

Facing Gaia

For Ulysse and Maya

Facing Gaia

Eight Lectures on the New Climatic Regime

Bruno Latour

Translated by Catherine Porter

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"In mythical language, the *earth* became known as mother of law ... This is what the poet means when he speaks of the infinitely just earth: *justissima tellus*."

Carl Schmitt *The* Nomos *of the Earth*, 42

"It is no longer politics *sans phrase* that is destiny, but rather climate politics."

Peter Sloterdijk Spheres, vol. 2, Globes, 333

"I would sooner expect to see a goat to succeed as a gardener than expect humans to become responsible stewards of the Earth."

James Lovelock

Gaia: The Practical Science of Planetary Medicine, 186

"Nature is but a name for excess."

William James A Pluralistic Universe, 148

Introduction

It all began with the idea of a dance movement that captured my attention, some ten years ago. I couldn't shake it off. A dancer is rushing backwards to get away from something she must have found frightening; as she runs, she keeps glancing back more and more anxiously, as if her flight is accumulating obstacles behind her that increasingly impede her movements, until she is forced to turn around. And there she stands, suspended, frozen, her arms hanging loosely, looking at something coming towards her, something even more terrifying than what she was first seeking to escape – until she is forced to recoil. Fleeing from one horror, she has met another, partly created by her flight.



Figure 0.1 Still from the dance "The Angel of Geostory," by Stéphanie Ganachaud, filmed by Jonathan Michel, February 12, 2013.

I became convinced that this dance expressed the spirit of the times, that it summed up in a single situation, one very disturbing to me, the one the Moderns had first fled – the archaic horror of the past – and what they had to face today – the emergence of an enigmatic figure, the source of a horror that was now in front of them rather than behind. I had first noted the emergence of this monster, half cyclone, half Leviathan, under an odd name: "Cosmocolossus." The figure merged very quickly in my mind with another highly controversial figure that I had been thinking about as I read James Lovelock: the figure of Gaia. Now, I could no longer escape: I needed to understand what was coming at me in the harrowing form of a force that was at once mythical, scientific, political, and probably religious as well.

Since I knew nothing about dance, it took me several years to find, in Stéphanie Ganachaud, the ideal interpreter of this brief movement.² Meanwhile, not knowing what to do with the obsessional figure of the Cosmocolossus, I persuaded some close friends to create a play about it, which has since become the *Gaia Global Circus*.³ It was at this point, in one of those coincidences that shouldn't surprise anyone who has been gripped by an obsession, that the Gifford Lecture committee asked me to come to Edinburgh in 2013 to give a series of six talks under the intriguing heading of "natural religion." How could I resist an offer that William James, Alfred North Whitehead, John Dewey, Henri Bergson, Hannah Arendt, and many others had accepted?⁴ Wasn't this the ideal opportunity to develop through argument what dance and theater had first compelled me to explore? At least this medium wasn't too foreign to me, especially since I had just finished writing an inquiry into the modes of existence that turned

¹See Bruno Latour, *Kosmokoloss* (2013d), a radio play broadcast in Germany (in German). The text of the play and most of my own articles cited in this book are accessible in their final or provisional versions at www.bruno-latour.fr.

²The movement was performed on February 12, 2013, and filmed by Jonathan Michel; see www.vimeo.com/60064456.

³A collective project carried out starting in the spring of 2010 with Chloë Latour and Frédérique Aït-Touati, directors, and Claire Astruc, Jade Collinet, Matthieu Protin, and Luigi Cerri, actors. Pierre Daubigny wrote the text, *Gaia Global Circus*, which led to performances in Toulouse in the context of the Novela, a festival celebrating new knowledge and culture, in October 2013, and in Reims at the Comédie in December of the same year, before the cast went on tour in France and abroad. ⁴The six talks are available on video at the site of the Gifford Lectures at the University of Edinburgh and in text form on my website (2013c). On the history of these lectures, and on the field of "natural religion," a rather enigmatic term, see Larry Witham, *The Measure of God* (2005).

out to be under the more and more pervasive shadow of Gaia.⁵ These lectures, reworked, expanded, and completely rewritten, are the basis for the present book.

If I retain the genre, style, and tone of the lectures in publishing them, it is because the anthropology of the Moderns that I have been pursuing for forty years turns out to resonate increasingly with what can be called the *New Climate Regime*. I use this term to summarize the present situation, in which the physical framework that the Moderns had taken for granted, the ground on which their history had always been played out, has become unstable. As if the décor had gotten up on stage to share the drama with the actors. From this moment on, everything changes in the way stories are told, so much so that the political order now includes everything that previously belonged to nature – a figure that, in an ongoing backlash effect, becomes an ever more undecipherable enigma.

For years, my colleagues and I tried to come to grips with this intrusion of nature and the sciences into politics; we developed a number of methods for following and even mapping ecological controversies. But all this specialized work never succeeded in shaking the certainties of those who continued to imagine a social world without objects set off against a natural world without humans - and without scientists seeking to know that world. While we were trying to unravel some of the knots of epistemology and sociology, the whole edifice that had distributed the functions of these fields was falling to the ground - or, rather, was falling, literally, back down to Earth. We were still discussing possible links between humans and nonhumans, while in the meantime scientists were inventing a multitude of ways to talk about the same thing, but on a completely different scale: the "Anthropocene," the "great acceleration," "planetary limits," "geohistory," "tipping points," "critical zones," all these astonishing terms that we shall encounter as we go along, terms that scientists had to invent in their attempt to understand this Earth that seems to react to our actions.

