'Can we have our nature/culture dichotomy back, please?'

Nigel Clark, Rupert Stasch and Jon Bialecki

INTRODUCTION (Jon Bialecki)

The Scottish Enlightenment is justly famous for upending fields as diverse as medicine, economics, and philosophy—not to mention anthropology. But perhaps the greatest legacy of this intellectual awakening is the effect that one of its least known luminaries had on the seemingly inconsequential field of geology. In 1785, to an astounded gathering of the Royal Society of Edinburgh, James Hutton gave two lectures that were subsequently published as *A Theory of the Earth* (Hutton 1788). Hutton's radical thesis was that the Earth's form had not remained unchanged since the seven days of Creation, and that the planet's topography was not the result of a singular catastrophic universal deluge or primary ocean. Rather, Hutton argued that the shape of the earth was the result of processes of constant but infinitesimally slow transformation. Hutton's claim was that erosion and volcanic uplift constantly worked together to remake the surface of the earth anew. This process, though, was so slow that it could only be inferred, occurring at the scale of not hundreds or thousands, but rather millions of years. Hutton's conclusion was encapsulated in the famous final sentence of the paper where he first presented this argument: 'The result of our present enquiry is that we find no vestige of a beginning, no prospect of an end'.

Hutton's claim has accorded him the honour of being the founder of modern geology, as it states on the gravesite memorial to James Hutton that can be found in Greyfriars

Kirkyard, located in Old Town Edinburgh, just minutes away from the original site of the

University of Edinburgh. Hutton's theory accomplished more than that, however. It was also pivotal in laying the groundwork for the development of the theory of evolution. When Darwin toured the world in the H.M.S. Beagle as the ship's naturalist, he brought with him all the then-extant volumes of Charles Lyell's *Principles of Geology* (1830); Lyell's book was a full-throated defense of Hutton's then still controversial geological theory. It was Lyell's book, credited in Darwin's *On the Origins of Species*, that opened Darwin's eyes to the vistas of time that he felt was necessary for natural selection to function as a means of speciation.

Hutton's work is therefore at once humanist and corrosive of any easy humanism. On the one hand it champions human rationality as it presents our species as having a unique capacity, discipline, and command of natural forces to deduce formative processes otherwise obscured through the passage of time ('This subject is important to the human race, to the possessor of this world, to the intelligent being Man, who foresees events to come, and who, in contemplating his future interest, is led to enquire concerning causes, in order that he may judge of events in which otherwise he could not know' (Hutton 1788:214)). At the same time, the suggestion of ancient pre-human eras challenges the concept of the human as a privileged species.. Not only does these vistas of time open the way for the 'cosmic outsideness' that terrified the American author H.P. Lovecraft, and haunts much of contemporary posthumanism (see Thacker 2011: 19-20). The stretches of long pre-human eons implicit in Hutton's theory also eats away at the Kantian vision of human subjectivity that has been so influential to much of Euro-American modernity. Immemorial time taxes the epistemological conceit that (putting aesthetics aside) though we are walled off from the way objects are in and of themselves, we can know them as they exist for 'for us.' Here, we have long-lost forces that are indifferent to the much latter development of humanity. There is no 'for us' to be found. (Meillassoux 2009).

When viewed from a strictly anthropological perspective, though, what is most striking is the way that Hutton's work at once reinforces one of the most foundational, and now problematic, oppositions in anthropology, and yet at the same time undoes that binary. Hutton's positing of an earth with unimaginably ancient beginnings helps validate a nature/culture dichotomy; if human history is just a slim swath of unimaginably vaster and more numerous ages, then it becomes possible to imagine a nature without a culture, a move which in turns suggest culture as something not identical to, or automatically following from, the natural order. At the same time, as the anthropologist Richard Irvine (2014a, 2014b) has recently suggested, Hutton's hypothesis in some ways is necessary for the Anthropocene to be conceivable in the first place. The human features and effects that constitutes the Anthropocene can only be truly visible when juxtaposed against a background of extended ages first charted in the West by Hutton. Thus, Hutton's work catalyses our conceiving of that most profound of nature-culture hybrids: an age forged, and perhaps destroyed, by Homo Sapiens Sapiens.

There is one more point that follows, though, when we juxtapose James Hutton and the Anthropocene. The apocalyptic anxieties that almost always arrive with the idea of the Anthropocene suggests that Hutton's claim that there is 'no beginning,' may hold up much better than his presumption of there being 'no prospect for an end'. Indeed, Hutton's Uniformitarianism, set up in opposition to Biblically dependent diluvian accounts of geological formation, may have blinded us to Catastrophism-leaning arguments regarding terrestrial or cosmological forces that could interrupt the Anthropocene - or which the Anthropocene may unknowingly unleash.

