



## Teaching history on the scale of the Anthropocene: Three ethical challenges

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### ABSTRACT

The Anthropocene strikes at the heart of the principle that making moral judgements involves a rich understanding of historical context. This article elaborates three subsequent challenges for history educators. First, locating human beings in geological time requires us to upscale our temporal conceptions of the human while downscaling our existential conceptions of the human. Second, we must make sense of a humanity that has combined an overwhelming power with a frightening loss of control, reviving the question of whether historical agents are to be morally judged by reference to their purposes and intentions. Third, history educators must be on guard against conceptions of the future that dispense with important notions of human and political agency. The challenges amount to a need to rethink the categories of scale employed by history educators to situate and explain human experience in time and space.

### KEYWORDS

Anthropocene, history education, historical thinking concepts, historical consciousness, narrative forms

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## Introduction

History as we know it grew out of the humanistic tradition. There have been iconoclasts and innovators who have pushed the boundaries into other fields. For example, the *Annales* group may be the most celebrated example of an approach to history grounded in the social sciences and the historical geography of the *longue durée*. But overall historians have identified their craft with the ethics of looking individuals in the eye, of reconstructing the experiences of people who lived in the past from the singular perspective of their time and place. In the educational sciences, when there arose a view that the school subjects were to be modelled on the forms of knowledge said to structure their corresponding academic discipline, it was to the humanistic tradition of thinking historically that history educators looked to establish a conceptual basis for teaching the subject (Retz, 2016). The second-order, procedural or historical thinking concepts that play so central a role in contemporary research and practice embody the ethics of a discipline committed to combatting what Thompson (1980, p. 8) memorably described as the “enormous condescension of posterity,” a commitment to restoring posthumous dignity and respect that has even led one historian to call for a “Declaration of the Responsibilities of Present Generations Toward Past Generations” (de Baets, 2004, p. 130).

In the past two decades, the rise of the Anthropocene has challenged this humanistic foundation on which history has identified itself. The Anthropocene is the name of a new geological epoch, currently being considered by a scientific panel for inclusion in the Earth’s official geological record, in which humankind has become a power on the level of a planetary force. In subject matter, it encompasses everything from global warming, environmental degradation and biodiversity loss to new schools of thought on the relations between humans and nonhumans, human time and geological time, how best to conceptualise the current predicament in which humanity finds itself, as well as its wide-ranging ethical and sociopolitical implications. Debates surrounding its starting date, which are debates about when human beings began to leave a permanent mark on the Earth’s sedimentary strata, like all historical periodisations, reflect deep ideological and interpretive commitments, with some placing the emphasis on capitalism (Capitalocene) or global economics (Econocene), others the massive mixing of the world’s biota (Homogenocene), plantations (Plantationocene) or the disproportionate contributions of Great Britain and the United States to global carbon emissions since the Industrial Revolution (Anglocene). Whatever their individual merits, the emergence of this *neologismcene* reflects the wide appeal of the Anthropocene as a new master concept for interpreting and addressing the current ecological transformation of the planet. Zoltán Simon (2020) calls it an *epochal event* requiring new *connective concepts* that could make sense of the radical novelty of humanity’s current predicament.

For history, the Anthropocene could mean the end of the *verum factum* principle that has sat at the heart of the discipline’s self-definition since the time of Vico. According to this principle, history is the story of what human beings have created with their own hands. Vico argued against his rival Descartes that it is in fact the natural world, as God’s creation, that is unknowable to human beings, whereas the human world, as humankind’s own creation, is knowable from the *inside*. The fundamental insight of the Anthropocene spelling trouble for the humanistic conception of history is this: what human beings have created with their own hands has accumulated to such an extent that it now exercises an independent agency of its own. It is a *technosphere* created by human beings that operates independently of their pretensions to mastery over nature and beliefs in rational, deliberative and self-determining action.

If the Anthropocene challenges basic humanistic principles on which the modern conception of history has been based, it should then also concern history educators who for decades have looked to the theory and philosophy of history for inspiration and guidance on how to teach the subject in ways proper to history’s status as a distinct discipline, school subject, and form of knowledge (I also note that history education research has influenced in its turn the theory of history). With the shift several decades ago to discipline-specific forms of knowledge, it was thanks to an intentionalist philosophy of history that educational reformers were able to develop

a concept-based approach to historical teaching and learning. Now with the Anthropocene, it is not what human beings intended that serves as the kernel of historical explanation, but rather how their actions, each in itself tiny and insignificant, accumulate to take on the power of a planetary force. The ethical challenge is less about how to judge the actions of individuals who may or may not have acted purposefully than how to make sense of a human species that has combined an overwhelming power with a frightening loss of control.

