Will Steffen, ‘The technosphere in Earth System analysis: a coevolutionary perspective’, *The Anthropocene Review*, 4:1 (2017), pp. 23–33.

⁹⁹Verburg *et al.*, ‘Methods and approaches to modelling the Anthropocene’, p. 328. It must be noted that this *inherent* uncertainty that is built into every single model is why ‘climate change denials’ can use them so effectively as red herrings to deny the evidence for Anthropogenic climate change. The (frustrating) irony here is that no model can *ever* be ‘100% certain’ because it is an *analogue to* reality; it can never be as ‘real’ as reality itself. Hence why the climate denialist argument that ‘the science is still murky!’, or ‘the models are unsure!’, etc., still remains today after many decades: it is a powerful rhetorical play on everyday (mis)assumptions of how all models function, rather than any attempt to grasp the actual workings of general circulation (GCM) or ESS models. As such, this denialism will never disappear from climate politics. (For an excellent overview, see Edwards, ‘Global climate science, uncertainty, and politics’).

¹⁰⁰See Spencer Weart, ‘The development of general circulation models of climate’, *Studies in History and Philosophy of Modern Physics* (2010), pp. 208–17 (p. 213).

¹⁰¹Johan Rockström, Will Steffen, Kevin J. Noone *et al.*, ‘Planetary boundaries: Exploring the safe operating space for humanity’, *Ecology and Society*, 14:2 (2009), pp. 1–33 (p. 31).

¹⁰²See S. Hamilton, ‘Securing ourselves from ourselves?’.

¹⁰³Burke *et al.*, ‘Planet politics’, p. 502.

questions thus arise: what role do 'I' play in this catastrophe 'We' are creating, and what relation does the individual 'I' have to the planetary 'We'?

It is a common practice for scholars to simply assume that the Cartesian 'I', human consciousness, and 'subjectivity', are the exact same thing.¹⁰⁴ This is a mistake. The concepts of the Cartesian I and the planetary We are different metaphysical possibilities or forms of *selfhood*. For Heidegger, 'metaphysics' is nothing magical, mystical, or anti-scientific. It describes the unique and specific conceptual 'grounds' of an age, 'in that through a specific interpretation of what is and through a specific comprehension of truth it [metaphysics] gives to that age the basis upon which it is essentially formed'.¹⁰⁵ Metaphysics, in other words, refers to what IR scholars label as the constitution of our political and 'social episteme',¹⁰⁶ or the intersubjectively shared boundaries of thought and action that allow members of state's society to function cohesively together. Metaphysics shapes and underpins a self's being-in-the-world, by placing humans within a shared 'cultural paradigm'.¹⁰⁷ As different variants of the self, the 'I' and the 'We' emerge from the same underlying, shared, historical, understanding of reality – what Heidegger calls a 'metaphysics of presence'.¹⁰⁸ How?

As Polt has described it, a metaphysics of presence 'pictures the human situation in terms of the subject, the object, and a representational connection between the two'.¹⁰⁹ The human subject, as a Cartesian I, represents and measures itself in relation to external objects in the world. Things a self sees as existing externally from itself, as objects, therefore have an 'object-ive' presence to a subject-ive self. Hence, this metaphysical 'subjectivism' of presence is one in which the self conceives of itself as an 'I' of subjectivity, 'presenting itself with the object by representing it', or picturing the object to itself – literally, re-presenting objects back to itself as subject.¹¹⁰

Essential to understanding Heidegger's reading of the Cartesian (and hence, modern and Western) metaphysics of the I and the We is his definition of the subject as *subiectum*. It is a translation of the ancient Greek word *hypokeimenon*: 'The word names that-which-lies-before, which, as ground, gathers everything onto itself.'¹¹¹ In other words, the Greek 'subject' was never a thinking human subjectivity. The Greek *subiectum* was whatever thing or entity was apprehended by a human self's senses, as 'something lying before from out of itself, which, as such, simultaneously lies at the foundation of its own fixed qualities and changing circumstances'.¹¹² Crucially, prior to modern times, the subject was not the human self's own observing and measuring of its 'objective' circumstance. Rather, the *subiectum* referred to the fundamental grounds for what entities were entering into Being and thought.¹¹³ The point here is that the 'subject' has not always been the human self, and hence 'subjectivity' has not always been the 'I'.

¹⁰⁴See, for instance, Alexander Wendt, *Quantum Mind and Social Science: Unifying Physical and Social Ontology* (Cambridge: Cambridge University Press, 2015), p. 119.

