

Studies for the End of the World

The Philosophical Question of Ecology in Art from the 1960's to the present

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Declaration of Authorship

I, Laure Jaumouillé, hereby declare that this thesis is the result of my own work and effort and that it has not been submitted anywhere for any other award. Where other sources of information have been used, they have all been acknowledged. This thesis or parts of it cannot be copied or reproduced without permission.

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Abstract

We live in a world where the idea of progress and the endless growth of modernity are reaching a point of no return. The reality we now face, that of a natural world we have mismanaged, fills us with dread and a feeling of apocalyptic tension grips us. In the tradition of the British philosopher Alfred Whitehead, contemporary thinkers such as Isabelle Stengers, Eduardo Viveiros de Castro, and Bruno Latour have addressed the global ecological problem. In this same context, art appears as a valuable resource to make us “sensitive” to the environmental situation. We must therefore approach the notion of “aesthetics” in its original sense, that of a capacity to perceive and make oneself sensitive to a shared problem. This leads us to the following question: what kinds of aesthetic experiences tend to stimulate the conscience of a “concerned” audience and call its members to action? In the field of contemporary art, from the 1960s to the present day, we have witnessed the emergence of a collection of visual images, which invite us to rethink our value system and re-examine that which connects us to a “shared world”. These artistic practices interrogate the conditions of our co-existence in the age of environmental crises. The researchers mentioned above think through “motifs” and “images”, which we will describe as “textual”, in an attempt to reinvent connections between humans and non-humans. This doctoral thesis aims to extract a set of linguistic images and “thought motifs” from the writings of researchers in order to combine them with images drawn from artworks. What happens in the encounter between a “conceptual figure” and a “pictorial” one? Between logos and icon? At the heart of the relation between text and image, we hope to find the key to a new “power of action”, in the sense of an eloquence striving for a real awakening of collective consciousness.

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Introduction

Since the birth of modern science, the intellectual, artistic and economic developments of human activity have given rise to a vast undertaking of *separation*. Everything occurs as though the West had put *nature* on one side and *culture* on the other—or alternatively, the object on one side and the subject on the other. Consequently, our existence seems to have adopted a fundamentally distinct essence of *nature*, on which it is possible for us to exercise a force, both physical and mental. In the tradition of the British philosopher Alfred Whitehead, contemporary thinkers such as Isabelle Stengers, Eduardo Viveiros de Castro and Bruno Latour are trying to shed light on this process, which currently conditions our relation to the world, in particular through the notion of the “bifurcation of nature”¹. In Whitehead’s work, the concept of “bifurcation of nature” highlights the opposition between subject and object, and by extension culture and nature, as well as the opposition between compartmented disciplines, such as philosophy and science. The Moderns thus proclaimed themselves masters of their world, thereby turning their backs on the links attaching them to it. By engaging in a boundless exploitation of animals and plants, instead of working the land they have instigated the endless conversion of their *ends* into *means*.² The natural elements have thus been reduced to the state of goods destined for consumption. While the exponential growth of human activity is now coming up against the limits of the earth’s resources, we are finally casting our eye on a tragic reality—that of a mistreated nature.

Introduced at the end of the 20th century by the chemist and meteorologist Paul Crutzen³, the term “Anthropocene”⁴ is used to designate a new geological era that is claimed to have replaced the Holocene⁵. The distinctive characteristic of this new geological age is that it is founded in the belief that mankind is a dominant force within the Earth’s system as well as all its ecosystems. Geologists work under the assumption that this new epoch would have started at the end of the 18th century. However, from 1950, humans have been causing their natural environment to deteriorate faster and in an infinitely deeper way than in any other historical period. This is why,

¹ WHITEHEAD Alfred, *The Concept of Nature*, Cambridge, The University Press, 1920, Cosimo Classics, 2007

² HACHE Emilie, *Ce à quoi nous tenons, Propositions pour une écologie pragmatique*, Les Empêcheurs de tourner en rond, La Découverte, Paris, 2011, p. 20. (my translation).

³ Paul J. Crutzen, Winner of the Nobel Prize in Chemistry in 1995. He is an Honorary Professor at Max Planck Institute, in Mainz and at the Scripps Institution of Oceanography in San Diego.

⁴ CRUTZEN Paul J., STROEMER Eugene F, *The Anthropocene*, The International Geosphere-Biosphere Programme (IGBP), Global Change Newsletter, 41, 2000, p. 17-18

⁵ The term “Anthropocene” is the subject of debate within the *International Commission on Stratigraphy* (ICS), a working group on the Anthropocene led by Jan Zalasiewicz. The notion of Anthropocene has not yet been approved as a geological era distinct from that of the Holocene. However, it has become a major concept in the humanities as well as in the artistic milieu.

after having defined the Anthropocene, climatologists such as Will Steffen, Paul Crutzen and the historian John McNeill introduced the term “The Great Acceleration”⁶ in 2005. This period can be observed through curves reflecting historic human activity, which display a slow progression since 1750, and an exponential growth after 1950. Within this study, we will work on “The Great Acceleration”, focusing on the period between the 1960s and the present day.

Comprising works by Pierre Huyghe, Lucien Castaing-Taylor and Verena Paravel, or Jan Dibbets, among others, I will address ecological questions, involving the necessity of rethinking politics in the larger sense. That is to say, a set of conditions necessary for our co-existence with non-humans. In addition, environmental crises are provoking a state of emergency, both in the arena of politics and in the field of theory. This is what leads us to consider the thinking of Bruno Latour, Isabelle Stengers, Donna Haraway and Eduardo Viveiros de Castro. Figures such as David Abram, Anna Tsing, Emanuele Coccia, Timothy Morton or Hicham-Stéphane Afeissa appear in the same nebula. The latter show how necessary it is to reshape the way we think about the world, in order to gain the ability to react to ecological catastrophe.

One must acknowledge that “images are capable of devouring ideas, while ideas are capable of digesting images”⁷. This reciprocal relationship must be taken into consideration. To further our understanding of the extent to which these notions constitute potential answers to our situation of apocalyptic tension, we must consider their context, that of a world on its way to “post-humanisation”. We will attempt to lend a “power of action” (an “agency”) to these “textual images”. This will lead us to deploy multiple formulations and compositions, in other words, to experiment with different ways of implementing these ideas in the field of the sensitive. We will therefore look at a range of contemporary works and practices, which sometimes illustrate but mostly rephrase questions raised by ecological pragmatism.

Firstly, environmental crises provoke a paralysis close to the sublime. We are gripped by terror in the face of events, which surpass us, leaving us unable to think or act. In our first chapter, we will study ecological crises through the lens of the sublime while addressing the notions of the Anthropocene and Gaïa. However, the sublime we are confronted with here involves an observer

⁶ MCNEILL John R., *The Great Acceleration: An Environmental History of the Anthropocene since 1945*, Cambridge, Harvard University Press, 2014

⁷ DIDI-HUBERMAN Georges, *Devant l'image. Questions posées aux fins d'une histoire de l'art*, 1990, Les Éditions de Minuit, Collection Critique, 2016, p. 153-154. (my translation) / *Confronting Images: Questioning the Ends of a Certain History of Art*, Penn State Univ. Press, 2004

who does not benefit from a secure position of withdrawal and detachment but is very much engaged in the surrounding natural spectacle.

Secondly, we will note that the ecological catastrophe does not function as a major and punctual event, but more so as a slow and progressive process. We must therefore question the idea of environmental rupture in line with Christophe Bonneuil and Pierre de Jouvancourt's expression: "locally situated anthropo-histories"⁸, which open us up to the possibility of telling stories in a situated way. In the second chapter, we will endeavour to study the production of knowledge on environmental crises through a range of narratives adapted to individual situations. This will lead us to address thought motifs such as Bruno Latour's injunction to "mourn for the image of the globe", the "necessity of a slowing down" (Stengers), and the observation of the "reversal between actor and décor" (Latour).

Thirdly, the beings we will encounter throughout this research are characterised by the co-dependent relationships that they develop with other beings. Thus, in order to describe a being, instead of focussing on its specificities, we will instead consider its survival needs so as to establish its conditions of existence. We will start by addressing Bruno Latour's essay, *Où Atterrir?*, and the notion of "terrain of life". We will then go on to study Anna Tsing's *The Mushroom at the End of the World*, exploring modes of "collaboration" on the ruins of capitalism; David Abram's *Comment La Terre S'est Tue*, introducing an "ecology of the senses"; and finally *La Vie Des Plantes* by Emanuele Coccia, who pushes us to approach the world through the lens of "vegetal life".

In order to study the environmental catastrophe, we must start by defining it. Hicham-Stéphane Afeissa⁹ highlights the origin of the word "catastrophe", which in Greek means "turnaround", "disruption". These are often found in the staging of dramatic art. According to the comedy author Aristophanes, a "catastrophe" can signify the "outcome" or the "end of a story". This allows us to consider the idea of a fortunate catastrophe. It is 1721, with Montesquieu's *Lettres Persanes*, that the word finds its contemporary meaning "collective and wide disasters"¹⁰. According to Afeissa, "there is a catastrophe as soon as the systematic order of institutions which compose a society is threatened in its balance and in its integrity"¹¹. This is relevant to the environmental catastrophe.