In what follows, I elaborate three ethical challenges for history education that ensue from the arrival of the Anthropocene. I track back and forth between key themes in the burgeoning literature on the Anthropocene and their ethical implications for the theory and practice of historical teaching and learning. Collectively, the challenges amount to a need to think afresh about the categories of *scale* employed by history educators to situate and explain human experience in time and space.

### **Challenge 1: Locating the human in the immensity of geological time**

“The shallow chronology of history as a national project provides a compelling reason to expand historical scale” (Aslanian et al., 2013, p. 1435). So added the Australian historian Ann McGrath to the conversation ‘How Size Matters’ in the *American Historical Review*. An explorer of *deep time* and leading practitioner of *deep history*, her censure of the discipline’s restrictive boundaries, relegating “whole categories of humankind to a timeless void” (Aslanian et al., 2013, p. 1435). while edifying the comparatively brief lifespans of nation-states, will be familiar to history educators who have adopted an increasingly critical posture towards the teaching profession’s own complicity in the myth-making of the nation-building project. Without doubt, the massive enlargement of the timeframe within which historians work is the most fundamental change that the discipline of history has undergone this century. As Helge Jordheim (2014) has explained, on the one hand, globalisation has introduced diverse and more complex temporal relations in which the global time of commerce, technology and media has clashed with the different rhythms in the variety of cultures and societies. On the other hand, the deep time of climate change and the new geochronological periodisation of the Anthropocene has challenged the comparatively short-lived temporal horizons of social relations and political decisions. According to the historian Dipesh Chakrabarty (2018, p. 6), “if we do not take into account Earth-history processes that outscale our very human sense of time, we do not quite see the depth of the predicament that confronts humans today.”

Chakrabarty has been the foremost member of a history discipline recalibrating its temporal coordinates. Beginning in 2009 with ‘The Climate of History’ and continuing with a string of essays since, Chakrabarty has maintained that the humanist distinction between natural history and human history no longer obtains in a world where human activities have become entwined in nature. “To call human beings geological agents is to scale up our imagination of the human,” Chakrabarty (2009, p. 206) contends. History as the attempt to gain ‘inside’ knowledge of historical agents may be a worthy ambition when humans are regarded solely as biological agents. Indeed, historical agents traditionally speaking have been nothing but living and breathing entities acting upon the world in the limited context of their lifespans and circumstances. But we become geological agents only “when we have reached numbers and invented technologies that are on a scale large enough to have an impact on the planet itself. To call ourselves geological agents,” according to Chakrabarty (2009, pp. 206–207), “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.”

Time is off-kilter in the Anthropocene. The upscaling of its conception of the human to the category of a geological force does more than furnish us with an Earth-moving strength; it undercuts the very temporality that has enabled history to model itself as the science of human efforts to make and remake the world. Geology and historiography operate on radically different temporal scales. The scale of geological time is *compressed* — processes that unfold over hundreds, thousands or millions of years, such as glaciation or the evolution of *homo sapiens*, can be comprehended as a coherent sequence (Horn & Bergthaller, 2020). Geological time is *uneventful*,

if by 'event' we follow William James (2014) and Mikhail Bakhtin (1990) in regarding events as eventful when they exceed the circumstances that created them, when an action is taken among a field of possibilities, where agents are responsible for taking *this* action as opposed to *that* action (Retz, 2021). In contrast to the flattened vista of geological time, the temporal scales employed in history tend to be calibrated to the pace of human lives, generational change, political conflicts, and social and cultural change. Questions of finding the correct temporal scale to study a period—that is, questions of periodisation—tend to revolve not around the changes to the planet that have occurred over the previous millennia. As exemplified by Jacques Le Goff in his final book *Must We Divide History Into Periods?*, the attention remains squarely on debates concerning a few decades or centuries; in Le Goff's case, the question of whether the Renaissance should be included in what he attempts to introduce as the 'long Middle Ages'. Classes in modern history debate the credibility of a 'long nineteenth century' beginning in 1789 or a shorter period taking the 1815 Vienna Congress as the ushering in of a new order. Supervisors hoping for successful completion would in general be reluctant to support postgraduates proposing to investigate a period of 100 years or more, with timescales of roughly a generation still the norm.