Thus, the quality and magnitude of the forces that we are playing with during the Anthropocene as a world-historical fact may exceed the capacity of the Anthropocene as a theoretical analytic to understand. In short, perhaps despite the critique that has been

launched against it, the nature/culture opposition may still have much to offer. It was these sets of concerns that contextualized the original plenary session at the ASA Decennial Conference in 2014 (convened by myself, Magnus Course, and Jamie Cross), and that was the precursor of this rendition of that session by Nigel Clark and Rupert Stasch. Nigel Clark, whose institutional home is at the Environment Centre of Lancaster University, is a sociologist by training but a geographer by profession, and has written not only on the vulnerabilities of human social and political forms to natural forces, but also on the forms of collective human responses that those overwhelming terrestrial and cosmological forces may trigger. Rupert Stasch is a Cambridge socio-cultural anthropologist. He works on the Korowai of West Papua; in particular, on the role that the Korowai play in a media- and tourism-enflamed Western imaginary that is searching for a stabilising 'primitive' other: a living specimen of the long-running Occidental fantasy of humanity in some originary natural state. Given the way that their collective works not only straddle both sides of the nature/culture divide but also play with the generative differential forces expressed through and created by that divide, we (Course, Cross and myself) turned to them at the ASA conference as we do here with a simple, heartfelt anthropological request: Either because of, or despite of, all that is on the table when we conjure with the concept of the anthropocene, should we not also make use of the conceptual apparatus central not just to a prior anthropology, but to an Enlightenment mode of Western thought? In short, 'Can we have our nature/culture dichotomy back, please?'

PART ONE (Nigel Clark)

Geologies of Enlightenment

What planet are you on?

Long ago, in another hemisphere, perhaps even in a bygone geological epoch, I discovered the later writings of cultural theorist Raymond Williams. What drew me to Williams was his willingness, rare in the late 1970s, to fuse ecological thinking with radical social politics. "In this actual world there is ... not much point in counterposing or restating the great abstractions of Man and Nature', he wrote. "We have mixed our labour with the earth, our forces with its forces too deeply to be able to draw back and separate either out' (1980: 83).

These words have since been copiously cited by critical social thinkers to support claims that the great modern binary - nature/culture and its variants - needed to be thoroughly undone. There are, at very least, several related factors motivating this task. One, perhaps Williams' prime aim, is to the avert the tendency, familiar in the western tradition, of conservative political forces evoking the referential force of nature in order to delegitimate undesired social change. Another is to prompt us to come to terms with the historical impact of social processes on the environment, especially valuable for problematising the idea of wilderness and all its occlusions of the agency of non-western peoples. A third is to undercut human exceptionalism and encourage us to take our place in the cosmos amidst a world of other beings and entities.

These are all imperatives I happily affirm. But has the project of effacing the nature/culture dichotomy become too routine, too strident, too totalising? As social theorist Vicki Kirby cogently asks: 'Why has the critique of binaries been turned into a moral witch-hunt, as if oppositional logic is an error to be corrected?' (1999: 27-8). Without dismissing the practice of deconstructing dualistic thinking, Kirby argues that too hastily dismantled dichotomies have a habit of circling back and reinsinuating themselves in the very critical practices doing the demolition work. Moreover, she insists, making cuts or distinctions is not simply an error – a misguided partitioning of an otherwise continuous world – it is a

productive process. Or rather, it *is* productivity, the very means by which processes of differentiation take place and are sustained (Kirby 1999: 28).

With this in mind, I want to take the current 'geologic predicament' of our species as an incitement to reconsider the nature/culture dualism - and question some of the prevailing modes of overcoming it. And then, in the context of a shifting and divisive Earth, I will return to Kirby's provocations.

First, back to Williams. Just a few pages on from his influential encounter with the human/nature antinomy comes another prompt, much less cited. Williams calls upon his audience to "to re-emphasize, as a fundamental materialism, the inherent physical conditions – a specific universe, a specific planet, a specific evolution, specific physical lives – from which all labour and all consciousness must take their origins" (1980: 108). The implications of this passage seem rather different from the first, and in the context of current planetary conditions, even more prescient.

It is noteworthy that Williams was writing not only in the midst of unfolding environmental problems, but just behind a wave of momentous changes in the Earth sciences. As historian John Brooke (2014: 25-28) reminds us, the years 1966-73 alone saw the emergence of four major new perspectives on the shaping of our planet. First came the confirmation of the theory of plate tectonics – the basis of a truly integrated view of the Earth's crustal dynamics. Soon after came the thesis that evolution is punctuated by catastrophic bursts linked to major geophysical events, followed by a new appreciation of the role of extra-terrestrial impacts in shaping Earth history, and finally, the beginnings of the idea the major sub-components of the Earth work in collusion - as expressed in the Gaia hypothesis and Earth systems theory (see Clark and Gunaratnam 2016).

Though quite a few dualisms or divisions in received ways of thinking about our planet began to take a tumble in this list, it is worth considering just how little these

developments - and the successive transformations in the Earth and life sciences that they unleashed – have impacted on the social sciences and humanities. Until very recently Williams' summoning of fellow critical thinkers to attend to 'a specific planet' has gone largely answered. And that's unfortunate, given that these literally 'earth-shattering' shifts in the scientific understanding of planetary dynamics do the groundwork for the major geophysical challenges of recent years; the abrupt climate change thesis and the more generalised idea of human-induced Earth system change - shorthanded in the notion of the Anthropocene.

The Anthropocene idea may foreground human agency, but it depends on an understanding of an Earth bursting with instabilities of its own. Bringing together an older stratigraphic geology with a newer Earth system science, the thesis hinges on a novel understanding of the way that the planet's relatively slow moving lithic crust articulates with the more mobile spheres of water, air, ice and life. It is the interaction of these subsystems that give rise to an Earth system with multiple possible operating states - with the disturbing possibility of being able to flip rapidly from one regime to another. And with this folding together of the temporalities and dynamics of the geophysical Earth and time-spaces of social life, the question of what planet we are on erupts into social thought.

