Reform and responsibility — the climate of history in times of transformation

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Sverker Sörlin
Fil.dr. 1988.
Professor ved Avdelningen för historiska studier av teknik, vetenskap och miljö, Kungliga Tekniska Högskolan, Stockholm.
sorlin@kth.se

Dear colleagues, students, friends!

It is a great pleasure to see you all here, a distinguished audience of Nordic historians, hono-ring this hour with your presence. For me it is a privilege. This is a congress I hold dear. In times when international conferences have grown in size and numbers I have always thought it is immensely valuable to keep the Nordic community of historians alive and well, not for nostalgic reasons but because “Nordic” is an appropriate level of focus and analysis.

Shortly before traveling here I finished the concluding chapter for a book with a Norwegian publisher on the tradition of Folkeopplysning in the Nordic countries since the 17th century. One of my ongoing papers right now is an analysis of the influence in our region of the famous Berkeley historian of science, environment and feminism, Carolyn Merchant. Other contributors to that book write of other themes, I write of the Nordic countries. I can swear she had some influence since I took a PhD course for her at Umeå University in 1984, but I am confident there is more…!

Nordic is real.

My ambition today is to make two claims, and to substantiate them. The first is that historians and historical knowledge are important and useful and that we live in an era when there is also a demand for a novel history writing linked to global change, the science that is describing it and the opportunities and dangers that that implies. The second is that we have not yet fully discovered this opportunity and we therefore haven’t responded properly to the demand that we can see around us—or is it perhaps that we haven’t seen it clearly enough?

These claims, I will argue, are motivated by a phenomenon that is undeniable and that is going on right now—the profound changes in the humanities at large. And, for the purposes of this talk, I will count history as “humanities”, albeit in the widest interpretation, since I am of the conviction myself that history straddles both the social sciences and the humanities and that it can also live well in closer collaboration with the natural sciences, a theme I shall return to.

WHO IS THE HISTORIAN?

Let me start by asking a very fundamental question: What Is History? Of course, this evokes the title of E. H. Carr’s famous Trevelyan lectures, delivered in Cambridge in 1961 and since then read by generations of historians and their students. It is an excellent little volume, wise and witty, written with an openness to change, yet still from what is now a bygone age. There is a little passage in one of the lectures where Carr opens the door ever so slightly to the possibility that changes in ecology might have a role in history. But the reflection is made in one sentence and then Carr moves on.

Many other of the main themes of historiography over the last sixty years are also left out. There is barely a mention of gender. The index—with more than a hundred men, almost all Europeans and a few odd Americans—has the name of one woman: Veronica Wedgwood, once known for books of popular history. The colonial world is also kept at a far distance.

“The historian” is, above all, a person more or less like Carr himself—a scholar of Trinity College, trained in a small elite strata of universities, of massive learning and superb memory, with enormously long work days and, often, the language skills to master foreign archives, in his case mostly Russian. With few exceptions, a man, working on his own. In Carr’s eminent book—and I still call it eminent—there is also a gaping void to the social sciences and all their theories that were sprouting up all around him. Almost a century earlier Marx was, as we of course know, much more important to Carr than any of the many social theorists of his day: Goffman, Riesman, Bateson. He briefly discusses sociology and says that “if it is to become a fruitful field of study”, it must become more “like history”, that is, more dynamic.3

This has changed, we can say. Even historians are wiser now. We know there is a point to sociology, and we do study the colonial world, in fact many of the most interesting histori-

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ans in recent years come out of the former colonies. We have a fantastic pluralism. We don’t have one man, or a small handful of them, representing History, telling the rest of society what it was like in the past. A few try to take that position, and may run a TV series in the Attenborough style. But it is quite rare and even the public knows that they are getting just a fraction of the whole, as part of the entertainment industry. As pluralism grew, authority became distributed. So there is no longer a particular instance to turn to—to learn about “History” with a capital H.

But authority, and wisdom, will always be in demand. And if the historians don’t produce them, others will, and do. In his book Régimes d’historicité (2003), Francois Hartog describes the time after 1989 as a period when time has lost direction—there is no longer either the wisdom of the past or the expectation of the future. Before 1789 the past informed contemporary life. Between 1789 and 1989 the future became the obsession of modernity. Our era, says Hartog, is one of hollowness and of fear of what is coming. Hollowness sometimes comes with a face, such as that of a Putin or a Trump. We try to see what historical forces may counter them, and we may think of the faces of Merkel, Macron, or Justin Trudeau, although we are far from certain what they can achieve. The fighting takes place against a backdrop of an entire Earth that is run very poorly based on regulation and economic ideas dating from the early days of capitalism, when the world population was less than ten percent of today’s and economic turnover and energy use a fraction of one percent. It should give impetus for historical consideration.

