

The Fragile Climate of Modernity

A Short History of Environmental Reflexivity

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Is man responsible for climate change? Two historians, Jean-Baptiste Fressoz and Fabien Locher, argue that this question is anything but new. Modern thinkers did not wait for the turn of this century to begin reflecting on the impact of human activities on the environment.

“The Anthropocene could be said to have started in the late eighteenth century, when analyses of air trapped in polar ice showed the beginning of growing global concentrations of carbon dioxide and methane. This date also happens to coincide with James Watt’s design of the steam engine in 1784.”¹

Paul Crutzen might well have pointed out another, more troubling, coincidence: the 1780 publication of Buffon’s *Époques de la nature*. Just when humanity was becoming a geological force, Buffon stated, “the entire face of the earth today bears the imprint of man’s power”. This influence could even be exerted on the climate: by properly managing its environment, humankind could modify the influences of the climate in which it lives and set the temperature to the point that suited it².

Thirty years later, demiurgic optimism had given way to climate anxiety. In 1821, the interior minister Joseph-Jérôme Siméon sent an unusual circular to his prefects: “Sirs, in recent years we have seen noticeable drops in atmospheric temperatures, sudden variations in seasons and hurricanes [...] by which France seems to be increasingly affected. This is partly attributed to deforestation in the mountains and the clearing of forests [...]; can these ills be remedied?”³. And the interior minister asked the prefects to carry out a survey on climate changes in their departments.

The surprise we feel on reading these texts comes from our ignorance of the *environmental reflexivity* of modern societies, in other words their complex, historically determined and entirely different way of contemplating the impact of human action on the environment. The concerns

¹ Paul Crutzen, “Geology of Mankind”, *Nature*, 3 January 2002, p. 23.

² Mike Davis, “Welcome to the Anthropocene”; 2 Georges Louis-Leclerc de Buffon, *Les Époques de la nature*, Paris, Imprimerie royale, 1780, vol. 2, p. 197.

³ Circular from the interior minister, 25 April 1821.

expressed by the interior minister in 1821 are neither prophetic (the climate change he feared bears no relation to contemporary global change) nor particularly original for the period.

The argument put forward in this article is that our planet's entry into the Anthropocene era follows not a frenetic modernism with no concern for the environment but, rather, two centuries of reflections and worries over human changes to the environment. We shall therefore question the theories that establish the contemporary era as the point at which humanity leapt into a new modernity: as they would have it, we now engage in unprecedented reflections on the environmental consequences of human activity and its backlash; men of the past, on the other hand, transformed the world without taking any care, blinded by their faith in progress and their trust in nature's capacity to regenerate. In an article from 2007, for example, recently translated into French by the *Revue internationale des livres et des idées*, Dipesh Chakrabarty defends the idea that our increased awareness of humanity's geological "agency" constitutes a radical break with the cultural patterns that constitute modernity, characterized by a longstanding restrictive concept of the effects of human action and the constant reassertion of the distinction between natural history and human history⁴.

To our mind, this perspective poses a problem. It makes the environmental reflexivity of previous societies insignificant, thereby depoliticizing the long history of environmental degradation. And, conversely, by focusing on the recent reflexivity of our risk societies, these accounts tend to naturalize environmental concern and disregard the conflicts that are nevertheless at the root of it. Our lack of understanding comes from the historical transformation of the categories: in order to comprehend the environmental reflexivity of societies in the 18th and 19th centuries, we must free ourselves from our dichotomic categories (innate/acquired, body/environment, living/inert, nature/society) and, within an epistemic space that no longer exists, consider *the theory of climates*, in which technical action, political form, environment and body intermingle. For more than 150 years, from the middle of the 18th century to the last third of the 19th, Western societies have contemplated their relationship with the environment with reference to the climate and its transformations, and the part they have played in the joint transformation of nature and of their own forms of life.

The plastic climate of biopolitics

In the wake of Ptolemy's geography, the climate was traditionally defined according to latitudinal position on the globe. The climate was both a given and a factor explaining cultural, racial and political differences⁵. During the 17th century, the climate acquired a certain plasticity: while it still remained partly determined by the position on the globe, scholarly discourse – primarily meteorological and medical – was concerned with its local variations, its countless changes and in the role of human activity on its "improvement" or "degradation".