In interesting ways, the Anthropocene reveals the currency of Williams' call both to relinquish human/nature dichotomies and to acknowledge the deep planetary prehistory of the human. But so too does it throw into relief the tension between these two imperatives. Over the intervening years, it is the demand to discompose the society/nature opposition that has prevailed in critical social thought - most notably in a range of 'relational materialisms' that attribute agency to all manner of things and insist on the co-enactment of the social and the natural (Clark, 2011: 30-4). Such ontological privileging of mutual or co-constitutive modes of relating often appears to be taken as the very condition of possibility of political change in

the complex, messy realities we inhabit. In other words, it is potentially within our grasp to collectively recompose the worlds we share with other beings or entities precisely because we are always already in relations with them.

The idea of a specific universe, planet and evolution as the origin of our social being has very different implications - for it draws us into domains that are before, beneath or beyond the human presence. In these regions or worlds there may well be all manner of entanglements and co-productions— but they do not involve 'us'. To put it crudely, there is 'nature' but not what we would recognise as 'culture' or 'society'.

The tension between nature-society co-enactment and fully inhuman worlds or forces, I want to suggest, is not only to be found Williams' work or in recent critical engagements with the Anthropocene. It has roots reaching deep into the European Enlightenment, and especially into the emergent geological imaginaries of the latter 18th century. For here, in early encounters with the deep temporal rumbling of the Earth, are profound premonitions of the geological anxieties of own era.

Enlightenment geotrauma

When Williams or any of our contemporaries speak of human-nature co-production, they are channelling a lengthy tradition of critical concern with the social transformation of the natural world and the self- or societal transformation seen to be its corollary. As Marx and Engels observed in the *German Ideology*: 'the nature that preceded human history ... is nature which today no longer exists anywhere (except perhaps on a few Australian coral-islands of recent origin)' (2004 [1845]: 63). If Marx carries forward the Enlightenment vision of the human capacity to improve upon the natural world, so too does he inherit the 18th century concern with the planet's inhuman origins. At high school, the young Marx had been tutored by geologist Johann Steininger - a follower of the geoscience pioneer Abraham Gottlob Werner

(Laudan, 1987: 94-5). It is from Werner that we get the basic stratigraphic notion of successive "rock formations' distinguished by the time and mode by which they were formed – the most likely inspiration for Marx's own notion of social formations.

But when Marx later observes that 'the processes by which the earth made the transition from a liquid sea of fire and vapour to its present form now lie beyond its life as finished earth' ((1973 [1857]: 460), he seems a little hasty to consign the formative action to the past. This seems to reflect the influence of Hegel. Like many contemporary *philosophes* Hegel was a keen follower of developments in the study of the Earth. Which meant, like Kant before him, that he had to grapple with the experience of deep time, the dramatic opening up of Earth history from a biblically-sanctioned few millennia to a yawning, hundreds of millions of years (see Irvine, 2014). As palaeontologist Stephen Jay Gould aptly observes, when Freud recounted the successive 'humiliating' decentrings of a self-important humanity, he neglected perhaps the greatest: the 18th century discovery of a protracted Earth history largely devoid of human presence (1987: 1-3). The deepest shock, however, may not have been the expanding time span nor even the radical absence of humans, but the perturbing manner in which the Earth had come to attain its present state.

Support for an extended geo-history came from increasing evidence that layers of the Earth's crust contained fossilised remnants of life forms no longer present in the world. The sense that that transitions between geological epochs were marked by events catastrophic enough to expunge entire populations of living creatures found expression in the idea of 'revolutions of the Earth' - a notion Kant and Hegel shared with many late 18th and early 19th century geological thinkers. Kant seems to be one of the first to glimpse the shocking implications of such upheavals. If the Earth has annihilated its own living creations many times before, what then is the prospect for the future, the outlook for humankind? For as

Kant agonized, if the universe lost its one and only thinking being, then '...the whole creation would be a mere waste, in vain, and without final purpose' (2005 [1790]: 219).

Kant's response was to construct an entire edifice of thought in which humankind and cosmos were so conceptually bound together that it was next to impossible to imagine one without the other: a system in which gazing at a convulsing nature served as a stimulus to strengthen man's steely will and self-responsibility. Hegel too, with a later and even darker comprehension of the Earth's susceptibility to 'tremendous revolutions' went a step further. So world-transforming was humankind's ascent, he decided, that by definition the Earth's formative tumult must be confined to a long-superseded past. As Hegel announced in the 1817 *Jena Encylopedia*, revolutions of the Earth should must now be considered ancient history, and thus of mere academic interest. '[T]his temporal succession of the strata, does not explain anything at all', Hegel insisted:

'One can have interesting thoughts about the long intervals between such revolutions, about the profounder revolutions caused by alterations of the earth's axis, and also those caused by the sea. They are, however, hypotheses in the historical field, and this point of view of a mere succession in time has no philosophical significance whatever' (1970[1817]: 283).

Henceforth it is humankind that makes history, not the Earth. Marx seems to have bought into this. And so, it seems, has nearly all subsequent social thought. Substitute *no social* or *no political* significance for *no philosophical significance* and this seems pretty much where the social sciences and humanities have been for the intervening two centuries.

