

More-than-Human History: Philosophy of History at the Time of the Anthropocene

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Philosophy of History and the New Human Condition

The twenty-first century brought about a sense of rapid global and planetary changes. Discussions of novel kinds of ecological and technological transformations are around since the immediate postwar years, but in the last two decades they became core issues of public debate. Today, there is a growing awareness about human-induced climate change and biodiversity loss radically transforming the Earth system, about new biotechnologies, transhumanism, and artificial intelligence research promising previously unforeseen changes that point beyond the human condition, and about the potential new dimensions all this adds to the already manifold ways in which inequalities pervade the socio-political sphere. At a time when immense changes seem to accelerate in various domains of life (Rosa 2013), when those domains exhibit multiple temporalities (Jordheim 2014), when we witness the metamorphosis of the world in which “what was unthinkable yesterday is real and possible today” (Beck 2016: xii), when change in some domains depart from a processual scheme of modern historical thinking and take the shape of “unprecedented change” by bringing about a disconnection between visions of the future and past conditions (Simon 2019a), when “the future ceases to be made of the same matter as the past” and “becomes radically *other*, not-ours” (Danowski and Viveiros de Castro 2016: 26), one may ask: where is the philosophy of history to make sense of this new human condition and the experience of momentous transformations?

For it seems to be nowhere. At least not as a respectable and legitimate form of knowledge production. Despite the fact that making sense of the world of human affairs as changing over time has been a task associated with the philosophy of history in Western modernity, and despite the fact the world is experienced today as being on the verge of changes more tectonic than ever, there is hardly any philosophy of history around to comprehend these

experiences historically. As common knowledge has it, philosophy of history has been transformed into a philosophy of historiography in the last more than half-century. Whereas philosophies of history of the late Enlightenment and the nineteenth century sketched long-term scenarios of human development gesturing towards ultimate meanings, a disillusionment with such grand schemes in post-World War II societies gave way to philosophies of history which typically put forward analyses and explanations of the business of professional historiography.

The transformation of philosophy of history is fairly well-known, and we do not wish to analyze here the way in which it took place. It seems more important to raise awareness of one of its most crucial consequences: the altered nature of the relationship between such philosophy of history and historical studies. Throughout Western modernity, both philosophy of history and the freshly professionalized historiography operated as first-order disciplines. Their relationship was based on the existence of mutually recognized ties on the one hand and a rivalry in saying meaningful things about change in human affairs on the other. They developed competing methods and argued with each other over the question of what constitutes reliable historical knowledge. In doing so, however, they were jointly debating change over time in the human world as a shared concern external to both, and jointly fulfilled the function of societal self-understanding as “historical.” But post-World War II philosophy of history transformed into a second-order discipline studying the first-order discipline of history, which remained engaged in studying and debating the changing world of human affairs. From the viewpoint of historiography, this philosophy of history appeared as the uninvited *Besserwisser* which claims to know better the dealings and nature of historical studies than it claims to know itself. The rivalry between historical studies and philosophy of history has been reduced into a rivalry about saying meaningful things about the self-understanding of the former. They ceased to debate a shared concern external to both; they were debating instead – with not much enthusiasm from the side of historiography – a concern internal to one of the parties involved. Accordingly, their functions parted ways. Historical studies stuck with the role of providing societal self-understanding as “historical,” while philosophy of history became the (oftentimes bad) conscience of historiography’s disciplinary self-understanding.

Phrased in the simplest way, philosophy of history and professional historiography were talking about the same thing – historical change – in the modern period and stopped doing so with the transformation of the former into a philosophy of historiography in the postwar period. The consequences of the changed relation have been devastating to both. Post-World War II philosophy of history – maybe with a very few although spectacular exceptions – has been relegated into one of the dustiest and most abandoned corners of academic work, without being

able to integrate into institutional structures. At the same time, since the two no longer talk about the same thing, historical studies is struggling with maintaining its wider societal relevance and thereby with fulfilling its function to provide societal self-understanding as “historical.” Neither of them seem to benefit from this constellation.

In this essay, we intend to rewire this relationship while arguing for two interrelated theses: (1) *philosophy of history has to broaden its scope and embrace a new concept of history*; and (2) *it has to be a new philosophy of history as a new knowledge formation designed to address the most pressing concerns of our own times which escape the confines of studying the human world*. The first thesis implies the necessity of reconnection of philosophy of history with historical studies in coming to terms with the emerging new notion of history. The function of societal self-understanding as “historical” can be fulfilled only insofar as the two are able to discuss jointly the concerns of the changing world and only insofar as they reinforce each other in that. The second thesis responds to the challenge implied in recent ecological and technological prospects. Whereas modern historical knowledge emerged as one of the human sciences designed to understand the simultaneously constituted human being as a subject of study (Foucault 2002), recent ecological and technological discussions extend beyond such confines in addressing the concerns of a more-than-human world – of animals, plants, machines, artificial intelligence, Earth system changes – and their relation to the human world. To be able to make sense of concerns for the more-than-human, historical knowledge as we know it might as well have to transform beyond recognition.

