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The Climate of History: Four Theses

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The current planetary crisis of climate change or global warming elicits a variety of responses in individuals, groups, and governments, ranging from denial, disconnect, and indifference to a spirit of engagement and activism of varying kinds and degrees. These responses saturate our sense of the now. Alan Weisman's best-selling *The World without Us* suggests a thought experiment as a way of experiencing our present: "Suppose that the worst has happened. Human extinction is a fait accompli. . . . Picture a world from which we all suddenly vanished. Might we have left some faint, enduring mark on the universe? . . . It is possible that, instead of heaving a huge biological sigh of relief, the world without us would miss us?" I am drawn to Weisman's experiment as it tellingly demonstrates how the current crisis can precipitate a sense of the present that disconnects the future from the past by putting such a future beyond the grasp of historical sensibility. The discipline of history exists on the assumption that our past, present, and future are connected by a certain continuity of human experience. We normally envisage the future with the help of the same faculty that allows us to picture the past. Weisman's thought experiment illustrates the historicist paradox that inhabits contemporary moods of anxiety and concern about the future of humanity. To go along with Weisman's experiment, we have to insert ourselves into

This essay is dedicated to the memory of Greg Denning.

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1. Alan Weisman, *The World without Us* (New York, 2007), pp. 3–5.

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a future “without us” in order to be able to visualize it. Thus, our usual historical practices for visualizing times, past and future, times inaccessible to us personally—the exercise of historical understanding—are thrown into a deep contradiction and confusion. Weisman’s experiment indicates how such confusion follows from our contemporary sense of the present insofar as that present gives rise to concerns about our future. Our historical sense of the present, in Weisman’s version, has thus become deeply destructive of our general sense of history.

I will return to Weisman’s experiment in the last part of this essay. There is much in the debate on climate change that should be of interest to those involved in contemporary discussions about history. For as the idea gains ground that the grave environmental risks of global warming have to do with excessive accumulation in the atmosphere of greenhouse gases produced mainly through the burning of fossil fuel and the industrialized use of animal stock by human beings, certain scientific propositions have come into circulation in the public domain that have profound, even transformative, implications for how we think about human history or about what the historian C. A. Bayly recently called “the birth of the modern world.”² Indeed, what scientists have said about climate change challenges not only the ideas about the human that usually sustain the discipline of history but also the analytic strategies that postcolonial and postimperial historians have deployed in the last two decades in response to the postwar scenario of decolonization and globalization.

In what follows, I present some responses to the contemporary crisis from a historian’s point of view. However, a word about my own relationship to the literature on climate change—and indeed to the crisis itself—may be in order. I am a practicing historian with a strong interest in the nature of history as a form of knowledge, and my relationship to the science of global warming is derived, at some remove, from what scientists and other informed writers have written for the education of the general public. Scientific studies of global warming are often said to have originated with the discoveries of the Swedish scientist Svante Arrhenius in the 1890s, but self-conscious discussions of global warming in the public realm

2. See C. A. Bayly, *The Birth of the Modern World, 1780-1914: Global Connections and Comparisons* (Malden, Mass., 2004).

began in the late 1980s and early 1990s, the same period in which social scientists and humanists began to discuss globalization.² However, these discussions have so far run parallel to each other. While globalization, once recognized, was of immediate interest to humanists and social scientists, global warming, in spite of a good number of books published in the 1990s, did not become a public concern until the 2000s. The reasons are not far to seek. As early as 1988 James Hansen, the director of NASA's Goddard Institute of Space Studies, told a Senate committee about global warming and later remarked to a group of reporters on the same day, "It's time to stop waffling . . . and say that the greenhouse effect is here and is affecting our climate."⁴ But governments, beholden to special interests and wary of political costs, would not listen. George H. W. Bush, then the president of the United States, famously quipped that he was going to fight the greenhouse effect with the "White House effect." The situation changed in the 2000s when the warnings became dire, and the signs of the crisis—such as the drought in Australia, frequent cyclones and brush fires, crop fail-

between 1993 and 2003, Oreskes found that not a single one sought to refute the “consensus” among scientists “over the reality of human-induced climate change.” There is disagreement over the amount and direction of change. But “virtually all professional climate scientists,” writes Oreskes, “agree on the reality of human-induced climate change, but debate continues on tempo and mode.”¹ Indeed, in what I have read so far, I have not seen any reason yet for remaining a global-warming skeptic.

