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History Begins in the Future: On Historical Sensibility in the Age of Technology

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The Supposed Lack of Future-Orientation

When Scarlett Johansson portrays an AI operating system that develops an intimate relationship with a human, you probably do not associate this with history. Not because the critically acclaimed *Her* is only a movie, but because it deals with our future prospects rather than the past. In other words, you probably would not make any meaningful connection between artificial intelligence and history because there has been a widespread and exclusive association between history – understood both as historical writing and as the course of human affairs – and the past in postwar Western culture.¹

With regard to historiography, it seems evident that historians write about past things and hardly ever about the future (unless it is about how people in the past

conceived of their future). The same goes for TV shows, movies, novels, exhibitions, games, re-enactment events, and practically everything to which we may assign the adjective ‘historical’: we tend to label them so inasmuch as they are about the past. As for history understood as the course of human affairs, the practice of postulating a historical process – and especially the practice of attributing meaning to it – became an illegitimate enterprise in the postwar period precisely because of its engagement with the future. In classical philosophies of history of the late Enlightenment, however, history meant not simply the past, but the past seen together with the present and the future. And it was precisely this idea of a temporal unity in which the future is logically connected to the present and the past (and the supposed meaningfulness of this temporal whole) that became rather unfeasible in the early postwar decades.

The problematic idea of a meaningful temporal whole *as* history (which enabled the postulation of directionality in human affairs) could be abandoned by cutting off the future. Hence the large variety of wartime and postwar criticism of philosophy of history from Walter Benjamin to Karl Löwith, hence the efforts of analytic philosophers to transform an ‘illegitimate’ philosophy of history into being a ‘legitimate’ philosophy of historiography, hence Karl Popper’s furious attack on historical prediction, and hence even the ‘postmodern’ ways of ending history.² The message of all this was that if you want to deal with history in a legitimate way, you should forget about *your* future in the present. Generations of historians and philosophers took this message to heart, internalizing it as self-evident that the future has practically nothing to do with whatever we mean by history. In other words, it simply has become an unquestioned tacit assumption in much historical and philosophical scholarship.

Contrary to this view, in what follows I will argue that *we cannot even think historically without having a vision of the future in the first place*. There simply is no history – neither as the course of human affairs nor in the sense of historical writing – without a vision of the future. Yet this is not to say that we should delude ourselves again into thinking that somehow we can have *knowledge* of the future. It is only to say that in order to have a concept of history we have to have a *vision* of the future, regardless of whether this vision comes true or not. This does not mean, however, that we must revive the concept of history demolished by postwar criticism together with its corresponding vision of the future. It is only to say that a certain vision of the future goes hand in hand with a certain concept of history, and that our present-day concept of history has to tally with the vision of the future in Western societies today.

It is for this reason that recent theories of presentism are largely misleading. When *François* Hartog argues that since the fall of the Berlin Wall and the collapse of the Soviet Union the Western world lives in a ‘regime of historicity’ that is no longer future-oriented but presentist (by dint of privileging the present as its point of view),³ or when Aleida Assmann claims that ‘the future has lost its magic power to make the present vanish into a past that is only of historical interest’,⁴ they both seem to mistake *future-orientation as such* for *ideological-political future-orientation in particular*. By describing the entire socio-cultural environment as presentist while having their exclusive focus on the political domain, theories of presentism themselves create a deceptive form of presentism. This operation prevents them from seeing that the future-orientation needed for having a history is not to be found today in the *explicitly* ideological-political realm, but in the technological realm.⁵

Although theories of presentism intend to escape the presentist condition they diagnose, these theories themselves seem to be the biggest obstacle to this very goal. The best way to escape presentism is, I believe, simply to dismiss the idea that Western societies live in a presentist ‘regime of historicity’ in the first place. As soon as one entertains the possibility that future-orientation is not an exclusively ideological-political matter, one begins to see how implausible and misleading the presentist diagnosis is.⁶ Whereas the lack of political vision and the collapse of utopian political thinking is a recurring postwar theme since the 1960s at least,⁷ our not (explicitly) political visions are thriving and they introduce genuine novelty in our prospects for the future. Unlike the anaesthetized political imagination, current technological visions – or the ecological visions entailed in climate change and in the notion of the Anthropocene – bring forth a qualitative change in the way we think about the future, departing from the characteristically developmental visions of the Enlightenment and political ideologies. If the arguments I present later hold, such a qualitative change in our vision of the future entails a qualitative change in the way we make sense of the world and ourselves historically’. But before I argue this point, I would like to return to the technological vision of our times to illustrate its pervasiveness.