Hartog’s ‘extended now’ is well observed and, as he has himself admitted, it cannot last. Progression and regression combine into something that maybe isn’t so hollow after all. Just as liberties and wealth have grown for decades, and same sex relations and marriages make global progress, still providing directionality for our time, it is combatted fiercely by authoritarian regimes. In Poland, our neighbor, the nationalist regime is clamping down on gender and sexology programs in universities. The campaign extends to the humanities at large. The Polish minister of research said last week, according to the Guardian, that he was going to cut back on humanities, “a waste of money”, and support what he called “hard sciences”. Academics in Poland now have two CVs—one with their courses in gender and sex included, one without.

So already, I think we are moving beyond Hartog’s distinction. Time and its directionality are coming back with force. On the surface, today’s conversation is about facts and alternative facts. But at the core it is all about values. Some of the most inspiring work in the humanities these days is about articulating values and anchoring them in realities.

But, to be honest, this is not yet the main focus of our work. The humanities are conspicuously weak when it comes to articulating where we are and where we should go. That is what we did in the past—history in particular—and perhaps we have become so aware of the risks of the directionality of our disciplinary ancestors that we have developed a Berührungsangst to anything that smells of a Grand Narrative? Instead, we mumble.

And when someone really provides such a grand narrative, it is with irony. The best review I have seen so far of Yuval Noah Harari’s two mega-bestsellers on the history and

future of humankind is by Norwegian historian of ideas, Trond Berg Eriksen, who rightly
notes that this is not even supposed to be taken seriously.\(^5\) It is part of the entertainment
industry, Pirates of the Caribbean relocated to Silicon Valley, where billionaires claim that
nanotech will make them live forever. It sells. But it will do nothing to change the mind of
Polish ministers, or help remove them from power. They are serious. We should be, too.

WHO ARE THE ARCHITECTS OF TIME?

Today, there is another source of authority that has rapidly been taking over a good deal
of the consciousness of time. They are also erudite, they have prestigious positions at top
universities, they are still often men—the difference is that they are scientists. They are the
new masters of time, and they appear when many historians have accepted that there is a
crisis of time, a vacuum, a period of no clear direction.

Just as the Cold War ended and Francis Fukuyama declared the end of history, and just
as neoliberal thought regimes took over and, in these extreme times, some journalist in the
US declared that the entire world is flat\(^6\)—in that very moment (just when it ceased to be
flat, in fact) a community that called themselves Earth System Scientists drew attention to
the fact that the Earth is changing on scales we had never thought about before, and that
we indeed thought were impossible for humans to affect. Humans are changing the planet,
said, and it is not becoming flatter.\(^7\)

They were physicists and chemists. In the old days physics people said very different
things. People like Robert Millikan, the Nobel Laureate, who thought very highly of God,
said in 1930 that the Lord had put in place “fool proof parts” to his Creation and that, as a
result, it was impossible for mankind to wreak any “Titanic physical damage” to it.\(^8\)

From about 1989 physicists started thinking otherwise. Or 1988, we should perhaps
say, when the Intergovernmental Panel of Climate Change (IPCC) was born.\(^9\) In fact,
some had started this thinking much earlier.\(^10\) But now there was an entire community
talking—about time and history. On scales that they only seem to talk about in the School
of Physics, or the School of Divinity, leaving us in history far behind… The first reaction
from history would of course be to say, come on, there are so many times! Your big time

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6. Francis Fukuyama, The End of History – and the Last Man (New York: FreePress, 1992), based on Fukuy-
Rockström et al., “A safe operating space for humanity”, Nature (2009); Elizabeth Kolbert, The Sixth Extinction:
Civilization (New York: Charles Scribner's Sons, 1930), on 53.
10. Among the most significant, Vladimir Vernadsky, La Biosphère (Paris, 1929, Russian orig. 1926). See further
below.
is just a special case. Come and take a course in our faculty first and you will realize how many. We see, unfolding before our eyes, what our Norwegian colleague Helge Jordheim, in an article in History and Theory a few years ago, called the “synchronization of time”\textsuperscript{11} This synchronization is a work now ongoing. Some of it is indeed done by scientists—but over the long term, we historians must also do the job, and we have barely started.