Much has been said about both the achievements and the pathologies of the European Enlightenment. But perhaps not enough has been made of the era's deep-seated geological anxieties, and the enduring ramifications of strategies to keep 'geotrauma' at bay. In their efforts to improve, to accumulate and to power their progressive advance, modernizing Europeans burrowed deep into the Earth's crust. The deeper they dug, the more evidence they unearthed of the planet's proclivity for life-annihilating upheaval – with its accompanying low, rumbling intimation of a future Earth bereft of human presence (Clark, 2016).

Finding ways to defuse the planet's cataclysmic tendencies may well have been one of the master strokes of modern European thought. Effectively what Kant and Hegel each managed to do was to find a way to neutralize the fearsome potentiality of a dynamic Earth, to contain and disarm the threat that inhuman nature posed to the ascendance of our species. As philosopher Quentin Meillassoux (2008) has recently argued, the much mulled-over culture/nature duality may well have functioned as a smokescreen - an alibi for avoiding the bigger, scarier confrontation with the autonomy and indifference of extra-human nature. What Kant succeeded in doing, Meillassoux insists, was not sundering society from nature, not partitioning the human from the nonhuman, but binding them into a 'correlation'. And this is our inheritance, he argues, for western social and philosophical thought has continued to disavow the idea of a natural world that is in and for itself ever since Kant.

If we run with Meillassoux's framing of correlationism – and my geological excavations suggest we should – then questions are raised about commitment to the coenactment of the natural and the social as the best forward, about prevailing assumptions that the messy reality of nature-culture entanglement is where our full attention ought to be focused. Then again, isn't co-constitution of humankind and the Earth - our labour and its forces inextricably mixed – precisely what the Anthropocene thesis is all about? And what

might it mean for our thinking about 'nature' and 'culture' if we ceased to imagine that the fate of the planet and the cosmos was bundled up with our own?

The cosmos after nature/culture

Treated cautiously, the conceptual framework of society-nature co-constitution seems to me to be useful for approaching certain kinds of issue: sociotechnical risk, ecological problems, human-animal relations, to name a few. But geophysical events – with their largely inhuman forces and timeframes – grate against assumptions of mutuality and co-presence. Which may help explain why, until very recently, most research in a relational materialist key has been oriented towards technological and biological processes.

If the Anthropocene thesis resuscitates the 18th century thematic of life threatening 'revolutions of the Earth', its novel positing of a human trigger for geophysical threshold events seems to invite a relational (we might say correlational) reading. But it is important to recall that just as human-induced climate change makes little sense without considering the broad sweep of past planetary climatic regimes, so too does an epoch counter-signed by *Anthropos* draw its significance from the context of a great succession of decisively inhuman geological periods. Meanwhile, beyond the anthropic flourish, the sun continues to power the planetary surface and the Earth's inner heat incessantly drives convection currents in the viscous rock of the mantle and the movement of tectonic plates.

So, we might say that the Anthropocene predicament simultaneously intensifies both sides of Williams' equation: it foregrounds the zone of social-natural interplay while reminding us that this slender province exists only by consent of the vast, pressing inhuman forces all around it (Clark and Gunaratnam 2016). And in this regard, our late 18th- early 19th century predecessors had every justification for constructing thought systems to salve our geotrauma and boost our confidence. It is just that averting our gaze from potential

paroxysms of the Earth and seeking to construct our own impregnable worlds turns out to have greatly exacerbated our vulnerability - as repressive strategies are wont to do.

But where else might our deconstructive urges lead us if we recognise that effacing nature/society antinomies is not the first or last word – and if we face the fact that this is not a cosmos organized for our comfort or our continuity? Here I want to return to Vicki Kirby's work, and in particular her reflection on whether there is '...another way to think the order of the nature/culture problematic that doesn't rush to answer it by repeating the very terms that presume it' (1999: 24). What Kirby prompts us to ask is the extent to which evoking a nonhuman nature that precedes or exceeds the complications of culture is enough to dismantle the society/nature binary – or to avoid erecting it in the first place. For even if we attribute the most momentous powers and agencies to the inhuman, have we necessarily freed ourselves from imagining that culture – if and when it arrives – brings to the world something unique and unprecedented, something unconscionable in 'raw' nature?

Beyond simply repeating that nature does things even in our absence, Kirby inquires what exactly it is about culture or language or subjectivity that we assume belongs to us alone - and what it is that stops us from perceiving these qualities in the world at large. Which brings her to consider whether 'what we conventionally call Nature is as actively literate, numerate, and inventive as anything we might include within Culture' (2011: 66). Moreover, Kirby queries, what if nature not only communicates with itself, but questions itself? And what if our own probings and interrogations of our planet were to be viewed as somehow continuous with 'the Earth's own scientific investigations of itself' (2011: 34). Finally, and coming back to our initial provocation concerning binaries, Kirby then raises the possibility that it is not only ourselves who make distinctions, draw lines, impose divisions, but that biological phenomena (or geological phenomena, it might be added) make their own cuts, their own 'operational differentiations' (2011: 66).

And so, we might wonder, if nature breaches its own integrity – as in the case of an Earth that breaks with its own previous operating state – does it also seek to span these divides, to reach across its own rifts? For as poet and writer Anne Michaels muses in the novel *Fugitive Pieces*:

It is no metaphor to witness the astonishing fidelity of minerals magnetized, after hundreds of millions of years, pointing to the magnetic pole, minerals that have never forgotten magma whose cooling off has left then forever desirous Perhaps the electron is neither particle nor wave but something else instead, much less simple – a dissonance – like grief, whose pain is love' (1997: 53, 211).