Our Technological Vision

To see how widespread our current technological vision of the future is, just consider how it has recently invaded three key areas of Western culture: cinematic imagination,

scientific imagination and public debates. This observation must nevertheless be preceded by an important qualification concerning the dominance of this vision. When I state, at a later stage, that the technological vision is ‘practically everywhere’ and that ‘this is our vision of the future’, I do not mean that this is the *only* vision of the future we have. Nor do I mean that what is dominant is the particular technological vision I deal with. What I mean is that our technological vision – together with ecological prospects of a climate catastrophe or the threat of global nuclear warfare – is the paradigmatic case of a wider category that I call ‘unprecedented change’. What is dominant, I think, is the ‘unprecedented’ as the perceived *character* of our technological vision.

Although we also talk about the future in terms of fighting poverty and emancipatory politics, and although such visions are equally widespread, my principal concerns here are more recent postwar future scenarios, which, I think, pose a challenge to the developmental historical sensibility that underlies the future visions of emancipatory politics. The most pervasive of these scenarios of an unprecedented future is the technological vision, which is of course not confined to the themes of artificial intelligence, technological singularity (the postulated point at which machines outsmart humans in designing more intelligent machines) and mind uploading. Among many other phenomena, it also concerns bioengineering, nanotechnology, cloning, transhumanism, and so forth.⁸ Moreover, it is of course not confined to the movie *Her*. In fact, it is not confined to cinematic imagination at all, although lately it has certainly become a prominent theme in movie theatres due to a renaissance of the sci-fi genre. To mention a few more examples, when it comes to movies or TV series produced in the last few years, you can consider *Ex Machina*, *Humans*, *Orphan Black*, and just to include a massive blockbuster, the latest *Avengers* movie with the artificial intelligence villain named Ultron. As previous waves of cinematic engagements with the themes and concerns, you can also think of classics like *Blade Runner* or *Terminator* from the first half of the 1980s, or the many (today less well known) movies of the 1950s and 1960s inspired by the scientific research of their own time, which brings me the second area of our lives where our technological vision thrives.⁹

The proliferation of sci-fi that we are currently witnessing, and the fact that sci-fi has transformed into being a major genre of interest in movie theatres, goes hand in hand with a proliferation of scientific imagination. The technological vision of the future that *motivates* scientific research is the same as in cinematic renderings, except of course that in the majority view of scientists all of this does not result in a robot apocalypse. The typical experiments that are actually going on in laboratories look like the ‘dumbing pill’

experiment, conducted with three Nao humanoid robots. In the experiment, two out of the three small machines were muted, with the knowledge given to them that each of them took a randomly chosen pill out of five pills available in the room. Two of the pills were ‘dumbing pills’ that produced the muting effect, and three pills were placebos. After the pills were given to the Nao robots (indicated by a touch on the sensors on the top of their heads), they were asked ‘Which pill did you receive?’ According to their program, each robot was trying to say ‘I don’t know’, but only one of them was able to voice it, given that the other two received dumbing pills. After a short while, however, the Nao robot inferred from hearing itself speaking that it could not be muted and said ‘Sorry, I know now! I was able to prove that I was not given a dumbing pill!’¹⁰

This experiment is also typical of those scientific achievements that feature as sensational magazine stories, that are regularly reported in (online) newspapers and in social media, or are accessible on YouTube in popular science documentaries, which is precisely my third point. Our shared vision of the future is not only the leitmotif of our current cinematic and scientific imagination, but also features prominently in our public debates and configures our public interests. The latest wave of debate was sparked by Elon Musk, CEO of SpaceX and Tesla Motors, after tweeting about *Superintelligence*, Nick Bostrom’s book on the existential risks that the prospect of artificial intelligence poses to humanity, and on the question of how can we avoid existential catastrophe.¹¹ Musk’s tweet reads like this: ‘Worth reading *Superintelligence* by Bostrom. We need to be super careful with AI. Potentially more dangerous than nukes.’¹² Following Musk’s tweet, more and more people voiced concerns and a large coalition began to form, with results including a public statement of AI researchers on military AI, endorsed by prominent figures like Stephen Hawking or Steve Wozniak.¹³ Given all this, it seems important to note that neither Bostrom nor Musk argue against artificial intelligence research. The main concern of those who take part in the public debate by placing warnings is not to ban AI research, but to introduce the necessary safety checks to control it.