History textbooks, syllabi and curricula are also modelled after the arrangement of the past into bite-sized, digestible chunks. Human societies seen from the vantage point of the Anthropocene appear grainy and irresolute. It is difficult to determine what can count as an event and, moreover, what its causes were. The smallness of human time in the vastness of geological time thus compels history educators to rethink the categories of periodisation that order, organise and structure their study of the past. David Christian's 'Big History' has of course already mapped a study of the past at all possible scales, hoping history can restore to our lives some of the enchantment modernity replaced with its secular-scientific mindset (Christian, 2004, 2010). But it is not an immodest 'modern creation myth' that the Anthropocene demands. Quite the opposite. The upscaled human being implies an ethics of *downsizing*—among its 'posthumanist' advocates, of acknowledging the 'symbioses' between human and nonhuman species, culture and nature (Haraway, 2016; Latour, 2013). The posthuman attitude might be put thus: humans need to get over themselves.

The Anthropocene's pitching of humanity into the expanses of planetary time carries with it the ethical challenge of rethinking the category of the human in a world where human beings have become a force of nature, where trusty distinctions separating humans from nonhumans and culture from nature, which were central to the nineteenth-century development of academic disciplines, and at the end of which history emerged as the master discipline, have lost their shine.

History educators have not begun to consider the ethical implications of this reconfiguration of time. Andreas Körber (2017) has drawn attention to the way in which the temporal and moral dimensions of historical consciousness are interlinked in 'orientation processes', by which he means that our standards for judging the past are moulded by the temporal structures that conceive differently the relations between the past, present and future. The moral implications of different temporal orientations have also been explored by Ammert, Sharp, Löfström and Edling (2020) in their research into students' readings of Christopher Browning's work on the 'ordinary men' who were the perpetrators of the Holocaust. At the core of such studies are concerns about the 'presentism' of judging the past by present-day standards, values and ways of thinking, an attention to learning about others from the perspective of one's own tradition that has seen Gadamer become a mainstay of educational thinking on the subject (Edling, Sharp, Löfström & Ammert, 2020; Levisohn, 2017; Retz 2015; Seixas, 2004; Wineburg, 2001).

Built on notions of historical consciousness that were central to the humanist project of securing history's autonomy against the natural sciences, the moral dimensions explored in such research pivots on questions regarding historical context and the extent to which students develop an ability to evaluate past actions by reference to the specific context that gave rise to them. Thus, in my own work on empathy I have argued that the historical context to be uncovered is that in which it was *possible* for past agents to hold their beliefs as true and to act upon them accordingly, and why it is widely believed that taking historical perspectives must accompany any

attempt to judge the past (Milligan, Gibson & Peck, 2018; Bellino & Selman 2011, 2012). Such fine-grained optics are hard to find on the scale of the Anthropocene.

## Challenge 2: Navigating the paradox of human agency

The Anthropocene brings into question the humanistic foundation that has enabled historians to locate meaning in the intentions with which agents acted. To the conversation on “how size matters”, Sebouh Aslanian (2013, p. 1454) pitched in that the new forms of deep history “have absolutely no place for what used to be called source criticism.” The reading of historical sources, whether written or otherwise, has been the vehicle through which historians have interpreted and explained the past. Identifying how human beings have exercised agency has been a prime component of this interpretive and explanatory enterprise. A close reading of historical texts reveals the diverse ways that individual actors and groups have made and remade history by shaping or adapting to their environment. “One of the risks inherent in supersizing our scales or optics when it comes to historical work,” according to Aslanian (2013, p. 1444), “is that we will eclipse philology, if not totally remove it from the historian’s craft.” At risk are the very principles of source criticism that have enabled historians to claim that they provide insights into human experience at a level of individual detail like no other discipline.