¹⁰⁵Heidegger, *The Question Concerning Technology and Other Essays*, p. 115. This grasp of metaphysics is actually similar to a Foucauldian 'game' or regime of truth (Michel Foucault, 'The ethics of the concern of the self as a practice of freedom', in P. Rabinow (ed.), *Ethics: The Essential Works of Foucault, 1954–1984* (London: Penguin Books: 2000), pp. 281–302), where subjects constitute themselves through historically unique practices and power relations.

¹⁰⁶John Gerard Ruggie, 'Territoriality and beyond: Problematizing modernity in International Relations', *International Organization*, 47:1 (1993), pp. 139–74.

¹⁰⁷Dreyfus, 'Heidegger on the connection', p. 354.

¹⁰⁸Heidegger, *The Question Concerning Technology and Other Essays*; Polt, 'Metaphysical liberalism in Heidegger's *Beitrag zur Philosophie*'.

¹⁰⁹Polt, 'Metaphysical liberalism in Heidegger's *Beitrag zur Philosophie*', p. 657.

¹¹⁰Polt, 'Metaphysical liberalism in Heidegger's *Beitrag zur Philosophie*'; Heidegger, *The Question Concerning Technology and Other Essays*. In IR, see Torsten Michels, 'Pigs can't fly, or can they? Ontology, scientific realism and the metaphysics of presence in international relations', *Review of International Studies*, 35:2 (2009), pp. 397–419; Torsten Michels, 'Under Heidegger's shadow: a phenomenological critique of Critical Realism', *Review of International Studies* 38:1 (2012), pp. 209–22.

¹¹¹Martin Heidegger, 'The age of the world picture', in *The Question Concerning Technology and Other Essays*, pp. 115–54 (p. 128).

¹¹²Ibid., p. 148

¹¹³Ibid., p. 150.

'This metaphysical meaning of the concept of subject [*hypokeimenon*] has first of all no special relationship to man and none at all to the I.'¹¹⁴

'Certainty' first became aligned with the human self when the ancient *subiectum* shifted away from the capacity of the human senses to reveal being(s), to the Divine Word of God as put forth in medieval Christian doctrine. Truth no longer lay in the revealing of the presence of things, but in 'the claim of man to a *fundamentum absolutum inconcussum veritatis* (self-supported, unshakable foundation of truth, in the sense of certainty)'.¹¹⁵ Truth lay in scripture, and certainty within the pious self. Hence why the 'history of modern mankind, ... was *mediately* prepared by Christian man, who was oriented toward the *certitude* of salvation'.¹¹⁶ However, it was the philosophy of René Descartes that transformed our understanding of 'truth', moving it away from the certainty of salvation found in Christian doctrine, towards something new: certainty of the human *self*. 'The essence of the modern age', wrote Heidegger, 'can be seen in the fact that man frees himself from the bonds of the Middle Ages in freeing himself to himself.'¹¹⁷ This 'freeing' is not accomplished through mere Cartesian doubt of the senses, which is conjured up in Descartes's famous phrase, *cogito ergo sum* (I think, therefore I am). Instead, Descartes's truly revolutionary move was to make the *subiectum* into the human self, assimilating the certainty of the subject with the 'I'.¹¹⁸ Now, the self, as *subiectum* or subject, can be certain of re-presenting external and objective being(s) *back to itself*, as subjective representations. 'It means simply this: to be subject now becomes the distinction of man as the thinking-representing being. The I of man is placed in the service of this *subiectum* ... Certainty is binding for every I as such, i.e., for every I as *subiectum*.'¹¹⁹ The Cartesian 'I', therefore, was here made coterminous, and has since become conflated with, subjectivity as self-certainty.

What does the metaphysical structure of the 'I' of subjectivity have to do with the Anthropocene? The subjectivism of the 'I' shares with modern science and technology the same metaphysics of presence. It is this subjectivist metaphysics that is accelerating and culminating in advanced technologies such as ESS. As Heidegger stresses, it is a 'deceptive illusion'¹²⁰ that modern science and technology – ranging from machinery, to quantum physics, lasers, nuclear reactors, computers, and even ESS – are instrumental or applied sciences, somehow beyond or different from the everyday workings of human thought. On the contrary, what makes the 'I' as *subiectum* 'technological' is the manner in which both science and the I represent or 'reveal' being(s) in the world: as external objects made knowable through calculation, quantification, measurement, and finally, representation back to the self as objects to a subject. Here, 'truth' is the scientific representation and measurement of external objects linking the self to its world.