As to the first thesis, the new century already witnessed a growing dissatisfaction with the narrow scope of philosophy of history understood as a philosophy of historiography. Eelco Runia (2006, see also Runia 2014; Runia and Tamm 2019) was among the firsts to take a firm stand against the reduction and the “ban on speculation.” By that time, François Hartog (2015, in the French original 2003) has already opened new vistas by venturing into an exploration of “regimes of historicity,” that is, into the ways in which the past, present and future relate to each other in experiences of time. Aleida Assmann (2013) shortly joined to such investigations, while Berber Bevernage (2012) suggested that a philosophy of such historicity that extends its scope over non-academic temporalities and relations to the past may replace both old-style philosophies of history and postwar philosophies of historiography. Finally, even in venues originally devoted to a sceptical take on history it became possible to argue for a philosophy of history understood as the philosophy of historical change in the shape of a “quasi-substantive philosophy of history” (Simon 2016).

Needless to say, none of this entails a straightforward revival of modern philosophy of history as sketches of grand schemes of human development and ideas of a meaningful historical process. Novel concerns are not to be conceived of as new versions of an old end point of humanity's quest of self-understanding, although there is a tendency to interpret the latest ecological and technological thoughts in such framework. The respective examples may be, first, Clive Hamilton (2017: 76–87) arguing for seeing the Anthropocene as the latest unifying grand narrative of humanity, and second, the story told by Yuval Noah Harari (2017) about technological developments leading to humans becoming gods as the latest stage of their development. This, we think, is not the shape that a reliable philosophy of history may take today. It is rather the shape that historical thinking took in the nineteenth century. Unlike such efforts, a philosophy of history engaged in the exploration of historicities and configurations of change over time would rather be occupied with conceptualizing novel *types* of change as “historical” and novel kinds of configurations of past, present and future, in conversation with historical studies invested in exploring what exactly changes and how.

These remarks already coincide with the second thesis concerning the necessity of a renewed philosophy of history to extend its scope beyond the confines of the human world and possibly beyond the confines of historical knowledge as we know it. Many other disciplines are much ahead in this respect. A large part of the humanities and social sciences are already on their way to explore a more-than-human world, including historical studies. The aforementioned growing interest in questions of historical time and historicity in the theoretical field coincides with the broadening of the scope, scale and the time horizon in historical studies, as is most apparent in the rise of deep history, evolutionary history and planetary history, or in the agenda of *The History Manifesto* (Guldi and Armitage 2014).

It was in a milieu of “transtemporal history” (Armitage 2012) that historical studies found its way to the transdisciplinary debate on the Anthropocene (Tamm 2018). The notion of the Anthropocene originally emerged within Earth system science as a proposed epoch signalled by human activity transforming the Earth system (Zalasiewicz et al. 2019). It nevertheless has quickly become a contested concept by acquiring socio-cultural and political meanings, due to the intervention of humanities and social scientific scholarship (Lorimer 2017; Ellis 2018; Lewis and Maslin 2018). Since a co-authored piece of Libby Robin and Will Steffen (2007) on the necessity of history for the Anthropocene, the more impactful discussion-opener piece of Dipesh Chakrabarty (2009), and the article of Julia Adeney Thomas (2014) in the leading journal of academic history writing, historical approaches to the Anthropocene and the more-than-human world are on a rapid rise. In negotiating the relation between change in the

natural world on a geological scale and change in the human world, they significantly contribute to turning the Anthropocene into a wider cultural predicament.

Yet the theoretical underpinnings of the potentially new historical condition underlying this wider Anthropocene predicament and the extent to which historical understanding as we know it is (un)able to cope with the novel predicament are yet to be explored (Simon 2018; Tamm and Olivier 2019). In our view, these questions constitute a part of a new agenda of a renewed philosophy of history. The overall agenda must of course be much wider and the Anthropocene predicament must be understood broadly enough. Its scope should encompass not only the entangled human and natural world as it appears in the transdisciplinary Anthropocene debate, but – among others – all the freshly emerging and oftentimes intersecting approaches of critical posthumanism, environmental humanities, multispecies approaches in anthropology and archaeology, and debates on biotechnology, human enhancement, transhumanism and artificial intelligence.