We have wandered some way from the theme of mixing of our labour with the forces of the Earth - but once the culture/nature couplet is prised open, there is no telling where it might lead. At very least, we have begun to part company with Kant's insistence that without us 'the whole creation would be a mere waste...without final purpose'. If the idea that the Earth and cosmos might spiral on without us – sensate, desirous, self-questioning – is not exactly a consolation, it may well offer timely provocations as we face the revolutions of the Earth now gathering on the horizon.

PART TWO (Rupert Stasch)

Which Nature/Culture Distinction for Anthropology in Anthropocene Time?

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In the historical context of the Anthropocene as both a material crisis and a condition of consciousness, is the nature/culture distinction obsolete, or helpful? Addressing this question requires recognizing that there are many different understandings available of 'nature,' of 'culture,' and of the idea of a 'distinction' between them. The differences between these understandings ought to be clarified as part of any argument affirming or denying a nature/culture distinction. In what follows, I will advocate the heuristic anthropological value of just one limited version of the nature/culture distinction, before then turning to the question of the Anthropocene and how it is illuminated by this specific distinction.

Critiques of Nature and Culture

Since at least the mid-1970s, there has been a trend in anthropology and allied fields of rejecting the nature/culture distinction. One set of important contributions has opened the question of cultural variability in whether 'nature' is even a widely recognized category in world societies. Wagner (1981[1975]), Strathern (1980), Descola (2013), and Viveiros de Castro (1998) are among those who have explored this issue. With deep conceptual insight as well as extensive ethnographic support, they have concluded that the Enlightenment's nature/culture distinction is peculiar, and not a sound basis for comparative anthropological understanding. In my own broader research I see myself as a student and fellow-traveller of these authors' ideas (e.g. Stasch 2009), and a student and partisan of the provincialization of the self-styled universalisms of Enlightenment 'Man' that these anthropologists' work advances (compare Tsing 2016). I view the specific distinction between nature and culture that I propose to rehabilitate here, and the way I propose to use it, as an homage to these authors' contributions, consistent with what they have done, and an attempt at further clarification of issues they raise.

Latour (1993) carries these anthropologists' train of reasoning and forms of evidence back to the Enlightenment formation itself, to argue that while naturalism is the ideology of this formation, it is not even a description of its actual character. Our worlds do not consist of nature and culture but of hybrid nature/cultures. And the nonhuman is as laden with forms of agency as the human. He takes ecological crises of the Anthropocene as the very model of a network or collective, the understanding of which is not helped by the concept of nature (Latour 2009).

Additionally, a large variety of anthropologists have sought to privilege materiality over idea, sign, and category as a site of the cultural (e.g. Gell 1998), or to develop understandings of signification and representation that have an internal relation to materiality rather than being exogenous to materiality (e.g. Keane 2003; Manning 2012; Hull 2012; Ochs 2012). Another specific movement has been interest in 'affect,' conceptualized as a domain of monistic unity between human experience and a wider material cosmos, following Spinoza by way of Deleuze, Guattari, and Massumi.

In the world or in anthropological research about it, we have also seen the growth in prominence of a variety of phenomena that trouble a nature/culture division, such as technologically-assisted reproduction; study of biopolitics, or the making of social orders centrally through the regulation of biology and population; study of infrastructure; projects of non-anthropocentric or post-humanistic study of human-animal and human-machine relations; a proportional shift from fieldsites where land features are not overwhelmingly anthropogenic in all respects, to fieldsites where they are; study of virtualized or mediatized nature, or of locations where the framing of earth features *as* spectacular nature is plainly entangled with human histories; the increasing ambition of kinship studies to unify conception, pregnancy, birth, bodilness, and feeling with issues of kinship as categorial and moral order; and the deepened quality of ethnographic knowledge of many Amerindian

people's understandings of their porous social and subjective interchanges with plants, animals, landforms, and divinities.

What Kind of Distinction Would We Want?

Any nature/culture distinction an anthropologist today might want to utilize would need to take on lessons of this work. And so behind the question 'Can we have our nature/culture distinction back?' is another one: 'Which nature/culture distinction would we wish to reclaim, in light of what we have learned?'

'Nature' means many different things. The element that critics of the nature/culture distinction most commonly reject as ethnocentric and ideological, rather than a helpful heuristic category in comparative work, is nature as an entity or a place; nature as a system, a unity, a field of laws, and a stable hierarchical order; and nature as a resource base externally given to human dominion (compare Valeri 1990:264-269). Yet there is a problem of possible slippage between rejecting the 'straw man' of these most Enlightenment-specific layers of what 'nature' can mean, and rejecting other layers of what 'nature' can mean that might better be kept in consideration.

It is longstanding anthropological practice to refine our comparative concepts to mean what we need them to mean, and thereby to work toward a helpful metalanguage for describing and translating how worlds are organized. One of Latour's own methodological concepts is 'infra-language,' by which he means analytic language of minimal semantic specificity (1995:30). The ultimate purpose of such language, on his account, is to facilitate making the different frames of reference that are being translated between show forth in their specificity. I will borrow his concept of 'infra-language' for my own purposes below.