The scientific consensus around the proposition that the present crisis of climate change is man-made forms the basis of what I have to say here. In the interest of clarity and focus, I present my propositions in the form of four theses. The last three theses follow from the first one. I begin with the proposition that anthropogenic explanations of climate change spell the collapse of the age-old humanist distinction between natural history and human history and end by returning to the question I opened with: How does the crisis of climate change appeal to our sense of human universals while challenging at the same time our capacity for historical understanding?

Thesis 1: Anthropogenic Explanations of Climate Change Spell the Collapse of the Age-old Humanist Distinction between Natural History and Human History

Philosophers and students of history have often displayed a conscious tendency to separate human history—or the story of human affairs, as R. G. Collingwood put it—from natural history, sometimes proceeding even to deny that nature could ever have history quite in the same way humans have it. This practice itself has a long and rich past of which, for reasons of space and personal limitations, I can only provide a very provisional, thumbnail, and somewhat arbitrary sketch.

We could begin with the old Viconian-Hobbesian idea that we, humans, could have proper knowledge of only civil and political institutions because we made them, while nature remains God’s work and ultimately inscrutable to man. “The true is identical with the created:

nature are mere events, not the acts of agents whose thought the scientist endeavours to trace." Hence, "all history properly so called is the history of human affairs." The historian's job is "to think himself into [an] action, to discern the thought of its agent." A distinction, therefore, has "to be made between historical and non-historical human actions. . . . So ~~man's~~ ~~man's~~ conduct is determined by what may be called his animal nature, his impulses and appetites, it is non-historical; the process of those activities is a natural process." Thus, says Collingwood, "the historian is not interested in the fact that men eat and sleep and make love and thus satisfy their natural appetites; but he is interested in the social customs which they create by their thought as a framework within which these appetites and satisfaction in ways sanctioned by convention and morality." Only the history of the social construction of the body, not the history of the body as such, can be studied. By splitting the human into the natural and the social or cultural, Collingwood saw no need to bring the two together.

In discussing Croce's 1893 essay "History Subsumed under the Concept of Art," Collingwood wrote, "Croce, by denying [the German idea] that history was a science at all, cut himself at one blow loose from naturalism, and set his face towards an idea of history as something radically different from nature."¹⁷ David Roberts gives a fuller account of the more mature position in Croce. Croce drew on the writings of Ernst Mach and Henri Poincaré to argue that "the concepts of the natural sciences are human constructs elaborated for human purposes." "When we peer into nature," he said, "we find only ourselves." We do not "understand ourselves best as part of the natural world." So, as Roberts puts it, "Croce proclaimed that there is no world but the human world, then took over the central doctrine of Vico that we can know the human world because we have made it." For Croce, then, all material objects were subsumed into human thought. No rocks, for example, existed in themselves. Croce's idealism, Roberts explains, "does not mean that rocks, for example, 'don't exist' without human beings to think them. Apart from human concern and language, they neither exist nor do not exist, since 'exist' is a human concept that has meaning only within a context of human concerns and purposes." Both Croce and Collingwood would thus enfold human history and nature, to the extent that the latter could be said to have history, into purposive human action. What exists beyond that does not "exist" because it does not exist for humans in any meaningful sense.

16. Collingwood, *The Idea of History* (1946; New York, 1976), pp. 214, 212, 213, 216.

17. *Ibid.*, p. 193.

18. Roberts, *Benedetto Croce and the Uses of Historicism*, pp. 59, 60, 62.

In the twentieth century, however, other arguments, more sociological or materialist, have existed alongside the Viconian one. They too have continued to justify the separation of human from natural history. One influential though perhaps infamous example would be the booklet on the Marxist philosophy of history that Stalin published in 1938, *Dialectical and Historical Materialism*. This is how Stalin put the problem:

Geographical environment is unquestionably one of the constant and indispensable conditions of development of society and, of course, . . . [it] accelerates or retards its development. But its influence is not the determining influence, inasmuch as the changes and development of society proceed at an incomparably faster rate than the changes and development of geographical environment. In the space of ~~6000~~ ³⁰⁰⁰ three different social systems have been successfully superseded in Europe: the primitive communal system, the slave system and the feudal system. . . . Yet during this period geographical conditions in Europe have either not changed at all, or have changed so slightly that geography takes no note of them. And that is quite natural. Changes in geographical environment of any importance require millions of years, whereas a few hundred or a couple of thousand years are enough for even very important changes in the system of human society.¹⁹