Although the immense socio-political transformations entailed by newer concerns for the more-than-human world of planetary scope are also part of the larger agenda, we wish to retain our focus in mapping the ongoing rearrangement of knowledge. This is largely due to the fact that recent changes in the ecological and technological domains have not yet triggered a deep structural transformation of world politics, still framed by negotiating nation states and international organizations. Migration due to anthropogenic changes in the Earth system, issues of climate and environmental justice, the potential colonization of Mars, the potential overtake of the labour market by artificial intelligence technologies, the perils of military AI, or the inequalities arising out of enhancement technologies available to the rich are of course serious political challenges. All these are widely addressed questions in climate and technological discussions, but they have not yet altered the political domain to the extent that there would be a new historicity or temporality to investigate for a philosophy of history.

Yet this does not mean that discourses on the Anthropocene, on a more-than-human world or on technological futures do not have their implied “politics” as humanities and social scientific scholarship conventionally understand it. They do. Isabelle Stengers (2015), for instance, has good reasons to fear that catastrophism about climate may result in securing the life of the rich but not of the poor in a coming barbarism. Besides, all the talk about changes that are “anthropogenic” has its own “politics” (Sayre 2012), and biotechnologies may entail a new kind of biopolitics of life and new ways of engineering vitality (Rose 2007). But again, these questions reflect long-established concerns of humanities scholarship and none of them seem to indicate a new configuration of political change or a new political temporality.

All in all, when assessing the role of a redefined philosophy of history in the Anthropocene engaged in mapping the historicity and the underlying temporality of a more-than-human world, we understand such world as one that includes all forms of the more-than-human, from the natural and biological to the mechanical and digital. Accordingly, on the coming pages we will argue for a more-than-human history by surveying fresh perspectives across disciplines. Although certain approaches – such as critical posthumanism (Braidotti and Hlavajova 2018; Braidotti 2019) or the technology-conscious approach of Dolly Jørgensen (2014; Jørgensen, Jørgensen and Pritchard 2013) to environmental history – blend ecological and technological nonhumans, we find it useful to analytically distinguish between two major forms of concerns that extend beyond the confines of studying the human world: the more-than-human as it typically appears in ecology-inspired thinking, and the better-than-human as it usually features in technological discussions.

In light of these considerations, on the coming pages we argue for a new notion history and a new agenda for philosophy of history. To avoid misunderstandings, we do not argue for or share all individual theoretical positions we introduce; what we argue for is a new notion of history that brings together the issues that new approaches to the more-than-human world debate. In outlining the new understanding of history appropriate for the time of the Anthropocene, we focus on its three main aspects. First, we begin by outlining the challenge of investigating a more-than-human world which will entail a *multispecies history*. Then we turn themes more familiar in philosophy of history: the relation between the question of scale and historical time. In doing so, second, we make the case for a *multiscalar notion of history* that entangles timescales; and third, we argue for a *non-continuous history* that departs from linear, processual and developmental configurations of historical time.

For a New Notion of History

The impact of the Anthropocene on human understanding is multiple and only partially graspable. In many respects, the Anthropocene has opened a new situation for humanity, “a new human condition” (Bonneuil and Fressoz 2016). Most fundamentally the dawning of the Anthropocene blurs and even scrambles some crucial categories by which humans have made sense of the world and their lives. More specifically, “[i]t puts in crisis the lines between culture and nature, fact and value, and between the human and the geological or meteorological” (Clark 2015: 9). We contend that each discipline in the present economy of knowledge must reappraise its boundaries and assumptions in the Anthropocene’s shadow (Farrier 2019: 3). In the context of history, the Anthropocene requires us to overcome many deeply rooted conceptual divisions:

natural history *versus* human history, written history *versus* deep history, national/global history *versus* planetary history, etc. But more profoundly, the Anthropocene compels us to work out a new notion of history that radically decenters humans and positions our actions in the multispecies entanglements and in the configuration of multiple times. In other words, the Anthropocene forces a radical shift in how we understand our past relationship to the more-than-human world. Bruno Latour (2017: 48) has succinctly captured the main lesson of the Anthropocene: “it gives another definition of time, it redescribes what it is to stand in space, and it reshuffles what it means to be entangled within animated agencies”.