The first challenge introduced the paradox of a downsized ethics—of viewing the place of human beings within the biosphere in more modest terms—combined with an upscaled conception of the human to the category of a geological force. The recognition that human beings have become such a force requires in response that they develop an ethics of humility towards the more-than-human world. The second challenge operates on the horns of the same dilemma, but this time with regard to identifying the human subject of historical understanding, knowledge and explanation. The paradox of human agency in the Anthropocene is the combination of immense power with a frightening loss of control. The ‘human’ from whom the Anthropocene takes its name is not the purposeful and self-determining agent of traditional historiography and historical thinking; it is the human who exists both naturally and unnaturally, who acts as both a part of nature and apart from nature, whose goal-oriented actions produce side-effects that accumulate to exert their own agency. Human beings in the Anthropocene are at once an intentional power and unintentional force, and the ethical challenge for anybody wishing to downscale the impact of human beings upon the Earth system consists first and foremost in translating the naturalistic category of ‘force’ into the humanistic-existentialist category of ‘power’, in particular with the latter’s emphasis on notions of consciousness and responsibility. Chakrabarty (2018) has come to see this balancing act as a type of code-switching that allows problems on the scale of Earth history to be grasped on the human timescales of politics and world history. The politically, culturally and economically differentiated human subject of the humanities runs up against the scientific perspective that views the cumulative effects of human activities.

A language for working with these tensions is Chakrabarty’s ‘pragmatic distinction’ between the human as *homo* and the human as *anthropos*. *Homo* designates that familiar Vichian handicraftsman of the humanities who carved out for history a distinct methodological identity that went on to supply the school subject of history with a model for teaching and learning. It is that human who stands outside nature and modifies the environment purposefully, differentiated by culture, gender, race and socioeconomic situation, but in possession of universal rights and freedoms as well as the ability to think rationally and morally. *Anthropos*, on the other hand, refers to the human as a biological species, capable of changing its environment but in the limited sense of satisfying its physical needs and depending for its survival upon natural forces and successful coexistence with other species (Horn & Bergthaller, 2020, p. 70). It is a causal term stripped of any sense of moral culpability that describes the condition of human beings a force within nature (Chakrabarty, 2015, p. 157). *Anthropos* is not entirely new to the scene of history—environmental historians may have established the field in the 1950s and 1960s by locating the *homo* behind ecological destruction and decline, but they have long since turned a considerable portion of their attention to the discovery of nonhuman agency. Alfred Crosby in *The Colombian Exchange* showed



in 1986 that the European conquest of the New World owed less to the technological and military superiority of the European settlers than to the ‘portmanteau biota’—the heady mix of microbes, plants and animals—that they carried with them across the Atlantic, which wreaked havoc on the local ecology and population.

Human actions have become tantamount to the great forces of nature, though they are not the *res gestae* or ‘great deeds’ of traditional historiography. Rather, they are the tiny and quotidian actions, each one insignificant in itself, that accumulates to take on the power of a planetary force. The Anthropocene may be the best example of Tolstoy’s view that history is the story not of people’s intentions but of what happened *in spite of* their intentions. When human agency is conceived according to models of “mutual, symbiotic entanglement” and “tangled feedback loops” in the style of new materialism and ecological posthumanism (Horn & Bergthaller, 2020, pp. 72–75), human beings appear as purposeless as other geological forces. Anna Tsing inverts causality entirely. Rather than having cultivated cereals that fed the growth of human society, “Cereals domesticated humans” (Tsing, 2012, p. 145), leading humans down a path that has not been good for them—a sedentary way of life, population growth and the development of cities and states and consequently to highly hierarchical social structures.

Under the label of the “technosphere,” human agency is marginalised even further (Horn & Bergthaller, 2020, pp. 78–80). According to the geologist and environmental engineer Peter Haff (2013, 2014), the technosphere is an independent dimension of the Earth system, created and maintained by humans, but where the reverse is also true: humans are created and maintained by the technosphere. While humans service the system and ensure its energy supply, their own bodies run on technically produced calories, are kept warm, dry and healthy by machines. The dependency is mutual and there is no reason to believe that the whole assemblage is the sum result of the actions taken by individual human beings. Within the technosphere, human beings are little more than ‘minor components’, elements of a larger system to which they ultimately have no access. Haff argues that humans can interact with things only of the same scale as their own bodies—what he calls Stratum II. Smaller elements belong to Stratum I, and larger elements belong to Stratum III (Haff, 2014). In a transport system, for example, humans have access to the car they are driving and its various interfaces (steering wheel, brakes, air conditioning), all of which are of the same human scale. But they have access neither to the technical micro-level of Stratum I (the electronics, the physics and the chemistry of the process of combustion in the engine), nor to the macro-level of Stratum III (the urban traffic system, the petroleum industry or the carbon dioxide emissions of global traffic). Our actions accumulate on a magnitude that becomes impossible to grasp.