⁸ BONNEUIL Christophe, JOUVANCOURT de Pierre, *En finir avec l'épopée. Récit, géopouvoir et sujets de l'Anthropocène*, in : HACHE Émilie, *De l'univers clos au monde infini*, Éditions Dehors, 2014, p. 61. (my translation).

⁹ AFEISSA Hicham-Stéphane, *La Fin du monde et de l'humanité, Essai de généalogie du discours écologique*, Puf, 2014, p. 23.

¹⁰ Ibid., p. 24. (My translation).

¹¹ Ibid., p. 33.

Following Thomas Mitchell's thinking, we will adopt a broad definition of images — visual and verbal, material and mental, iconic and literary. Artworks will be considered as sources in their own right, on the same level as theoretical materials. In keeping with the phrase “imaging theory and theorising imagery”¹², we will endeavour to study that which produces the encounter between textual images and visual images, and this in terms of their “power to act”. In order to do this, our process will involve the de-definition of the categorisation of disciplines. In the tradition of Thomas Mitchell's *Picture Theory*¹³, we will attempt to identify and decipher the processes of representation operating in the text-image relation¹⁴. Let us start by examining the aesthetics of the sublime emerging at the time of the Anthropocene and of the Great Acceleration.

¹² BRUNET François, *Théorie et politique des images: W. J. T. Mitchell et les études de visual culture*, *Études anglaises* 1, 2005 (Tome 58), p. 82-93. (my translation).

¹³ MITCHELL Thomas, *Iconology: Image, Text, Ideology*, University of Chicago, 1986, p. 16.

¹⁴ We are following the principle whereby the “power to act” goes hand-in-hand with the “power of representation”.

CHAPTER 1 – Stupor and stupefaction: an aesthetics of the sublime

Introduction

In 1977 Walter De Maria created his best-known work: *The Lightning Field*. In order to produce this work, commissioned by the Dia Art Foundation, he worked with a plot of land in the north of Catron County in New Mexico¹⁵. Situated on a desert plateau and elevated 2200 metres above the ground, this space forms a rectangle that is 1 mile long and 1 kilometre wide. With the help of his assistants, De Maria planted 400 stainless steel posts able to attract lightning, each 67 metres apart from each other. When lightning strikes, the field is illuminated by a dazzling and powerful light, creating a spectacle that is both terrifying and fascinating. We are caught in a deeply immersive experience, in which the natural landscape we are an integral part of is torn apart before our very eyes¹⁶. Here, the sublime exposes our connection to nature, revealed in that very moment, when the lightning strikes, making our experience of the work a kind of rite of passage.

¹⁵ There are frequent storms and lightning in this.

¹⁶ There is a tension between the outburst of the elements and the immersive position of the spectator.



Figure 1. Walter De Maria, The Lightning Field, 1977

Much like *The Lightning Field*, the immeasurable aspect of the environmental crises triggers stupor and stupefaction. What is the nature of these emotions? Stupor implies a state of despondency and torpor; it produces a moral and physical insensitivity as well as a feeling of numbness. Meanwhile, stupefaction refers to extreme amazement preventing all form of reaction, a deep state of shock close to lethargy. The material manifestations of ecological crises – floods, acid rain, nuclear catastrophes, the pollution of seas and oceans, desertification, etc. – echo a singular aesthetic that could resemble that of the sublime.

Firstly, let us establish a definition of the term “ecology”. According to Isabelle Stengers, ecology is the science of “entangled relations”¹⁷ involving heterogeneous beings without clearly defined identities. Moreover, ecology entails a “becoming sensitive”¹⁸, as the only condition to approach the link between scientific ecology and ecological engagement. In this sense, ecology can be seen as the science of the “conditions of existence”¹⁹.

Questions to do with these “conditions of existence” can be found in Emilie Hache’s writings, which underline the urgent necessity for the emergence of a kind of ecology that “is not external, separate from us, but well and truly here, where we breathe, where we live, where the conditions of our existences are built.”²⁰

Following this, let us ask this question: “what is an ecological crisis?” An ecological crisis happens when the milieu of life of a species evolves to the detriment of its survival. Ecological crises can be local or global. Moreover, what we are currently facing far exceeds the notion of “crisis”: “Unfortunately, speaking of “crisis” is still a way for us to reassure ourselves in thinking that “it will pass”, that the crisis “will soon be behind us”. If only it were just a crisis!”²¹ It would be more relevant, instead, to speak of a “mutation”²², of a deep alteration of our relation to the world.

An environment is both the product and the condition of the activity of multiple species and hence the prerequisite for their survival. Tim Ingold defines the “environment” in the broader sense, not as “what surrounds us – what is ‘here outside’ and not ‘here inside’ – but as a zone of

¹⁷ STENGERS Isabelle, *Penser à partir du ravage écologique*, in : HACHE Émilie, *De l'univers clos au monde infini*, Éditions Dehors, 2014, p.174. (my translation.)

¹⁸ Ibid., p. 165.

¹⁹ Ibid., p. 174.

²⁰ HACHE Émilie, *Retour sur terre*, in *De l'univers clos au monde infini*, Éditions Dehors, 2014, p. 21. (my translation)

²¹ LATOUR Bruno, *Face à Gaïa, Huit conférences sur le nouveau régime climatique*, La Découverte, Paris, 2015, p. 16. (my translation). / *Facing Gaïa. Eight Lectures on the New Climatic Regime*, 2017, Polity Press

²² LATOUR Bruno, Ibid.

interpenetration within which our lives and those of others mix to form a homogeneous whole.”²³ Similarly, the adjective “ecological” and the notion of “environment” evoke a reassuring distance²⁴, which hardly fits the current situation. This is why this first chapter will explore notions such as the Anthropocene and Gaïa, which appear to be more efficient and relevant alternatives to the weaker concept of “environmental crises”.

What are the roots of the idea of the sublime? Edmund Burke²⁵ and Immanuel Kant²⁶ defined this notion in the 18th century. Yvon Le Scanff describes the Romantic sublime as “fundamentally apocalyptic”²⁷ in the sense that it confronts us with the disappearance and birth of landscapes, in other words, with their ultimate states. In 1757, Burke wrote his *Philosophical Inquiry into the Origin of Our Ideas of the Sublime and Beautiful*²⁸, in which he described the limitless and invincible character of nature, its grandiosity and pathos. The 18th century was marked by the European bourgeoisie’s fondness for travelling through mountain sceneries. This new practice contributed to the invention of new landscapes – through the exploration of summits, crests, peaks, volcanoes and crevasses – , while the upper classes cultivated an interest in geology. The 1755 Lisbon earthquake marked the start of reflections on the sublime, with Burke significantly publishing his book the following year. From then on, a passion for the aesthetics of rubble and ruins spread across Europe.

How can we define the Kantian sublime? Kant defined the sublime as a combination of “painful pleasure” and “negative delight”, describing it as the point in which our imagination reaches its limits. Furthermore, he distinguished the “mathematical sublime”, which relates to the immensity of a landscape, from the “dynamical sublime”, which relates to violence the natural elements’ unleashing. In his *Critique of Judgment* (1790)²⁹, Kant demonstrated that the sublime resides neither in an object nor in a natural spectacle. Furthermore, the sublime is the feeling that one experiences when faced with the fury of the elements when nature generates extraordinary phenomena. Therefore, the sublime should be distinguished from the excessiveness of nature’s power and the immensity of the cosmos. On the other hand, that very immensity awakens our awareness of “our

²³ INGOLD Tim, *Marcher avec les dragons*, Éditions Zones Sensibles, 2013, p. 10. (my translation) / *Walking with Dragons: An Anthropological Excursion on the Wild Side*, 2013, Bloomsbury

²⁴ LATOUR Bruno, *Ibid.*

²⁵ BURKE Edmund, *Philosophical Inquiry into the Origin of Our Ideas of the Sublime and Beautiful*, 1757, New York, Simon & Brown, 2013

²⁶ KANT Immanuel, *Critique of Judgement*, 1790, Oxford: Oxford University Press, 2007

²⁷ LE SCANFF Yvon, *Le Paysage romantique et l'expérience du sublime*, Seysses, Champ Vallon, coll. “Pays/Paysages”, 2007, p. 143. (my translation)

²⁸ BURKE, *Ibid.*

²⁹ KANT, *Ibid.*

own sublimeness”, in other words, “what exceeds us absolutely”³⁰. In this sense, no well-executed representation, no work of art could ever claim to express the Kantian sublime. These ideas led to the aesthetic notions of the unrepresentable and inexpressible, which quickly affected German Romanticism. At the time, nature was considered to be a reflection of the soul, making the infinitely great and the infinitely powerful eager for sublime spectacles to be depicted on canvas. The most talented painters searched the depths of their minds and experimented with all forms of artistic representation in attempts to visually convey the sublime.