Importantly, the subject's 'picturing' or re-presentation of objective reality back to the 'I', is what Heidegger calls our metaphysical *world picture*.¹²¹ Despite its name, the 'world picture' has no spatial relation to the scale of the Earth or the globe, nor to *actual* pictures of the world, nor concepts of globality. Instead, 'the world picture' refers to the metaphysical state in which contemporary subjectivity, as an I, imagines or 'pictures' the world as an external object, to be re-presented back to subjectivity.¹²² Certainty becomes the security of technological

¹¹⁴Ibid., p. 128.

¹¹⁵Ibid., p. 148.

¹¹⁶Martin Heidegger, *Nietzsche, Volume IV: Nihilism* (San Francisco: Harper & Row, Publishers, 1982), p. 100.

¹¹⁷Heidegger, 'The age of the world picture', p. 127.

¹¹⁸As Heidegger (ibid., p. 150) writes, in his typically abstruse way: 'The *subiectum*, the fundamental certainty, is the being-represented-together-with – made secure at any time – of representing man together with the entity represented, whether something human or non-human, i.e., together with the objective.'

¹¹⁹Ibid., p. 151.

¹²⁰Heidegger, *The Question Concerning Technology and Other Essays*.

¹²¹Heidegger, 'The age of the world picture', p. 129.

¹²²Ibid.

representation; the self-certain I. Yet, this world picture depends upon an increasingly orderable, objective, mathematical representation of a 'nature that reports itself in some way or other that is identifiable through calculation and that it remains orderable as a system of information'.¹²³ Both technology and subjectivism, therefore, posit objective nature as an external, calculable reality that must be increasingly revealed and made known through specific and intensifying modes of quantification and calculation.

What drives the 'I' forth to picture the world and its components in this way, is its *uncertainty* about external reality. As the gap between subject and object is navigated, both the 'I', and technology, are forever engaged in a Sisyphean pursuit to acquire more and more – potentially, *infinite* – knowledge about objective reality. There is always a gap between objects and the *subiectum*; there is always more to be measured and known. In order to be certain about Nature, whether it is through conducting a complex scientific experiment or a simple subjective reflection about the world, this is a 'way of being human which mans the realm of human capability as a domain given over to measuring and executing, for the purpose of gaining mastery over that which is as a whole'.¹²⁴ In sum, the world picture strives for achieving certainty through integrating as many objective representations as it can, into itself and into its own picture, so that 'all that belongs to it and all that stands together in it – [is] as a system'.¹²⁵ What subjectivity as 'I' shares with technology, therefore, is a drive to endlessly systematise all Being and knowledge into an ongoing attempt to reduce objective uncertainty. It is an endless acquisition of knowledge so as to secure itself as *certain*.

The danger, however, is when the *subiectum* – the fundamental ground for certainty, or today, the 'I' – becomes *itself* drawn into the process of ever expanding systemic calculations being made in the quest for total certainty. This occurs when 'what can seemingly always be calculated completely, becomes precisely through this, incalculable'.¹²⁶ Here, when chasing total technological certainty, the individual subject and the objects measured by the 'I', are assimilated and lost in an ever-expanding 'objectlessness' of the system; what Heidegger calls the 'gigantic'.

It is precisely here in the objectlessness of endless systemic calculation that Heidegger warns about the emergence of the 'We'. He cautions that '[s]ubjective egoism, for which mostly without its knowing it the I is determined beforehand as subject, can be cancelled out through the insertion of the I into the we. Through this, subjectivity only gains in power'.¹²⁷ In other words, in objectlessness, subjectivity must shift from the I to the 'We' because the certainty of the I as *subiectum*, is lost. When there is no possibility of 'certainty' of the self as I, then certainty of the self as 'We' is possible if buttressed by a larger, collective technological system. If a system's uniformity of shared and global technological representations is rigorous enough, then 'the subjectivism of man attains its acme, from which point it will descend to the level of organized uniformity and there firmly establish itself'.¹²⁸ 'This uniformity becomes the surest instrument of total, i.e., technological, rule over the earth.' If the I is made metaphysically and technologically uncertain, then a new certainty of the 'We' can become the new *subiectum*.

As noted above, it is precisely the incredibly complex technological foundations of ESS that now places the existential uncertainty of humanity – and hence, of the contemporary self – into a future that is *certain* of only one thing: that 'We' have spawned the Anthropocene and that 'We' are only recognisable in this geological timescale as a collective species.