The point of recounting all this is neither to advocate technology nor to suggest that any of this will inevitably happen. Regardless of its likelihood, the point is that here we encounter, arguably, the shared vision of the future of our times, at least in Western societies and societies that are heavily linked with the Western world. This is our vision of the future, and it is practically everywhere: in public discussions, in scientific laboratories and in movie theatres. That said, the question that somewhat naturally arises goes as follows: ‘Alright, but why should all this matter to historians or anybody relying on a historical sensibility?’ My answer is that all of this matters to historians because history

begins in the future. Regardless of whether any of the aforementioned future scenarios come true or not, insofar as this is our vision of the future, this is where history begins. And if history begins in the future, then the way we conceive of history *today*, must begin in our current future vision of technology.

To support this claim, I will in the following present an argument distributed across five (sometimes very brief) sections. First, I will restate the thesis that history begins in the future, in a vision of the future different from both the past and the present. In the second step I will support this thesis by outlining the interdependence of the concepts of history, change and the future in the shape they came about during the late Enlightenment. The third step that logically follows from this interdependence is a deductive argument stating that if our vision of the future changes, our concept of history changes with it. In the fourth step I will return to technology and elaborate on the characterization of our technological vision of the future as *unprecedented change*. The task of this section is also briefly to outline the notion of history that might be able to make sense of such a future vision by recognizing the unprecedented as unprecedented without creating a historical trajectory leading to it. Finally, in the fifth step I will answer the question ‘Why is it crucial to account for unprecedented change “historically”?’ by claiming that we simply cannot do it otherwise because it is not only that history begins in the future, but our future is historical too.

History Begins in The Future

The first point I would like to make is that the very possibility of change begins in the future. More precisely, change begins with the assumption that there is a future different from the present and the past. This assumption is a precondition of history, both in the sense of the course of human affairs and in the sense of historical writing. The concept of history as we know it necessarily entails change over time: when you say that something has a history, you mean exactly that it changes over time, and when you write the history of a particular subject, you write about the changes that particular subject went through. On the other hand, when claiming that something does not change over time, this means that it has no history, that it is ‘ahistorical’. In order for history to be possible, in order to have a concept of history, we need change over time; and in order for change to be possible, we need a future different from the past and the present, all this meaning that history – its very possibility – begins in the future.

Without a future vision to enable change in human affairs and postulating history as the course human affairs to conceptualize and account for that change, there is no historical writing either, there is nothing historical writing could study and inquire into. Nor would we have without a future vision any cultural practices labelled either reasonably or quite mistakenly ‘historical’ (novels, TV shows, museum exhibitions, re-enactment events, and so on). Or, if change in human affairs concerned only the past but not the future, if we actually had an ‘end of history’ situation, then there would be only one single and incontestable story to tell about human affairs.¹⁴ It would be the single grand story about how human affairs have come to a very specific end, which would absorb all smaller and particular stories. Furthermore, none of these stories could ever change or be challenged precisely because an ‘end of history’ situation means that the future is closed. Without any possibility of a future impact, without change in the course of human affairs, there would no longer be anything to compel us to rectify the grandiose story itself. An ‘end of history’, were it really to occur, would result in an ‘end of historical writing,’ meaning that without the possibility of novelty in the course of human affairs there simply is no novelty in historical studies.

To sum up, the thesis I would like begin with concerns our historical sensibility at the most general level, encompassing both senses of history. Condensed into one sentence, the thesis goes as follows: *history – the very possibility of history – begins with the formulation of a vision of the future, that is, with the postulation of a future different from the present and the past.*

History, Change, and the Future: A Story of Interdependence

The philosophers (of history) of the Enlightenment knew this very well. In their own respective ways, they opened up a future that would be better than their past, and postulated a historical process to account for all change leading to that better future. It may very well be that their enterprise did stem from ‘the basic experience of evil and suffering’ as Karl Löwith stated,¹⁵ and it may equally well be that all this was a compensatory act to unburden human beings from being responsible for all evil as Odo Marquard argued.¹⁶ But regardless of the motives behind postulating a historical process, and regardless of whether such postulation was or was not successful in compensating for all the monstrosities attested to in daily experience, the compensation itself, that is, the concept of history itself could not have been formulated without opening up the future.¹⁷

As for the monstrosities attested to in daily experience in the Enlightenment, they make at least one thing perfectly clear: for those who lived through it, the Enlightenment could not mean something that they already had or lived. It could not refer to anything tangible and available; it was not their present condition. Or, to be more precise, it was only partly their condition as a stage in a postulated historical process, but it was still in the future that wonderful things were supposed to happen. For Kant it was a matter of the future for humankind to reach maturity,¹⁸ while in Condorcet's classification of the epochs of history, the tenth and final epoch, namely the 'future progress of mankind', organizes all the previous epochs: it is only in light of the foreshadowed changes that even the first epoch about 'men united into hordes' has any significance.¹⁹ Hence, back in the Enlightenment, the Enlightenment meant less the actual state of affairs and more the prospect of such enlightenment yet to be reached. It meant more the future when things were expected to change for the better, and conversely, such change could place only insofar as there was something like history, something like a historical process *as* the taking place of such change.