My original discipline, science studies, finds itself reinforced today by the widely accepted understanding that the old constitution, the

⁵Bruno Latour, An Inquiry into Modes of Existence: An Anthropology of the Moderns ([2012] 2013b).

⁶The expression is derived from the term "climatic regime" introduced by Stefan Aykut and Amy Dahan, in *Gouverner le climat? Vingt ans de négociations internationales* (2014), to designate a very particular and, in their view, not very effective way to try to "govern the climate" as if CO₂ were another case of pollution. Their work, unfortunately not translated, plays an important role in the present book.

one that distributed powers between science and politics, has become obsolete. As if we had really passed from an Old Regime to a new one marked by the emergence in multiple forms of the question of *climates* and, even more strangely, of their link to *government*. I am using these terms (which historians of geography have generally abandoned except with reference to Montesquieu's "climate theory," itself long since deemed obsolete) in their broadest sense. All a sudden, everyone senses that another *Spirit of the Laws of Nature*⁷ is in the process of emerging and that we had better start writing it down if we want to survive the forces unleashed by the New Regime. The present volume seeks to contribute to this collective work of exploration.

Gaia is presented here as the occasion for a return to Earth that allows for a differentiated version of the respective qualities that can be required of sciences, politics, and religions, as these are finally reduced to more modest and more earthbound definitions of their former vocations. The lectures come in pairs. The first two deal with the notion of *agency* (in the sense of "power to act"), an indispensable concept for allowing exchanges between heretofore distinct fields and disciplines; the next two introduce the principal characters – first *Gaia*, then the *Anthropocene*; the fifth and sixth lectures define the peoples who are struggling to occupy the Earth and the epoch in which they find themselves; and the last two explore the geopolitical question of the territories involved in the struggle.

The potential audience for a book is even more difficult to pin down than the audience for a lecture, but, since we have actually entered a period of history that is at once geological and human, I would like to address readers with diverse skills. It is impossible to understand what is happening to us without turning to the sciences – the sciences have been the first to sound the alarm. And yet, to understand them, it is impossible to settle for the image offered by the old epistemology; the sciences are now and will remain from now on so intermingled with the entire culture that we need to turn to the humanities to understand how they really function. Hence a hybrid style for a hybrid subject addressed to a necessarily hybrid audience.

Such a book is hybrid in its composition, too, as you might imagine. Once the six Gifford Lectures had been drafted for delivery in Edinburgh in February 2013, they were translated into French by Franck Lemonde, along with another talk given in 2013. But then I

⁷Trans.: This imagined title refers to a work on political theory by Charles de Secondat, Baron de Montesquieu, *The Spirit of the Laws* ([1748] 1989).

⁸The second lecture includes parts of my "Agency at the Time of the Anthropocene" (2014a).

put the text through what translators hate most when they have the misfortune of needing to translate into an author's mother tongue: I thoroughly modified the French version and added two new chapters, reshaping it to such an extent that it is an entirely different text, now translated once more for publication in English. The English version differs from the French only in some footnotes, several of the works cited, and a few cosmetic changes.

If writers can flatter themselves that their readers are the same from the beginning to the end of a book, and that these readers will be learning as they proceed from chapter to chapter, the same cannot be said for speakers, who must address a partly different audience every time. That is why each of the eight lectures can be read on its own and they can be perused in any order. The more specialized points have been shifted to the notes.

*

I owe thanks to too many people to name them all here; I attempt to acknowledge my debt, instead, in the bibliographical references.

Still, it would be unfair not to cite first and foremost the members of the Gifford Lecture committee, who allowed me to address the theme of "natural religion," without forgetting the audience in the Santa Cecilia Room during those six marvelous days in February 2013 in sun-drenched Edinburgh.

It is thanks to Isabelle Stengers that I first became interested in what she has called the intrusion of Gaia, and it was as usual by going to Simon Schaffer for help that I tried to sort out Gaia's impossible character, sharing my anxieties with Clive Hamilton, Dipesh Chakrabarty, Déborah Danowski, Eduardo Viveiros de Castro, Donna Haraway, Bronislaw Szerzynski, and many other colleagues.

But I would like to offer special thanks to Jérôme Gaillardet and Jan Zalasiewicz, who confirmed for me that there has been, since the Anthropocene, a common ground for the natural sciences and the humanities that we all share.

I unquestionably owe much more than they imagine to the students who created and produced *Make it Work* at the Théâtre des Amandiers in Nanterre in May 2015; I am equally indebted to the creators of the *Anthropocene Monument* exhibit at the Abattoirs museum in Toulouse in October 2014, as well as to the students in the course titled "Political Philosophy of Nature."