In simple terms, there was a shift from climate thought of as a place, as a geodesic fact, to a climate conceived of as a set of dynamic processes that helped to create the character of a place:

⁴ Dipesh Chakrabarty, "The Climate of History: Four Theses", *Critical Inquiry*, vol. 35, no. 2, pp. 197-222.

⁵ Clarence J. Glacken, *Traces on the Rhodian Shore: Nature and Culture in Western Thought from Ancient Times to the End of the Eighteenth Century*, Berkeley, University of California Press, 1967.

precipitation, pressure, wind, odour, topography, soil, water, vegetation, light, electricity, smoke, etc. This transformation was vital because human activity could then be seen as one process among many within this set of causes. The notion of climate enabled nature to be seen as having a history in which man played a role⁶.

This transformation was partly linked to the biopolitical projects of enlightened monarchs: given that, according to Hippocratic doctrine, the climate had a decisive influence on the health of the population and could be modified at will, governments tried to intervene and thereby influence the size and quality of their populations. For example, in 1770 the abbot Richard explained that his *Histoire naturelle de l'air* “is not a study of pure speculation” but rather that “it is useful for the great art of governing men”⁷. In 1776 the French monarchy founded the Royal Society of Medicine in order to study the link between climates, epidemics and temperaments and thus guide its medico-environmental policy⁸.

The plan to carry out a rational transformation of climates was also widely discussed under the Consulate and the Empire. In 1800, in his French translation of the Hippocratic treatise *On Airs, Waters and Places*, Coray pointed out that the book “deserves all the attention of modern legislators [because] they can make noticeable changes to the climate’s influence: clear uncultivated areas, cut down or plant forests, drain swamps, [...] remodel towns [...] – these are the primary objectives with which the government should concern itself if it wants to control the negative impacts or boost the positive impacts of the climate’s influence”.

Eusèbe de Salverte – a doctor, a revolutionary and then a member of the French Parliament, close to the society of *Idéologues* and a friend of Cabanis – was the first to take further this plan to carry out climatic and human engineering. In *Des rapports de la médecine avec la politique* (1806), he sets out the medical benefits of the Napoleonic Empire. Given that the occupied territory extended across many climates and peoples, “transmigrations” meant it was possible for populations to adapt to those climates that were most favourable to them. The new authority of the government also enabled hybridizations between populations in order to produce a racial optimum. Finally, through major projects, the government could improve the “physical constitution of the climate” and once again that of its people.

Degradation of forests and climate change

The demiurgic optimism that accompanied these plans could be turned around. The human manufacturing of climates constituted the extreme form of plans to control nature. As the climate was a set of very heterogeneous processes that interacted with each other, climate transformation would always be an uncertainty. Apparently harmless changes to the environment could have terrible consequences. According to the abbot Richard, for example, an epidemic in the Moluccas Islands destroyed the clove trees, whose aromatic particules corrected the air polluted by volcano smoke⁹. While human action could improve climates and populations, it could also lead to

⁶ Jan Golinski, *British Weather and the Climate of Enlightenment*, Chicago, Chicago University Press, 2008, p. 170-202.

⁷ Abbot Jérôme Richard, *Histoire naturelle de l'air et des météores*, Paris, Saillant et Nyon, vol. 1, 1770, p. 2.

⁸ A commission of medicine was created in 1776, which became the Royal Society in 1778.

⁹ Abbot Jérôme Richard, *op. cit.*, vol. 2, 1771, p. 412.

disaster.

During the 18th century this worrying observation spread throughout the colonial islands. From the 1760s onwards, the environmental impacts of the plantation economy became apparent in Mauritius and the British colonies (Saint Helena, Grenada, Barbados)¹⁰. Borrowing from the theories of Theophrastus (the successor to Aristotle as head of the Lyceum), which maintained that trees had a decisive influence on rainfall by absorbing and returning water through their pores, the colonial elite was concerned by reduced levels of rainfall linked to deforestation. These concerns were echoed back in mainland France; in 1766, when Pierre Poivre was appointed as Intendant to Mauritius, he was given the task of “restoring the rain” to the island by implementing a forest conservation policy.