Much of this work by the sciences is creative, fabulous, groundbreaking, mind-boggling. We should embrace it. And of course, most of us do—we register that this is happening, just as historians always take note of progress in science, medicine and technology.

We should also be proud of taking, sometimes, a critical attitude. Historians always kept a distance from science-y ways of talking about history, such as Darwinism and evolutionary thought, because it intruded on what we held dear, intentionality. With R. G. Collingwood we took seriously the distinction between events—that happened in nature—and actions, that humans performed and could be held responsible for. That was “The idea of history” in Collingwood’s famous book, posthumously published in 1946\textsuperscript{12}.

But I think this time is different. In times of climate change and rapid environmental disruptions, and when ice ages are so rare that we can leave them to the geologists, nature is not just a silent backdrop where things go on more or less as they always did. To his credit, E. H. Carr was somewhat aware of this. He noted that with Charles Lyell in geology and Charles Darwin in biology, history entered science—and science entered history. In a remarkable passage he even argues that the study of history and of science is “the same: to increase man’s understanding of, and mastery over, his environment”\textsuperscript{13} We could discuss the mastery point of course, but this was 1961—the downside of mastery was not yet fully established.

At the time, few historians thought that this was their mission. Carr doesn’t say much more on the topic, but the idea had at least entered his mind. His point was not so much the environment, but rather the status of history. In order to stay relevant, to remain, as he said, “even more difficult than classics and at least as serious as science”, it needed to use the methods of science. Carr dislikes the dualism of Collingwood. He cites C. P. Snow, the chemist and novelist, who had given his Reid lectures just a couple of years before and denounced the humanist scholars by talking about their “anti-social feeling”. Carr was acutely afraid that historians would be counted among the “literary intellectuals”, that is, would not be taken seriously. It was only three years later that his Cambridge colleague Jack Plumb would issue his famous book, Crisis in the Humanities, perhaps more famous now than anything he ever did in the field of history\textsuperscript{14}.


Carr had a very developed sense of disciplinary politics. To keep crisis away, to stay relevant, it was a good idea to align history with real world changes, and what could be more real than changes in nature? This may not sound so radical now, but it was then. We may understand just how immensely radical it was if we compare it to the insight of even Fernand Braudel, commonly known for having introduced geography and thus “the environment” into history with his colleagues in the Annales school. But for all Braudel’s genius appreciation of the “La part du milieu”—the “role of the environment”, his 350 page “Introduction” to L’Histoire de la Méditerranée in 1949—he had a remarkably static view of nature, which he left as basically a slowly changing state, quasi immobile; the arena of the longue durée on which human drama appeared. In the new introduction to the English translation of his work in 1974, he is not willing to accept Emmanuel le Roy Ladurie’s work on climate change—the historian must not believe that nature changes too quickly. Agency stays in society.15

Braudel’s environment was not yet fully historical. It can be of some interest to quote one of those dangerous “literary intellectuals”; Roland Barthes, writing in the middle of the decade that separated Braudel from Snow and Carr, in Mythologies (1957): “Progressive humanism … must always remember to reverse the terms … constantly to scour nature, its “laws” and its “limits” in order to discover History there, and at last to establish Nature itself as historical.”16

POSTWAR “ENVIRONMENT”—BEGINNING AN INTEGRATIVE NARRATIVE

It is important to remind ourselves of this moment, not too long ago, as the postwar period was winding on: how a new discussion of nature and environment was swelling up and how it drew creative minds across all sciences, including the humanities and history. We have become so used to thinking about the environment as the domain of natural scientists. And yes, it turned out that way, but in this formative moment of “the environment”, this was not yet established.

The late 1940s was the first breakthrough years of “the environment” as a concept that signified this arena of change. A small handful of ecologists presented worrying messages. William Vogt wrote The Road to Survival, published in 1948, where he used the word actively in its new meaning: that thing out there that humans destroy. He had been researching the state of nature in Latin America for many of its governments and what he saw made him deeply worried: bird species going extinct, decaying wildlife. He became a strong opponent of population growth. Neo-Malthusian waves were riding high. Each of his chapters addressed a “problem”: pollution, overfishing, erosion, poverty. The environment was a catalogue of problems.17 Fairfield Osborn, another ecologist, talked, also in

1948, of humans working on a massive scale, humanity as a “a geological force”. A physicist, Harrison Brown, wrote pessimistically of the new world ridding itself of resources. He used the concept peak oil, it too coined in 1948 by the British Paley Commission on natural resources.