Does the Kantian sublime apply to the present situation? Kant defined the metaphysical and moral experience of the sublime from the point of view of an observer, fundamentally detached from the spectacle itself. While nature is presented as the reflection of the soul and the depth of tormented interiority, the position it lends the observer is always distinct and central. The Romantic sublime relates to the experience of an individual – a subject – witnessing an infinitely superior natural force, yet always from a position of personal safety. The individual thus appropriates nature’s fury, which acts as a mirror of his own spiritual state, all while remaining detached from him. David Le Breton described this as “applying a sort of luxurious panic to lucid awareness”³¹. However, the evolution of the Romantic figure has led it to adopt a new position, as a “part” of a “whole”. In this sense, human beings are no longer separate from the nature that surrounds them; they now have a stake in it.

However, Western history up to the present day is marked by deep changes. Indeed, we are not separate from the nature that surrounds us; we have a stake in it. Furthermore, the questioning of the “bifurcation of nature”³², as defined by Whitehead, invalidates the distinction between the subject – the observer – and the object that is observed – raging nature. In this context, the sublime is no longer the moral and metaphysical experience of a solitary subject in the presence of agitated nature. It would be more relevant to assert: “I am what nature is, and vice versa”³³. Kant’s position in considering man as the observer of nature is also challenged today, with reference to which Merleau-Ponty observed “my body is formed of the same flesh as the world”³⁴.

³⁰ SCHEFER Olivier, *Sublime et cosmos, du romantisme à l’art contemporain*, in: *Sublime, Tremblements du monde*, exhibition catalogue, Centre Pompidou-Metz, 11 February – 5 September 2016, p. 26. (my translation)

³¹ LE BRETON David, *Passions du risque*, Paris, Métailié, coll. Traversées, 2000, p. 23. (my translation)

³² WHITEHEAD Alfred North, *Ibid.*, p. 26.

³³ SCHEFER OLIVIER, *Ibid.*, p. 26.

³⁴ MERLEAU PONTY Maurice, *Le Visible et l’Invisible*, Paris, Gallimard, 1964, cited in COLLOT Michel, *Le Corps cosmos*, Brussels, La Lettre volée, collection Éssais, 2008, p. 31. (my translation) / *The Visible and the Invisible*, 1969, Northwestern University Press

Should we forgo the Kantian sublime? The ecological crises we currently face well and truly invoke an aesthetic of the sublime that must be analysed in light of the current cultural, social and political context. The notion of the Anthropocene, which is central to ecological philosophy, has given rise to a unique aesthetic of the sublime, while that of Gaia prompts a state of stupefaction³⁵. Since the 1960s and the 1970s, an iconography of human beings merging with the elements has appeared in the arts, and the sublime is returning with unprecedented force.

The legacy of German Romanticism is invalidated when we experience a form of the sublime relating to the here and now. The sublime theorised by Kant has an abstract, even negative dimension, as it is purely part of our interiority and separate from the natural spectacle. The aesthetic of the sublime must therefore be fundamentally challenged in order to evaluate its relevance in our contemporary context, where the distinction between man and the natural spectacle is no longer made. If the contemporary sublime really exists, it implies a metaphysical experience that is radically different from that proposed and conceptualised by Burke and Kant. We will study the way it appears through notions like the Anthropocene and Gaia. These two concepts, which come from science, but are embraced by philosophy and ecology, are symbolically echoed in many works of art that adopt a contemporary aesthetic of the sublime.

I. The Anthropocene

The discourse on ecological crises from the perspective of the Anthropocene accompanies the “metaphysical terror”³⁶ with which we are gripped. It gives rise to an aesthetic of the sublime based on an inverted logic: now it is the human’s intervention into its environment that underlies our fear when the elements unleash their force. “Humanity is itself a catastrophe, an unexpected and devastating event in the history of the planet”³⁷. Lastly, we will attempt to show how works of art reflect our inner fear and paralysis in facing an overwhelming phenomenon, even when we are its catalysts. In other words, we will highlight the ways in which those works of art generate an initial understanding: that of our stupefaction when faced with the weight of a catastrophe.

³⁵ The notions of Anthropocene and Gaia will be addressed in more depth over the course of this chapter.

³⁶ DANOWSKI Déborah, VIVEIROS DE CASTRO Eduardo, *L'Arrêt de monde*, in: HACHE Émilie, *De l'univers clos au monde infini*, Bellevaux: Éditions Dehors, 2014, p. 242. (my translation)

³⁷ *Ibid.*, p. 230.

A. The Anthropocene – An epoch that will outlive us

As presented in this study's introduction, the notion of the Anthropocene is the subject of debates within a working group led by Jan Zalasiewicz, as part of the *International Commission on Stratigraphy*. In 1986, the ecologist William Clark introduced the idea of Man's increasing on Earth³⁸. Following Clark, Paul Crutzen highlights the seniority of this idea, alluding particularly to the research of the Italian geologist abbot Antonio Stoppani (1824-1891)³⁹.

The Anthropocene is an epoch, but it also marks the end of all “epochality”: while it began with us, it will probably end without us⁴⁰. It is necessary to highlight the fact that the concept on which the Anthropocene is based incorporates mankind, which it considers as a species, in the universal regime. Our analysis has led us to be critical of the Anthropocene's “globalising” approach to environmental crises. We would like to take into account the manner in which, despite its power to stir our awareness, this paradigm envisages Humankind (Anthropos) as a homogenous group. As demonstrated by Christophe Bonneuil and Pierre de Jouvancourt, the Anthropocene takes the form of a “Great Epic”⁴¹, and does not engage with the profuse complexity of local realities. In addition to this, the Anthropocene introduces a paradox in that it presents us with the “end of the world”, an intrinsically metaphysical phenomenon, while nevertheless being tied to “supremely empirical sciences like climatology, geophysics, biochemistry, ecology”⁴². Taking into account these inherent flaws of the notion of Anthropocene allows us to explore other alternatives for it. Let us, therefore, follow the thinking of Donna Haraway when she proposes the term « Chthulucene ».

This new paradigm, through which she intends to characterise our contemporary epoch, is inspired by a spider, the Pimòia Cthulhu. Haraway refers to the etymology of the word “tentacle”, which comes from the Latin “tentaculum” and means “feel”, and “tentare”, which means “palpate”, “sense”, “try”⁴³. The Chthulucene implies the telling of new stories and, through this, the continuous configuration of worlds and possible times. By multiplying zones of contact, the Chthulucene is fundamentally open and establishes itself in a context of emergency: we live in a

³⁸ Clark William and MUNN Robert E., eds., *Sustainable Development of the Biosphere*, IIASA, Cambridge, Cambridge University Press, 1986, chap.1, p. 43

³⁹ STOPPANI Antonio, *Corso di Geologia*, vol. II, *Geologia stratigrafica*, G. Bernardoni & G. Brigola Editori, Milan, 1873

⁴⁰ Ibid., p. 224.

⁴¹ BONNEUIL Christophe, JOUVANCOURT de Pierre, Ibid., p. 61. (my translation).

⁴² DANOWSKI & VIVEIROS DE CASTRO, Ibid., p. 225.

⁴³ HARAWAY Donna, *Symptôme, sf, embrouilles multispécifiques*, in: DEBAISE Didier and STENGERS Isabelle (dir.) *Gestes spéculatifs*, Dijon, Les presses du réel, 2015., p. 43. (*Speculative Gestures*; my translation)

time of urgency that calls for new stories⁴⁴. We should then learn how to tell new stories – “Gaïa-stories”⁴⁵, according to Latour, – and cultivate a practice of care and thought⁴⁶. Moreover, Haraway introduces the motif of the Gorgone⁴⁷, and that of the jellyfish. Gorgones appear as “powerful chthonious winged entities”, whose “extension is lateral and sprawling”⁴⁸. Neither sacred nor profane, The Chthulucene must allow us to feel and think about that which worries us. It refers to a deeply earthly and unfinished world that allows us to “harvest and cultivate what troubles us”⁴⁹. This new notion, as defined by Donna Haraway, therefore appears to offer an efficient alternative to the Anthropocene.

B. The Anthropocene and the sublime

How can we define the specific sublime of our time? Within this new era that we call by default “Anthropocene”, nature, which previously seemed distant, suddenly comes to reveal its absolute power. The fundamentally novel quality of the Anthropocene resides in the role it gives human beings, as instigators of the elements’ unleashing. Humanity is thus seen as the source of the sublime spectacle we witness. Faced with the change of geological age, the very notion of “ecological crisis” is replaced by an incommensurable change that resists our understanding. The global facet of the Anthropocene makes the notion of “crisis” too weak to address the present situation. Indeed, the sublime specific to the Anthropocene must be approached in relation to the immeasurable and unheard-of dimension of the new geological era. Today the acceleration of geological time leaves us stupefied. The situations we are faced with both gives rise to a feeling of the sublime and cause us to sink into a state of torpor. Bruno Latour quotes Michel Serres, evoking a “second trial of Galileo” during which a scientist does not whisper “And yet, the Earth moves”, but rather “And yet, the Earth is moved!”⁵⁰ The earth thus turns into a historical agent, and is lent a form of agency or “power to act”. Bruno Latour sees ecology not as “the irruption of Nature in the public space, but as the end of “nature”⁵¹. According to him, we are in a “generalized state of

⁴⁴ Ibid., p. 49.

⁴⁵ Ibid., p. 54.

⁴⁶ Ibid., p. 49.

⁴⁷ Characterized by a face bedecked with snakes, they distinguish themselves through the stupor they provoke, petrifying the ones who look at them.