As regards France, the impact of deforestation and agriculture on the climate had long been considered beneficial (in his *Époques de la nature*, Buffon favourably compared the climate of Europe – made milder by centuries of human presence – with the wild climate of America). These effects did not begin to cause concern until the 1790s, in connection with a discourse that condemned the loss of French forests. In the wake of the Revolution, the forests were undergoing a profound reorganization in terms of ownership and use. The expropriation of the clergy and *émigrés*, the sale of national assets and the sharing out of communal lands had brought about the division and transfer of wooded areas, which benefitted the bourgeoisie and some parts of the farming population. The *Maîtrises des Eaux et Forêts*, symbols of absolutism, were abolished and private woods became exempt from all forms of regulation.

This (post-)revolutionary transformation made the climate a deeply political issue: with each meteorological disaster, the peasants of year II were blamed for descending on the noble forests waving their axes. During the dry summer of 1800, the *Moniteur Universel* newspaper published a series of catastrophist articles. Cadet de Vaux, a renowned chemist as well as farmer, explained: “We are being eaten alive by drought, and science says we must not blame nature but man who, by altering the surface of the earth, has changed the course of the atmosphere and thus the influence of seasons”¹¹.

Successive regimes tried to find a suitable response. The Consulate set a limit on the liberalization of the forests by making administrative authorization a condition for deforestation, which was intended to protect the forests and therefore the French climate. The governments of the Restoration, meanwhile, accused the Revolution of taking the forests away from their traditional and rightful owners and handing them over to a bourgeoisie that was incapable of the long-term vision of land management that was the preserve of the aristocracy. This was the background for the 1821 climate survey cited earlier: after the terrible winter of 1820-1821, the interior minister consulted the prefects on the imbalances seen in the “meteorological system” of their departments in connection with deforestation.

Through the climate, humanity was becoming a planetary force and in turn the planet had

¹⁰ Richard Grove, *Green Imperialism: Colonial Expansion, Tropical Islands Edens and the Origins of Environmentalism, 1600-1860*, Cambridge, Cambridge University Press, 1996.

¹¹ Antoine-Alexis Cadet de Vaux, “Observation sur la sécheresse actuelle, ses causes et les moyens de prévenir la progression de ce fléau”, *Moniteur universel*, 26 August 1800.

become a fragile being. In 1822, Charles Fourier wrote an unusual text entitled *De la détérioration matérielle de la planète* (On the Material Degradation of the Planet)¹². Based on observations of the climate's imbalance, he made a diagnosis of "the decline of the planet's health". The root of the evil was social. It was individualism that led to deforestation: "Climatic disorders are a vice inherent to civilized culture; it disrupts everything through the struggle between individual interest and collective interest". According to Fourier, any attempt to change the current individualist society was doomed to fail, as proven by the futility of successive forest legislation; the cure for the planet could only come through Revolution: "We must leave civilization behind".

The climate debate, shaped by extreme meteorological events, also resurfaced when forest policy was debated in the National Assembly. During the July Monarchy, there were skirmishes between supporters and opponents of the authorization to clear forests. On 27 February 1836, for example, when a member of the French Parliament submitted a draft bill removing the administrative authorization required for clearing woods, the astronomer François Arago improvised a response by describing the catastrophic consequences of deforestation: cooling of the atmosphere, hail, changes in river patterns, floods, etc. He then observed, "I am not saying that this shall be, but that it is possible and that a serious investigation into the matter would be useful"¹³. At his suggestion, a parliamentary commission on climate change was set up. Two years later, however, Arago was forced to acknowledge to the Assembly that meteorological science was incapable of solving the issue. A number of MPs then accused him of using the lack of certainty to delay the repeal of the administrative authorization.