Gradually over the 1950s and the early 1960s the new language of anthropogenic environmental impact spread. The 1955 Princeton conference, “Man’s Role in Changing the Face of the Earth,” was a coalescing moment. Interestingly, the discussion was broad, and the scientists didn’t dominate it. Social scientists were there, humanists too. Urban historian and planning visionary Lewis Mumford felt the need to liven the meeting up after a week of dismal messages and talked about the urge for more love, heralding the psychedelic sixties. Historian of geographical ideas Clarence Glacken invoked the idea of the Anthropocene, saying it was already a concept almost a century old.

The rest is history, as they say. Rachel Carson’s *Silent Spring* (1962) and the rise of what is today called Global Environmental Governance, GEG, with the Stockholm UN 1972 conference on the Environment as a significant real and symbolical turning point. From then on one could follow this trajectory all the way through to the Paris COP 21 climate agreement and the Sustainability Development Goals, both from 2015. With my co-authors Libby Robin at ANU and Paul Warde in Cambridge, I have been researching over several years the emergence of “the environment” as a modern global phenomenon. Our book, *The Environment – a History*, is due out soon with Johns Hopkins University Press. A main message from this volume is that time scales are changing. We have set the starting point for “the environment”, the transformation of the old concept, to this remarkable year of 1948, but we write its prehistory as well as its later remarkable career—one of the central concepts of the twentieth century.

As “The Environment” enters the 21st century, the language of change is making another quantum leap as the concept Anthropocene returns again, as it had tried to do several times before, with Comte de Buffon in the 18th century (who had the idea although not the word), continuing with the geologist Antoni Stoppani in the 1870s, and the Russian biogeochemist Vladimir Vernadsky in the 1920s. But it was not until the relaunch by geo-

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chemist Paul Crutzen and several other scientists in the Earth System Science community in the early years of the 2000s that it really took off.23

SOCIAL INTERPRETATIONS OF THE PLANETARY

A key moment was in 2005. At a Dahlem Conference in Berlin, several Earth System Scientists gathered together with archaeologists and historians and tried to assemble the state of the art knowledge on long-term changes.24 That was when the concept “the Great Acceleration” was coined. It was inspired by Karl Polanyi’s concept “the Great Transformation” and his idea in a book of that title from 1944 that the growth of modern, industrial, liberal, capitalist, or socialist societies did not come in bits and pieces, but was pervasive and sweeping, and was linked across sectors, political boundaries, technologies, resources, and energies; it involved materialities and ideas at the same time.25

The Great Acceleration was a similar idea, on the same grand scale. Changes in our time have been, and will become, as sweeping, with the additional element of the natural sciences offering much of the evidence. They would also occur in the environment, happens in the seas, in forests and fields, in the atmosphere, along with the growth of digital technologies, stock markets, welfare budgets, spurred by demographic shifts, longer life expectancies, exponential growth of university degrees, of calories from meat, of obesity, of energy consumption.

The most abrupt shifts, and in most dimensions, came after 1945—or 1948 if you wish. Only a few years after the Dahlem meeting, in 2009, the same community of Earth System scientists would launch another idea, namely that some of these curves are very dangerous, they risk disturbing the stable domain of the Holocene, the entire time period since the last Ice Age 11,700 years ago. If these boundaries were crossed, runaway change would follow and nobody would know the consequences.26 I was the only historian, or indeed the only humanities person, on that team of 28 people submitting the article on the nine “planetary boundaries” to Nature. I was at a meeting in Santa Barbara on the day in September 2009 when the Nature story broke. Present were several others of the co-authors as well. Throug-


hout the entire day we could see how the news was rolling around the planet, hour by hour, time zone by time zone. I was making a statement over e-mail and was cited the next hour in *Mother Jones* in New York City. The following hour in Vancouver, in the afternoon in Hong Kong. It made me sad, actually, to learn about the power of media.