⁴⁸ HARAWAY Donna, Ibid., p. 68.

⁴⁹ Ibid., p. 69.

⁵⁰ LATOUR Bruno, *Face à Gaïa, Huit conférences sur le nouveau régime climatique*, La Découverte, Paris, 2015, p. 80-81. (my translation)

⁵¹ LATOUR Bruno, Ibid., p.53.

war”⁵², on a battlefield on which Lovelock’s “Gaïa” went to war with humans, in search of “revenge”⁵³.

Moreover, we are at a junction in which the change of geological era meets the “age of capital”⁵⁴, hence the appearance of the term “Capitalocene”⁵⁵. In this context, Frederic Jameson’s phrase: “Nowadays, it seems easier to imagine the end of the world than the end of capitalism”⁵⁶ seems particularly emblematic. Furthermore, the Anthropocene gives rise to the aestheticisation of a “second nature”, that is to say, an anesthetization of techniques and the knowledge specific to capitalism. In this sense, it is relevant to pay attention to different forms of aestheticisation, taking the “technological sublime” as their object, including factories, railway stations, drilling platforms, skyscrapers... We seem to have inherited a celebratory and aestheticised perception of 19th and 20th-century industrialisation, along with the spread of the religion of progress⁵⁷, the development of which reached a peak during the Cold War. Additionally, it is necessary to highlight the depth of the change emerging as a result of the new geological era of the Anthropocene, inasmuch as it annihilates all forms of filiation or genealogy. Beyond the “technological sublime”, there exists a sublime specific to the Anthropocene that eludes all traditional spectacles inasmuch as the distinction between scene and spectator is no longer valid. The rise of a new geological era calls the separation between spectator and spectacle into question. We are now immersed in the very spectacle we are witnessing: “There is no more spectator because no shore has remained unscathed by the tragedy of geo-history”⁵⁸.

The Anthropocene well and truly emits a form of sublime, one which allows us to think and feel differently, which despite its aesthetic of stupor, builds a beneficial awareness, alerting us to the dangers of the religion of progress. In highlighting the disasters caused by man, this aesthetic awakens our dignity and fragile nature. In discussing the sublime emerging from a nuclear catastrophe, Barbara Novak observes, “it awakens deep awareness in us of our mortality”. She goes

⁵² Ibid., p. 98.

⁵³ Ibid.

⁵⁴ HOBBSAWM Eric, *The Age of Capital: 1848-1875*, 1975, Vintage Editions, 1996.

⁵⁵ Andreas Malm introduced the term « Capitalocene » during a lecture in Lund in 2009. Jason Moore’s project also incorporates environmental issues in the history of capitalism. Going back to the end of the Middle Ages, he places the exploitation of natural resources at the core of his study. He uses the notion of “Capitalocene” to critique the ideology that underpins our relationship to other forms of life. Donna Haraway has been using the same term independently since 2012.

⁵⁶ JAMESON Frederic, *Future City*, New Left Review, 2003. The exact quote is the following: « Someone once said that it is easier to imagine the end of the world than to imagine the end of capitalism. We can now revise that and witness the attempt to imagine capitalism by way of imagining the end of the world. »

⁵⁷ Here we are referring to the capitalist sense of the word “progress”.

⁵⁸ LATOUR Bruno, Ibid., p. 55. (my translation)

on to say that “The destruction of nature heralds our own destruction”⁵⁹. Bonnie Mann points both to our terror and to our responsibility: “We are at the mercy of the Earth, the air and the water – and what we have done to it [...]. This sublime experience does not unravel our dependence on the planet but weaves it tighter until we choke on our own mistakes”⁶⁰. We will now attempt to redefine the notion of the sublime in its relation to the concept of the Anthropocene and to underline its contemporary characteristics in order to make productive use of it. The analysis of works of art will reflect the decline of the romantic tradition and the rise of an aesthetic of disaster, the manifestations of which are themselves driven by human forces.

C. The notion of Anthropocene must be called into question

Which philosophical and practical issues do the sublime of the Anthropocene raise? The aesthetics of the sublime contains an element of danger mostly emerging from the seductive nature of its apparent solutions to problems presented by the Anthropocene. This relates to the demiurgic project of geoengineering, which Bruno Latour describes as a new “frenzy”⁶¹, a new “total domination of man over nature, which is always conceived as restive and wild”⁶².

The sublime of technological mastery opens us up to a great breadth of practices, which contribute to the struggle against global warming. Geoengineering involves a large-scale, corrective approach, including ideas such as injecting sulphur dioxide into the upper atmosphere so as to reflect solar radiation into space. Governments around the world have yet to agree on serious measures to be taken for environmental protection, and geoengineering has so far been considered as a last resort. Although they are probably very risky, geoengineering techniques could be adopted in case of a dire emergency. It is possible to understand the extent to which the aesthetics of the sublime that accompany these geoengineering techniques contain a harmful dimension. Paul Crutzen, who coined the term “Anthropocene”, is an advocate of so-called “solar radiation management” techniques, exemplifying scholars’ ambitions to increase their action upon the Earth. This involves specific manifestation of the sublime that incites a total and brutal geoengineering, to the detriment of a patient and ambitious work of involution and adaptation.

⁵⁹ NOVAK Barbara, *Common Ground, Five Artists in the Florida Landscape*, Exhibition Catalogue, Sarasota, John and Marble Ringling Museum of Art, 1982, p. 63.

⁶⁰ MANN Bonnie, *Women’s Liberation and the Sublime. Feminism, Postmodernism, Environment*, New York, Oxford University Press, 2006, p. 162-163.

⁶¹ LATOUR Bruno, *Ibid.*, p. 21.

⁶² *Ibid.*

More urgently, we must learn to dismantle the link between the illusion of emancipation and what we have experienced as the “epic conquest” of modernity. According to Emilie Hache, we must perform a form of exorcism in order to “become foreign, in our perceptions, our attachments, our imagination, to free ourselves from productivism and its inexhaustible ideology of progress”⁶³. This should allow the Anthropocene’s subject to discard the legacy of the 19th century “dazzled by progress in the sciences and technology”⁶⁴. Furthermore, Jean-Baptiste Fressoz invites us to employ other aesthetic categories⁶⁵ that will hopefully enable us to think and feel differently, in a way “that is not barbaric”⁶⁶. Other contexts and methods in the fields of thought and art will come to us. We must try out all these processes, aesthetic regimes and mechanisms in order to “resist the coming barbarism”⁶⁷. This very “barbarism” is Gaïa herself, that is to say, a dreadful being personifying the environmental threat.

II. Gaïa

The first distinctive characteristic of the word “Gaïa” is its plurality. Introduced with reference to the mythological personification of the Earth, *Gē*, Gaïa initially took on the lead role in what was originally a purely scientific theory, but this soon shifted in the direction of a pragmatic philosophical approach to ecology. Gaïa is used by various thinkers⁶⁸ and has been assigned a plethora of connotations. However, we must highlight the fact that the confluence of these diverse meanings of Gaïa is that of an environmental threat, the sudden intrusion of which induces stupor. Ever since its appearance, we have been caught in the grip of an irreversible “metaphysical terror”⁶⁹ that stirs up an aesthetic of the sublime. We will try to indicate the extent to which some artists attest to Gaïa’s formidable power and all-encompassing dimension; and how this overwhelms us, filling us with a feeling of the sublime marked by terror and awe.

⁶³ HACHE Émilie, *Retour sur terre*, in *De l’univers clos au monde infini*, Éditions Dehors, 2014, p. 19. My translation.

⁶⁴ STENGERS Isabelle, *Au temps des catastrophes. Résister à la barbarie qui vient*, Paris, La Découverte, 2009, p. 48. (my translation). / *In Catastrophic Times: Resisting the Coming Barbarism*, 2015

⁶⁵ FRESSOZ Jean-Baptiste, *L’Anthropocène et l’esthétique du sublime*, in: GUENIN Hélène (Dir.), *Sublime, Tremblements du monde*, exhibition catalogue, Centre Pompidou-Metz, 11 février – 5 septembre 2016, p. 49.

⁶⁶ STENGERS Isabelle, *Ibid.*, p. 78.