It is in this way that *the concept of history, the possibility of change and the vision of the future were invented as one comprehensive package*, with the constitutive components inseparable from each other. Since their first comprehensive appearance in the Enlightenment, the three components are arranged in the following way: history takes the shape of the developmental unfolding of an ontological subject (Humanity, human faculties, Freedom or Reason on the largest scale); change takes the conceptual shape of stages in such development during which the subject of change retains its self-identity as a substance of the historical process; and finally, the future vision takes the shape of the ultimate fulfilment of the development. All this is not to say that subsequent philosophies of history did not introduce alternative visions. They definitely did, and there are obvious differences between the Enlightenment vision of the perfectibility of human beings and the rise of the proletariat to power. All this is rather to say that despite all obvious differences, prewar philosophies of history exhibited *a certain disposition* of the interdependent notions of history, change and the future as their shared condition.

Yet the sharpest illustration of the interdependence comes not from those philosophies of history which postulate a future yet to arrive at, but from those which eliminate or negate one of the three notions, necessarily implying the elimination or negation of the others. This is precisely how 'end of history' theories proceed: either it comes directly from Hegel or as Fukuyama's modern variation on Hegel, speaking *about* the end of history and thus speaking *from* the supposed position of standing at that

endpoint means nothing other than that there is no further change to come.²⁰ Saying with Hegel that we have arrived at the point where the conditions for everyone's freedom are given or with Fukuyama that liberal democracy has already proven to be the ultimate socio-cultural development means that there is no further change exactly because the future is empty.²¹ In other words, claiming an end to history necessarily entails closing the future and rendering change impossible.

New Future Means New History

There is, I believe, no escape from the triad of history, change and the future. Their necessary interrelatedness is equally well testified by classical philosophies of history and end of history theories. We may choose to embrace or reject the entire package of history, change and the future, but either way, we can only do so wholesale. Yet when it comes to embracing the package, there is a further choice that makes a crucial difference. We do have a choice about the specific shape in which we do so: there is nothing compelling in embracing the constituents in the very conceptual shape that the Enlightenment or German Idealism did. *Even though our notions of history, change, and the future are bound to each other, in their togetherness they are open to conceptual innovation.* If we are able to think differently about any of the three – either the future, or the concept of history, or the concept of change – it implies that simultaneously we begin to entertain different ideas about the other two as well.

The general point here is that a change in one part of the package implies a change in the other two. In particular, this general point means that if our vision of the future changes, our notion of history (and our concept of historical change) necessarily changes with it. And given the technological vision introduced earlier, I believe that all this is not only a theoretical and logical possibility but an actuality, entailing that we already do cultivate a historical sensibility other than the developmental one inherited from the Enlightenment.

History in Times of Unprecedented Change

In order to grasp this historical sensibility and sketch a notion of history that matches the technological vision, it is necessary first to characterize the latter. As mentioned earlier,

our current future vision can be understood in terms of ‘unprecedented change’. This point calls for some qualifications right away. To begin with, when I talk about ‘unprecedentedness’ in relation to change, I do not mean an inherent property of change itself, but our perception of it. What matters for my argument is not what the future actually will be, but that we *perceive* the future in the present as unprecedented. But what exactly does ‘unprecedented’ mean in this context? In the first place and against the backdrop of the classical disposition sketched above, I mean a change for which you cannot account by relying on a concept of history as the development of a subject over time, simply because there is nothing from which it could develop. The reason why it has nothing to develop from is that the change that is unprecedented rather signals the birth, the coming-to-existence or coming-to-presence of a subject that had no prior existence. All in all, *by a change that is unprecedented I mean the coming-to-existence of an ontological subject that has no origin and no past condition from which it could unfold.*²²

Such change cannot even be conceived merely as the disruption of the continuity of developmental unfolding that features in classical notions of history, change and the future. It is nevertheless true that unprecedented change, at least as I use the term, signals a disruptive event, best exemplified by the notion of technological singularity that is supposed to bring about a subject (sentient machines) with no prior existence. But then, if a disruptive event does not concern a deep continuity, what could it possibly disrupt? To answer this question, one needs to take the long-term view and consider a series of disruptive events as a concept of history encompassing past, present and future. What gets disrupted is not a deep continuity and unfolding, but the coming-to-existence of a previous subject that came to be by an earlier disruptive event. Whereas classical philosophies of history kept hold of continuity by having a definite subject of development (humankind on the largest scale, in philosophies of history) that retained its identity in going through various stages of change, in times of unprecedented change the historical process we postulate in order to make sense of the worlds and ourselves ‘historically’ must abandon continuity. The only way continuity can be abandoned means nothing other than abandoning the definite subject and configuring the historical process as a supersession of the very subjects of the course of (human?) affairs. Hence the thesis I would like to put forward goes as follows: *the notion of history that matches our future vision of unprecedented change must be one that already configures the course of human affairs as a series of unprecedented changes.*