Finally, I want to thank Philippe Pignarre, whose editorial work has supported me for a very long time. I don't think he has ever published a book that makes such direct reference to the name of his collection⁹ – because, contrary to what people too often think, Gaia is actually not global at all. Gaia is unquestionably the great *empêcheur de penser en rond*, the grand inhibitor of circular thinking, a great impetus to thinking outside the box...¹⁰

⁹Trans.: Les empêcheurs de penser en rond is the name of a publishing house founded by Philippe Pignarre in 1989, taken over as a collection devoted to the humanities and social sciences by Seuil in 2000 and then by La Découverte in 2008. The term plays on the familiar French expression empêcheur de tourner en rond, literally someone who interferes with a smoothly running operation, metaphorically someone who "throws sand in the gears," a "spoilsport," a "killjoy," a "party pooper." ¹⁰The very important doctoral thesis by Sébastien Dutreuil, "Gaïa: hypothèse, programme de recherche pour le système terre, ou philosophie de la nature?," defended in 2016 at Université de Paris I, was completed too late for me to use it in his book. Once published, it will significantly renew the history of Lovelock and Gaia and their place in earth science.

FIRST LECTURE

On the instability of the (notion of) nature

A mutation of the relation to the world • Four ways to be driven crazy by ecology • The instability of the nature/culture relation • The invocation of human nature • The recourse to the "natural world" • On a great service rendered by the pseudo-controversy over the climate • "Go tell your masters that the scientists are on the warpath!" • In which we seek to pass from "nature" to the world • How to face up

It doesn't stop; every morning it begins all over again. One day, it's rising water levels; the next, it's soil erosion; by evening, it's the glaciers melting faster and faster; on the 8 p.m. news, between two reports on war crimes, we learn that thousands of species are about to disappear before they have even been properly identified. Every month, the measurements of carbon dioxide in the atmosphere are even worse than the unemployment statistics. Every year, we are told that it is the hottest since the first weather recording stations were set up; sea levels keep on rising; the coastline is increasingly threatened by spring storms; as for the ocean, every new study finds it more acidic than before. This is what the press calls living in the era of an "ecological crisis."

Alas, talking about a "crisis" would be just another way of reassuring ourselves, saying that "this too will pass," the crisis "will soon be behind us." If only it were just a crisis! If only it had been just a

crisis! The experts tell us we should be talking instead about a "mutation": we were used to one world; we are now tipping, mutating, into another. As for the adjective "ecological," we use that word for reassurance as well, all too often, as a way of distancing ourselves from the troubles with which we're threatened: "Ah, if you're talking about ecological questions, fine! They don't really concern us, of course." We behave just like people in the twentieth century when they talked about "the environment," using that term to designate the beings of nature considered from afar, through the shelter of bay windows. But today, according to the experts, all of us are affected, on the inside, in the intimacy of our precious little existences, by these news bulletins that warn us directly about what we ought to eat and drink, about our land use, our modes of transportation, our clothing choices. As we hear one piece of bad news after another, you might expect us to feel that we had shifted from a mere ecological crisis into what should instead be called a profound mutation in our relation to the world.

And yet this is surely not the case. For we receive all this news with astonishing calm, even with an admirable form of stoicism. If a radical mutation were really at issue, we would all have already modified the bases of our existence from top to bottom. We would have begun to change our food, our habitats, our means of transportation, our cultural technologies, in short, our mode of production. Every time we heard the sirens we would have rushed out of our shelters to invent new technologies equal to the threat. The inhabitants of the wealthy countries would have been as inventive as they were earlier in times of war, and, as they did in the twentieth century, they would have solved the problem in four or five years, by a massive transformation of their ways of life. Thanks to their vigorous actions, the quantity of CO₂ captured at the Mauna Loa observatory in Hawaii would already be starting to stabilize;1 well-watered soil would be swarming with earthworms, and the sea, rich in plankton, would again be full of fish; even the Arctic ice might have slowed its decline (unless it has been on an irreversible slope, shifting for millennia toward a new state).²

In any case, we would already have acted. Beginning some thirty years ago, the crisis would already be over. We would be looking back at the era of "the great ecological war" with the pride of people who

¹This observatory has been providing measurements of atmospheric CO₂ longer than any other. On the history of these measurements, see Charles David Keeling, "Rewards and Penalties of Recording the Earth" (1998). I shall come back to this example a number of times.

²See David Archer, The Long Thaw (2010b).

had nearly succumbed, but who had figured out how to turn the situation around to their advantage by reacting rapidly and mobilizing the totality of their powers of invention. We might even be taking our grandchildren to visit museums devoted to this struggle, hoping that they would be as stunned by our progress as they are today when they see how the Second World War gave rise to the Manhattan Project, the refinement of penicillin, and the dramatic progress of radar and air travel.

But here we are: what could have been just a passing crisis has turned into a profound alteration of our relation to the world. It seems as though we have become the people who could have acted thirty or forty years ago – and who did nothing, or far too little.³ A strange situation: we crossed a series of thresholds, we went through total war, and we hardly noticed a thing! So that now we're bending under the weight of a gigantic event that has crept up on us behind our backs without our really realizing it, without our putting up a fight. Just imagine: hidden behind the profusion of world wars, colonial wars, and nuclear threats, there was, in the twentieth century, that "classic century of war," another war, also worldwide, also total, also colonial, that we lived through without experiencing it. Whereas we are now preparing ourselves quite nonchalantly to take an interest in the fate of "future generations" (as they used to say), just imagine what it would be like if everything had already been done by the previous generations! Just imagine that something has happened that is not ahead of us, as a threat to come, but rather behind us, behind those who have already been born. How can we not feel rather ashamed that we have made a situation irreversible because we moved along like sleepwalkers when the alarms sounded?