⁶⁷ *Ibid.*

⁶⁸ James Lovelock, Bruno Latour, Isabelle Stengers

⁶⁹ DANOWSKI Déborah, VIVEIROS DE CASTRO Eduardo, *L’Arrêt de monde*, in: HACHE Émilie, *De l’univers clos au monde infini*, Bellevaux, Éditions Dehors, 2014, p. 242. (my translation)

A. Gaïa, a dreadful force that embodies the threat to come

What is it about when one evokes the notion of Gaïa? James Lovelock introduced the term ‘Gaïa’ in his 1979 essay *Gaïa. A New Look at Life on Earth*⁷⁰. The essay describes the character Earth – known as Gē in mythology – as a composite being. Similar to a living creature, Gaïa is described as a system of feedback loops that balance themselves out. It is these that determine Gaïa’s character, which we should not think of as an organism or organisation. Lovelock and his co-author Lynn Margulis were among the supporters of the Darwinian model, on the basis of a mechanism whose primary characteristic is that it is not unified. Uprooted from our cosmic fantasies, we once again found ourselves projected in a sublunar world in order to test the “imbalance” of Gaïa, this fundamentally “animated” and “local” being⁷¹. Following Lovelock, let us attempt to understand how Gaïa interacts with humans via feedback and how it is “active”. In Bruno Latour’s words, Lovelock arrived at “a version of the Earth that is entirely here-below” and immediately added, “Let’s say that to study Earth, we have to return to Earth”⁷². Besides, it is necessary to clarify that this being, named after an ancient goddess, embodies one of the most secular and non-religious powers in our history. It is “here-below” and not “in the beyond” that Gaïa operates, at the heart of the teeming connections between beings. Standing firm against all holistic concepts, Lovelock succeeded in developing an Earth-system in the form of an “anti-system”. “There is only one Gaïa, but Gaïa is not one”⁷³. The profane Gaïa with which we are confronted does away with all forms of borders, scales and levels. It orchestrates the active interaction between beings, bringing about what can be called “waves of action”⁷⁴. Are we prepared to interact with these action waves? By blurring perspectives, creating what Latour calls a “real hotchpotch”⁷⁵, Gaïa both mixes human and non-human points of view and puts them on an equal footing. How can we react to Gaïa? Would it be a matter of establishing a pact of symbiosis with the elements, what Michel Serres calls a “natural contract”⁷⁶

In alluding to Michel Serres, we rely on the assessment according to which we have not only invaded the space of the world as well as its ontology⁷⁷, while the Earth is the victim of “objective

⁷⁰ LOVELOCK James, *Gaïa. A New Look at Life on Earth*, 1979, Oxford, OUP, 2000

⁷¹ LATOUR Bruno, *Face à Gaïa*, Ibid., p. 105. (my translation)

⁷² Ibid., p. 116.

⁷³ Ibid., p. 130.

⁷⁴ Ibid., p. 135.

⁷⁵ Ibid., p. 134.

⁷⁶ SERRES Michel, *Le Contrat Naturel*, 1990, Flammarion, 1999, p. 40. (my translation)

⁷⁷ Ibid.

violence”⁷⁸. We must therefore make peace, not only with our fellow “humans”, but also with the world. A new form of justice must be implemented: could it include non-humans? As for humans, they must learn to recognize their finitude⁷⁹. Finally, we must note that Michel Serres insists on the metaphysical dimension⁸⁰ on such contract, for which we have yet to invent a law.

B. Gaïa, a plural figure of the pragmatic philosophy of ecology

Gaïa is a plural figure towards which pragmatic thinkers of ecology have all taken different approaches. Regarding Gaïa, Isabelle Stengers insists on its “intrusion”. Following this idea, we will now consider the “intrusion of Gaïa”⁸¹ as an unheard-of event that puts us in relation with a new actor. Gaïa is neither the Earth nor Nature but a force, a formidable power with which we must “compromise”. It takes the form of an event that can be extended on the basis of “slow violence”, the violence of a “coming barbarism”⁸². As previously mentioned, Gaïa must be thought of as a living entity with its own regime of activities. Unaware of the damage they cause, Gaïa’s movements and dynamics tangle and snarl with one another, with a fluctuation in one affecting the others in various ways. For Isabelle Stengers, Gaïa is “touchy”⁸³. Moreover, its intrusion is one-directional as it subjects us to a question without having any interest in the answer. According to Isabelle Stengers, it would be pointless to fight Gaïa and much more beneficial to “come to terms with it” and try to respond to its intrusion in “a way that is not barbaric”⁸⁴.

Bruno Latour sees Gaïa as a “Moebius strip”⁸⁵, holding us tightly in its grasp and threatening us as we grasp and threaten it in return. This metaphor helps us to find correspondences in the field of visual arts. Through the image of the “Moebius Strip”, traditional distinctions between inside and outside seem to shatter in the same way as the distinction between “Nature” and “Culture”. The “Bifurcation of nature”, as defined and criticised by Alfred Whitehead⁸⁶, is hereby challenged. In the past, nature appeared to be beneficial and generous as well as radically external to man, to the extent that we were able to control it. Today we witness the emergence of a fundamental

⁷⁸ Ibid.

⁷⁹ Ibid., p. 148.

⁸⁰ Ibid., p. 78.

⁸¹ STENGERS Isabelle, *Au temps des catastrophes. Résister à la barbarie qui vient*, La Découverte, 2009, p. 48. (my translation)

⁸² Ibid.

⁸³ Ibid., p. 36.

⁸⁴ Ibid., p. 78.

⁸⁵ LATOUR Bruno, *Enquête sur les modes d'existence*, La Découverte, 2012, p. 21. (my translation) / *An Inquiry Into Modes of Existence*, 2013, Harvard University Press, Cambridge, Mass.

⁸⁶ WHITEHEAD Alfred North, Ibid.

contradiction: we have developed an immense dependence on nature by forcefully using it for our own benefit while ignoring the potential outcomes for non-humans. Today, the consequences of this oversight put us in irreversible peril: Gaïa is demonstrating its “intention”, or, in Latour’s term, the “agency”⁸⁷ of a fearsome power indifferent to our survival. However, there is a paradox here: nature, as understood by the “Moderns”, also had an “intention”. Although inarticulate, it acted in compliance with some rules and demonstrated a will, knowledge, etc. Through its multiple external manifestations, nature, as seen by the “Moderns”, expressed its “agency”, in other words, its “power of action”, and was, therefore, present to human consciousness. The distinctive feature of Gaïa, according to Latour, is that it makes its intention fully visible and explicit. However, Gaïa appears as “a gigantic discordant accord, variable and contingent”⁸⁸.

C. Gaïa and the aesthetic of the sublime

James Lovelock named Gaïa after Gē, the Earth. Gē was not a goddess but a power that predated the birth of the gods. Gaïa made the world tremble, and everything suggests that it caused the original experience of the sublime. Hesiod’s *Theogony* describes the prolific and dangerous nature of the ancestral Gaïa: an original force spouting enormous jets of blood and vapour⁸⁹. Sowing global terror and accompanied by Chaos and Eros, Gaïa had no maternal qualities: she spread discord and encouraged her offspring of gods and monsters to kill one another. At her request, her son, Kronos, emasculates her husband Uranus with a “steel billhook with sharp teeth”⁹⁰. Like a sublime spectacle, in her presence, debacle and tumult reigned. The incarnation of disorder, she embroiled us in the continuous confusion that she inhabited.

Gaïa Theory – that of Lovelock⁹¹ and Margulis⁹² – invites us to take part in our planet’s geohistory, which carries us into a “contingent cascade of unforeseen events”⁹³ and an environment devoid of all forms of order. One hereby discovers a new experience and singular form of the sublime: in the kingdom of Gaïa, no spectacle can be experienced at a distance; we are caught in a cluster of beings

⁸⁷ LATOUR Bruno, Ibid.

⁸⁸ Ibid.

⁸⁹ LATOUR Bruno, *Face à Gaïa*, Ibid., p. 109-110.

⁹⁰ Ibid., p. 112. (my translation)

⁹¹ LOVELOCK James, *Gaïa: A New Look at Life on Earth*, Oxford, Oxford university press, 2000

⁹² MARGULIS Lynn, *Symbiotic Planet: A New Look at Evolution*, London, Weidenfeld & Nicolson, 1998

⁹³ Ibid., p. 142.

and feedback loops. In *Gaïa Theory*, life with Gaïa radically changes our experience of the sublime, as it prevents us from being the external observers of the Romantic sublime.

Gaïa's unilateral intrusion and awesome power give rise to a new aesthetic of the sublime. This irreversible event, this immeasurable force, which we must respond to in order to "resist the coming barbarism"⁹⁴, leaves us awestruck, paralysed, and terrified. This ferocity instigates a "slow violence", which we are part of, allowing us to see ourselves as "Gaïa's people"⁹⁵. Gaïa is a secular force that does not announce *katechon*, meaning "the time of the end", but *eschaton*, the end of time, the "ontological disappearance of time", and the "end of the end". As Latour puts it, "we are, indeed, *in a tunnel*, as they say, although we *won't see the end of it*". In their essay *L'Arrêt de monde*, Deborah Danowski and Eduardo Viveiros de Castro reference Lars von Trier's film *Melancholia*⁹⁶. While the film ends with a collision between Planet Earth and another planet, thereby eradicating all forms of life, the authors allude to the "end of the end" and to the "gigantic and enigmatic transcendence of Gaïa"⁹⁷. This shows the extent to which Gaïa participates in the need to produce different prophecies of the end of the world. According to Danowski and Viveiros de Castro, we lack a mythology of the end of time, in the same way that we need a more precise definition of what constitutes "Gaïa's people". Whereas the Anthropocene thwarts the notion of "Anthropos" as a universal and undifferentiated subject, Gaïa requires a "*demos*" to associate with the "missing people"⁹⁸ as defined by Deleuze and Guattari. With Gaïa revealing the "ravaged desert of our imaginations"⁹⁹, we are left to invent her people. By weaving her way through each of our histories, Gaïa binds us together in "a mixture of melancholy and splendour"¹⁰⁰. However, "it is no longer a spectacle that we are able to appreciate at a distance insofar as we are part of it"¹⁰¹. In the same way as the Anthropocene, Gaïa's sublime infers the temptation of geo-engineering.