The subject of climate change therefore became a major political issue after the Revolution, but academic science had difficulty taking responsibility for it because it remained outside of the experimental and mathematical programme that dominated the physical sciences at the time. Scholars who, like Arago, had been recruited as climate experts objected to giving clear answers and drew attention to the difficulties of the undertaking: how could climate change be defined? How could an epiphenomenon be distinguished from long-term trends? What criteria should be taken into account (precipitation, extreme phenomena, temperature)? Although scholars emphasized measure and precision as criteria for objectivity, successive governments required them to study a subject that could not be grasped in such terms.

Colonialism and climatic orientalism

Beyond the issue of forests, the idea of human manufacturing of climates provided an opportunity to contemplate together the two major historical processes of the 19th century: the industrial revolution and the second imperialism. The most general justification for industrialization and its resulting environmental damage was based on a form of climatic orientalism: comparing industrial climates and oriental climates provided an opportunity to create an image of a healthy, industrial Europe in a barbaric, dangerous world. The notion of climate

¹² These were preparatory notes for the *Traité de l'association domestique agricole : théorie de l'unité universelle*, published in *La Phalange* journal in 1847. For a perspective of the earth as a living being that humanity is likely to kill, see Eugène Huzar, *La Fin du monde par la science*, 1855 (éditions Ère, 2008).

¹³ François Arago, "De l'influence du déboisement sur le climat", *Œuvres complètes*, Paris, Gide, 1859, vol. 12, p. 432.

enabled a joint justification of colonization and industrialization.

Indeed, colonization was contemplated and legitimized as an attempt to sanitize and *restore* the climate, preventing European bodies from suffering the same deterioration as indigenous bodies. Within climate theories, European racial superiority was naturalized in an indirect manner: Europeans stood out for their capacity to properly manage their environments and climates and thereby to protect or even “produce” the quality of their body.

From the time of the French conquest of Algiers (1830), doctors began raising the question of the potentially harmful influence of eastern climates on colonizers’ bodies. According to hygienists specializing in “medical geography”, the risk was that the Europeans might orientalize after settling in Africa or Asia. The mortality rates for colonial armies were hardly encouraging: they tended to prove that man was not “cosmopolitan”, that he could not get used to climates that were too different from that of his racial place of origin. Unless, as the hygienist Jean-Christian Boudin explained, they became “Hottentots in Western Africa and Eskimos in Antarctica; but if that is acclimatization, they are perhaps paying too high a price for it”¹⁴.

Fortunately, insalubrity was not inherent to the climates of North Africa. It was seen as a historical artefact, the unhappy result of “Eastern barbarism” and “Islamic fatalism”, which had been unable to properly manage the environment. The problem with “Orientals” was that they had not succeeded in controlling nature and therefore had brought about their own degeneration. The case of the Egyptian people under Mamluk rule was a classic example in medical literature. In 1826, Jean-Baptiste Bérard, in his inaugural lecture for the chair of hygiene at the faculty of medicine in Montpellier, explained, “Egypt was one of the healthiest, most fertile and most populated countries of Antiquity. That same country, subjected to the ignorance and barbarism of Islamism has become the most insalubrious country of modern times. The Nile, through Turkish negligence, has become the source of the plague that infects or threatens the rest of the world.”¹⁵. The colonizer’s mission consisted in transforming these harmful climates through agricultural labour, draining of swamps and “reforestation”¹⁶.

Algeria, as a settlement colony, experienced the largest climate correction projects. In 1864 the Climatological Society of Algiers was established. Its aim was to show that the climate of North Africa was generally healthy and that the few truly harmful (marshy) areas could be improved. The secretary of the Society, Doctor Bertherand, campaigned for the “reforestation” of the plains and in particular praised the virtues of the eucalyptus, which could destroy the effects of noxious air. On his recommendation, a farmer from the Mitidja plain planted 20,000 plants, which he positioned upland “so as to set up proper barriers against the odours of the plain”¹⁷. In 1876, Bertherand estimated that more than two million eucalyptus trees had been planted in Algeria in under ten years. In the same vein, the plan for an Algerian inland sea, which the

¹⁴ Jean-Christian Boudin, “Recherches sur l’acclimatement des races humaines sur divers points du globe”, *Annales d’hygiène publique et de médecine légale*, 2nd series, 13, 1860, p. 310-341.