In veering away from nature as unitary system and as entity that is localized in specific places and objects, one could also move away from taking the nature/culture

distinction to entail that there are natural things and there are cultural things. Rather, the prototype case could be that there are natural aspects and cultural aspects in the same things, and that in many situations any presence of the natural is also a presence of the cultural. The distinction could describe a border-zone or a threshold of inter-implication more than a separating line between two kingdoms. And yet the distinction could still be worth drawing.

As is also common in anthropological work, we can distinguish the categories informing thought of people whose lives we are seeking to understand, from the categories specific anthropologists wish to inform their own thought. There could be a nature/culture distinction in the thought of people we are in dialogue with (or a range of nature/culture distinctions), that is not exactly the same as a nature/culture distinction in a researcher's thought. Research subjects' judgments of what is natural or cultural should not always be expected to closely track researchers' own. The relation between these levels is always complex. This is another sense in which 'nature' means many things and there are many nature/culture distinctions that could be differently rejected or accepted. Nor should we expect research subjects' concepts to be expressed primarily in the mode of explicit single words or propositions. Those concepts' more consequential life may take oblique forms and require very active but epistemologically problematic work of interpretive inference for an anthropological observer to make them out. Further, specific anthropologists' own thought may be opaque to themselves: just because a researcher affirms or rejects a nature/culture distinction in explicit propositional discourse does not mean this overt discourse closely matches the researcher's own actual practices of thinking and analysis.

In my remaining comments, I will consider directly only the issue of nature/culture distinctions as they might inform the thought of people whose lives we are seeking to understand.

Here are at least a few distinctions that the language of 'nature versus culture' sometimes shifts across in different contexts of its use:

biology; culture; VS. genes, hard-wiring; nurture, socialization; animal; human; earth, physics; human; things; humans; objects; subjects; mind; matter; raw material of matter, energy, life; human appropriation and reorganization of matter, energy, life; extrahuman biophysical human society; environment; fact; value; primary qualities, things as they are secondary qualities, things as experienced; symbolic; real; transhistorically universal; historically particular; contingent; necessary; heteronomy, determination; autonomy, freedom; processes and conditions understood processes and conditions subjects are to unfold independently of subjects' understood to intentionally control. intentional, mind-mediated control.

It is the last of these distinctions that I would propose retaining, as candidate meanings of 'nature' and 'culture' for a comparative infra-language. This last distinction perhaps repeats the preceding one of 'determination' versus 'freedom,' and bears partial ties to many of the other distinctions. But it can be separated from presuppositions of 'nature' as environment, as a system of laws, as universal, as singular, or as unitary.

One could argue that determination versus freedom is specific to European Enlightenment thought, and not relevant to comparative knowledge. Or one could argue the same about an opposition between human intentional mind and what is outside the mediation of human intention. But there are many areas of ethnography and language where there is evidence of people being oriented by *some* kind of problematic of what can be controlled via the mediation of mental intention, and what is given, constraining, or presupposed from sources independent of human mental intention. Enlightenment ideology might promote peculiar understandings of 'freedom' that are ill-suited to understanding people's lives in all times and places. But perhaps a relatively open or semantically reduced understanding of 'freedom' of a different order is relevant beyond Enlightenment-shaped worlds?

Cross-societal phenomena of mourning are one of many possible illustrations of this. Death is organized variably in different social settings, and responses or non-responses to it are also diverse. But in many contexts, death events are a major social disruption and emotional trauma, and there are elaborate processes by which people adjust to those events. This suggests in those contexts a basic problematic of humans having something done to them that they do not intend, control, or fully comprehend, and they are reckoning with the actuality of what they did not control and intend. Phenomenon of killing, of political use and regulation of death, and of biomedical creation or prolongation of life complicate these dialectics of human autonomy and heteronomy around the life/death threshold, but do not likely involve the complete elimination of such a dialectics.

This proposal posits that all people are likely to have a reflexive understanding of human action as lodged in a dialectical inter-space of the given, the enabling, the constraining on the one hand, and the intentionally performed or mediated-by-consciousness on the other. Yet we can also expect the distinction between intentional control and what unfolds independently of human intention to map onto different areas of experience across societies or contexts. People change the location of this threshold or have multiple thresholds operating at once. And this threshold is likely to be present in most areas of life not in the form of there being natural things and cultural things, but in the form of there being natural or naturalized levels to all objects, activities, and states of being, and cultural or culturalized aspects to them.

I am thus suggesting that nature/culture could be a comparative infra-language for talking about people's own cultural sensibilities about agency and its conditions, especially in relation to biophysical levels of being. The nature/culture distinction as understood here would be a heuristic path toward perceiving and thinking about people's reflexive understandings about intentional control versus that which is other to such control. An idea of tension between what humans control and what are uncontrolled or less controlled conditions of their actions is a potentially helpful starting point for comparative work on variation in how that tension is constituted in different societies or institutional settings, and variation in the location of people's understood thresholds between natural and cultural (in this specific sense).