D. Dangers and consequences of geo-engineering

⁹⁴ STENGERS Isabelle, *Au temps des catastrophes*, Ibid., p. 130. (my translation)

⁹⁵ LATOUR Bruno, *L'Anthropocène et la destruction de l'image du globe*, in: HACHE, Ibid., p. 39. (my translation).

⁹⁶ Ibid., p. 249.

⁹⁷ Ibid., p. 249.

⁹⁸ DELEUZE Gilles, *Cinema 2, L'Image-Temps*, Éditions de Minuit, 1985, p. 283. (my translation) / *Cinema 2: The Time-Image*, 1989, University of Minnesota Press

⁹⁹ STENGERS, Ibid., p. 118.

¹⁰⁰ LATOUR Bruno, *Gaïa, Figure (enfin profane) de la nature*, in: *Face à Gaïa*, Ibid., p. 146. (my translation)

¹⁰¹ Ibid.

Gaïa teaches us that we are caught in a new experience of the sublime as we are an integral part of it. This new aesthetic is accompanied by the temptation to think of Earth as a whole. Bruno Latour warns us against the dangers of this belief. Indeed, making a whole out of Gaïa's parts implies that we are part of a "technical system"¹⁰² that requires the services of an "engineer"¹⁰³. However, a "technical metaphor" of this kind cannot be applied to Earth as our planet has nether been "fabricated" nor "maintained"¹⁰⁴. We must therefore resist schemes to "re-engineer" our world. As Clive Hamilton demonstrates¹⁰⁵, our dreams of acting as demiurges and raising the technological stakes applied to System Earth represent the same risks.

Far more importantly, we must develop new ways to live that are compatible with Gaïa and that allow us to "compromise" with it. In the words of Isabelle Stengers¹⁰⁶, we must invent "new stories" so as to be able to "think together" through a "work that must be done" in line with Etienne Souriau. In order to regenerate our landscapes, stories, and ravaged imaginations, we must learn to think and feel differently.

With this in mind, we will assume that the Pharmakon's critical attention¹⁰⁷ is necessary and requires critical examination. Depending on its dosage and usage, the Pharmakon can be used as a remedy or as a poison. It plays a key role in the aesthetic of the sublime, an aesthetic equally capable of alerting us by raising our awareness of "the coming barbarism" and drawing us into the insidious vortex of technological escalation.

While the sublime leaves us dumbstruck, stupefied by the ecological catastrophe we are causing, it nonetheless authorises us to follow the arts of pharmacology in order to be "touched" by the environmental catastrophe as well as to abandon the narrative of technological modernity, which has poisoned our society¹⁰⁸ for so long. Furthermore, the narratives we must start to create should draw from multiple sources in order to allow us to repopulate "the desert of our imaginations"¹⁰⁹

¹⁰² Richard Buckminster Fuller's work strongly resonates with this. Through the title "Spaceship Earth", he addresses the Earth as a "system", which must be looked after through some kind of maintenance, in order to preserve human life and protect it from environmental dangers.

¹⁰³ LATOUR Bruno, *Ibid.*, p. 129.

¹⁰⁴ *Ibid.*

¹⁰⁵ HAMILTON Clive, *Earthmasters: Playing God with the Climate*, London: Allen & Unwin, 2013

¹⁰⁶ STENGERS, *Ibid.*, p. 118. (my translation)

¹⁰⁷ *Ibid.*, p. 103.

¹⁰⁸ *Ibid.*, p. 130.

¹⁰⁹ *Ibid.*, p. 118.

more effectively. Alternatively, we could choose to approach a selection of artworks that echo the sublime of the Anthropocene and the sublime of Gaïa.

III. Artworks

A. The Anthropocene

The landscape of contemporary art includes multiple instances of the aesthetic of the sublime, echoing the notions of Anthropocene¹¹⁰. Although we aim to distance ourselves from this new “epic narrative”, focussing instead on local situations, we must acknowledge that some art practices bear witness to this new era, all while inducing a critical point of view. Some artists engage with apocalyptic themes, conveying the formidable power of unrelenting natural elements, describing the dreadful force of cataclysms. The anthropic sublime brings the field of art with the following question: “how can we represent the Anthropocene?” We have selected images depicting industrial landscapes or nuclear catastrophes, the ambivalence of which are particularly striking. In their oscillation between seduction and revulsion, these images urge us to cast our eyes upon a reality that is specific to our time. Finally, contemporary art’s landscape also includes representations of a world without humans, reminding us of the extent to which the Anthropocene appears as “the end of any epochality” and will probably “end without us”¹¹¹.

Numerous artists evoke a singular form of the sublime, which stems from the Anthropocene, and underlines human responsibility in the surge of natural elements¹¹². This paradoxical aesthetic involves compelling images depicting the horror of devastated landscapes. The supreme beauty of these images goes hand in hand with the atrocities they portray. At the time of the Anthropocene, numerous artists develop representations of sublime landscapes while questioning the fragile balance that must be reached between mankind, the industry and the environment. Through this, they reveal the way some apocalyptical spectacles induce stupor. Without purporting to refer to the Anthropocene, some artists highlight the impact of the human being on its environment, especially on stratigraphy. They stress the necessity of thinking both about geological time (through zooming in), and about more recent events (through zooming out).

¹¹⁰ The choice of works presented below relies on their tendency to echo this notion.

¹¹¹ DANOWSKI Déborah, VIVEIROS DE CASTRO Eduardo, *Ibid.*, p. 224. (my translation)

¹¹² FRESSOZ Jean-Baptiste, *L'Anthropocène et l'esthétique du sublime*, in : *Sublime, Tremblements du monde*, Exhibition Catalogue, Centre Pompidou-Metz, 11 February – 5 September 2016, p. 44.

Robert Longo

With a hyperrealist approach, Robert Longo endeavours to represent extreme natural phenomena, as well as nuclear catastrophes. The artist attempts to convey the dreadful force of cataclysms with a technical dexterity that brings his works close to perfection. His works generate tension within us, leaving us torn between attraction and revulsion, to the extent that the ultimate beauty of the artist's drawings goes hand in hand with the terror that they depict. Robert Longo employs the aesthetic of the sublime, that of the Anthropocene defined above: humanity being at the origin of a devastated landscape or the unleashing of the elements. In establishing a representation of environmental catastrophes, Longo reaches towards an answer to our time's most pressing question: how can we give a sensitive form to the Anthropocene?

Robert Longo was born in Brooklyn in 1953 and is now based in New York. In the 1980s, he gained recognition for his *Men in the Cities* series. His large charcoal drawings depicted male and female office workers — suits for both genders — caught in uncontrollable movements. These contortions and disarticulations conjured up the madness of city life. Since the late 1990s, the artist has been exploring hyperrealist representations of apocalyptic landscapes using charcoal and mounted paper. In an interview with Richard Price, Robert Longo said: “I think I make works for brave eyes. I don't want to make a comforting art. I want to make a striking, powerful art, not just something to look at but a work that looks at you as much as you look at it.”¹¹³ Guided by deep melancholy, Robert Longo tries to explore the fearsome beauty of the forces of nature. With his series *Bodies* (2004-2006), the artist strove to represent the Earth, the sun, Saturn, and landscapes made up of interstellar nebulae. Since 2001 Longo has been developing charcoal representations of various atomic mushroom clouds, with an aesthetic close to perfection. These works' supreme beauty and the horror that they express combine to create an experience of the sublime. By generating face-to-face encounters with violent scenes, these images aim to depict our world's fateful forces. Furthermore, the distinctive feature of Longo's series *The Sickness of Reason* (2001-2005) is that it introduces an unusual form of the sublime, specific to the Anthropocene: humans are the root of the disaster, the agents that trigger it. While the stunning beauty of Longo's drawings may appear dangerous because of their seductive power, their aesthetic qualities contribute to making them fiercely efficient. When we look at these images, which resemble the picturesque clouds painted by the Romantics in the 18th century, we are caught in a kind of ambivalence,

¹¹³ Robert Longo: *Men in the Cities, 1979-1982, With an Introduction and Interview by Richard Price*, Paperback, Harry N. Abrams, First Edition, April 1986, p. 94-100.

somewhere between attraction and repulsion. However, this body of work acts above all as an alert, thus giving tragedy the upper hand. Concerning Longo's work, to use Werner Spies' words, we might speak of "horror being tipped into an absolutely effective sublimity"¹¹⁴. Robert Longo presents us with an initial attempt at answering the question raised by the Anthropocene: how are we to describe this epoch in which humankind is the principal agent of changes that it no longer controls? According to Bruno Latour's thinking, natural objects—unleashed here by the force of disaster—are now "political objects" that must be "represented"¹¹⁵, leading him to speak of a "Parliament of things"¹¹⁶. Robert Longo offers us the sketch of a "representation" of catastrophe. This is how he enables us to see the powerful strength of "anthropocenic sublimity", through a hyperrealist aesthetic and a masterful method.

¹¹⁴ SPIES Werner, *Robert Longo*, Musée d'art moderne et d'art contemporain de Nice, 2009 (my translation)

¹¹⁵ LATOUR Bruno, *We have never been modern*, Harvard University Press, 2012, p. 144.