¹⁵ Jean-Baptiste Bérard, *Discours sur les améliorations progressives de la santé publique, par l’influence de la civilisation*, Paris, Gabon, 1826, p. 24.

¹⁶ On the “reforestation” of previously unforested land, see Diana K. Davis, *Resurrecting the Granary of Rome: Environmental History and French Colonial Expansion in North Africa*, Ohio University Press, 2007.

¹⁷ Docteur Bertherand, *L’Eucalyptus du point de vue de l’hygiène*, Algiers, Aillaud, 1876.

geographer and colonial officer Roudaire had proposed in 1874 (flooding the chotts by opening up a canal towards the Mediterranean), had the aim of improving the colony's climate in order to revitalize its agriculture¹⁸.

Industrial climates

In the same period, the question of the artificial modification of climates played a vital role in interpreting the effects of the industrial revolution. Very early on, industrial environments were of interest to doctors. In the context of climatic medicine, artisans were fascinating subjects of study: the fumes surrounding them created small artificial climates whose comparative study could enable the causes of epidemics to be understood. Ramazzini's treatise, *De Morbus artificium* (1699), which is often presented – somewhat anachronically – as the founding act of professional medicine¹⁹, primarily constitutes an attempt to think of workshops as medical microclimates. The (presumed) resistance of some artisans to epidemic diseases also provided cases for studying contagion phenomena. This explains why, in 1776, the Royal Society of Medicine asked its correspondents if artisan processes “have ever influenced prevailing epidemics”²⁰.

In the following century, it became common to question the deterioration in the health of industrial and urban populations. The problem with industrial environments was that of humankind's production. In 1857, Bénédict Augustin Morel put forward a major theory on degeneration: he based it on the ideas of Buffon and the progressive transformation of the human race under the influence of climates and applied it to the new climate created by the industrial society. “The entire planet has [become] the domain of man”, wrote Morel. However, he continued, “does not that same action exerted on the elements modify him in turn?” In order to triumph over the dangers of nature, man had been obliged to create an “artificial nature” that was even more dangerous because it “subjected the organism to new causes of degeneration”²¹. The factory with its air and toxic agents caused a profound transformation in workers. Legal medicine of the 1860s studied the scars left by their labour – changes in the hands, particularly – and drew up a taxonomy for bodies that had undergone changes due to professional environments.

Envisaging the factory as a climate also enabled workers' illnesses to be thought of as a form of acclimatization. In hygienist works from the mid-19th century, the workshop was seen as a colonial microclimate embedded in the metropolitan climate. Doctor Mélier, in a report on tobacco manufacturing, considered the worker as an analogy for the colonizer: “The situation of a worker, tackling particular workshops for the first time, can be compared to that of a traveller who finds himself transported to a new world that is different from his own; like him [...], he must shape himself in response to the action of other elements; in short, undergo the trials and

¹⁸ *Travaux de la commission supérieure pour l'examen de projet de mer intérieure dans le sud de l'Algérie et de la Tunisie*, Paris, Imprimerie Nationale, 1882, p. 418.

¹⁹ Julien Vincent, “Ramazzini n'est pas le père fondateur de la médecine du travail”, *Genèses*, 20102, vol. 89, p. 176.

²⁰ Session of 17 December 1776, cited in *Journal de Paris*, 22 October 1778.

²¹ Bénédict Augustin Morel, *Traité des dégénérescences physiques, intellectuelles et morales de l'espèce humaine*, Paris, J.-B. Baillière, 1857, p. 30-50.

modifications of a form of acclimatization”²². With regard to a phosphorous factory (one of the most toxic), the hygienist Dupasquier explained that despite a very troublesome first impression, “the workers quickly get used to it, they become *acclimatized*, and then live among the fumes without suffering from them, as if breathing in the purest air”²³.