On what basis are students to make moral judgements about past actions when action itself is regarded as springing not from the intentions of historical agents but in combination with smaller and larger scale phenomena to which they had no access? On what basis are they to judge past actions when there is no identifiable ground on which past agents are seen to have thought, deliberated and acted? How is it possible to judge past actions when unintentionality replaces intentionality as the prime category of historical explanation? What hope is there of identifying a historical context that serves to explain why people acted the ways they did when that historical context becomes viewed as comprised of tangled feedback loops the most of which exist beyond the ken of human understanding? It seems the ‘epochal event’ that is the Anthropocene is a truly ‘unprecedented change’ (Simon, 2019, 2020). “Little wonder,” writes Simon (2020, n.p.), that “its challenges to modern historical thinking leave the historical profession and historically minded scholars and educators puzzled.”

### **Challenge 3: Leaving open the future of individual and collective decision-making**

Perhaps nothing has seized the attention of researchers in history education more than Jörn Rüsen’s (1987, p. 284) account of historical consciousness as giving “structure to historical

knowledge as the medium for understanding present time and for anticipating the future”, the achievement of which is to be found in the narrative forms specific to history. Narration, according to R usen, is a process of historical sense-making, of translating the experience of time into something meaningful and intersubjectively communicable. Since human beings experience time differently, it follows that there are different forms of historical narration. R usen’s chief point is that being historically conscious entails having the narrative competence to distinguish the different narrative forms while also being able to work within them and across them. The *moral dimension* consists in recognising the moral standards and assumptions bound up in these narratives as well as how, in Gadamerian language, our own prejudices and traditions are stirred up in our encounters with historical others (Retz, 2015, 2018; Edling, Sharp, L ofstr om & Ammert, 2020). A ‘moral turn’ in historical studies, George Cotkin (2008) argues, has been characterised by a greater willingness on the part of historians to recognise the moral background and consequences of their own research.

An attention to narrative forms is especially important when it comes to the moral implications of the Anthropocene. A recurrent trope is that the Anthropocene acts as a kind of alarm bell, awakening humanity from its slumber and jolting it into action against climate change, environmental degradation and species loss. Chakrabarty (2015, p. 158) summarises the view that motivating human action in the Anthropocene “entails the difficult task of making available to human experience a cascade of events that unfold on different scales, at once human and *inhuman*.” If we are to accept Haff’s argument that only elements of the same scale as human beings (Stratum II) are accessible to human cognition, this task would appear not difficult, but impossible.

Even if we did not accept it, a distinct feature of the narrative form of the Anthropocene still prevents it from generating the motivation for such moral action—its special variety of future-perfect determinism (Nordblad, 2021). The temporal structure of the Anthropocene is such that it is presented to us today as a series of unfolding events that *have already happened*. From the perspective of geology and Earth system science, what is unusual about the Anthropocene is that it is the first geological epoch to be declared in the present, without a delay of several millennia (the time it takes to distinguish one sedimentary layer in the earth’s surface from another). But even this is misleading, for the fact that the Anthropocene can be declared in the present is possible only because it enlists the perspective of an imaginary geologist located millions of years into the future from now. The Anthropocene, to be sure, is a thought experiment, one that has done much to raise awareness of the grim reality on the ground and the dubious inheritance that recent generations are bequeathing to future generations, but also one that closes down rather than opens up the future to creative thought and decision-making.