¹²³Heidegger, *The Question Concerning Technology and Other Essays*, p. 23.

¹²⁴Heidegger, 'The age of the world picture', p. 132.

¹²⁵Ibid., p. 129.

¹²⁶Ibid., p. 135.

¹²⁷Ibid., p. 152.

¹²⁸Ibid.

I am uncertain but We are not

The Anthropocene integrates humanity and Nature into a system of incomprehensible complexity. We must recall, as Clive Hamilton stresses, 'It is a transdisciplinary and holistic approach integrating earth sciences and life sciences, as well as the "industrial metabolism" of humankind, all within a systems way of thinking, with special focus on the non-linear dynamics of a system.'¹²⁹ When Heidegger describes the emergence of the We in a 'planetary imperialism of technologically organized man', therefore, he is not referring to physical spatiality, statist colonialism or political conquest, nor to any material or instrumental technologies. Metaphysics does not mean ideological, cultural, linguistic, religious, etc. differences, but goes much deeper. Instead, a metaphysical imperialism describes the spread of a new *subiectum* relying exactly on such systems thinking as embraced in ESS: a certainty of Nature and Earth that is conceived through a technological world picture that makes the self certain only by securing its place as a quantified collective entity within endless and ongoing processes of a homogenous system. Hence why, today, we hear so many refrains from even the most esteemed and critical scholars, celebrating and declaring the totalising and universalizing aspects of the Anthropocene and ESS. 'The Anthropocene arrives as the totalizing event par excellence ... every human is destined to live in it.'¹³⁰ For Chakrabarty, the Anthropocene manifests a 'mood of anxiety and concern about the finitude of humanity',¹³¹ demanding a rethinking of how to exist across scales of deep time: only as a collective species, the We of collective humanity.

Chakrabarty goes one step further than C. Hamilton by denying what he calls the 'phenomenology of us as a species'. Chakrabarty asks: 'Who is the we? We humans never experience ourselves as a species. We can only intellectually comprehend or infer the existence of the human species but never experience it as such.'¹³² His point is that the universal 'We' is real, but as a concept it cannot be truly understood by the 'I' that he claims is shaped by dynamics of capitalism. However, what Chakrabarty omits in his argument is what the metaphysical history of subjectivity clarifies. The new *subiectum*, a human self that 'empowers himself as lord of the earth',¹³³ is the same subjectivity that is now described as emerging in the Anthropocene: the We that 'shows up humans as super-agents, powerful even beyond the imaginings of the Moderns',¹³⁴ Hence, while the 'I' could have no phenomenology of the human species, the 'We' of the Anthropocene opens a new 'cultural paradigm' where this phenomenology may become more normal and commonsensical than the 'I'. This is the emerging cultural paradigm of the We.

So, now is a time when assertions that 'We' have caused global climate change and the Anthropocene are becoming commonplace, because 'We' are gaining a new *subiectum* through a technological metaphysics of planetary (un)certainty. Unlike politics-as-usual, therefore, 'Rather, we must embrace a multi-species, multi-disciplinary action plan. And we must do it now. We cannot unravel time and restore our lost species to life, but we can fight for this planet we call a home.'¹³⁵ Yet what type of *politics* does this 'fight' imply? Whom are 'we' fighting against?

With the movement of the *subiectum* from the 'I' to the 'We', a new perspective on the recent surge of nationalism, populism, racism, and various forms of identity politics visible across the globe may be sketched out.¹³⁶ Piet Strydom has succinctly expressed how a change in epochs should change subjectivity in turn: 'Subject-formation is thus inevitably and fundamentally affected by a transition from one geological epoch to another and the unavoidable concomitant

¹²⁹C. Hamilton, 'Getting the Anthropocene so wrong', p. 94.

¹³⁰C. Hamilton, *Defiant Earth*, p. 77.

¹³¹Chakrabarty, 'The climate of history', p. 197.

¹³²Ibid., p. 220.

¹³³Heidegger, 'The age of the world picture', p. 152.

¹³⁴C. Hamilton, *Defiant Earth*, p. 101.

¹³⁵Burke *et al.*, 'Planet politics', p. 502.