To conceptualize the difference between the two notions of history, I would like to invoke what Reinhart Koselleck calls history as a collective singular. By this, Koselleck

refers to the notion of history in which the possibility of all individual histories came together in the late Enlightenment and the two meanings of ‘history’ – that of the course of human affairs and historical writing – became synthesized.²³ I would like to invoke it as an equivalent of what up to this point I have called the developmental notion of history. Against this backdrop, the notion of history entailed in the prospect of unprecedented change may best be called *history as a disrupted singular*. On a conceptual level, history remains a singular insofar as we necessarily postulate a historical process (absorbing all possible individual histories) by keeping the future open and thereby enabling change. But history transforms into a disrupted singular insofar as the particular change we envision in the future is unprecedented change, and the historical process we necessarily postulate thereby is that of the disruptive supersessions of subjects as a series of unprecedented changes.

The notion of history emerging from our future vision retains the possibility of postulating a historical process that nevertheless circumvents the postwar suspicion of the very idea of such a historical process. History as a disrupted singular does not involve an ultimate meaning attributed to the course of human affairs. It does not imply a supposed knowledge of the future, it does not entail teleology, and – due to the lack of a single self-identical subject of the postulated process – it does not introduce a substance. Yet it testifies to a sensibility that is still ‘historical’, with all its attendant attributes of future-orientation and change, although these components get arranged in an entirely different, postwar disposition. For ease of comparison, I would like to offer the following table, with the classical disposition on the left side, and our postwar disposition on the right (see next page).

Classical disposition

Vision of the future

The fulfilment of what has already been there in the past, originating from it

Concept of change

Continuous change as stages of the development of a self-identical subject

Notion of history

Collective singular: the developmental unfolding of a single subject as the substance of a historical process

Postwar disposition

Vision of the future

The coming-into-existence of a new subject without having an origin in the past, that is, unprecedented change

Concept of change

Disruptive, unprecedented change that supersedes a previous subject

Notion of history

Disrupted singular: a series of unprecedented changes, the perpetual supersession of the coming-into-existence of ever new subjects

The conceptual dispositions of the respective sides of the table match and render possible characteristically different socio-cultural and political endeavours. As for the left side, in the modern period Western societies witnessed a large variety of endeavours and beliefs that presuppose a notion of history as developmental unfolding. The Enlightenment idea of the education of humankind, the belief in the perfectibility of human faculties, nineteenth-century nation-building processes, August Comte's positivism with its three stages of the evolution of societies, and any sort of evolutionary thinking for that matter, or the famous scheme charting the route to classless society are the most obvious examples. Although the paradigmatic endeavours tailored to the classical disposition are typical of the late eighteenth and the nineteenth century, some of them are still with us. Emancipatory politics and civil rights movements may be the most apparent ones, exhibiting the same developmental temporal structure. True, in many cases the subject of

development that goes through changes is smaller than humanity as such. But the point is not to state that every subject about which a history is written can substitute humanity as the subject of the whole historical process. The point is rather that the conceptual configuration that enables you to make sense of the respective endeavours of women's suffrage and the Enlightenment betterment of ourselves as humans is the same: to make sense of them 'historically', you have to plot the course of human affairs as development and future fulfilment.

As for the right side of the table, the notion of history as disrupted singular might enable us to make sense 'historically' of the results of bioengineering, artificial intelligence, of humans becoming geological agents, or of humans living on another planet as is the goal of the various projects of establishing colonies on Mars ran by NASA, SpaceX or Mars One. In one way or another, all these prospects involve leaving behind our human condition as we know and knew it in its many appearances since the beginning of what we consider to be human history. However, the consideration that we are about to leave behind something that we have been since the beginning of human history, the very idea that there is *a beginning of human history*, enters our minds only by relying on the developmental notion of history. But the prospect of having human minds uploaded into computers or the prospect of being outsmarted – or in other scenarios even erased – by machines simply does not make sense as the continuation of the developmental story of our human condition. We cannot make sense of what we perceive as unprecedented by telling stories of preceding states of affairs. Yet this poses a serious difficulty: if we perceive future prospects as unprecedented, the past is not supposed to play any role in understanding them. Accordingly, the question to face is whether we can and should establish a relationship between past and future when the future is no longer understood as emerging from the past.

