

## DEFIANT EARTH:

Lina Moe in conversation with Clive Hamilton

Lina Moe spoke with writer, public policy advisor, and academic Clive Hamilton to discuss his book, *Defiant Earth: The Fate of Humans in the Anthropocene* (2017). Hamilton is the author of many books about the environmental crisis, from *Requiem for a Species: Why We Resist the Truth about Climate Change* (2010), about climate change denial, to *Earthmasters: The Dawn of the Age of Climate Engineering* (2013), which delves into the growing debate around geoengineering experiments and research. Hamilton now asks what kind of writing comes after accepting the dire forecasts of environmental change.

Recently, the Anthropocene has become a charismatic term within a range of disciplines. In The Distance Plan's discussion with Hamilton, we ask how to understand the impasse between, on the one hand, the appeal that the term Anthropocene has had for academics—as the amount of scholarship historicizing, politicizing, rejecting the term grows rapidly—and, on the other hand, the lack of coordinated global political will that has been directed toward combating climate change.

Hamilton has often worked at the intersection of social science policy and scientific investigation. *Defiant Earth* engages a burgeoning field of Anthropocene criticism that historicizes humans' geological impact on the Earth as part of the domestication of agriculture, the industrial revolution, and the development of global capitalism. Hamilton challenges the trend to historicize the Anthropocene, and those interested in the political as well as scientific implications of the acceptance of humans as a geological force will find in Hamilton's work both a forceful rebuttal of new materialism and post-humanism, and an embrace of the question of what to write in a time of growing environmental despair.

- Lina Moe This issue of *The Distance Plan* is in part about the power and futility of narratives and the urgency writers and environmental activists feel to find charismatic ways to write about climate change. You've written previous books about the environmental crisis, including *Requiem for a Species* and *Earthmasters*. In what mood did you approach writing your third book?
- Clive Hamilton What is there after *Requiem's* brutal confrontation with the truth, after helplessness and despair? I wrote *Defiant Earth* as a philosophical reflection on the state of humankind, to wrestle with the question of how it had arrived at a point where its technological power and destructive urges are so great that it can change the geological evolution of the planet as a whole.
- LM And what audience were you particularly trying to reach?
- CH I didn't set out to "reach" anyone, because to reach means to persuade them to act. I set out to try to think through what has happened and its meaning. To "think through" means in some sense to "reconcile with." Of course there is always a reader in mind but in this case the reader was anyone and no-one. I felt that there were things that just needed to be said. The act of saying has meaning in itself, a bit like writing down all of the mistakes you have ever made and then committing the piece of paper to the fires of eternity.
- If this all sounds defeatist then it is, up to a point, and that point is the one we irrevocably passed beyond when we entered the new geological epoch. Yet it does not relieve us of our duties to act, so that we can just disengage and do nothing. Of course, we are each obliged to do everything we reasonably can, especially in the political realm.
- LM You emphasize that many critical books today try to build a long lineage of human action and institutions that constitute a history of the Anthropocene. Christophe Bonneuil and Jean-Baptiste Fressoz want their audience not to be surprised at the predicament of environmental disaster that we've found ourselves in, but see it rather as a culmination of a long history of pollution, ecosystem disturbance, and landscape change that began with the industrial revolution and the mass extraction and use of fossil fuels in the eighteenth century. Jason Moore also has written a book about the Anthropocene that begins by analyzing Thoreau. Instead, you argue that the history of the Anthropocene is not a long one, writing that these books elide "the recent rupture in geochronology with early industrial ecological damage, which effectively denies that anything new has happened." Can you explain what damage you think this strain of "the historic Anthropocene" criticism is doing?

CH

Those who attempt to locate the advent of the Anthropocene—which as a matter of fact did not begin until after the Second World War—appear to be radical in their intent. “We have always known this. If only we had been listened to. The Anthropocene is the inevitable product of capitalism and therefore must have begun with it.” In truth, what they are doing is deflating something monumental, normalizing something monstrous.

The post-humanists and new materialists can tell their stories of the arrival of the Anthropocene only by repudiating science. The Anthropocene is geology, or rather Earth System science. It becomes an epoch of social history only after the science has been accepted. The authority on this must be the Anthropocene Working Group of the International Commission on Stratigraphy. It has concluded, after much scientific work, that the Anthropocene began in the decade or so after 1945.