And yet we haven't lacked for warnings. The sirens have been blaring all along. Awareness of ecological disasters has been long-standing, active, supported by arguments, documentation, proofs, from the very beginning of what is called the "industrial era" or the "machine age." We can't say that we didn't know. It's just that there are many ways of knowing and not knowing at the same time. Usually, when it's a question of paying attention to oneself, to one's own survival, to the well-being of those we care about, we tend rather

³This is the object of the frightening little exercise in science fiction produced by historian of science Naomi Oreskes and her colleague Erik M. Conway, *The Collapse of American Civilization: A View from the Future* (2014).

⁴This is the theme addressed by Jean-Baptiste Fressoz in his important book *L'apocalypse joyeuse: une histoire du risque technologique* (2012), and again in Christophe Bonneuil and Jean-Baptiste Fressoz, eds, *The Shock of the Anthropocene: The Earth, History, and Us* (2016).

to err in the direction of security: when our children have the sniffles, we check with the pediatrician; at the slightest threat to our plantings, we call for insecticide; if there is any doubt about the safety of our property, we take out insurance and install surveillance cameras; to prevent a potential invasion, we assemble armies at our borders. The overly celebrated precautionary principle is applied abundantly as soon as it is a matter of protecting our surroundings and our belongings, even if we are not too sure about the diagnosis and even if the experts are still quibbling about the scope of the dangers.⁵ Now, for this worldwide crisis, no one invokes the precautionary principle in order to plunge bravely into action. This time, our very old, cautious, tentative humanity, which usually advances only by groping, tapping each obstacle with its white cane like a blind person, making careful adjustments at every sign of risk, pulling back as soon as it feels resistance, rushing ahead as soon as the horizon opens up before hesitating once again as soon as a new obstacle appears, this humanity has remained impassive. None of its old peasant, bourgeois, artisanal, working-class, political virtues seem to come into play here. The alarms have sounded; they've been disconnected one after another. People have opened their eyes, they have seen, they have known, and they have forged straight ahead with their eyes shut tight!⁶ If we are astonished, reading Christopher Clark's The Sleepwalkers, to see Europe in 1914 hurtling toward the Great War with its eyes wide open,⁷ how can we not be astonished to learn retrospectively with what precise knowledge of the causes and effects Europeans (and all those that have followed the same path since) have rushed headlong into this other Great War about which we are learning, stunned, that it has already taken place - and that we have probably lost it?

2

"An alteration of the relation to the world": this is the scholarly term for madness. We understand nothing about ecological mutations if we

⁵The precautionary principle is often misinterpreted: it is a question not of abstaining from action when one is uncertain but, on the contrary, of acting even when one does not have complete certainty: "Better to be safe than sorry." It is a principle of action and research and not, as its enemies would have it, a principle of obscurantism. ⁶This is why, in *L'apocalypse joyeuse*, Fressoz uses the term "disinhibition": "The word disinhibition condenses the two phases of moving into action: that of reflexivity and that of going beyond; that of taking danger into account and that of normalizing danger. Modernity was a process of reflexive disinhibition…" (p. 16). In the sixth lecture, I shall look more closely at this term in search of its religious origin. ⁷Christopher M. Clark, *The Sleepwalkers: How Europe Went to War in 1914* (2013).

don't measure the extent to which they throw everyone into a panic. Even if they have several different ways of driving us crazy!

One segment of the public – some intellectuals, some journalists, helped occasionally by certain experts – has decided to plunge little by little into a parallel world in which there is no longer either any agitated nature or any real threat. If they remain calm, it is because they are sure that scientific data have been manipulated by dark forces or, in any case, have been so exaggerated that we must courageously resist the opinions of those whom they call "catastrophists"; we must learn, as they say, "to keep our heads" and go on living as before, without worrying too much. This madness sometimes takes on fanatical form, as it does with the so-called climate skeptics – and even sometimes "climate deniers" - who adhere in varying degrees to a conspiracy theory and who, like many elected American officials, see in the issue of ecology a devious way of imposing socialism on the United States!8 This view is much more widespread in the world at large, however, in the form of a low-level madness that can be characterized as quietist, with reference to a religious tradition in which the faithful trusted in God to take care of their salvation. Climate quietists, like the others, live in a parallel universe, but, because they have disconnected all the alarms, no strident announcement forces them up from the soft pillow of doubt: "We'll wait and see. The climate has always varied. Humanity has always come through. We have other things to worry about. The important thing is to wait, and above all not to panic." A strange diagnosis: these people are crazy by dint of staying calm! Some of them don't even hesitate to stand up in a political meeting and invoke the covenant in Genesis where God promises Noah that He will send no more floods: "Never again will I curse the ground because of man, even though every inclination of his heart is evil from childhood, and never again will I destroy all living creatures, as I have done" (Gen. 8: 21).9 With such solid assurance, it would be wrong indeed to worry!