For all its dogmatic and formulaic tone, Stalin's passage captures an assumption perhaps common to historians of the mid-twentieth century: man's environment did change but changed so slowly as to make the history of man's relation to his environment almost timeless and thus not a subject of historiography at all. Even when Fernand Braudel rebelled against the state of the discipline of history as he found it in the ~~1930s~~ ^{1930s} and proclaimed his rebellion later ~~in 1949~~ ^{in 1949} through his great book *The Mediterranean*, it was clear that he rebelled mainly against historians who treated the environment simply as a silent and passive backdrop to their historical narratives, something dealt with in the introductory chapter but forgotten thereafter, as if, as Braudel put it, "the flocks did not come back every spring, the flocks of sheep migrate every year, or the ships sail on a real sea that changes with the seasons." In ~~completing~~ ^{completing} *The Mediterranean*, Braudel wanted to write a history in which the seasons—"a history of constant repetition, ever-recurring cycles"—and other recurrences in

19. Joseph Stalin, *Dialectical and Historical Materialism* (1938), www.marxists.org/reference/archive/stalin/works/1938/09.htm

tories. Smail's book pursues possible connections between biology and culture—between the history of the human brain and cultural history, in particular—while being always sensitive to the limits of biological reasoning. But it is the history of human biology and not any recent theses about the newly acquired geological agency of humans that concerns

numbers and invented technologies that are on a scale large enough to have an impact on the planet itself. To call ourselves geological agents is to attribute to us a force on the same scale as that released at other times when there has been a mass extinction of species. We seem to be currently going through that kind of a period. The current "rate in the loss of species diversity," specialists argue, "is similar in intensity to the event around 65 million years ago which wiped out the dinosaurs." Our footprint was not always that large. Humans began to acquire this agency only since the Industrial Revolution, but the process really picked up in the second half of the twentieth century. Humans have become geological agents very recently in human history. In that sense, we can say that it is only very recently that the distinction between human and natural histories—much of which had been preserved even in environmental histories that saw the two entities in interaction—has begun to collapse. For it is no longer a question simply of man having an interactive relation with nature. This humans have always had, or at least that is how man has been imagined in a large part of what is generally called the Western tradition. Now it is being claimed that humans are a force of nature in the geological sense. A fundamental assumption of Western (and now universal) political thought has come undone in this crisis.

Thesis2: The Idea of the Anthropocene, the New Geological
 Epoch When Humans Exist as a Geological Force, Severely
 Qualifies Humanist Histories of Modernity/Globalization

How to combine human cultural and historical diversity with human freedom has formed one of the key underlying questions of human histories written of the period from 1750 to the years of present-day globalization. Diversity, as Gadamer pointed out with reference to Leopold von Ranke, was itself a figure of freedom in the historian's imagination of the ofoSLB

anthropogenic climate change has raised the question of its termination. Now that humans—thanks to our numbers, the burning of fossil fuel, and other related activities—have become a geological agent on the planet, some scientists have proposed that we recognize the beginning of a new geological era, one in which humans act as a main determinant of the environment of the planet. The name they have coined for this new geological age is Anthropocene. The proposal was first made by the Nobel-winning chemist Paul J. Crutzen and his collaborator, a marine science specialist, Eugene F. Stoermer. In a short statement published in 2000, they said, “Considering . . . [the] major and still growing impacts of human activities on earth and atmosphere, and at all, including global, scales, it seems to us more than appropriate to emphasize the central role of mankind in geology and ecology by proposing to use the term ‘anthropocene’ for the current geological epoch.” Crutzen elaborated on the proposal in a short piece published in *Nature* in 2002:

For the past three centuries, the effects of humans on the global environment have escalated. Because of these anthropogenic emissions of carbon dioxide, global climate may depart significantly from natural behaviour for many millennia to come. It seems appropriate to assign the term “Anthropocene” to the present, human-dominated, geological epoch, supplementing the Holocene—the warm period of the past 10–12 millennia. The Anthropocene could be said to have started in the latter part of the eighteenth century, when analyses of air trapped in polar ice showed the beginning of growing global concentrations of carbon dioxide and methane. This date also happens to coincide with James Watt’s design of the steam engine in 1784.