Unfortunately, the left’s undermining of the authority of science in the 1970s and 1980s has led some intellectuals to believe they can make their own determination about the initiation of a geological epoch, that their social science can over-rule physical science, that sociologists and historians know more about it than stratigraphers and Earth System scientists. At this time of enormous political struggle over the future of the world, it’s regrettable, to say the least, that much of the left’s intellectual fire-power should marginalize itself in this way.

At a time in history when science is under such sustained attack from climate science deniers and right-wing ideologues, sensible people have an obligation to defend climate science and the authority of climate scientists. Relativising and historicizing science, or attacking it as “masculine”, “western” and so on, only plays into the hands of the deniers (apart from being untrue). In these circumstances, to continue playing those post-modern games is decadent.

Without question, the greatest difficulty people have in understanding the Anthropocene is the way they confuse, or conflate, “the environment” or “ecological systems” with the Earth System. The Earth System is an entirely new concept, developed in the 1980s and 1990s. If you don’t experience that little “Aha” moment, when you “get” the idea of the Earth System and how it is not the same as our early concepts of nature, then you cannot understand the Anthropocene. The Anthropocene is defined as a disruption of the Earth System.

LM

I’m particularly interested in your criticism of new materialism because its calls to acknowledge non-human agency and importance have widespread appeal in the humanities. In drawing comparisons to innovations in feminist or queer studies that urged scholars to move beyond dualities of sex or gender, scholars like Jason Moore set up a parallel between the burgeoning field of environmental humanities and past waves of criticism. What from the insights of postcolonial or queer studies do you think can be usefully imported to illuminate the current environmental crisis?

- CH                    There is nothing in the new materialism that can tell us anything at all about the starting date or the physical nature of the Anthropocene. The question of the factors that brought about the ecological disruption are of course in the domain of social science, where the new materialists' arguments and concepts belong.
- But there too I think they make a serious epistemological error. Feminist, post-colonial and queer studies have done an invaluable and necessary service in exposing and challenging binaries between classes of human beings and the way those binaries are structured into social institutions and our thinking. But animals are not humans; trees are not humans; ecosystems are not humans. Humans are unique and the attempt to write us into the natural world as "just another species" is perverse and, yes it must be said, unscientific.
- Jason Moore's analysis is especially perverse as he attempts to construct a kind of Frankenstein worldview made up of body parts collected from Marxism, post-colonialism, feminism and environmental science. This is possible only if you make no epistemological distinctions between anything. Marx would look at this monster and say "I am not a Marxist".
- LM                    Your title, "Defiant Earth" enlivens, even anthropomorphizes, the Earth as a whole. How does the "Defiant Earth" compare with Gaia? How much of Lovelock's characterization of Gaia do you accept?
- CH                    This is quite hard, although I make a few comments in the book. It's hard because first you have to decide what Lovelock's Gaia is. Despite appearances, the closer you peer at Gaia the more confusing it becomes. Lovelock himself said "Gaia" is only a metaphor, one he sometimes wished he had not used. But the thing the metaphor is getting at is opaque. So I stay away from the term.
- LM                    Climate change is perhaps best measured in volatility, risk, and uncertainty: a greater chance of storms, of unpredictable weather, and a less hospitable Earth. And yet, you urgently want humans to recognize (and own up to) their power as an Earth-changing species. How do you see this unstable balance between growing human power and growing Earth instability developing in the near future?
- CH                    Because of the volatility and uncertainty—we have entered a completely new kind of planetary condition—it's hard to say with any certainty where things will go, even in the near future. Humans are in for a rough ride, without an end.
- LM                    The theme of this *Distance Plan* is "Charismatic Facts." We are imagining environmental facts and stories that have charisma: they travel from scientific journal to popular

discourse; they have staying power such that they are spoken about urgently rather than passed over as something too difficult to understand or too abstruse for the layman. What aspects of the current formulations of the Anthropocene do you think—for good or ill—are the most charismatic?

CH

I like the idea of charismatic facts. Obviously, “the Anthropocene” has enormous charisma for many intellectuals, including me, judging by the explosion of articles and books over the last five or six years. It’s intellectually tremendous. But it has not made its way into popular consciousness. I don’t think it will because most people don’t have the conceptual framework to place it in and, perhaps more so, don’t know what to do with it. I think it will enter popular consciousness only when school children begin to be taught about it in science lessons.