Others, fortunately fewer in number, have heard the warning sirens but have reacted with such panic that they have plunged into a differ-

⁸There is now an abundant literature on the origins of climate skepticism, starting with the classic book by Naomi Oreskes and Erik M. Conway, *Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming* (2010). This phenomenon occupies an important place in my own study, and I shall come back to it often in these lectures.

⁹Cited by Congressman John Shimkus of Illinois on March 25, 2009, during a meeting of the United States Energy Subcommittee on Environment and Economy; see Shawn Lawrence Otto, Fool Me Twice: Fighting the Assault on Science in America (2011), p. 295.

ent frenzy: "Since the threats are so serious and the transformations we have caused in the planet are so radical," they argue, "let's come to grips with the entire terrestrial system, which we can conceive as a vast machine that has stopped working properly only because we have not controlled it completely enough." And there they are, seized by a new urge for total domination over a nature always perceived as recalcitrant and wild. In the great delirium that they call, modestly, geo-engineering, they mean to embrace the Earth as a whole. 10 To recover from the nightmares of the past, they propose to increase still further the dosage of megalomania needed for survival in this world, which in their eyes has become a clinic for patients with frayed nerves. Modernization has led us into an impasse? Let's be even more resolutely modern! If the members of the first group of climate skeptics have to be shaken up to keep them from sleeping, those in this second group need to be strait-jacketed to keep them from doing too many foolish things.¹¹

How can we begin to list all the nuances of depression that strike a third group of people, much more numerous, who carefully observe the rapid transformations of the Earth and who have decided that these can neither be ignored nor, alas, be remedied by any radical measures? Sadness, the blues, melancholia, neurasthenia? Yes, they've lost their nerve, their throats are tightening; they can hardly bring themselves to read a newspaper; they're stirred from their lethargy only by their rage at seeing others even crazier than they are. But once this fit of anger has subsided, they end up prostrate under huge doses of antidepressants.

The craziest of all are those who appear to believe that they can do something despite the odds, that it isn't too late, that the rules of collective action are surely going to work here again, that one has to be able to act rationally, with eyes wide open, even in the face of threats as serious as these, while respecting the framework of existing institutions. ¹² But the people in this group are probably bipolar, full of energy in the manic phase, before the letdown that gives them a terrible urge to jump out of the window – or to toss their adversaries out instead.

¹⁰In Clive Hamilton's book *Earthmasters: The Dawn of Climate Engineering* (2013), the presentation of the solutions proposed is enough to make one's hair stand on end. ¹¹In *The Planet Remade: How Geoengineering Could Change the World* (2015), Oliver Morton tries to draw a fine line between *hubris* and sanity.

¹²This is what Stefan Aykut and Amy Dahan, in *Gouverner le climat?* (2014), call the "denial of reality" on the part of international organizations; they analyze the negotiation procedure that has worked to limit certain instances of pollution as it is applied to a much thornier problem.

Are there still a few people left who are able to escape these symptoms? Yes, but don't think for a moment that that means they're of sound mind! They are most likely artists, hermits, gardeners, explorers, activists, or naturalists, looking in near total isolation for other ways of resisting anguish: *esperados*, to use Romain Gary's humorous label¹³ (unless they are like me, and manage to shed their anguish only because they have found clever ways to induce it in others!).

No doubt about it, ecology drives people crazy; this has to be our point of departure – not with the goal of finding a cure, just so we can learn to survive without getting carried away by denial, or hubris, or depression, or hope for a reasonable solution, or retreat into the desert. There is no cure for the condition of belonging to the world. But, by taking care, we can cure ourselves of believing that we do not belong to it, that the essential question lies elsewhere, that what happens to the world does not concern us. The time is past for hoping to "get through it." We are indeed, as they say, "in a tunnel," except that we won't see light at the end. In these matters, hope is a bad counselor, since we are not in a crisis. We can no longer say "this, too, will pass." We're going to have to get used to it. *It's definitive*.

The imperative confronting us, therefore, is to discover *a course* of treatment – but without the illusion that a cure will come quickly. In this sense, it would not be impossible to make progress, but it would be progress in reverse: this would mean rethinking the idea of progress, retrogressing, discovering a different way of experiencing the passage of time. Instead of speaking of hope, we would have to explore a rather subtle way of "dis-hoping"; this doesn't mean "despairing" but, rather, not trusting in hope alone as a way of engaging with passing time. ¹⁴ The hope of no longer counting on hope? Admittedly, that doesn't sound very encouraging.

¹³Romain Gary, interview by Pierre Dumayet, in *Lecture pour tous*, December 19, 1956. For me, the model is George Monbiot, a journalist with *The Guardian* whose blog (www.monbiot.com) is as depressing as it is invigorating, but also Gilles Clément, a "planetary gardener," a renowned landscape architect who has held a chair in artistic creation at the Collège de France.