Multispecies History

The difficulty to be faced right away in trying to explore a more-than-human world is that the concept of history as we know it refers implicitly to “human history”. History deals only with humans, while the rest of the nonhuman world belongs to the province of an entirely distinct “natural history”. One could argue more specifically that it was only after nature acquired its own history that the modern notion of history became possible (Hamilton 2017: 7). This distinction between human and natural history goes back to the eighteenth century, to the famous *Sattelzeit* defined by Reinhart Koselleck, and it was formulated most memorably in the philosophy of Hegel. History is for Hegel the universal process of the realization of the spirit and the nature has no role to play in this process: “we do not see the universal emerge in nature, which means that the universality of nature has no history” (Hegel 1970, vol. 3: 18). Whilst history is a realm in which creative and self-reflective human agents make progressive change, nature encompasses ceaseless movement without forward motion, change without alteration (Kolb 2008, 2011). The verdict of Hegel that “nature has no history” became the cornerstone of the nineteenth century historical research and this tradition is well summarized by Marc Bloch in his *Historian’s Craft* (1949): “Long ago, indeed, our great forbears, such as Michelet or Fustel de Coulanges, taught us to recognize that the object of history is, by nature, man. (...) The good historian is like the giant of the fairy tale. He knows that wherever he catches the scent of human flesh, there his quarry lies.” (Bloch 1953: 25–26) Until recently, historians have acted mainly as the giants of the fairy tale, turning their noses only to where they could smell the human.

Dipesh Chakrabarty was one of the first to argue that the Anthropocene has challenged “the assumption that our past, present, and future are connected by a certain continuity of human experience” (Chakrabarty 2009: 197). He contends that in the situation where humans have become geological agents, “the distinction between human and natural histories (...) has begun

to collapse” and that the consequences of this “make sense only if we think of humans as a form of life and look on human history as part of the history of life on this planet” (ibid., 207, 213). This “Great Ontological Collapse” (LeCain 2016: 16) has revealed more clearly than ever the anthropocentric character of history (Domanska 2010). It has challenged the deeply rooted illusion of humans as the sole actors on the stage of history. Bruno Latour (2018: 43) describes eloquently the new situation: “Today, the decor, the wings, the background, the whole building have come on stage and are competing with the actors for the principal role. This changes all the scripts, suggests other endings. Humans are no longer the only actors, even though they still see themselves entrusted with a role that is much too important for them.” In the light of this new situation, it is increasingly important to ask what history would look like if seen not from the human, but from the nonhuman perspective. This question was first formulated by advocates of animal history who are no longer interested to study only the human-animal relations in the past, but also the history “from the animal’s point of view” (Baratay 2012). Indeed, what would happen to the notion of history if considered from the nonhuman or from the interspecies perspective? To what extent would this approach problematize the epistemological foundations of historical research? And, in the first place, it is possible at all to adopt a nonhuman perspective to history?

Widely known is the thought experiment by Thomas Nagel (1974) concerning the question “what is it like to be a bat?” Nagel concluded that such knowing is unattainable to humans, because we cannot grasp how the bat experiences the world. However, in one of the footnotes to his article, Nagel admits that his conclusion is about experience not knowledge, and that a partial understanding of bat’s perspective may still be possible:

It may be easier than I suppose to transcend inter-species barriers with the aid of the imagination. (...) My point, however, is not that we cannot *know* what it is like to be a bat. I am not raising that epistemological problem. My point is rather that even to form a *conception* of what it is like to be a bat (and a fortiori to know what it is like to be a bat) one must take up the bat’s point of view. If one can take it up roughly, or partially, then one’s conception will also be rough or partial. Or so it seems in our present state of understanding. (Nagel 1974: 442, fn 8).

To understand, even if only partially, the animal perspective is one of the main aims of today’s animal history. One of the leaders in the field, Erica Fudge, admits in her recent article titled “What Was It Like to Be a Cow” (2017) that, in fact, the starting position of human and animal historians is not fundamentally different, as both try to understand how historical subjects have experienced changes over time. At the same time, Fudge does not claim that the

new purpose of historical writing should be to replace the human perspective with an animal one. Instead, she calls for a multiple perspective: “I no longer only want to know (or to try to know) what the experience of an animal was, although I do still hold that as a desire – impossible as it will be to fulfil. I also want to know (or to try to know) what the animals’ experience of being with humans might have been, what the animals’ experience of being with other animals was, and what the humans’ experience of being with animals was.” (Fudge 2017: 272)