My suggestion implies that the category 'subject' or 'human' itself is a needed infralanguage, against the current of contemporary academic post-humanism. It is likely that virtually all humans have concepts of 'human,' and that these concepts partly involve a close (but non-exclusive) relation of prototypy between 'human' and 'intentionality' or 'consciousness.' 'Human' could be defined and distributed in all kinds of culturally variable ways. Part of the point of this infra-language would be to open up to the extreme variability in understandings and relationalities of 'human' or 'subject' cross-societally and cross-institutionally, while also registering that categories akin to 'human' or 'subject' are *central* to most people's worlds, whether lexically named or only tacitly entailed in discourse and practice. In other words, rejecting European 'humanism' leads not to post-humanism, but to comparative inquiry into the understandings of 'human' or 'subject' and its relationalities that are historically particular to different people and social contexts, something the best critics of the nature-culture distinction have pioneered. Correlatively, 'intentionality' or 'consciousness' are likely to be defined and distributed in all kinds of ways, in different systems of thought and practice. Across this variability, I am suggesting that most people are likely to understand 'human' as being centrally lodged in an ambiguous border-zone of intentionality and conditions independent of human intention, and that studying their theories and practices of the organization of such a border-zone is a core anthropological task.

Some critics of the nature/culture distinction retain distinctions cognate to the one I am making, while eschewing 'nature' as too badly compromised a term to be useful for naming one pole of the distinction. The nature they reject again tends to be most focally the Enlightenment one of a unitary hierarchical system of laws. Perhaps the more limited, intentionality-focused distinction should be drawn using more neutral labels, even merely algebraic ones like 'A' versus 'B.' Additionally, it would be possible to accept a heuristic nature/culture distinction without expecting A or B themselves each to be unitary. Each could be further subdivided, and the A/B distinction itself could be crosscut by other distinctions that are equally important or more important. But in the midst of those needed additional directions of inquiry, retaining for a little while a language of 'nature' versus 'culture' might foster valuable recognition of continuities between the current task and an older anthropological project.

The Anthropocene and the Nature/Culture Distinction: A Crisis of 'Human'

The current emergence of humans—or rather, of those humans participating in the most energy-intensive tiers of industrial economic systems—into the status of a geophysical force might at first seem to weigh on the side of discarding the nature/culture distinction. For example, at an early moment of popular awareness of climate change some years before the term Anthropocene entered circulation, environmentalist and journalist Bill McKibben argued in *The End of Nature* (1989) that the human and the natural can no longer be distinguished, because the human has overwhelmed the natural. Crutzen, one early coiner of the term 'Anthropocene,' co-authored a more recent statement that 'The long-held barriers between nature and culture are breaking down. It's no longer us against 'Nature.' Instead, it's we who decide what nature is and what it will be.'iii

But this is 'nature' in the popular and historically recent sense of a unitary human-external system. What I will do briefly now is use the different nature/culture distinction I have proposed to try to parse cultural and historical consciousness in the Anthropocene era. I suggest that the Anthropocene is not only a crisis of ecological destruction, but correlatively a crisis and destructive reorganization of the category 'human' and its relationalities. It is a crisis of dominant understandings of human agency.

Enlightenment as Destruction and Unfreedom

The broadest pattern I wish to track is the Faustian narrative of an Enlightenment project of self-styled rationality and freedom that turns out to cause the destruction of our own lives. The project of heightened realization of culture as control turns out to lead to its opposite, an increased heteronomy in relation to forces humans do not entirely control (compare Boyer and Morton 2016). These include forces humans create or disrupt, but without controlling or

rationally understanding them. Even when humans do understand them, we are not able to act intentionally in changed ways in light of what we know about those forces.

Horkheimer and Adorno wrote in 1944 that 'Enlightenment, understood in the widest sense as the advance of thought, has always aimed at liberating human beings from fear and installing them as masters. Yet the wholly enlightened earth is radiant with triumphant calamity' (2002:1). They were referring to totalitarian regimes and the fast, deliberate technological apocalypse of death camps and industrial warfare, but their model also fits the slow apocalypse of anthropogenic climate change.

Specifically, the Anthropocene exposes the incoherence of modern societies' value commitment to economic growth, and the incoherence of their lack of social will to change that value commitment. Modern societies are centered on the embodied conviction that a good way to realize the Enlightenment value of human freedom is the increase in personal consumption that can be won through ever-accelerating burning of fossil fuels. But planetary finitude increasingly haunts this conviction about growth. It is no longer only fringe critics who have to at least *think* about the idea that growth and cheap carbon-burning leads toward collapse and unfreedom.

Additionally, the Anthropocene thematizes human mental and social self-opacity.

Unlike processes of industrial warfare and genocide, anthropogenic climate change does not involve people deliberately using Enlightenment principles to destroy freedom. Instead destruction of freedom is unfolding largely as an uncontrolled—or at least, willfully ignored or denied—effect of what actors more deliberately intend. To an understanding of culture as consciousness-mediated control, the Anthropocene is extra-shocking. It consists of unintended, freedom-destroying consequences of what are ideologized as freedom-realizing actions.

In this way, the Anthropocene undermines the Enlightenment formation's idea of humans as triumphantly realizing an accelerating proportion of free control over conditions of life. Enlightenment-heritage humans do not even control the processes of their own purported control. We think that in succeeding at economic growth or other modes of progress, we are realizing our high values of freedom, triumphing over exogenous constraint. Then we learn that we have entered our own Faustian trap of vast unfreedom.

