

This issue of the Annales contains a thematic dossier dedicated to the Anthropocene, a concept currently enjoying undeniable scientific and public success. At first glance, one might be tempted to situate this dossier in the context of the histories of climate and the environment promoted by the journal since the 1950s. Indeed, the Braudelien longue durée offered a geohistorical unit of time that encouraged researchers early on to take “the role of the environment” into account in their analyses of human societies. In a 1974 issue of the Annales entitled “History and Environment,” Emmanuel Le Roy Ladurie emphasized how the journal had already “taken an interest in the questions posed by an ecological history, a history that concerns outbreaks of epidemics and the fluctuations of meteorology.”¹ Studies published regularly in the journal thus set out to explore the range of available sources, not only to reconstruct the history of the climate and date moments of transition, but also to recreate paleoenvironments, retrace the history of natural resources and supply systems, or measure the effects of meteorological changes on economies. However, far from simply underlining the impact of an unchanging environment on human activity, Le Roy Ladurie’s article advanced a plurality of possible factors to explain climate shifts in the modern era, evoking “demographic expansion,” “industrial overconsumption,” and “runaway urbanization.”

And yet, while historical and historiographical awareness of human influence on the evolving climate is certainly nothing new, the notion of the Anthropocene nevertheless carries us one step further. When the chemist Paul Crutzen coined the term in 2000, he proposed considering human activity as the decisive factor in the geophysical and atmospheric changes

1. Emmanuel Le Roy Ladurie, ed. “Histoire et environnement,” special issue, *Annales HSS* 29, no. 3 (1974): 537.

undergone by the planet, in particular due to the impact of CO₂ emissions. Scientifically and politically charged, the Anthropocene was rapidly adopted and helped structure new fields of study, research groups, journals, and edited collections, at the intersection of the social and the natural sciences. From this point of view it has served to catalyze—under a motivating and highly effective banner—the epistemological reflections that have characterized environmental studies over the past few decades, such as those documented in a special issue of the *Annales* edited by Alice Ingold in 2011.² These approaches sought to challenge the foundation of the division between natural and human history, and to reflect more broadly on the skills and methods that would enable a fruitful collaboration between the natural and the human sciences—the kind of dialogue that the *Annales* once placed under the heading “inter-science.”

In the dossier published in the present issue, Grégory Quenet offers a wide and useful panorama of the different intellectual paths opened up by the Anthropocene over the last fifteen years. In particular, he considers the various ways of articulating geological and historical periodizations, as well as the intellectual exchanges that can arise from such reflections. What emerges is an uneven and heterogeneous landscape, demonstrating not only the variety of protocols by which different disciplines establish temporal dividing lines, but also the diversity of controversies around the role of technology and Western modernity, and thus the multiplicity of political buttons that the concept is expected to push. Putting a date (or not) on the beginnings of the Anthropocene means agreeing on a collective definition of the criteria that would mark the break with the Holocene. The debates over when it began (3000 BCE? 1601? 1784? 1964?) effectively reveal not only points of disciplinary or methodological disagreement, but also the different expectations and political implications entailed by the very question of periodization. To put it another way, the Anthropocene of geologists, who use a temporal scale measured in millions of years to identify stratigraphic thresholds, does not obey exactly the same categorization system as that of historians, who often see the Anthropocene as a heuristic toolkit that includes more critical perspectives—we could cite, for instance, the alternative “Capitalocene,” which makes the rise of capitalism the driver of environmental transformation.

Though the concept is not yet unanimously accepted among geologists, it continues to gain in scientific legitimacy. Made up of researchers from multiple disciplinary backgrounds, since 2008 the Anthropocene Working Group has sought to explore its relevance from the perspective of geological time-scales. In summer 2016, the Subcommittee on Quaternary Stratigraphy submitted a report in favor of designating the Anthropocene as a stratigraphic reality likely to define a new geographical era of the Quaternary Period, beginning around 1950. In the original essay published here, three geologists at the forefront of this research group, Jan Zalasiewicz, Colin Waters, and Mark Williams, urge us to reflect on the indelible impact that metropolises, the ultimate symbol of the age of the Anthropocene, have had on the planet Earth, considering them an essential component of its geological evolution that will ultimately come to form gigantic fossils. In so doing, they confront readers of the *Annales* with a regime of historicity based not only on the multi-millennial scales of mineral and chemical sedimentations, but also on prospective approaches (looking forward over millions of years) and artistic representations (provided in illustrations by Anne-Sophie Milon). The result

2. On the trajectories, issues, and lines of inquiry that characterize environmental history, see Alice Ingold, “Écrire la nature. De l’histoire sociale à la question environnementale?” *Annales HSS* 66, no. 1 (2011): 11–29.

will surely take historians, used to more cautious thought experiments, out of their comfort zone. In order to better understand the current situation and the consequences of human activity on the planet, the geologists appeal to a “hybrid” and collaborative science that takes account of both geological and historical time.

*In the domain of social sciences and what are sometimes called “environmental humanities,” the appropriation of the term Anthropocene was quickly accompanied, especially in the writings of Dipesh Chakrabarty and Bruno Latour, by a radical challenge to the theoretical and normative foundations of the traditional order of knowledge. Pierre Charbonnier analyzes the way that the totalizing aspect of the concept affects not only studies and reflexivity linked to the environment, but also and more broadly the practice and rationality of the social sciences. In this interpretation, the adoption of the term Anthropocene would mark a dual realization—not just of the crisis facing the climate but also of that facing epistemology, characterized by the exhaustion of certain paradigms that once structured the social sciences, such as the great divides between nature and society, between nature and modernity, or between naturalism and constructivism. Because it binds together the history of the Earth and that of human societies, once shorn of its dramatic and even apocalyptic tone the concept of the Anthropocene offers a stimulating intellectual promise to the social sciences, forcing a shift in the very coordinates of their own historicity. The political implications of such an inversion lie at the heart of Latour’s *Facing Gaia: Eight Lectures on the New Climatic Regime* (2015) and the close reading of this work offered in the article by Bruno Karsenti. Thinking about the multiple forms of interaction between the Earth and human societies is not simply an invitation to redefine the temporal divisions or methods employed by the social sciences. On a deeper level, it also means reflecting on the conditions of possibility of a political ecology that would be conscious of the contradictions of modernist thought. From there, the Anthropocene prompts a recomposition of the political spaces relevant to analysis, encouraging us to reject the restrictive framework of the state inherited from modernity and to redraw the respective conceptual spheres of science, religion, and politics. This task, at once collective and ambitious, testifies to the scope of the empirical and theoretical questions posed by the Anthropocene, questions that historians must now grapple with.*

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