Probably one of the most original and ambitious animal historians nowadays is Éric Baratay, who believes that it is high time to move forward from the usual “human history of the animals” (*histoire humaine des animaux*) and to exchange the human perspective for the animal’s perspective. Baratay has shown new avenues for animal history in several studies, but one of his most innovative books is *Biographies of Animals* (2017). It attempts to study the life experience of about a dozen of animals in nineteenth and twentieth century on the basis of diverse written evidence, research done by ethologists, and the imagination of the author. The main aim of Baratay is to restore the historical individuality of animals, to show that it is possible to write the history of a specific animal instead of a specific species. Baratay explains that he tries to “place himself on the animal’s side in order to pass on what this animal at some moment, during a certain period of time, or through his life, has experienced and felt” (Baratay 2017: 21–22). On the pages of the book we get acquainted with a giraffe from Egypt, presented as a gift to the French king in 1826, with a British war horse called Warrior who became famous in the First World War, with the bull Islero who was killed at the Linares bullfighting arena in 1947, or with a Chimpanzee called Consul who was able to learn most of the human behaviours and won much attention in the late nineteenth-century Manchester. Baratay’s approach is made original by putting the emphasis on the reconstruction of how animals themselves understood and experienced the humans. He does not fear to write in the first person and to experiment with various typographic techniques to convey what, for example, the bull Islero might have experienced in the last minutes of his life on 28 August 1947 (Baratay 2017: 107–120).

But the new notion of history means more than a simple integration of the animal perspective into our understanding of the past; it forces us to rethink the very idea of history along multispecies lines. Ewa Domanska (2018a: 337) has called recently for a “multispecies knowledge of the past” based on the fundamental recognition that human life is closely entangled with other forms of life. Such an approach is inspired by multispecies ethnography as proposed by Eben Kirksey and Stefan Helmreich (2010, cf. Ogden, Hall and Tanita 2013). The multispecies ethnography “centers on how a multitude of organisms’ livelihoods shape and

are shaped by political, economic, and cultural forces” (Kirksey and Helmreich 2010: 545) and on the question of the extent to which the recognition of other species are integral and not subsidiary to what it means to be human. We have seen recently also attempts to build a multispecies archaeology which encourages the archaeologists to “dig deeper into considerations of life; into a wider ecology of interactions with plants, fungi, microbes, and even the fundamental building blocks of life, DNA” (Pilaar Birch 2018: 2, cf. Hamilakis and Overton 2013). The main questions posed by multispecies archaeology – namely, “what can we learn about the past without humans as the focus of the question? What can we learn if we frame ourselves as one actor among others in the long march of time? (...) How might situating humans within a wider ecology serve to extend or alter our knowledge of the past?” (ibid., 2–3) – remain most relevant also in the context of history.

The milestones for a multispecies history have been laid out in the last few years (Domanska 2013, 2018b; Onaga 2013; Tsing 2015) with the aim to see humans within temporally as well as spatially dynamic “webs of interspecies dependence” (Tsing 2012: 144). Domanska (2018b: 120) argues that multispecies history should seek “‘innovative forms of agency’ that go beyond human agency, finding them also in non-human factors – so, in animals, plants, objects, microorganisms (as well as in sound and light).” In other words, the notion of history from a multispecies perspective should include all agencies of human and other-than-human species, whether they are animals, plants, fungi, bacteria, or viruses. One classic example of an early approach to multispecies history is John McNeill’s *Mosquito Empires* (2010), demonstrating how the conquest and colonization of the Greater Caribbean depended not so much on the military capabilities of the parties involved but on their ability to cope with mosquito-borne viruses such as yellow fever and malaria. Multispecies history challenges also the traditional understanding of historical sources, extending our attentiveness to the traces left by various nonhuman organisms. Anna Tsing convincingly argues that

there is no reason not to spread our attention to the tracks and traces of nonhumans, as these contribute to our common landscapes (...). Whether or not other organisms “tell stories,” they contribute to the overlapping tracks and traces that we grasp as history. History, then, is the record of many trajectories of world making, human and not human.” (Tsing 2015: 168)

The multispecies notion of history does not only offer a new knowledge of the past but also undermines most of the epistemological certainties in contemporary historical research. According to Domanska (2017: 271), it requires “a different way of knowing the past from the

one offered by historical epistemology with its specific understanding of time, space, change, rationality, and causality”. And, we may add, explicating the epistemology of a multispecies history in order to better navigate among the aforementioned knowledge-claims and their feasibility or unfeasibility requires the renewed philosophy of history we advocate.

Multiscalar History

Bruno Latour has described compellingly in his book *We Have Never Been Modern* how the modern delusion of the clear difference between nature and culture took shape and how from this distinction the very notion of linear “historical time” was born with its sharp distinction between the past and the future. Latour (1993: 71) writes:

The asymmetry between nature and culture becomes an asymmetry between past and future. (...) Modernization consists in continually exiting from an obscure age that mingled the needs of society with scientific truth, in order to enter into a new age that will finally distinguish clearly what belongs to atemporal nature and what comes humans.