This pattern could be described as a historical process that is repudiating the very same concept of 'nature' that Latour and others are at pains to reject, and reinstalling a different dialectics of human intentional control and uncontrolled processes of growth and destruction. Enlightenment was the myth of nature as mere objectivity and as external, controllable system. Enlightenment tried to claim that everything can be commensurated with human rationality and control, and the problem of givens and foundations can be handled by a nature that is an external objective unitary system. The belief and practice of that myth is at least slightly imploding, as culture on the extractivist model destroys the basis of its own existence, and we are presented with a more troubled internal relation between an exercise of free control and its unfree conditions.

Physical and Temporal Scale: The Thought-Defying Otherness of Geological Humanity

Another widely-remarked face of the Anthropocene's delivery of these troubling rebuttals of

Enlightenment ideologies of intentionality and freedom concerns the physical and temporal
scale of what one has to think about in order to posit the Anthropocene.

The shock of the Anthropocene category is the shock that humans could cause changes to world structure on a geological scale, and humans could themselves be a geophysical force. Thinking about geological history involves engagement with a vast scale

of time in excess of intentionality. Then the Anthropocene mixes human intentionality and its uncontrolled, impersonal consequences right into the latest temporal phases of that vast scale.

This scale-collapse of the difference between human history and planetary history is also a new challenge of otherness for thought. It is a challenge of stabilizing how to think about close relations between human intentionality and scales of uncontrolled physical process that are too big to think on a human intentional scale. And it is a challenge to stabilize how to think about human intentional action's relations to its presupposed conditions in less anthropocentric ways than the Enlightenment promoted.

Alongside those challenges of physical and temporal scale, there is the equally difficult idea of collective human suffering and mass death, in defiance of most people's habituated understandings of growth and progress as the story of their historical position. Millenarianism is not a mainstream Enlightenment historical model, but ecological millenarianism is now a mainstream spectre.

Thinking the Anthropocene and Thinking Human Social Divisions

The last perturbation I will allude to is the Anthropocene's intersections with human social divisions. Under the old nature/culture dispensation in anthropology, one brass ring was to work out how the natural operates as a figural field mediating constitution of human society. This problematic intersects with something I have barely touched on so far, namely that intentionality and consciousness are not either/or matters. Humans' self-knowing in personal subjectivity and across social networks is ambiguous and multilayered. The nature/culture field I am advocating, as a distinction between what people understand to be intentionally controlled and what they understand to unfold independently of human intentionality, is also a site through which people take on or hide away forms of self-knowledge, and a site through which they organize power-laden aspects of social life. A common anthropological intuition

is that inside what people naturalize, such as a landscape or a bodily feeling or condition, are many social and historical commitments. At stake in nature/culture distinctions could be models of intrahuman social otherness and of what a self owes to others.

In the present moment, the Anthropocene intersects with human social divisions in a variety of well-known forms. First, it raises issues of the discrepancy between who causes the ecological crises through massive fossil fuel burning, and who suffers its consequences (Chakrabarty 2009; Hornborg 2014:9; Haraway 2016). Humans are entering a relatively unitary planetary crisis, but like many other crises this one is created from deep divisions of wealth and political interest, its effects unfold differently across those divisions, and people's perceptual and political responses to it are refracted through those divisions again.

The Anthropocene also intersects with human social divisions by highlighting incapacity for collective social mobilization to do anything substantial about the crisis. Societies are divided in views or admissions about whether the crisis exists, who needs to do anything about it, and what to do.

This is where I would circle back finally to my choice to discuss a nature/culture distinction relevant to comparative understanding of research subjects' own thought: nature versus culture as a 'folk' distinction or ethnotheory, immanent to lives of people in their historical particularity.

Since the Anthropocene is an ecological crisis, one might reasonably argue that the first task is to assess the nature/culture distinction as it applies to understanding the crisis in its ecological dimensions, such as understanding humans *as* geophysical actors. We do not need a cultural analysis of the Anthropocene, centered on a model of human agency organizing the thought of actors. We need the actual nature/culture distinction that is organizing the world and human presence in it.

But the contrary hypothesis that has motivated my discussion here is that it is exactly the ideological commitments in people's models of intentional, mind-mediated control and independently given processes that, in the first place, structure their arguments over what the Anthropocene is and whether it exists. And it is those models that are structuring our ongoing actions of throwing more fuel on the fire.

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Notes

ⁱ I once wrote an essay on hunting symbolism that falls squarely within the terms of the nature/culture framework I am elaborating here (Stasch 1996).

builds his fourfold typology of different ontologies of the human versus non-human field of relations on the universality of a physicality versus interiority split. Latour (1993) advocates the recognition and analysis of nature-culture hybrids, which implies a plural constitution out of distinguishable and mutually irreducible (as well as mutually entangled, mutually produced, and mutually interdependent) aspects (compare Hornborg 2009:95). Later he juxtaposes to the 'collectivity' a 'pluriverse' that is its 'outside,' comprising 'new nonhumans' that have not been brought into it (Latour 2009). Wagner (1981[1975]) retains a distinction between what is taken as innate and what is taken as requiring effort and attention,

while drawing attention to cross-societal variation in where these dialectical poles of attention and inattention or masking are located.

iii See Paul Crutzen and Christian Schwägerl, 'Living in the Anthropocene: Toward a New Global Ethos,' 24 Jan 2011,

http://e360.yale.edu/feature/living_in_the_anthropocene_toward_a_new_global_ethos/2363/ (Accessed 7 November 2016).