¹¹⁶ *Ibid.*, p. 142.



Figure 2. Robert Longo, The Sickness of Reason, 2001-2005

Adrien Missika

Much like Robert Longo, Adrien Missika shows us how the Anthropocene gives rise to a form of sublimeness we are both the cause and an integral part of. Humankind reveals itself to be the cause of the unleashing of the elements, producing, in turn, a spectacle that shakes us out of our state of torpor. Without seeking to refer to the Anthropocene, Adrien Missika is developing a body of work that reveals humankind's interference on the earth's crust, thus producing an apocalyptic landscape. In addition to this, the artist underlines the need for a simultaneous factor in our view of the world: in the age of the Anthropocene, we must think of the human being both in the context of its geological time and in the context of its recent time frame. Thus, to adopt Dipesh Chakraparty's words: "We need to zoom both in and out".¹¹⁷

Born in 1981 in Paris and now based in Berlin, Adrien Missika's projects are driven by his travels. This activity takes on diverse historical and cultural forms: inspired by the "Grand Tour" performed by artists in the 18th and 19th centuries, as well as scientific expeditions and ideas of escape and pilgrimage, the artist keenly indulges in the art of travelling through many different landscapes. The experience of changing places is thus seen both as a rite of passage and as a component of the artistic process. In 2011, Adrien Missika won the 13th Fondation Ricard Prize with his exhibition *The Seabass*, curated by Eric Troncy. That same year, the artist produced a video titled *Darvaza*, which he screened during the Benin Biennial, at the Kora Centre. The title of the work refers to the name of a village in Turkmenistan, in the Ahal province. It seems relevant to note that "derweze" in Turkmen means "gate"; and that the place filmed by Adrien Missika is now commonly called the "Gate of Hell", an expression introduced by locals. In 1970, the site was discovered by a delegation of Soviet scientists specialising in the petrochemical industry and responsible for a prospecting programme. The subsoil turned out to be rich in gas, which prompted the delegation's agents to set up a drilling platform. After the inspection and appraisal of the available resources and their quantities, the Soviets embarked on storage operations. In an unfortunate turn of events, a pocket was accidentally pierced, causing the drilling rig to collapse. Although there were no victims, large amounts of methane gas were released, producing an environmental threat and endangering the area's inhabitants. Additionally, the extraction of gas was made impossible. In order to limit the release of toxic gases, a decision was made to burn the whole

¹¹⁷ CHAKRABARTY Dipesh, *The Human Significance of the Anthropocene*, in: LATOUR Bruno & LECLERC Christophe (Eds.), *Reset Modernity !*, Exhibition Catalogue, ZKM, Centre for Art and Media, Karlsruhe, The MIT Press, Cambridge, London, 2016, p. 197-198

pocket. The geologists involved in the project reckoned that the combustion process would come to completion after a few weeks. However, the pocket has consistently continued to burn since 1971, the methane escaping from having kept it alight for almost forty years. Adrien Missika's film presents us with this last phenomenon through different framing effects, offering viewers a sublime spectacle. The initial static shot is followed by an evocation of unstoppable combustion, revealed by a dull noise and an orange-coloured vapour emerging against a night sky. Subsequently, a close shot reveals the wall of fire formed by rocks burning with no visible fuel. The swirling flames appear on the screen through a dissolve, which turns them into an infernal circle. Lastly, many different shots gradually reveal nothing less than a "coliseum of fire"¹¹⁸, to use the words of George Kourounis.

We are thus brought to the edge of the "Gate of Hell", in the midst of the black sands of the Karakum desert. The image manipulation and the soundtrack composed by Victor Tricard emphasise, after the fact, what might have been called a "mistake", a scientific and technological "error" inflicted by humans on their environment. *Darvaza* also incarnates the brazen futility with which we are developing our limitless energy consumption. The film highlights both short-term consequences relating to the past four decades, as well as the long-term effects of fossil fuels, which have developed over hundreds of millions of years. For some years now, beyond the environmental alert it represents, this place has become a tourist destination, providing visitors with a "postcard inferno". What is added by Adrien Missika's film is precisely the emancipation of such an aesthetic simplification in favour of a prolonged attention paid to the meaning of this sublime spectacle, and its social and cultural, but above all environmental implications. Human intervention has failed, reached its limits, while natural forces exceed petrochemical forces. Lastly, symbolic forces are released, associated with the place's name —"Gate of Hell"—, which conjures up an apocalyptic landscape and foreshadows a future without humankind.

¹¹⁸ KOUROUNIS George, in: NUNEZ Christine, Q&A: *The First-Ever Expedition to Turkmenistan's "Door to Hell"*, National Geographic, online version, 17 July 2014.



Figure 3. Adrien Missika, Darvaza, 2011

Edward Burtynsky

In Edward Burtynsky's oeuvre, the sublime observed by Adrien Missika shifts towards industrial sites that the artist engages with through photography. Burtynsky captures the stunning beauty of industrial landscapes,¹¹⁹ leading the viewer to experience an inner tension between wonder and repulsion. The artist does not, however, propose any specific viewpoint; instead, he asks us to cast our eye over what appears to be a reflection of our times. Burtynsky's work differs from that of photographers such as Margaret Bourke-White, who focused on celebrating mankind's grandiose ingeniousness and power of his environment. In Burtynsky's work, the pure beauty of the machine is seen for itself while the artist fully incorporates the natural element in his works. He invites us to meditate on the fragile balance between humans, their effect on the world, and their natural environment. In the age of the Anthropocene, Burtynsky raises the issue of our inclination to develop sublime landscapes, mainly a sublime system of anthropic origin.

Edward Burtynsky was born in 1955, to Ukrainian parents, at Saint Catharines in Ontario. He is currently based in Toronto. At a very early stage, he turned to photography, attracted by the fragile balance between human beings and their surroundings. His taste for rich detail and clarity soon led him to take on a pictorial approach. Inspired by industrial sites, Edward Burtynsky tries to capture landscapes that have been irreparably altered by human activity. Quarries, railway tracks, recycling plants, oil refineries, and dismantled ships are among his favourite subjects. The ambivalence of his images opens us up to a line of questioning. Cracked rock faces, labyrinths inside refineries, and gigantic mined quarries produce a sense of wonder, and their beauty is celebrated. However, Burtynsky's oeuvre is often perceived as condemning the industry, and his approach is anything but a eulogy of consumer society. Beyond the conflict between the "capitalist's dream" and the "environmentalist's nightmare", the artist invites us to "see these landscapes as products in tune with our day and age."¹²⁰ Burtynsky is simply encouraging us to cast our eye over the scope of our collective imprint on Earth and think about the current nature of our relationship to the world. According to the critic John Bentley Mays,¹²¹ these photographs can be described as depicting a "sublime", typical of the "industrial landscape". Where Burtynsky's works are concerned, we may

¹¹⁹ *Rock of Ages n° 25*, abandoned zone, Adam-Pirie quarry, Barre, Vermont (1991), *Uranium Tailings N°12*, Elliot Lake, Ontario, Canada (1995), *Nickel Tailings n° 34*, Sudbury, Ontario (1996), *Oil Refineries n°22*, St. John, New Brunswick, Canada, 1999, *Shipbreaking n° 27*, Chittagong, Bangladesh, 2001, *Oil Fields n°2*, Belridge, California, USA, 2003...

¹²⁰ PAULI Lori, *Gros plans sur l'insaisissable*, in: *Paysages manufacturés: les photographies d'Edward Burtynsky*, Musée des Beaux-arts of Canada, in association with Yale University Press, PAULI Lori (ed.), Ottawa, May 2003, p. 24. (my translation) / *Manufactured landscapes, Photographs of Edward Burtynsky*, Beau Livre, 2003

¹²¹ BENTLEY MAYS John, *Review in Brief, The Globe and Mail*, Toronto, 22 March 1994

refer to an “anthropic” sublimeness, insomuch as the effects of human activity on nature lie at the root of a sense of “reverential fear”¹²². The industrial landscape has been a significant subject of artistic representation over the past two centuries, with artists such as Carleton Watkins, George Bellows, Margaret Bourke-White, William Gropper, Edward Weston and Charles Burchfield... While Burtynsky is one of these artists, his way of conveying the at once striking, sinister and dangerous beauty of the mining landscape, of revealing the paradoxes of anthropocenic sublimeness, leads him to stand out. Furthermore, the gradual enlargement of the print allows the artist to push the abstract quality of his work further, drawing him closer still to a pictorial dimension.

Burtynsky’s various series thoroughly match the title of his exhibition held in the Canadian Museum of Fine Arts in 2003, *Paysages Manufacturés/ Manufactured Landscapes*¹²³. Given the ambivalence of the artist’s images, which lead us to oscillate between attraction and repulsion, it seems necessary to mention Burtynsky’s original intention, making us stop and look, to take the time to cast our eye over a work that embodies the values of our day and age. Through this, the image itself becomes a “manufactured” element¹²⁴— nevertheless necessary, in the age of the Anthropocene, for the development of an anthropological approach to our industrial environment.

¹²² PAULI Lori, *Ibid.*, p. 22

¹²³ *Ibid.*

¹²⁴ *Ibid.* p. 10.