The Anthropocene challenges this conventional understanding of historical time and invites us to think beyond our usual anthropocentric scales (Tamm and Olivier 2019). The problem is, however, that none of the traditional historical timescales can account for what it means to be an agent or a force on a planetary scale (Jordheim 2019: 45). According to Chakrabarty (2018: 6; 2019: 220), any historical understanding at the time of the Anthropocene has to combine human and planetary time in a single, multiscalar framework. In the end, this may result in a novel way to situate ourselves in time. As Paul Warde, Libby Robin and Sverker Sörlin (2019: 166) put it: “Perhaps [the Anthropocene] also holds out the promise of a new understanding of time itself and the roles of humans in it.”

The historian’s time horizon seems indeed surprisingly limited from the perspective of the Anthropocene. Historically, both in the geological and biological sense, historians are interested in a curiously short time period. Already Walter Benjamin (2007: 263) pointed out that the history of *homo sapiens* does not occupy more than two seconds in the 24-hour period of the history of organic life. John L. Brooke reminded this recently when he imagined the 5 million years of human evolutionary time as a 24-hour period. Then the entire 300,000 years of modern humanity would comprise about an hour and a half, the 60,000 years since modern humans left Africa comprise about seventeen minutes, and the 12,000 years since the end of the Pleistocene and its aftershocks comprise slightly more than four minutes. But against a similar

24-hour clock of the geological time of evolving earth systems since 4,6 billion years ago, these epochs are even more minutiae: about six seconds since the emergence of modern humanity, one second since the first successful departure from Africa, and a few nanoseconds since the end of the ice ages (Brooke 2015: 114).

We need a much longer temporal view of our past as E. O. Wilson acknowledged a couple of decades ago; we need a “deep history” that would “combine genetic and cultural changes that created humanity over hundreds of thousands of years” (Wilson 1996: X). Wilson’s call has been recently picked up by Daniel Lord Smail, who, together with scholars from various fields, has been committed to develop the principles of “deep history”, aiming nothing less than to propose “a new architecture for human history” (Shryock and Smail 2011: XII). According to Smail (2008), the notion of history should not rest on the invention of writing, but should encompass the entire development of the human species, stretching millions of years into the past. This means, of course, that historical research must be based on close cooperation with disciplines like anthropology, archaeology, genetics, neurophysiology and evolutionary biology. “Histories can be written from every type of trace, from the memoir to the bone fragment and the blood type,” Shryock and Smail (2011: 13) contend.

The initiative of deep history is close to the project of evolutionary history, proposed a few years ago by Edmund Russell (2011). Evolutionary history focuses on how human and nonhuman populations have coevolved or continually changed in response to each other. Besides, it also aims to show also how humans have fundamentally shaped the evolution of a variety of species, embedding organisms in social, economic, and technological contexts (Russell 2011: 2). The project of big history (Christian 2004; Spier 2015) runs parallel to these initiatives inasmuch as it offers an interpretation of history on the largest possible scale, with human history seen within the history of the universe.

Taken together, all these endeavours clearly point toward a need for a new notion of time in history, to look at ourselves “in the mirror of deep time” (Ginspoon 2016: X). To a certain extent, they also fit what the Anthropocene has taught us, namely, that time and historicity are not specifically human: “we may not build our interaction with nature by claiming a monopoly on the short term any more than we may hive off the long-term onto a world beyond the human without agency or ‘thought’.” (Sawyer 2015: 12) It is no longer sufficient to see ourselves only in terms of human development; “we must have a broader perspective, a geological perspective, one that prompts the idea of deep time” (Wood 2019: 6).

But there is also an extent to which deep, evolutionary and big histories resonate less with the Anthropocene predicament. For the new notion of historical time is not only about

expanding our temporal horizon deep in the past. It is more about a pluralistic understanding of temporality that is open to its multiple rhythms, events and trajectories over different scales. This was already the original message of the initial engagement of Chakrabarty (2009) with the Anthropocene, to situate human history with the geological timescale in a meaningful way, and this is what drives his recent efforts to find a way translate ideas that work on the scale of Earth history to the language of the history of the human world (Chakrabarty 2018). Or, as Rosanne Kennedy and Maria Nugent (2016: 65–66) assert, the Anthropocene “pushes the question of scalarity (...) away from the horizontal plane registered by cultural and human flows across borders to the vertical scales of geology, earth and deep time”. We should be able to move between multiple temporal scales, even to “play with the scales”, to follow the conceptual metaphor of Jacques Revel (1996). It is important to “shuttle between scales, explaining how small-scale phenomena (like a factory adopting a steam engine) generated large-scale phenomena (particulate emissions, acid rain, climate change) via multiple, recursive, aleatory acts” (Otter et al. 2018: 595; cf. Fitz-Henry 2017), just as well as it is important to explore how such large scale phenomena shapes actions on smaller scales.