I have never been so deeply involved in what might be called a mind shift. It felt as if it was instant. It wasn’t, of course; many people, perhaps most of the entire population even of the Western world, have probably not heard of Planetary Boundaries, despite it is one of the most cited scientific articles in the last decade. We did a follow up, published in *Science* in 2015. In that version we were fewer authors, and things had changed so that the humanities dimension of the story that I tirelessly tried to provide in 2009, with small results, were now much more integrated.²⁷

I could offer a meta-story to the “planetary” narrative and cite colleagues in anthropology and history who have contributed to the history of planetary consciousness, some of whom, for example Sabine Höhler, are present in this Nordic Congress.²⁸ Not only had there been the breakthrough of the Anthropocene as a concept and a name for this proposed new epoch, we had also had the Stern report, the rise of climate change as a global super-narrative, and a financial meltdown that had threatened major institutions of late modern societies and social stability, everything underpinned by a massive digital revolution and major geopolitical shifts with the upheaval of Asia and China in particular and the relative regression of Europe and the United States had been going on for a long time but it all came to the surface within a few short years.

In my own thinking about what it means to be an historian in our time, it is inevitable to include this experience. I couldn’t help notice these Earth System Science colleagues surrounding me in Santa Barbara, at the Stockholm Resilience Centre, or at the Haus der Kulturen Welt in Berlin, where we gathered for several years for Anthropocene events with hundreds of scholars and artists and students. They were numerous and they were active, and they had so many things to say about the organization of time. They had ways of retelling stories of our world and our societies on scales and with concepts that were compelling and immediately paved the way to media coverage and the attention of policy-makers.

It was perhaps not history writing, although certain parts of it were, but it was temporalization, new social interpretations of the passing of time. I feel humble to have been part of this and I also think I have learned a few things from this experience of temporalization work in practice. In fact, I think that these kinds of processes and concepts are just now reconfiguring historical work both inside our profession and in our relationship to the rest of society—what we sometimes strangely call the outside world (as if we are on the inside, a strange elevation of our community…).

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BEGINNING A TRANSFORMATIVE RESPONSE

What I refer to is a major response, going on right now. I call it the new integrative humanities, and history is part of it, indeed is playing a leading role. It is inevitable not to see this new turn as a response to all this massive change in Earth systems thinking and the crises coupled to it. It started around 2009–10. It is hard to fix a date. In retrospect, one can see that Dipesh Chakrabarty’s article in Critical Inquiry, “A Climate for History”, spurred the discussion. He was inspired by the climate change discourse. When I was first invited to his seminar in the Franke Institute at the University of Chicago in March 2012, I didn’t know that in the audience was a journalist writing for Forbes Magazine. I talked about the history of climate science focusing on Scandinavian meteorologists and glaciologists. When I returned to Stockholm, I found my name all over the web—two articles drawn from my talk. I even thought it was a pretty mediocre presentation; I had talked too much, too fast, been too detailed. It was of course the level of tension and anxiety that these issues drew in the American context that motivated publication.

Now, several years later, I can see how it was that I had also talked about the importance of narrative. That was cited in Forbes. How the new orthodoxy of anthropogenic climate change was about scientific knowledge, but also about how the story was framed. That had not been working out well when Svante Arrhenius or Guy Stewart Callendar—the British steam engineer who came up with the best paper of all in 1938, only to be brushed aside—and others had proposed the reality of global warming earlier. Their narrative hadn’t been compelling enough. In the 1950s and 1960s the idea could be aligned with “the environment” and, from 2005, it could be aligned with the Great Acceleration. It had reached biblical proportions.

Now, if we as historians are going to have an influence on future generations, maybe this is about narrative too? About the imagination of a future history that will be about a humanity that doesn’t keep tipping the Earth out of balance, and that this history must include human societies, oppressed groups, power struggles, the haves and the have-nots, and a reshuffling of privileges, new heavens and a new Earth.

Historians may argue that as soon as we start smelling the future we shy away. We want archives. We can perhaps explain how we ended up here. But we can’t research what hasn’t happened.

That is right. But this is where I would like to quote our colleague Johan Schot, the Dutch historian of agriculture and technology, now heading the Science Policy Research

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Unit, SPRU, at the University of Sussex. He received the SHOT medal from the Society of the History of Technology in October 2015 in Albuquerque, New Mexico. I was there and heard his thank you address. He talked about the historian’s role in “transitions”. The word links to innovation, not history. But, Johan said, there is something called the historical imagination. In distinction from many of our colleagues in other disciplines, we as historians can only reconstruct the realities we study. They are since long gone. In order to do that, a lot of imagination is required. We can’t do experiments. We can’t observe the past in real time. Data are often fragmented. We must fill in the gaps through our imagination, almost like novelists or film-makers. We must create narratives even where they don’t exist, because they are always of our making.