As well as maintaining this reassuring position on acclimatization, the hygienists evoked the contrast between the relatively healthy climates of Europe (even the microclimates of factories) and the deleterious, barbaric climates of the East and of Africa. In the mid 19th-century, a reader of the *Annales d'hygiène et de médecine légale* would find in a single volume colonial medical articles on the mortality of Eastern populations and the appalling diseases discovered in Africa, statistics on the state of health of troops in Algeria and on mortality in Paris, and reports on the controversial insalubrity of some factories. The risk (mortality and disease rates) brought together Eastern, European, urban and industrial climates in a single statistical field, thereby putting the harmfulness of the latter into perspective. Hygiene medicine conjured up an Earth that was a medical, isomorphic space transformed by contrasting forms of environmental management, thereby enabling an overall soothing picture of the metropolis to be created.

Nevertheless, hygiene medicine eventually played a part in weakening the climatic paradigm. In order to counter bourgeois complaints against insalubrious factories (which made use of 18th-century climate medicine), hygienists succeeded in reshaping medical etiologies by using statistics and risk comparisons: social conditions, more than the climate, became the decisive factor for health. Hygienists' social surveys gradually replaced medical topographies²⁴. This refocusing of medicine on the social question created a link between industrialization and sanitary progress: despite their inconvenience, factories would create a prosperous society and a healthier population. Producing a strong population with energetic bodies no longer required a good climate but rather industrial prosperity. The political economy gradually replaced the climate as the means of biopolitics.

The decline of the climatic paradigm

During the last third of the 19th century the climatic paradigm experienced a permanent decline; the revolution triggered by Pasteur, the development of earth and planetary sciences and the emergence of social sciences all helped, each in its own way, to weaken causalities and produce new determinisms.

First of all, the revolution brought about by Pasteur invalidated climatic etiologies: doctors, when explaining diseases, now had specific, microscopic culprits to blame and no longer needed to cite the generality of environmental factors.

²² Docteur François Mêlier, “De la santé des ouvriers employés dans les manufactures de tabac, rapport lu à l’académie royale de médecine, 22 April 1845”, *Annales d'hygiène publique et de médecine légale*, 1st series, 34, 1845, p. 241-286.

²³ Alphonse Dupasquier, “Mémoire relatif aux effets des émanations phosphorées sur les ouvriers employés dans les fabriques de phosphore”, *Annales d'hygiène publique et de médecine légale*, 1st series, 36, 1846, p. 342-356.

²⁴ Jean-Baptiste Fressoz, “Circonvenir les circumfusa : la chimie, l’hygiénisme et la libéralisation des choses environnantes”, *Revue d'histoire moderne et contemporaine*, special edition “Histoire environnementale”, 56- 4, December 2009.

Secondly, scientific developments took a direction that was to favour other timescales and chains of causality in the analysis of climatic processes. In the second half of the 19th century, climatology was organized as a scientific discipline structured around the production and processing of large masses of numbers, mapped to characterize “climatic regions” with almost immutable properties and contours²⁵. The idea of a transformation of climates through man’s action ebbed, and at the same time this notion of climate changed its meaning to indicate merely a certain regularity in the averages of atmospheric variables (temperature, hygrometry, pressure, etc.). With the rise of glaciology a little earlier in the century, a theory – initially controversial – became dominant, according to which a succession of glacial cycles had affected vast areas of the earth’s surface. The origin of the glaciations was debated but there was a consensus that attributed their occurrence to causes beyond man’s activity: variations in sunspots and centennial changes in the trajectory and position of the Earth on its axis, according to Serbian scholar Milutin Milankovic’s current theory. Climates were seen as fixed frameworks, which were constant at a millennial level and imposed their own restrictions on the development of societies.

The birth of sociology was the third aspect of the anti-climatic period. “Temperament”, “constitution”, “character”: the theoretical grammar of the climate indistinctly characterized spaces and those who inhabited them. It reflected jointly on the natural and political aspects of places, and positioned social organizations within the continuity (and complexification) of plant and animal societies. In the mid 19th century, sociology emerged in opposition to climate by asserting the immanence of the laws of society against the naturalistic exteriority of climatic determinism. In *Cours de philosophie positive*, Auguste Comte invented the word “sociology” to distinguish his “social physics” from Montesquieu’s climate theory and to indicate the precedence of the law of three stages over climatic determinisms²⁶. In the same way, and in line with the statistical methods of hygienism, Durkheim sought to create/present “social things” that would replace “environmental things” in the study of population behaviour. An entire section of *Suicide* was also dedicated to refuting the influence of “cosmic factors” and to replacing climatic determinisms, studied previously by Quetelet, Lombroso and Morselli, with social determinisms²⁷. Establishing the climate as an object that escaped man’s activity and the substitution of climatic determinisms with social laws disconnected human action from the natural order. Industrial societies could then see themselves as isolated systems governed by their own economic laws, in a state of infinite growth, creating merely local damage that could therefore be disregarded or internalized.