According to the right side of the table above, I believe that we can and we definitely should. We can make sense of these prospects by postulating a historical process that moves along non-developmental, unprecedented transformations, a process that *already* plots the course of human affairs as a series of unprecedented changes. And the reason why we need to do so is that there is no other way to make sense of the unprecedented as unprecedented than *thinking about unprecedentedness as being the preceding state of affairs from time to time*.

There Is No Other Future than the Historical

But why would it be important to recognize something as unprecedented? And why would it be crucial to recognize it as such ‘historically’? To begin by answering the first question, it is important to recognize something as unprecedented because this is what recent calls for public action require. If postwar future scenarios belong to the category of the unprecedented, then *in order to be able to act upon* them we must recognize them in their perceived unprecedentedness. And this, I think, we simply cannot do by relying on developmental history, since its job is nothing other than to domesticate the new.

As an illustration of how developmental history domesticates the new, and how this presents an obstacle to acting upon current public concerns instead of presenting an incentive to action, consider *The History Manifesto*. Its authors, Jo Guldi and David Armitage ask what I think is the right question at the right time, that is, the question of the public relevance of history. Yet, despite their best intentions, their answer rather functions as an obstacle to public action due to their invocation of developmental history as the only form in which the discipline can return to providing long-term interpretations. All this is most apparent when *The History Manifesto* discusses climate change and the notion of the Anthropocene, noting that ‘the label immediately resulted in a historical debate over whether the effects of climate change began 250 years ago with the steam engine, eleven thousand years ago with the rise of human hunter civilizations and the extinction of animals, or five to eight thousand ago with the agricultural revolution’.²⁴ What features here as a ‘historical debate’ over the Anthropocene is actually a set of suggestions as to how a present day phenomenon (humans becoming geological agents) can be ordered developmentally by pushing its origin far back into the past. Yet, telling climate scientists or the participants at the 2015 United Nations Climate Change Conference that we have been living in the Anthropocene for eleven thousand years ago is hardly an adequate response to an immediate call for action.²⁵ It can hardly make history relevant for climate concerns because instead of recognizing the unprecedented it tries to convince us of the opposite, namely, that the change we face is anything but unprecedented.

The search for precedents and antecedents to present-day phenomena in order to explain how a particular subject became what it is now and to indicate where it is heading is the fundamental operation of developmental history. And the operation is carried out recently not only with regard to the Anthropocene, but on practically all current prospects of the unprecedented. When it comes to our postwar enchantment with robots,

developmental history either tells a long-term story of how the idea of the automaton preoccupied Western imagination since the Antiquity and what different shapes this idea has taken over time,²⁶ or shows the antecedents to this enchantment in a specific time period in the past (with all the specificities of that historical environment), like the automaton in the medieval age.²⁷ Similarly, we may be thrilled by ‘innovation’, technology, and the question of the newness of the new, but developmental history tells us (tells me) that the newness of the new was a question that troubled people as early as the medieval age. It tells everybody that ‘today’s understanding of technology ... shows the residue of a wide range of features of the medieval discourse of the new’.²⁸ But again, *what developmental history offers here is the counteraction of our felt concerns and the mockery of our recent engagements.* When we feel confronted with our technological vision of the future, developmental history can only ask ‘Why is all the fuss?’ It is by definition and in principle that developmental history cannot apprehend our felt concerns of unprecedentedness as actually pressing ones.

Turning now to the second question of why it is crucial to recognize the unprecedented ‘historically’, the answer is that it is impossible otherwise to recognize the unprecedented as unprecedented. This is because the unprecedented establishes itself in relation to the past, even if this relation means negating any association with past states of affairs. Such a complete dissociation from everything we are familiar with, however, defies our best efforts at sense-making. It is impossible for us to conceive of something in its utter unfamiliarity with everything else we know. In order to make sense of something unprecedented, we cannot but associate it somehow with something we know or are familiar with, *despite* the fact that it is by definition that being unprecedented dissociates from everything we know or are familiar with.