Non-continuous History

Mutiscalarity is nevertheless not the last issue to consider in relation to historical time. If we venture into deep time with an attentiveness towards multiple timescales and rhythms, then we also need to be mindful of alternatives to historical continuity. The greatest shortcoming of big, deep and evolutionary history approaches is precisely that they habitually align with a notion of history inherited from Western modernity in telling an overarching story of development informed by a deep temporal continuity. Although multiscalarity to a large extent does way with the idea that we can tell a single unfolding story of practically everything since the birth of the universe, it is still prone to result in simply retaining the developmental temporality and continuity in change in all its entangled timescales. If we think that the Anthropocene predicament challenges the conventional understanding of historical time, this must also mean a challenge to continuity.

This is where recent work in philosophy of history may already come handy. For the linear notion of historical time that Latour thinks is challenged by the Anthropocene is of ill repute in the humanities and the social sciences since quite some time in the world wars. It is another question that we still seem to lack feasible alternatives to it. But twenty-first century philosophy of history has already ventured into exploring the possibility of non-developmental historical time and the question of non-continuous change. Runia (2014) even argued that the

most pertinent question to come to terms with in philosophy of history today is the one concerning discontinuity over time, without giving in to the urge to cover its traces by historical works (which is precisely what big and evolutionary histories do today). Besides, long before Runia, Foucault has already devoted both his archaeological (2002) and genealogical approaches (1984) to the endeavour of conceptualizing alternatives to the developmental historicity of Western modernity.

It is of course true that neither Foucault nor Runia has much to say about anthropogenic changes in a more-than-human world. It is equally true that discontinuity (which belongs to the same order as continuity, being each other counterparts) may not be the perfect terms to describe the radical transformations entailed by the Anthropocene predicament. But their general concerns for historical disruptions may find resonance with concerns about anthropogenic changes in the natural world which are perceived today as abrupt transformations with unforeseeable consequences. What brings them to the same platform is their shared objection to hypothesize linearity and continuity in the human and the more-than-human worlds respectively. Accordingly, what we argue for is a broad notion of non-continuous history that potentially covers all kinds of non-continuity, including but not reduced to discontinuous, abrupt, disconnective, disruptive transformations.

As an example in the more-than-human world, think of the notion of “planetary boundaries” that intends to define a safe operating space for humanity through identifying “key Earth System processes associated with dangerous thresholds, the crossing of which could push the planet out of the desired Holocene state,” while such thresholds “are defined as non-linear transitions in the functioning of coupled human-environmental systems” (Rockström et al. 2009). Transgressing planetary boundaries to a large extent threatens with transitions in Earth system conditions that are considered to be “catastrophic” and “deleterious” to human societies. Such changes, needless to say, can hardly be reconciled with the deep continuity of historical time as we know it throughout Western modernity.

The same non-continuity applies to runaway changes in the technological domain. To begin with, singularitarians expect an event to happen in the near future called “technological singularity” (or sometimes simply “singularity”), that is, the most profound alteration of the human condition and practically everything we know through surpassing general human capacities by technological means (Eden et al. 2012). Such non-continuous transformations may be brought about through superintelligence scenarios (Bostrom 2014) or as the result of human enhancement and transhumanist aspirations (Savulescu and Bostrom 2009; Ranish and Sorgner 2014; Fuller and Lipinska 2014). For our present purposes, the latter matters more not

only because “singularitarianism may be the best known public face of transhumanism” (Thweatt-Bates 2012: 51) as well exemplified by the fact of a transhumanist candidate running a presidential campaign in the US in 2016, but primarily because the aim of technologically engineering beings whose capacities escape the realm of human limitations connects to the multispecies history aspect discussed earlier.

Theories of species companionship typically consider technological beings part of their entanglements, making claims that “as a nature cultural compound, a dog – not unlike other products of techno science – is a radical other” (Braidotti 2013: 69). On closer inspection, however, things do not look that simple, plain and unambiguous. Enhanced humans and subjects of transhumanist aspirations do not spring out the way in which “the humanities are extending their debates about identity, alterity and exclusion to encompass nonhuman entities” (Domanska 2010: 124). For the technological nonhuman of transhumanism and enhancement debates is not simply one among the many in a more-than-human world of species equality. It is not a subject that needs to be emancipated but a subject remarkably exceptional: it is better-than-human being (Simon 2019b) in the sense that it outperforms human capacities. The ultimate aim of transhumanism is not simply to act on the Enlightenment ideal of human perfectibility as transhumanism itself oftentimes claims, but to transcend the biological limitations of being human. In the most primordial sense, such technological beings – just as well as enhanced humans – may be part of a multispecies assemblage. But their exceptionality do not really fit together with the anti-exceptionalist and egalitarian sensitivity of theories of multispecies companionship.