The second half of the 20th century saw the gradual emergence of integrative scientific approaches, the practice of digital simulation, and the processes of isotopic dosage that would slowly form the foundation for the diagnosis of global climate change²⁸. This development in the “Earth-system sciences” was established largely through the efforts of the United States which, engaged in the Cold War, elevated the study of the physical environment of the Earth (planet,

²⁵ Fabien Locher, *Le Savant et la Tempête. Étudier l’atmosphère et prévoir le temps au XIXe siècle*, Rennes, Presses universitaires de Rennes, 2008; “Configurations disciplinaires et sciences de l’Observatoire : le cas des approches scientifiques de l’atmosphère”, *Enquête. Anthropologie, Histoire, Sociologie*, 5, 2006, p. 193-212.

²⁶ Auguste Comte, *Cours de philosophie positive*, Paris, Bachelier, 1840, vol. 4, chap. “La physique sociale”.

²⁷ Émile Durkheim, *Le Suicide. Étude de sociologie*, Paris, F. Alcan, 1897.

²⁸ Amy Dahan-Dalmedico (ed.), *Les Modèles du futur. Changement climatique et scénarios économiques : enjeux politiques et économiques*, Paris, La Découverte, 2007.

oceans, atmosphere) to the rank of strategic objective²⁹. This transformation in scientific approaches, the increase in political environmentalism and the rise of cultural and economic globalization laid the foundations of our growing awareness of global and anthropic climate change. The category of “climate”, in an entirely different guise, had (once again) become the scene for environmental reflexivity.

Us and them: environmental reflexivity and modernity

For a number of years now, the social sciences – under pressure and duress – have taken a renewed interest in the climate. Global warming and the “intrusion of Gaia” (Isabelle Stengers) have contributed to turning the atmosphere, the climate and its recent (?) entry into politics into a philosophical space and an opportunity to deepen (or clarify) modernity.

However, throughout the 18th and 19th centuries, the “climate” category was the matrix of environmental reflexivity; it allowed a joint contemplation of beings, objects and processes, without splitting them according to the “great divide” between Nature and Society, from a perspective that was mindful of their shared future. This should lead us to revise our vision of modernity that underpins contemporary discourse on the global shift and its impact on civilization. We must remember that deforestation has continuously been perceived as the breaking of an organic link between trees and human society; we must take into account the medical treatises which, in the 18th and 19th centuries, brought together social and environmental facts in their etiologies; and we should highlight the permanence of organicist thought, which saw the Earth is a living being until the middle of the 19th century. This shows the interweaving, in the cosmologies of modernity, of environments and civil societies, in a persistent indistinction of the political and natural orders.

All things considered, we must take on board the strange and troubling fact that the modern destruction of the environment was not carried out as if nature counted for nothing but, on the contrary, in a context in which climate theories that made environmental factors the very manufacturers of humankind had been dominant for a long time. Modern man, oblivious of the impact of his actions and blinded by his faith in progress and their dichotomic vision of the world? Our postmodernity also has its own mythologies.

Published on Books&Ideas, 31 March 2014, translated by Susannah Dale, with the support of the Institut du Monde Contemporain. ©booksandideas.net

First published in French in laviedesidees.fr, 20 April 2010.

²⁹ It was at the Pentagon that the possibility and consequences of global climate change were discussed for the first time in the spring of 1947. The aim was to assess its potential impact on the ice of the North Pole, that future battlefield of the Third World War. Ron Doel, “Quelle place pour les sciences de l’environnement physique dans l’histoire environnementale ?”, *Revue d’histoire moderne et contemporaine*, 56-4, December 2009.