The Russian literary critic Mikhail Bakhtin (1984, 1990) spent his life trying to free the characters of novels from the closed structure imposed on them by the novelist. His efforts to do so are instructive for us in our present moment as subjects in the Anthropocene, illuminating that creativity, choice and ethics are only real when the events of life are *eventful*, which for Bakhtin meant looking upon an action as but one of a number of different possible actions. Central to the idea of ethics is that agents may take certain actions as opposed to other actions, for there can be no moral judgment when what happened is the only thing that could have happened. We can judge the actions, ideologies and belief systems of historical agents only to the extent that they were able to pursue alternatives. What is so illuminating about the study of the ‘ordinary men’ of Reserve Police Battalion 101 is that the overwhelming number of them carried out the order to commit murder even when offered an alternative (Ammert, 2015, p. 22). It is only because the events were eventful that students can judge these men and evaluate the merits of the intentionalist and functionalist accounts of the Final Solution. Viewed within a narrative structure that removed the criterion of responsibility, there would be little purpose in trying to judge their actions. Agency and action would be regarded as a mere unfolding of events, doing little to inspire thought on how the men perceived their situation and acted upon it.

The view of the present from the dizzyingly distant future denies the present moment of this eventness. It is this temporal setup that relates specifically to the attempt in history education to

engage with the past in ways that sharpen perceptions of the present and expectations of the future. Jeremy Davies (2016) is a representative of the widely held belief that the picture depicted from the deep future is the key to a contemporary green politics of the Anthropocene. Imagining how the Earth will look in that deep future, so the argument goes, serves as a means for concentrating on the concrete realities at hand. A 'geology of the future' becomes the blueprint for a politics of the here and now in the immensity of geological time. Against this view we could ask whether this temporal structure engenders apathy and political disengagement. After all, why act at all if the future is already determined?

Indeed, the future geologist of the Anthropocene could be described as the author of a narrative of *foreshadowing* (Morson 1994), a type of backward causation implying that the future is already there, already sufficiently well formed to send signals back to us. It is not that the past pushes life and events forward into the future, but rather that life and events are pulled from the future. The narrative establishes a fixed pattern to which time-bound events conform. The achievement of historical consciousness in such a narrative form would consist in appreciating the inevitability of historical events as well as those yet to come. History loses its eventness, becomes a series of mere occurrences, while expecting the future becomes thinking about how to navigate a course through a set of pre-given stages. By contrast, Bakhtin's hero was Dostoevsky, the literary master of *sideshadowing*, able to cast shadows obliquely over his characters of an alternative present. Unlike foreshadowing where agents walk forwards into a shadow cast from the future, the multiple shadows laying across the path in a narrative of sideshadowing enables agents to experience time as a *field of possibility* (Retz, 2021). Their past is one in which historical agents were responsible for their actions, as they are responsible for their actions in the present and in the open futures they create.

## Conclusion

The Anthropocene comes with all sorts of tensions and paradoxes. In the three challenges that I have elaborated, we have encountered a need to upscale our temporal categories while downscaling our existential categories, to come to terms with the combination of our immense power and lack of control, to raise accident as perhaps the more important category than intentionality, to see agents as operating freely within a narrative structure that closes down the future. The three challenges are no more than rough guideposts to the advent of a new knowledge regime that strikes at the humanistic foundation upon which history secured for itself the status of a distinct academic discipline and school subject. From the developmental logic behind such second-order concepts as 'progress and decline', 'continuity and change' and 'cause and consequence' to our habitual modes of historicisation that explain phenomena by reference to previous phenomena, it may be that we lack the mental furniture to deal with our Anthropocene predicament.

And yet I worry about what happens to historical thinking when it operates on a scale that loses sight of the fine texture of historical context. I worry about how we are to conceptualise, understand, explain and judge the past. Perhaps part of the answer lies in what Marnie Hughes-Warrington (2021) describes as 'scale-switching', moving between times, slowing down, speeding up, zooming in and zooming out again. Historians and history teachers are, in a way, already expert scale-switchers. They move back and forth between periods and events, movements and counter-movements, groups and individuals, the general and the particular. Now with the Anthropocene, the discovery of history might be characterised by evaluative thinking about what is good, fair and just in terms of different optics and levels of resolution—the big, the small, the micro and the macro. Each sets groups and individuals in a different relief and in relation to different constellations of nonhuman factors. As for the kind of political consciousness that will emerge from this new knowledge regime, one of the great benefits of an education in history is learning to spot the sideshadows that lurk in every foreshadow, learning to see how things could have been different, which is to appreciate how things can be different now and could be different in the future. I only hope that the compressed historical time of the Anthropocene will not



represent the final triumph of necessity over freedom, that history will continue to reveal life as an open-ended field of possibility.

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### About the author

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