The future is quite a bit like the past in this regard. It can’t be observed, it can’t be compiled, we need to, if I may say so, pre-construct it. The difference is that it is also ethical, or political. We can still influence it, and our narratives do influence it. If we wish to have transitions in order to be responsible in the face of climate change, the environment, or not exceeding planetary boundaries, while increasing social justice—virtues that our profession can agree upon—then we need well-informed imagination, responsible reflexivity, with a sense of direction.

Similar ideas are now finding their ways across the humanities and social sciences. The approach taken is integrative since what is obviously needed is a response that is trustworthy. The world is in danger—call a linguist! No, we probably won’t.

How could we think about responses to the global challenges we face? Poverty, climate change, religious conflict, terrorism? Call a geologist? No. Call a linguist? Again, no. But what if someone said you don’t need to know anything about religion, ideas, values, why people love and hate, what holds societies together, what inspires them, moves them? What if someone said we don’t need to know about nationalism, about greed and power, about institutions, about the roots of social conflict, of pride and prejudice, of music and visual language, of the history of Poland to understand the mind of their current Minister of Research?

If someone said that, we would rightly think that person ignorant. That is the answer. The integrative humanities have arisen as a response to the need for much more powerful and useful knowledge to deal with a world where the financial crisis demonstrated that the economists were wrong, where the climate crisis has exposed us to the fact that our energy technologies are inadequate, and that nuclear physics probably won’t help us either. We need, just as Karl Polanyi presented it, a Great Transformation, and in response, our knowledge work needs to be reorganized.

THE INTEGRATIVE HUMANITIES

As for the environmental humanities, the movement seems to have started in Australia. They had an Ecological Humanities group up and going already by 2004. Environmental historians played a central role. A few years later, things started to happen elsewhere. In Sweden, an initiative was taken by the Mistra Foundation in 2008–09. Historians were joined by post-humanities scholars, by eco-critics. In 2014, human geographer Noel Castree led a worldwide team of prominent scholars in a Nature Climate Change article, also widely cited. The title echoed Chakrabarty’s piece: “Changing the Intellectual Climate”. Even earlier were fields such as digital humanities and medical humanities. In more recent years the trend has spread to what is called the geo-humanities, techno-humanities, and several others. The heritage from these fields was that they started a reshuffling of faculties. Particularly where infrastructures were needed, like major computing capacity or visual labs, new units were formed.

The integrative humanities is fairly new as a term and it is only now being used. Programs and research centers using the term have appeared in American universities in the last few years. Somewhat older are centers like CRASSH in Cambridge and TORCH in Oxford. In Sweden, Uppsala University has just decided to embark on a faculty-wide initiative, the Centre for Integrated Research on Culture and Society, CIRCUS.

For several years now I have been working with Anders Ekström, a colleague at Uppsala University, on a project on the history and future of the humanities. We published a book in 2012 where we decisively turned away from the crisis discourse that has been haunting the humanities ever since, and even earlier than, Plumb’s book. Last year we received a grant from the Swedish research council to organize a series of workshops analyzing the humanities. One observation that came out of these discussions was that integrative knowledge environments were on the rise in many places. But they do not emerge in the same way as sub-disciplines formed over many decades, fighting for space near the ground in the dense faculty jungle. The integrative humanities are forming differently. In large universities they tend to organize as cross-cutting initiatives aided by the increased roles of funding agen-


cies and foundations. In special schools and smaller colleges they may organize humanities centers instead of traditional disciplines.\textsuperscript{39}

Such is the tendency where we are at KTH, Sweden’s largest school of technology. We are a history department, started in the 1980s as a small unit for the history of technology, fitting the campus priorities. Thirty years later we have expanded to other subfields such as history of science and environmental history and now also including sizeable activities in colonial and resource history, polar history, and with activities in environmental humanities, with a special lab, started in late 2011 based on a donation from an industrialist. We also explore visual culture, and higher education and research policy. Our PhD students are mostly historians but a sizeable portion of them, and also of our contract researchers, have a background in neighboring fields such as anthropology, ecocriticism, semiotics, and others.\textsuperscript{40}

This makes a very odd creature in KTH and the university at large has yet to find out how they can use our capacities in the teaching of engineering students. But our smorgasbord of courses linked to our research is quite popular. It has also worked well in relation to the funding organizations and, after a long period of steady growth, we are now—surprisingly to everyone, I think, including ourselves—one of Sweden’s larger environments for historical research, with a very strong international commitment, and with English as our working language for the last five years or so. This is an exciting, but also a challenging activity and we find that every day we are entering uncharted territory where we have to navigate our way forward.