Both ecological and technological nonhumans compel us to rethink the human and its interspecies relations, but the ways in which they respectively do so differ and may even entail contradictions and aporias within the larger picture. For now, it seems to us that whereas ecological approaches to a more-than-human world much more forcefully display the multispecies aspect of the new notion of history, technological approaches to the better-than-human manifest a non-continuity aspect, while the relation between the two is yet to be explored. What is certain is that the agenda “to apply technology to overcome limits imposed by our biological and genetic heritage” (More 2013: 4) escaping the logic of mere improvement and points beyond the ideal of perfectibility. By escaping biological limits, human enhancement and transhumanist scenarios escape the realm of continuous evolutionary transformations and entail radical changes that can no longer be associated with a “human” condition. At its most extreme, such changes align singularity scenarios that represent a leap into the complete unknown and unfathomable future (to our human minds). Inasmuch as such abrupt changes

revolve around events that trigger wholesale transformations, they defy the continuity of processual historical time and represent an “evental temporality” (Simon 2019a: 101–103).

Although paying attention to such evental eruptions, we believe, is a key feature of non-continuous history, we do not of course wish to argue that from now on nothing can be conceived of in terms of any versions of continuity. Cumulative, progressive, developmental and processual temporalities may still dominate the ways we conceive of both certain human and natural phenomena. What a non-continuous history entails is a new dimension of large-scale wholesale transformations that became thinkable due to the entanglement of the human and the natural world and the unprecedented technological capacities. In similar ways, multispecies history and multiscalar history do not put a definite end to historiographies of the human world but open up a potentially new historical knowledge unconceivable within the confines of an exclusively human-focused modern notion of history.

For a New Philosophy of History

At the time of the Anthropocene and rapid technological changes we need new a notion of history on which a new agenda for philosophy of history can be build. In turn, the first phase of this new agenda consists of the very work of theorizing the new notion of history. The two endeavours presuppose and reinforce each other: the notion of history we need includes all forms of life (multispecies history), extends deep in the past and supports the interaction and integration of multiple time scales (multiscalar history), and takes seriously the role of transformative events and disruptions on a deep timescale (non-continuous history); at the same time, the new philosophy of history has to come to terms with an extremely broad set of interrelated questions inherent in the new notion of history. Our task is neither to provide answers right away nor to outline all potential questions one may ask within the new agenda. What we can do here in place of a conclusion is to offer a few intriguing themes deriving from the challenges we touched upon in this essay, themes that most certainly gesture toward the possibility of the new philosophy of history.

The themes are typically a mixture and refocused older debates and adventures into unexplored territories. To begin with, one can think of the necessity to readdress epistemological questions and to redefine the limits of historical knowledge. To study a more-than-human world, we need to come to terms with the extent to which historical knowledge must or must not be grounded in human experience. We need to assess whether the claims to study animals’ experiences – quite strong claims such as that of Baratay’s we introduced earlier – are amount to an epistemologically feasible enterprise. In doing so, we need to develop

answers to the question whether anthropocentrism is inescapable and the human remains exceptional in one sense or another: is the “multispecies knowledge of the past” of Domanska (2018a: 337) possible or will it necessarily remain what we may call “a human knowledge of a multispecies past”? But this question is focused primarily on animals and the ecological other. Taking into consideration the prospect of technologically enhanced beings makes the picture far more complex with the assumed exceptionality of the technological other. Not to mention that confines of human experience are exceeded also in terms of larger-than-human lifetime natural phenomena that may not be a subject of primary experience even if such phenomena are now intertwined with human activity. And, of course, the main question is whether these interrelated themes and concerns are reconcilable with and supplement each other or, to one extent or another, are rather built on contradictory premises.

Tackling these issues, as we argued in the introductory section, brings philosophy of history and historical studies to a joint platform in studying a world whose new “historical” character they jointly explore. The same applies to the potentially new themes that philosophy of history in the Anthropocene must grapple with. Inasmuch the scope is broadened to encompass the more-than-human world and inasmuch as the limits of historical knowledge are redefined, the new philosophy of history – just as well as historical studies and the new notion of history – interferes with domain formerly associated with the natural and life sciences. Yet this does not mean a simple intrusion. It rather points towards an emerging transdisciplinary knowledge regime in which all former knowledge formations may transform beyond recognition. It may be that a novel role and function of the new concept of history and the new philosophy of history needs to be theorized within such a knowledge regime. But it may equally be that, on the long run, the main agenda of a new philosophy of history proves to be eventually to author the transition into a knowledge economy without a notion of history, either old or new.

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