Would this be possible? Can we render the utterly unfamiliar familiar? Can we meaningfully bring together unprecedentedness with any preceding state of affairs? As a final contention, I would like to offer the following answer: bringing together unprecedentedness with a preceding state of affairs lies in creating the historical conditions for any *particular* unprecedented change to become thinkable and intelligible for us by making the *genus* of unprecedented change to be the preceding state of affairs. This is, I think, precisely what the notion of history as a disrupted singular enables when it postulates a historical process as a series of unprecedented changes. When the future is unprecedented, the past has to be unprecedented too, because *it is not only that history begins in the future, but also that, at the same time, there is no other future than the historical.*

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¹ As it will be apparent on the following pages, I regard history to be a Western notion, idea, and practice (as historiography), invented in the late Enlightenment. Therefore, whenever I address questions of historical sensibility, future visions, and configurations of

change over time, the scope of my investigations is limited to this framework. Accordingly, whenever I use the plural ‘we’ and ‘our’ in relation to history, future prospects, and configurations of change over time, I mean these as chiefly associated with Western societies (and societies heavily interfering with Western ones). Also, regarding history to be the invention of Enlightenment entails a take on the historical sensibility of modernity that goes against the view that the modern Western idea of history developed out of – and thus retains the structural characteristic of – the Christian worldview in one way or another. Unfortunately, I cannot sufficiently engage here in a debate about inheritance, but for an interpretation of the modern idea of history as secularized eschatology, see K. Löwith, *Meaning in History: The Theological Implications of the Philosophy of History* (Chicago: University of Chicago Press, 1957); for a contemporary overview of these debates, see J. Svenungsson, *Divining History: Prophetism, Messianism, and the Development of the Spirit*, trans. S. Donovan (New York: Berghahn, 2016).

² See W. Benjamin, *Illuminations*, trans. H. Zorn (New York: Harcourt, Brace & World, 1968), 253–64; Löwith, *Meaning in History*. For the appropriation of philosophy of history by analytic philosophy, see A.C. Danto’s distinction between substantive and analytical philosophy of history in *Narration and Knowledge: Including the Integral Text of Analytical Philosophy of History* (New York: Columbia University Press, 1985), 1–16. For Popper’s take, see K. Popper, *The Poverty of Historicism* (London and New York: Routledge, 2002). For ‘postmodern’ end of history theories see G. Vattimo, ‘The End of (Hi)story’, *Chicago Review* 35(4) (1987), 20–30; or J. Baudrillard, *The Vital Illusion* (New York: Columbia University Press, 2000), 31–57.

³ F. Hartog, *Regimes of Historicity: Presentism and Experiences of Time*, trans. S. Brown (New York: Columbia University Press, 2015).

⁴ A. Assmann, ‘Transformations of the Modern Time Regime’, in C. Lorenz and B. Bevernage (eds), *Breaking Up Time: Negotiating the Borders between Present, Past and Future* (Göttingen: Vanderhoeck & Ruprecht, 2013), 54.

⁵ This of course does not mean that technology is ideology-free. It rather means that if technology is ideological, in most forms (except visions like human enhancement which claim continuity with Enlightenment ideals of human perfectibility) it does not have much to do with nineteenth-century political ideologies whose future-orientation may have indeed been lost.

⁶ You can nevertheless reasonably diagnose the ideological-political environment as presentist and/or consensus-driven and try to escape it within this particular context. This

is, I think, what political theorists like Chantal Mouffe aim at when talking about the current ‘post-political’ environment they try to counter; cf. C. Mouffe, *On the Political* (London and New York: Routledge, 2005). The same applies to some recent, supposedly more radical political theories, which, proceeding from the same diagnosis, try to break out by theorizing the revolutionary Event, as advocated most notably Alain Badiou and Slavoj Žižek. My sympathies lie with such efforts insofar as they theorize change over time as defying existing structures (as you will see, this is structurally similar to what I will later call ‘unprecedented change’), Yet, insofar as political theories of the Event are inspired by centuries-old political concerns instead of future prospects of their own time, they simply qualify as a supposedly new way of reaching the old political dream of the Left, as if that dream itself was not already discredited with the collapse of ideological-political visions. In other words, despite their merits, political theories of the Event are not engaged bringing about a new future-orientation; they are engaged in a restorative work that tries to revive visions of the future that postwar intellectuals discredited. In doing so, they seek conceptual tools in theology, as it is thoroughly mapped by Svenungsson, *Divining History*, 151–202.

⁷ J. Shklar, *After Utopia: The Decline of Political Faith* (Princeton: Princeton University Press, 1957); D. Bell, *The End of Ideology: On the Exhaustion of Political Ideas in the Fifties* (New York: Free Press, 1960).