A NEW SATTELZEIT?

Why do I spend so many minutes of this talk on what may seem as boring organizational issues? Isn’t that precisely what you talk about when you have no ideas? Well, I do this because I believe earnestly that we are in a critical moment of history and that, as historians, we have important work to do.

We are likely to enter an era of profound post-fossil fuel transformations. Some of the changes are likely to be comprehensive enough to justify the period from say 1950 to 2050 to be called a new \textit{Sattelzeit}, on a par with the arrival of modernity in the period 1750 to 1850.\textsuperscript{41} Concepts such as the environment, Anthropocene, the Great Acceleration, climate, posthuman, and many others have already changed their meaning considerably as com-


pared to classical Enlightenment modernity before 1950, if they even existed then.42 They belong to the vocabulary of such change, and so to theorize it and rethink history and historiography using these concepts seems in fact almost inevitable. We may recall that Reinhart Koselleck himself thought of the Enlightenment as a period when history could finally be separated from nature and hence be transformed into the modern concept.43

But that was then. Was it a good idea to separate the Earth from history?

This speaks directly to the revival of “species history” that Dipesh Chakrabarty has suggested. I may not wish to go fully as far as that, but I like the argument. In a forthcoming volume on major issues in history, edited by Peter Burke in Cambridge and Marek Tamm in Tartu, Grégory Quenet at the Université de Versailles and myself have a discussion about this. Quenet argues that it is the mission of environmental history to develop a new theory of the man-nature relationship. He is bolder than I am; I am probably too fond of pluralism to ask historians of any kind to persist with one single issue, as when they did—for example when science historians became obsessed with the scientific revolution, or economic historians with the industrial—it hampered the flourishing of these fields.44

Environmental history thrives in its promiscuity, just as the entire discipline of history does in its endless polymorphism. But there is also something essentially healthy in the bold ideas that Quéné or Chakrabarty put forward. After two centuries in separation it is the mission of the presently emerging Sattelzeit to rejoin the humans and nature. A wealth of literature in the posthumanities and in climate change scholarship already moves in this direction: work by Mike Hulme on climate, by Rosi Braidotti on the posthumanities, on the circulation of poisonous substances in what Stacy Alaimo and Nancy Langston call “bodily natures” and “toxic bodies”.45

We must also differentiate planetary history, which has in its current incarnation become overly dominated by geological scales, partly as a result of the Anthropocene debates, even giving new life to the old ghosts of environmental determinism.46 It remains the task of


historians to make sure that the scales where human societies act are part of an “integrated history”, a concept so far mostly applied in science-led attempts to connect natural and human histories.47

New work is appearing in a number of disciplines, from philosophy to religious studies to anthropology, that suggests the emergence of an age of multi-temporalities that may also be part of the new Sattelzeit. “Scaling” is necessary to translate natural processes to times and places where they intersect with the human enterprise. How do genes and microorganisms “from below” or geophysical teleconnections “from above” become integrated parts of the kind of complex narratives of change, and the attempts to explain change, that we call “the writing of history”? It is truly inspiring to think of history in this visionary light.48

This gospel is circulating wider and wider. Morgenbladet in Norway is the best Nordic news magazine, a rare piece of evidence that qualified cultural journalism can survive even in a Facebooked world. In last week’s edition Ellen Krefting, a historian at the University of Oslo, presented to its readership some of the ideas of Chakrabarty and a new essay in History and Theory by Suman Seth. She brings out the absolutely essential point by Seth that Chakrabarty’s interest in the Anthropocene and the fusion of nature and history is predicated on his previous work, Provincializing Europe (2000). What this is all about, claims Seth, is to unsettle the traditional, Eurocentric mode of defining history, its themes, periods and actors.49 I fully agree. We are not turning to geology because we wish to be polite to geologists—we do it because there is a history to tell that is richer, better, more relevant, and that is ultimately a new history that makes us explain things in a new light.