¹⁴The relation to hope is the object of Clive Hamilton's book *Requiem for a Species:* Why We Resist the Truth about Climate Change (2010). I shall come back to it in the fifth and sixth lectures when we approach the question of the "end time." The link between paradoxical temporality and ecology is explored by Jean-Pierre Dupuy in Pour un catastrophisme éclairé: quand l'impossible est certain (2003); see also Dupuy's interview, "On peut ruser avec le destin catastrophiste" (2012), but it goes back to Hans Jonas, The Imperative of Responsibility: In Search of an Ethics for the Technological Age (1984). It is quite clearly present, as well, in the theology underlying Pope Francis's encyclical Laudato Sí: On Care for Our Common Home (2015).

If we can't hope to cure ourselves for good, we might at least gamble on the lesser of two evils. After all, one form of treatment entails "living well with one's ailments," or even simply "living well." If ecology drives us crazy, it's because what we call ecology is in effect an alteration of the alteration in our relations with the world. In this respect ecology is both a new form of madness and a new way of struggling against the forms of madness that preceded it. There is no other solution to the problem of treating ourselves without hoping for a cure: we have to get to the bottom of the situation of dereliction in which we all find ourselves, whatever nuances our anxieties may take.¹⁵

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The expression "relation to the world" itself demonstrates the extent to which we are, so to speak, *alienated*. The ecological crisis is often presented as the eternally renewed discovery that "man belongs to nature" – a seemingly simple expression that is actually very obscure (and not only because "man" is obviously also "woman"). Is it a way of talking about humans who finally understand that they are part of a "natural world" to which they must learn to conform? In the Western tradition, in fact, most definitions of the human stress the extent to which it is distinguished from nature. This is what is meant, most often, by the notions of "culture," "society," or "civilization." As a result, every time we attempt to "bring humans closer to nature," we are prevented from doing so by the objection that a human is above all, or is also, a cultural being who has to escape from, or in any case be distinguished from, nature. 16 Thus we shall never be able to say too crudely of humans "that they belong to nature." Moreover, if human beings were truly "natural," and only that, they would be deemed no longer human at all but only "material objects" or "pure animals" (to use even more ambiguous expressions).

¹⁵As of now, no one has taken this exploration of the relation to time further than Déborah Danowski and Eduardo Viveiros de Castro in *The Ends of the World* (2016).

¹⁶I am interested here only in the relation established by modern philosophy between subject and object, on the assumption that the opposition between nature in the sense of wildness – "wildlife" – and artifice has been so thoroughly criticized by historians of the environment that there is no need to go back over it. See the classic study edited by William Cronon, *Uncommon Ground: Rethinking the Human Place in Nature* (1996), and the recent overview offered by Fabien Locher and Gregory Quenet, "L'histoire environnementale: origines, enjeux et perspectives d'un nouveau chantier" (2009). For a particularly striking example of the artificialization of an ecosystem, see Gregory Quenet, *Versailles: une histoire naturelle* (2015).

We understand, then, why every definition of the ecological crisis as a "return of the human to nature" immediately unleashes a sort of panic, since we never know if we are being asked to return to the state of brute beasts or to resume the deep movement of human existence. "But I am not a natural being! I am first of all a cultural being." "Except that, of course, in fact, you are first of all a natural being, how could you forget that?" Enough to drive us crazy, indeed, and without even mentioning the "return to nature" understood as a "return to the Cave Man era," whose pathetic lighting system serves as an argument for any ill-tempered modernist who runs into an ecologist of some standing: "If we listened to you, we'd still be lighting with candles!"

The difficulty lies in the very expression "relation to the world," which presupposes two sorts of domains, that of nature and that of culture, domains that are at once distinct and impossible to separate completely. Don't try to define nature alone, for you'll have to define the term "culture" as well (the human is what escapes nature: a little, a lot, passionately); don't try to define "culture" alone, either, for you'll immediately have to define the term "nature" (the human is what cannot "totally escape" the constraints of nature). Which means that we are not dealing with domains but rather with one and the same concept divided into two parts, which turn out to be bound together, as it were, by a sturdy rubber band. In the Western tradition, we never speak of the one without speaking of the other: there is no other nature but this definition of culture, and no other culture but this definition of nature. They were born together, as inseparable as Siamese twins who hug or hit each other without ceasing to belong to the same body.¹⁷

As this argument is essential for what follows, but always difficult to grasp, I need to go back over it several times. You surely remember the period, not so long ago, before the feminist revolution, when the word "man" was used to speak of "everyone," in an undifferentiated and rather lazy way. In contrast, when the word "woman" was used, it was necessarily a specific term that could designate nothing other than what was then called the "weaker sex," or the "second sex." In the vocabulary of anthropologists, this means that the term "man" is an *un*marked category: it poses no problem and attracts no attention. When the term "woman" is used, attention is drawn to a specific

¹⁷This is the sense in which we have never been modern: we may believe we have been modern as long as we believe it possible to bring two distinct domains into existence, and we stop having been modern as soon as we realize that there are not two; see Bruno Latour, *We Have Never Been Modern* ([1991] 1993).

feature, namely, her sex; this is the feature that makes the category *marked* and thus detached from the unmarked category that serves as its background. Hence the efforts to replace "man" by "human" and to proceed as if this term common to the two halves of the same humanity signified at once woman and man – each with her or his own sex, or in any case her or his own gender, which distinguishes them both equally, as it were.¹⁸