¹³⁶See Chua, 'How America's identity politics went from inclusion to division'.

reconfiguration of the sociocultural world.¹³⁷ Indeed, what this article has argued is that the ‘We’ underlying the Anthropocene’s sociocultural world – a collective political globality of human-made crises and uncertainty – rests upon a transforming metaphysical representation of human subjectivity, from the individual I to the collective group or humanity as species. If states and the ‘I’ are only recent historical developments, then it is obvious that new subjectivities and discourses will foment new scales and forms of politics.¹³⁸ Indeed, ‘Man as a rational being of the age of the Enlightenment is no less subject than is man who grasps himself as a nation, wills himself as a people, fosters himself as a race, and, finally, empowers himself as lord of the earth.’¹³⁹ The modern Western identity of the liberal individual as an I, therefore, fades in the Anthropocene into a new and strange form of subjectivist identity: the self and subject as *group* identity.

Why does the subject as planetary We not foster a cosmopolitan or peaceful global holism, instead of the conflictual and divisive identity politics we see developing today? As Amartya Sen has argued, a drive towards unity, holism, and universalism risks obfuscating the rich fabrics underpinning sociocultural pluralism. ‘The implicit belief in the overarching power of a singular classification’, Sen writes, ‘can make the world thoroughly flammable.’¹⁴⁰ The promotion of one singular identity endangers the *multiple* identities – national, religious, cultural, gendered, racial, economic, etc. – that a ‘self’ as an ‘I’ might today possess. ‘The art of constructing hatred takes the form of invoking the magical power of some allegedly predominant identity that drowns other affiliations, and in a conveniently bellicose form can also overpower any human sympathy or natural kindness that we may normally have.’¹⁴¹ And yet, it is precisely this singular identity of the planetary species of the ‘We’ that scholars like Chakrabarty and C. Hamilton now actively strive *towards*. With subjectivity left to derive certainty from what ESS constructs as its future, collective, *singular* identity, there remain no places for the classical Cartesian ‘I’ to be sheltered. And so, ‘When groups feel threatened’, notes Amy Chua, commenting on the surge of identity politics in the USA after the 2016 election of President Donald Trump, ‘they retreat into tribalism.’¹⁴² What we see in recent racist and populist calls for ‘culture’ and/or nationalism, therefore, is the political future of the Anthropocene contained today within the domestic framework of the ‘I’. The danger of the objectlessness of the We, therefore, is not only that *anthropos* becomes this ‘choiceless singularity of human identity [that] not only diminishes us all’, but makes the world more ‘flammable’¹⁴³ – but that its technological metaphysics subsumes the concept of plurality and difference *altogether*. All that remains in ESS is the system, the totality, the gigantic. ‘The gigantic presses forward in a form that actually seems to make it disappear’, Heidegger wrote.¹⁴⁴ The danger of the planetary imperialism of technological metaphysics is, ironically, the ESS goal where ‘the quantitative becomes a special quality and thus a remarkable kind of greatness ... and what can seemingly always be calculated completely, becomes, precisely through this, incalculable’.¹⁴⁵

It is here where any collectivising system of thought – from liberalism to communism, etc. – shares the same metaphysical root: ‘Every nationalism is metaphysically an anthropologism, and

¹³⁷Piet Strydom, ‘The sociocultural self-creation of a natural category: Social-theoretical reflections on human agency under the temporal conditions of the Anthropocene’, *European Journal of Social Theory*, 20:1 (2017), pp. 61–79 (p. 70).

¹³⁸Ruggie, ‘Territoriality and beyond’.

¹³⁹Heidegger, ‘The age of the world picture’, p. 152.

¹⁴⁰Sen, *Identity and Violence*, p. xvi.

¹⁴¹*Ibid.*, p. xv.

¹⁴²See Chua, ‘How America’s identity politics went from inclusion to division’. Ironically, “tribalism” is exactly what some portended the rise of global technological infrastructures would foster, by creating a ‘global village’ of sorts. See Marshall McLuhan, *The Gutenberg Galaxy: The Making of Typographic Man* (Toronto: University of Toronto Press, 1962).

¹⁴³Sen, *Identity and Violence*, p. 16.

¹⁴⁴Heidegger, ‘The age of the world picture’, p. 135.