WE MUST MANAGE MANY SCALES

At the same time as we do the scaling and bring our individual lives and fates into a global force, we must also address issues of responsibility. The climate crisis requires this kind of history. What happens to issues of freedom? Personal experience? Where are the differences between rich and poor? They are still there, and we need to fit them into this even larger picture.

We must manage many scales at once.

47. The role of natural scientists in the debates on temporalities is underarticulated by Quenet and several contributions in recent years have argued that there is an “integrated history” possible that links nature and humans and with the capacity to make predictions, S. Cornell, R. Costanza, S. Sörlin, S.E. van der Leeuw, “Developing a systematic ‘science of the past’ to create our future”, Global Environmental Change 20(2010):3, 423–425. R. Costanza et al., “Developing an Integrated History and future of People on Earth (IHOPE)”, Current Opinion in Environmental Sustainability [COSUST], 4(2012): 1 106–114.
It would be silly to suggest a program for an enterprise as diverse as history, so if I sound like I did—honestly, I don’t. But I do think we should pay attention when some of the most compelling and interesting narratives of time are presented with historians in a marginal position. History is growing ever more central in the interpretation of our world. Big Data and Big Media will only reinforce that. Historians should be part of it.

We have learned the hard way, not only from Lyotard, that Big Narrative is dangerous—but so are very truncated messages. Truth is not necessarily secured by the brevity and frequency of tweets. There are times to tear apart and deconstruct, but there are also times to piece together again. We can offer some of the best elements of a Weltanschauung.

As you may have picked up by now, I don’t think we should do that in isolation from the sciences, as R. G. Collingwood recommended. Nor would I suggest the metaphysical schemes of a Toynbee or a Spengler. But I would like to see us take seriously the new human condition, which is that we are looking at a sinister twenty-first century, based on what we did in the previous one.

Responsibility is in the air. I recently attended a session at the Swedish Foreign Policy Institute. Timothy Garton Ash and his Oxford colleague Margaret MacMillan had come over to Stockholm. Chair of the session was the eminent former foreign minister of Finland, Erkki Tuomioja, himself a professional historian. They presented a newly formed network of Historians without Borders.\(^{50}\)

As much as I like the initiative I found that I would have liked it to be a little bit less traditional. It was basically a lesson of geopolitics and negotiation, an updated version of the kind of work we know that historians did since Thucydides and, well, Winston Churchill. Of course we can help out with advice and sit at the peace negotiation table as E. H. Carr did after Versailles as a young apprentice in the Foreign Office. But we also have much to learn from legal scholars, nurses and doctors about human rights and compassion, and about what French anthropologist Didier Fassin calls the ethics of “humanitarian reason”.\(^{51}\) But it is a good start.

I would like to see this as a history of hope. A book to cherish and remember was written by a colleague of ours, Rebecca Solnit, who is also an essayist and non-fiction author in California. *Hope in the Dark* from 2004 is an exploration of the social thinkers and movements of the past and the near present who have used their ideas and moral vision to lead us into the dark—not the dark of the night, but of the unknown future. This does not mean there should be a response to every leap of history. History, she says, is not an army. It is a crab scuttling sideways.\(^{52}\) (Well, sometimes it is an army.)

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We are not just social thinkers; we are also professionals. We do our work under a set of norms and virtues. That is the larger message from E. H. Carr and that is why I started with him, despite the many shortcomings of his day, back in 1961. Somewhere deep down he articulated a relationship to a wider knowledge project which we can’t be separated from. We thought we could, perhaps, but we can’t any more.

Nature and history are increasingly becoming intertwined. We need the history of nature in order to write history. We need the stories and the big drama and the Earth histories of the sciences. And we can’t leave these stories to the scientists alone, because their stories lack details of the human.

Why do I say all this? Ultimately because I believe in the good judgment that I think history cultivates, and which is used far too little. Societies will improve from the prudence, care, reflexivity and wisdom that history and the humanities provide in our finest moment. If this sounds strange, it is because we, too, rarely talk about the potential of our profession.

With a world so complex and full of fears and dangers, there will be no shortage of missions for people who love to sort out the most complex problems that we could imagine. The basic virtues of the profession still prevail. We are already experts of multi-layered analysis and we are already dealing with what Ronald Barnett called “supercomplexity”.53 Now is the time to use our skills. We will expand in many directions and we will go to places we have never gone before. We need to change, but we will not cease to be who we are.