Well, we could make headway on these questions if we could bring about exactly the same gap with the "nature/culture" pairing, so that "nature" would stop sounding like an unmarked category. (The two pairings are historically linked, moreover, but inversely, since "woman" is often found on the side of nature and "man" on the side of culture.)¹⁹ Thus I would like to bring into existence a place – a purely conceptual place, for the time being, but one that I shall try to flesh out later on²⁰ – that makes it possible to define culture and nature as equally marked categories. If you recall the wonderfully ingenious devices adopted to avoid the sexist use of language, you understand that it would be very convenient to have an equivalent for this bond between nature and culture. Alas, since there is no accepted term that plays the same role as "human," in order to obtain the same effect of correcting the reader's attention I propose to link the two typographically by referring to Nature/Culture. If the use of "he/she" allows us to avoid taking the male sex as a universal (unmarked) category, similarly we can avoid making nature something universally self-evident against which the marked category of culture would stand out.21

Let us take another comparison, this one borrowed from art history and linked more directly to our perception of nature. We are familiar with the very odd habit in Western painting, starting in the fifteenth century, of organizing the viewer's gaze so that it can serve as a

¹⁸See Vinciane Despret and Isabelle Despret, *Les faiseuses d'histoires: que font les femmes à la pensée?* (2011).

¹⁹This reversal has been subject to a great deal of study since Carolyn Merchant's classic work *The Death of Nature: Women, Ecology and the Scientific Revolution* (1980); Donna Haraway's *Simians, Cyborgs, and Women: The Reinvention of Nature* (1991); and, more recently, Silvia Federici's *Caliban and the Witch: Women, the Body and Primitive Accumulation* (2004). The same inverted pairing can be seen in the trouble women scientists have making their voices heard; see the classic example studied by Evelyn Fox Keller, *A Feeling for the Organism: The Life and Work of Barbara McClintock* (1983).

²⁰This is the focus of the last four lectures.

²¹A crucial work by Philippe Descola has made this position much easier to understand: see *Beyond Nature and Culture* ([2005] 2013).

counterpart to a spectacle of objects or landscapes. Viewers must not only remain at a certain distance from what they are looking at, but what they see must be arranged, prepared, aligned so as to be rendered perfectly visible. Between the two, there is the plane of the painting, which occupies the midpoint between the object and the subject. Historians have given a lot of thought to the oddness of this *scopic regime* and the position it assigns to the viewing subject. ²² But we do not pay enough attention to the symmetrical strangeness that gives the object the very odd role of being there only so as to be seen by a subject. Someone who is looking, for example, at a still life (the expression itself is significant) is entirely programmed so as to become the subject in relation to this *type* of object, whereas the objects – for example, oysters, lemons, capons, bowls, bunches of gold-tinged grapes arrayed on the folds of a white tablecloth – have no role other than to be presented to the sight of *this particular type* of gaze.

We can see clearly in this case how absurd it would be to take the subject who is looking as a historical oddity while considering what he/she is looking at – still life!— as something *natural* or, as it were, self-evident. The two cannot be separated or critiqued separately. What has been invented by Western painting is *a pair whose two members are* equally bizarre, not to say exotic, a pairing that has not been observed in any other civilization: the object *for* this subject, the subject *for* this object. Here, then, is proof that there is an operator, an operation, that *distributes* object and subject, exactly as there is a common concept that distributes the respective roles of Nature/Culture by occupying the same place "human" occupies with respect to the marked categories man/woman.

To make the presence of this operator less abstract, I asked an artist to draw it.²³ He chose to put an architect – Le Corbusier, as it happened! – in the obviously virtual position of someone who slipped into the plane of the painting and staged, symmetrically, the two positions, the one as unnatural as the other, of object and subject. The role of the viewer who is presumed to be contemplating a painting in the Western style is so improbable that the artist represented

²²In the wake of Panofsky's classic studies, this quite particular type of attention has been the object of significant historical work; see, for example, Jonathan Crary, *Suspensions of Perception: Attention, Spectacle, and Modern Culture* (1999), and, more recently, Lorraine Daston and Peter Galison, *Objectivity* (2007). (The expression "scopic regime" comes from Christian Metz; see *Psychoanalysis and Cinema: The Imaginary Signifier*, [1975] 1982.)

²³Samuel Garcia Perez agreed to do the drawings. For the complete gallery, see http://modesofexistence.org.

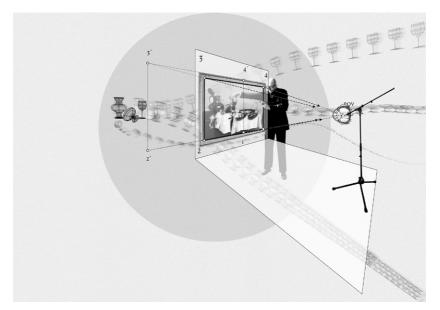


Figure 1.1 Drawing by Samuel Garcia Perez to flesh out the staging operation through which subject and object are visually constructed.

him/her in the form of a tripod to which an enormous single eye is attached!²⁴ But what is not noticed often enough is that the object that serves as counterpart to this eye is just as implausible. To prepare a still life, the artist first has to kill it, as it were, or at least interrupt its movement – hence the lines that trace the trajectory of an object of which the manipulator seizes only a moment, through what is quite appropriately called a "freeze frame."²⁵ One might say, with very little exaggeration, that there were no more objects in the world before this procedure than there were persons before the invention of photography smiling foolishly in front of a camera while someone yelled "Cheese!".