It is, of course, true that Crutzen’s saying so does not make the Anthropocene an officially accepted geologic period. As Mike Davis comments, “in geology, as in biology or history, periodization is a complex, controversial art,” involving, always, vigorous debates and contestation.³³ The name Holocene for “the post-glacial geological epoch of the past ten to twelve thousand years” (“A,” p.17), for example, gained no immediate acceptance when proposed—apparently by Sir Charles Lyell in 1830. The International Geological Congress officially adopted the name at their meeting in

31. Paul J. Crutzen and Eugene F. Stoermer, “The Anthropocene,” [International Geosphere-Biosphere Programme] *News* 41 (2000): 17; hereafter abbreviated “A.”

32. Crutzen, “Geology of Mankind,” *Nature*, 3 Jan. 2002, p.23.

33. Mike Davis, “Living on the Ice Shelf: Humanity’s Meltdown,” *TomDispatch.com/post/174949*; hereafter abbreviated “LIS.” I am grateful to Lauren Berlant for bringing this essay to my attention.

Bologna after about fifty years in 1885

lem now. . . . We know what to do" (FLp. 102). Or, to quote Crutzen and Stoermer again:

Mankind will remain a major geological force for many millennia, maybe millions of years, to come. To develop a world-wide accepted strategy leading to sustainability of ecosystems against human-induced stresses will be one of the great future tasks of mankind, requiring intensive research efforts and wise application of knowledge thus acquired. . . . An exciting, but also difficult and daunting task lies ahead of the global research and engineering community to guide mankind towards global, sustainable, environmental management. ["A," p. 18]

Logically, then, in the era of the Anthropocene, we need the Enlightenment (that is, reason) even more than in the past. There is one consideration though that qualifies this optimism about the role of reason and that has to do with the most common shape that freedom takes in human societies: politics. Politics has never been based on reason alone. And politics in the age of the masses and in a world already complicated by sharp inequalities between and inside nations is something no one can control. "Sheer demographic momentum," writes Davis, "will increase the world's urban population by 3 billion people over the next 40 years (90% of them in poor cities), and no one—absolutely no one [including, one might say, scholars on the Left]—has a clue how a planet of slums, with growing food and energy crises, will accommodate their biological survival, much less

aimed at xing. . . [Global warming] requires nations and regions to plan for the next 50 years, something that most societies are unable to do because of the very short-term nature of politics.” His recommendation, “we must prepare for the worst and adapt,” coupled with Davis’s observations about the coming “planet of slums” places the question of human freedom under the cloud of the Anthropocene.

Thesis 3: The Geological Hypothesis Regarding the Anthropocene Requires Us to Put Global Histories of Capital in Conversation with the Species History of Humans

Analytic frameworks engaging questions of freedom by way of critiques of capitalist globalization have not, in any way, become obsolete in the age of climate change. If anything, as Davis shows, climate change may well end up accentuating all the inequities of the capitalist world order if the

universalizing and single modernity but an integrated world of multiple and multiplying modernities.” “As far as world history is concerned,” they said, “there is no universalizing spirit. There are, instead, many very specific, very material and pragmatic practices that await critical reflection and historical study.” Yet, thanks to global connections forged by trade, empires, and capitalism, “we confront a startling new condition: humanity, which has been the subject of world history for many centuries and

“human nature.” Here, as in so many areas, biology and cultural studies are fundamentally congruent.⁴⁵

It is clear that different academic disciplines position their practitioners differently with regard to the question of how to view the human being. All disciplines have to create their objects of study. If medicine or biology reduces the human to a certain specific understanding of him or her, humanist historians often do not realize that the protagonists of their stories—persons—are reductions, too. Absent personhood, there is no human subject of history. That is why Derrida earned the wrath of Foucault by pointing out that any desire to enable or allow mad ~~discourse~~ to speak in a history of madness would be “the ~~most~~ ^{most} modest aspect” of the project.⁴⁶ An object of critical importance to humanists of all traditions, personhood is nevertheless no less of a reduction of or an abstraction from the embodied and whole human being than, say, the human skeleton discussed in an anatomy class.