¹⁴⁵*Ibid.*

as such subjectivism',¹⁴⁶ because every nationalism (or subjectivism) is a mode of thinking that has pre-determined what the 'human self' is as a subject, and how its objective reality ought to be related, *before* any analysis begins. 'For ideologies that are based on self-presence, we can do all sorts of things and achieve all sorts of things, but who we are remains certain and self-evident – and, consequently, the meaning of Being itself remains unquestioned.'¹⁴⁷

Going forth, therefore, IR has to engage and fight against the assimilation of plurality and difference in two ways: First, to protest collectivising modes of thought that assert what the self, humanity, or Nature is (or is not), such as the ESS. Second, to be wary of embracing the new planetary 'We' that Heidegger considers 'an ahistorical collectivism' representing 'the subjectivity of man in totality'.¹⁴⁸ Perhaps it is best for IR to advocate for what Polt describes as a non-subjectivist metaphysics; a mode of thinking that recognises the danger of both individualism *and* planetary collectivism, seeking to circumvent both through concerted and local political action and engagement.¹⁴⁹ The goal of such a non-subjectivist metaphysics is to disclose new aspects of politics and Nature through human interaction and open dialogue, rather than assimilating and systematising them into any objective or overarching framework.

Conclusion

When faced with anthropogenic climate change, it is easy for individuals to conjure a plethora of options they can engage in that *might* ameliorate this looming global crisis. Recycling, monitoring one's carbon footprint, purchasing carbon offsets, cycling to work, etc., are all choices that foster a sense of individual agency and control over both climate change and one's own sense of self in the face of a global catastrophe.¹⁵⁰ When considering the Anthropocene, however, there are no such options for the 'individual' to pursue. The Anthropocene's temporal, spatial, and existential implications are not only far beyond 'climate change', but they are also beyond the conceptual boundaries of the Cartesian 'I' of the Holocene. In the epochal thinking of *anthropos*, only the planetary collective – the species, the group, *the 'We'* – can have any real agency. 'I can't do anything; *but We might!*'

To be clear, this author is wary and unnerved by this portent of the 'We.' Its focus on a singular humanity as *anthropos* is reminiscent of a restrictive Schmittian or authoritarian call to arms. It implies a denial of local practices, cultures, languages, histories, and colonial legacies of violence and terror. The objectlessness of the 'We' dissolves the multitude of overlapping worlds and forms of being(s) existing around us today, into an abyss of geologic time and incalculable Earthly systems. It is, of course, impossible to foretell whether or how a transition into objectlessness through the ESS's complex 'datafication' of planetary systems will spell an improvement for humanity and the Earth, or if it will help to facilitate the ultimate destruction of both. Heidegger described these entangled possibilities as a simultaneous 'saving power' and 'the danger'.¹⁵¹ Either a new cultural paradigm opened by the Anthropocene will safeguard and protect the self, Nature, and Earth in new and unimaginable ways, or, it will obfuscate them beyond all recognition through endless waves of calculation.

To predict which of these possibilities will emerge in time is far beyond the scope of this article. Its aim was to highlight how the ubiquitous 'We' now appearing in discourses of globality concerning the Anthropocene and climate change is becoming more and more common, and

¹⁴⁶Martin Heidegger, 'Modern science, metaphysics, and mathematics', in David Farrell Krell (ed.), *Martin Heidegger: Basic Writings* (New York: Harper Collins, 1993), p. 244.

¹⁴⁷Polt, 'Metaphysical liberalism in Heidegger's *Beitrage zur Philosophie*', p. 663.

¹⁴⁸Heidegger, 'Modern science, metaphysics, and mathematics', p. 244.

¹⁴⁹Polt, 'Metaphysical liberalism in Heidegger's *Beitrage zur Philosophie*'.

¹⁵⁰See Matthew Paterson and Johannes Stripple, 'My space: Governing individuals' carbon emissions', *Environment and Planning D: Society and Space*, 28:2 (2010), pp. 341–62.

¹⁵¹Heidegger, *The Question Concerning Technology and Other Essays*.

hence, more and more ‘real’ as a shared social fact. *Why* the ‘We’ is so prominent in these discourses is typically overlooked. The point of this article is that the planetary ‘We’ should be regarded with great caution. It is not an innocuous linguistic addition to our lexicon, but it represents an important and subtle shift in the manner in which human beings access and engage the Earth, their world, each other, and themselves. It hints at a fundamental transition of the human *subiectum* – the fundamental certainty of Being – from the Cartesian ‘I’ to the planetary collective of ‘We’. In the Anthropocene, I am uncertain, but We are not.

If the certainty of the ‘I’ was once derived from the Cartesian ‘I think, therefore I am’, then certainty in the Anthropocene epoch might become: ‘We are, *because of what We have done.*’ Whether this will become the foundation of ‘the danger’ or ‘the saving power’ is yet to be decided, and it hopefully remains a question that is not too late for each of us to answer.

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