This schema makes it easier, I hope, to understand why it would be pointless to seek to "reconcile" or "go beyond" the subject and the object without taking into account the operator – represented here by the architect-manipulator – who has *distributed* the roles to these strange characters, some of whom are going to play the role of nature – for a subject – and others the role of consciousness – of

²⁴The oddness of the cognitive apparatus imposed on such subjects has been well known since the publication of Erwin Panofsky's *Perspective as Symbolic Form* ([1927] 1991).

²⁵See Julie Berger Hochstrasser, Still Life and Trade in the Dutch Golden Age (2007).

this object. The example is all the more clarifying in that it is in very large part from painting – landscape painting in particular – that we draw the basis for our conceptions of nature.²⁶ The manipulator actually exists: he/she is a painter. When Westerners are said to be "naturalists," it means that they are fond of painted landscapes, and that Descartes imagined the world as if projected onto the canvas of a still life whose manipulator would be God.²⁷

Emphasizing this work of distribution makes it clearer that the expression "belonging to nature" is almost meaningless, since nature is only one element in a complex consisting of at least three terms, the second serving as its counterpart, culture, and the third being the one that distributes features between the first two. In this sense, nature does not exist (as a domain); it exists only as one half of a pair pertaining to one single concept. We must thus take the Nature/ Culture opposition as the *topic* on which to focus our attention and not at all, any longer, as the resource that would allow us to get out of our difficulties. 28 To keep this point in mind, I shall adopt the habit of carefully surrounding "nature" with protective quotation marks, as a reminder that we are dealing with a coding system common to both categories. (To speak of the beings, entities, multiplicities, agents that people used to try to stuff into so-called "nature," we shall need an additional term, one that I shall introduce toward the end of this lecture.)

If ecology sets off panic reactions, we now understand why: because it obliges us to experience the full force of the instability of this concept, when it is interpreted as the impossible opposition between two domains that are presumed actually to exist in the real world. Above all, don't try to turn "toward nature." You might just as well try to cross through the plane of the painting to eat the oysters that gleam in the still life. Whatever you do, you will be tripped up, because you will never know whether you're designating the domains or the concept. And it will be worse if you think you can "reconcile"

²⁶Interestingly, the object of Philippe Descola's recent seminars and ongoing work is precisely to link the question of the invention of nature to the history of painting; this approach can be glimpsed in the catalog of his exhibition at the Musée du Quai Branly, *La fabrique des images* (2010).

²⁷On the whole question of "empirical style" and the invention of the theme of copy and model, so contrary to scientific practice, see Bruno Latour, What Is the Style of Matters of Concern? Two Lectures on Empirical Philosophy (2008c).

²⁸Transforming what is an explanatory resource into an object to be explained (shifting from *resource* to *topic*) amounts to depriving yourself intentionally of an element of metalanguage and making the element instead a basis for study. Instead of having it at your back, you finally have it in front of you.

nature and culture or "go beyond" the opposition through "pacified" relations between the two.²⁹ Despite the title of a justifiably famous work, we cannot go "beyond nature and culture."³⁰

But perhaps it is not entirely impossible to probe *on the near side*. If we are indeed dealing with one and the same concept consisting of two parts, this demonstrates that the parts are held together by a common core that distributes differences between them. If only we could approach this core, this differential, this apparatus, this manipulator, we could imagine how to get around it. Starting with a language that uses the opposition, we would become capable of translating what we want to say into another language that does not use it. This would give us something with which to begin to treat our madness – by inoculating ourselves with a different one, obviously; I have no illusions about this.

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Now, we begin to spot this common core as soon as we take an interest in expressions such as "acting in keeping with one's nature," or in the classic line about living "according to one's *true* nature." It isn't hard, here, to detect the *normative dimension* of such expressions, since they purport to orient all existence according to a model of life that obliges us to choose between false and true ways of being in the world. In this case, the normative power that one would expect to find rather on the "culture" side turns out to be clearly imputed, on the contrary, to the "nature" side of the twofold concept. This curious imputation is more obvious when we mobilize the theme of "human nature," which one is supposed to "learn to respect" or against which, on the contrary, one is supposed to "learn to struggle."

When we invoke "natural law," we are expressing even more directly the idea that "nature" can be conceived as a set of quasi-legal regulations. In this case, oddly enough, the adjective "natural" becomes a synonym for "moral," "legal," and "respectable." But of course there is never any way to stabilize its meaning or respect the

²⁹This is the difficulty that many contemporary philosophers run into when they approach the question of nature: they want to go beyond the division even as they continue to maintain it as the only available explanatory resource. This has been the problem from Catherine Larrère, *Les philosophies de l'environnement* (1997), through Dominique Bourg, *Vers une démocratie écologique: le citoyen, le savant et le politique* (2010), to Pierre Charbonnier, *La fin d'un grand partage: de Durkheim à Descola* (2015); the last keeps "the great distribution" in place even though he declares that the end has come.

³⁰I am of course referring here to Descola's Beyond Nature and Culture (2013).