The crisis of climate change calls on academics to rise above their disciplinary prejudices, for it is a crisis of many dimensions. In that context, it is interesting to observe the role that the category of species has begun to play among scholars, including economists, who have already gone further than historians in investigating and explaining the nature of this crisis. The economist Jeffrey Sachs’s book, *Common Wealth*, meant for the educated but lay public, uses the idea of species as central to its argument and devotes a whole chapter to the Anthropocene.⁴⁷ In fact, the scholar from whom Sachs solicited a foreword for his book was none other than Edward Wilson. The concept of species plays a quasi-Hegelian role in Wilson’s foreword in the same way as the multitude or the masses in Marxist writings. If Marxists of various hues have at different times thought that the good of humanity lay in the prospect of the oppressed or the multitude realizing their own global unity through a process of coming into self-consciousness, Wilson pins his hope on the unity possible through our

Yet doubts linger about the use of the idea of species in the context of climate change, and it would be good to deal with one that can easily arise among critics on the Left. One could object, for instance, that all the anthropogenic factors contributing to global warming—the burning of fossil fuel, industrialization of animal stock, the clearing of tropical and other forests, and so on—are after all part of a larger story: the unfolding of capitalism in the West and the imperial or quasi-imperial domination by the West of the rest of the world. It is from that recent history of the West that the elite of China, Japan, India, Russia, and Brazil have drawn inspiration in attempting to develop their own trajectories toward superpower politics and global domination through capitalist economic, technological, and military might. If this is broadly true, then does not the talk of species or mankind simply serve to hide the reality of capitalist production and the logic of imperial—formal, informal, or machinic in a Deleuzian sense—domination that it fosters? Why should one include the poor of the world—whose carbon footprint is small anyway—by use of such all-inclusive terms as ~~species~~ mankind when the blame for the current crisis should be squarely laid at the door of the rich nations in the first place and of the richer classes in the poorer ones?

We need to stay with this question a little longer; otherwise the difference between the present historiography of globalization and the historiography demanded by anthropogenic theories of climate change will not be clear to us. Though some scientists would want to date the Anthropocene from the time agriculture was invented, my readings mostly suggest that our falling into the Anthropocene was neither an ancient nor an inevitable happening. Human civilization surely did not begin on condition that, one day in his history, man would have to shift from wood to coal and from coal to petroleum and gas. That there was much historical contingency in the transition from wood to coal as the main source of energy has

are among the oldest of such grasses. Without this lucky “long summer” or what one climate scientist has called an “extraordinary” “uke” of nature in the history of the planet, our industrial-agricultural way of life would

hundred million years. The release of SO_2 to the atmosphere by coal and oil burning, is at least two times larger than the sum of all natural emissions . . . more than half of all accessible fresh water is used by mankind; human activity has increased the species extinction rate by thousand to ten thousand fold in the tropical rain forests. . . . Furthermore, mankind releases many toxic substances in the environment. . . . The effects documented include modification of the geochemical cycle in large freshwater systems and occur in systems remote from primary sources. ["A," p.

obvious value in our postcolonial suspicion of the universal? The crisis of climate change calls for thinking simultaneously on both registers, to mix together the immiscible chronologies of capital and species history. This combination, however, stretches, in quite fundamental ways, the very idea of historical understanding.

Thesis4: The Cross-Hatching of Species History and the History of Capital Is a Process of Probing the Limits of Historical Understanding

Historical understanding, one could say following the Diltheyan tradition, entails critical thinking that makes an appeal to some generic ideas about human experience. As Gadamer pointed out, Dilthey saw “the individual’s private world of experience as the starting point for an expansion that, in a living transposition, lls out the narrowness and

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The discussion about the crisis of climate change can thus produce affect and knowledge about collective human pasts and futures that work at the limits of historical understanding. We experience specific effects of the crisis but not the whole phenomenon. Do we then say, with Geyer and Bright, that “humanity no longer comes into being through ‘thought’”

understand this universal. It is not a Hegelian universal arising dialectically out of the movement of history, or a universal of capital brought forth by the present crisis. Geyer and Bright are right to reject those two varieties of the universal. Yet climate change poses for us a question of a human collectivity, an us, pointing to a figure of the universal that escapes our capacity to experience the world. It is more like a universal that arises from a shared sense of a catastrophe. It calls for a global approach to politics without the myth of a global identity, for, unlike a Hegelian universal, it cannot subsume particularities. We may provisionally call it a “negative universal history.”⁶¹

61. I am grateful to Antonio Y. Vasquez-Arroyo for sharing with me his unpublished paper “Universal History Disavowed: On Critical Theory and Postcolonialism,” where he has tried to develop this concept of negative universal history on the basis of his reading of Theodor Adorno and Walter Benjamin.