⁸ For an introduction into debates over transhumanism and human enhancement, see J.B. Hurlbut and H. Tirosh-Samuels (eds), *Transhuman Visions and Technological Imaginations* (Wiesbaden: Springer, 2016); or L.Y. Cabrera, *Rethinking Human Enhancement: Social Enhancement and Emergent Technologies* (Basingstoke: Palgrave, 2015). For an introduction to the prospect of AI and technological singularity, see M. Shanahan, *The Technological Singularity* (Cambridge, MA: The MIT Press, 2015); and N. Bostrom, *Superintelligence: Paths, Dangers, Strategies* (Oxford: Oxford University Press, 2014).

⁹ To avoid any misunderstandings, my argument is not about sci-fi, and for the argument it is not relevant how far you may attempt to stretch back the origins of the genre. The argument is about how the prospect of unprecedented change is hosted lately by a revitalized and overtly popularized sci-fi. Thanks to Kenan Van De Mierop for pointing out the possible confusion.

¹⁰ See the video of the experiment: RAIR Lab, ‘Self-Consciousness with NAO Bots’, YouTube video, retrieved 21 May 2016 from https://www.youtube.com/watch?v=MceJYhVD_xY. For the paper, see S. Brinksjord et

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¹¹ Bostrom, *Superintelligence*.

¹² E. Musk, Twitter post, retrieved 2 August 2014 from <https://twitter.com/elonmusk/status/495759307346952192>.

¹³ *Autonomous Weapons: An Open Letter from AI & Robotics Researchers*, retrieved 21 May 2016 from http://futureoflife.org/AI/open_letter_autonomous_weapons.

¹⁴ I will briefly return to ‘end of history’ theories later.

¹⁵ Löwith, *Meaning in History*, 3.

¹⁶ O. Marquard, *Farewell to Matters of Principle: Philosophical Studies*, trans. R.M. Wallace (Oxford: Oxford University Press, 1989) 38–63.

¹⁷ Cf. Koselleck’s inquiries into the birth of the notion of history in correlation with the anticipation of an open future: R. Koselleck, *Futures Past: On the Semantics of Historical Time*, trans. K. Tribe (New York: Columbia University Press, 2004), esp. 26–42, 137–48, 192–204, 222–54.

¹⁸ I. Kant, ‘An Answer to the Question: What is Enlightenment?’, in Hans Reiss (ed.) *Kant: Political Writings*, trans. H.B. Nisbet (Cambridge: Cambridge University Press, 1991), 54–60.

¹⁹ M. de Condorcet, *Outlines of an Historical View of the Progress of the Human Mind* (Philadelphia: Lang and Ustick, 1796).

²⁰ G.W.F. Hegel, *Lectures on the Philosophy of World History*, trans. H.B. Nisbet (Cambridge: Cambridge University Press, 1975); F. Fukuyama, *The End of History and the Last Man* (New York: The Free Press, 1992).

²¹ To be fair to Fukuyama, lately he came to the conclusion that history does not end with the end of ideological evolution, and what made him modify his position was precisely the technological vision. See F. Fukuyama, *Our Posthuman Future: Consequences of the Biotechnology Revolution* (New York: Farrar, Straus and Giroux, 2002), 15.

²² For my detailed argument on the necessity to reconcile our notion of history with the prospect of unprecedented change (on the occasion of the Anthropocene) see Z.B. Simon, ‘History Manifested: Making Sense of Unprecedented Change’, *European Review of History* 22(5) (2015), 819–34. For my efforts to sketch this notion as a philosophy of history see Z. B. Simon, ‘We Are History: The Outlines of a Quasi-Substantive Philosophy of History’, *Rethinking History* 20(2) (2016), 259–79. Here I merge the

vocabularies of the two articles. Also, the notion of ‘unprecedented change’, despite lacking an ideological-political character, may have similarities to the notion of Event in recent political theories. See again note 6.

²³ See Koselleck, *Futures Past*, esp. 32–37.

²⁴ J. Guldi and D. Armitage, *The History Manifesto* (Cambridge: Cambridge University Press, 2014), 65.

²⁵ Whereas historians offer developmental history to understand our current environmental concerns, environmental scientists already become skeptical about linear stories told about the Anthropocene (regardless of the feasibility of their alternative proposal). Cf. S. Veland and A.H. Lynch, ‘Scaling the Anthropocene: How the Stories We Tell Matter’, *Geoforum* 72 (2016), 1–5.

²⁶ M. Kang, *Sublime Dreams of Living Machines: The Automaton in the European Imagination* (Cambridge, MA: Harvard University Press, 2011).

²⁷ E.R. Truitt, *Medieval Robots: Mechanism, Magic, Nature, and Art* (Philadelphia: University of Pennsylvania Press, 2015).

²⁸ P.C. Ingham, *The Medieval New: Ambivalence in an Age of Innovation* (Philadelphia: University of Pennsylvania Press, 2015), 14.