Figure 4. Edward Burtynsky, Nickel Tailings #32, Sudbury, Ontario 1996

B. Gaïa

Specific artworks seem particularly relevant when broaching the notion of Gaia in the field of the perceptible. The aesthetic of the sublime invites us to engage in a form of meditation, through which we can change the way we feel about the situation in which we are caught, in keeping with Bruno Latour's "Möbius strip" motif. Through an immersive aesthetic, which dissolves the distinction between interior and exterior, some artworks allow us to go so far as to posit a tangible emergence of Gaïa. They lead us to witness a moment in which human power reaches its limits, exceeded by natural forces and confronted with ultimate landscapes. Numerous artists convey our internal shock, our paralysis, in other words, the "metaphysical terror"¹²⁵ we experience when confronted with the changing geological era. While Gaia applies an aesthetic of the sublime involving a process of immersion, it also involves emancipation from the role of the external observer as defined by Kant.

Furthermore, some artworks represent the "intrusion of Gaïa"¹²⁶. The "Möbius strip" motif, as defined by Bruno Latour provides a relevant description of the reciprocal immersion with Gaïa that we experience through many artistic practices. We are faced with a force we think we can overcome, despite being irreversibly enveloped by it. In response to Gaia, artists invite us to engage in a form of meditation, which might lead us to a contemporary cosmology we have yet to invent.

Tadashi Kawamata

Tadashi Kawamata's practice offers us a meaningful way into imagining the notion of Gaia in the artistic field. Indeed, in certain decisive moments, this artist's praxis embodies Bruno Latour's famous "Möbius strip",¹²⁷ in order to our relationship with Gaia. Instead of allowing us to merely gaze at them, this artist's works often plunge us into a completely immersive experience. Kawamata's work thus leads us to call all distinction between interior and exterior into question. Through his complex installations, Kawamata, who favours heterogeneous beings¹²⁸ and the blurring of perspectives, guide us towards a new experience of the sublime, free from the position of an outside observer.

¹²⁵ DANOWSKI Déborah, VIVEIROS DE CASTRO Eduardo, *Ibid.*, p. 242. (my translation)

¹²⁶ STENGERS Isabelle, *Au temps des catastrophes*, *Ibid.*, p. 48. (my translation)

¹²⁷ LATOUR Bruno, *Enquête sur les modes d'existence*, La Découverte, Paris, 2012, p. 21.

¹²⁸ Here, we are referring to James Lovelock's book: *Gaia: A New Look at Life on Earth*, 1970, Oxford, Oxford university press, 2000

The Japanese artist Tadashi Kawamata, born in 1953, has developed many different forms of intervention, using architectural spaces as his medium. Indeed, he sees architectural constructions as social and cultural products and uses them as sites of artistic experimentation. His works, which are often ephemeral, involve encounters with the users of the spaces he works with, a necessary condition for the gradual development of each of his projects. The artist's works involve forming communities whose members agree to participate in the development of his constructions. These installations are usually made with recycled materials. More specifically, the elements used consist of strips of wood found in the surrounding areas. The structures Kawamata assembles often interfere with existing forms of architecture, contributing to the dissolution of boundaries between inside and outside. In this sense, the artist's activities echo certain motifs found in Bruno Latour's thinking with regards to Gaia, as was mentioned earlier and will continue to be discussed further on. Moreover, the artist's works reveal another identity of place, an invisible and yet thoroughly present part: its cultural and social dimension. The use of multiple connections blurs the vanishing lines. These installations lead us to witness a kind of de-territorialisation of place, in the tradition of what Deleuze and Guattari describe in *Rhizome*¹²⁹. Everything seems to suggest that each construction forms a "rhizomatic plateau of interference, a set of additive structures expanding in space"¹³⁰. Tadashi Kawamata focuses his interest not on the architecture *per se* but above all on the way in which what is built determines volumes of air as well as a spatial arrangement of shapes.

From the 1980s to the present day, Tadashi Kawamata has been developing works that he incorporates in different buildings, where interior and exterior merge. He has also worked on autonomous constructions he calls *field works* or *favelas*. In 2011 he produced a masterful work titled *Under the Water*, involving a fragmented ceiling of disparate wooden slats suspended above our heads. The installation, which involves a unique physical experience, was produced in homage to the victims of the catastrophes that struck Japan in March 2011. The work is experienced as a journey through a flow of rubble and wreckage. These piles of rubble invite us to think about the origins of the catastrophe. The stunning dimension of the work draws us into a moment of contemplation. *Under the Water* is a pivotal work, a product of the artist's longstanding research on the theme of catastrophe, which he has been developing for over fifteen years. For many years, Kawamata has been collecting images of disasters in the press, putting together a considerable

¹²⁹ DELEUZE & GUTTARI, *Capitalisme et Schizophrénie 2. Mille Plateaux*, Paris, Minuit, 1980, p. 9. / *Anti-Oedipus: Capitalism and Schizophrenia*, Penguin Classics, 2009

¹³⁰ BRAYER Marie-Ange, JULIEN-LAFERRIÈRE Alain (ed.), *Kawamata, Constructions nomades*, in: Exhibition Catalogue, *Kawamata*, Saché, Atelier Calder; Tours, CCC, 1994, p. 76. (my translation)

archive exploring themes of collapse and chaos, which he sees as forms that are “out of control”¹³¹. Initially devised by the Kamel Mennour gallery in Paris, *Under the Water* was re-invented on a larger scale in one of the galleries in the Centre Pompidou-Metz in 2016. An installation of this scale immediately acquires a sublime dimension insofar as it confounds our ability to embrace it in a single glance, while it physically envelops us. This constellation of objects, which seem to be carried by the sea, surrounds us, filling us with a sense of amazement. Before long, the amazement gives way to the possibility of a moment of meditation and contemplation before something resembling a “silent monument”¹³². This is a time dedicated to anyone who is inwardly struck by the “intrusion of Gaia”¹³³. We are moved in a way that awakens a desire to slow down and change our way of thinking.

¹³¹ KAWAMATA Tadashi, *Interviews*, Paris, Editions Lutanie, 2013, p. 112.

¹³² GUENIN Hélène, *Sublime, Tremblements du monde*, Ibid., p. 128. (my translation)

¹³³ STENGERS Isabelle, *Au temps des catastrophes*, Ibid., p. 48. (my translation)



Figure 5. Tadashi Kawamata, Under the Water, 2011

Henrique Oliveira

Henrique Oliveira is developing a praxis that involves the merging of architectural spaces and sculptural proliferations with powerful organic undertones. The immersive dimension of his works creates an unusual aesthetic experience. Much like Tadashi Kawamata's piece, this experience involves a gripping force that envelops the spectator, despite their belief in their ability to contain it. While free from notions such as Gaia during their conception, Henrique Oliveira's works offer us a chance to experience a situation of paradoxical immersion, which relates to the specific nature of our current circumstances.

Born in 1973 in Brazil, Henrique Oliveira has been developing site-specific installations using materials drawn from urban contexts since 2003. In most cases, the artist uses "*tapumes*" wood from building site barriers, which he collects in the streets of São Paulo. Henrique Oliveira's practice is marked by a novel coalescence between the work and the spatial structures that surround it, as well as a combination of architectural and vegetal elements. The artist's works deploy an outstanding material and visual power, draws us into both contemplative and immersive experiences. Henrique Oliveira both incorporates the actual architecture of the space in which he is invited to exhibit into his works and develops strikingly spectacular forms with organic undertones. The artist's works also possess an endemic, parasitic quality, evoking wooden tumours that develop in an irrevocable way. In 2013, he was awarded a residency as part of the SAM Art Projects. It was after that stay in France, in June of that same year, that he presented the monumental installation *Baitogogo* at the Palais de Tokyo. This monumental work appears as a hybrid body insofar as it associates the styles of the natural and the constructed. The installation's organic imagery merges with the structural framework of its exhibition space. The work appears as an arrangement of fantastic and salient features, the building itself framing its basic structure. Henrique Oliveira extends the space's pillars in a kind of tentacular proliferation, calling to mind the generous abundance of plant life. The Palais de Tokyo architecture resembles a matrix giving life to an abundance of circumvolutions with organic touches. Henrique Oliveira's work involves a propagation driven by the proliferation and multiplication of heterogeneous forms. In line with Deleuze and Guattari's "rhizome"¹³⁴, the *tapumes* wood extensions are developed using a process with no beginning or end. Through them, a process of de-territorialisation establishes a plane of immanence, a biological extension that functions through "environments"¹³⁵. The artist's

¹³⁴ DELEUZE Gilles, GUATTARI Félix, *Ibid.*

¹³⁵ *Ibid.*

installation, which is essentially heterogeneous, engages with notions of mobility, fluidity, and dynamism traditionally associated with notions of “plateau”¹³⁶ and “rhizome”¹³⁷. The work has no centre and is thereby bound to a state of constant metamorphosis. With *Baitogogo*, Henrique Oliveira presents unfixed futures, an arrangement of forms free from any predetermination. These forms overlap indefinitely with one another, with no apparent structure or method. Furthermore, through his emphasis on heterogeneous and erratic elements, the artist draws attention to what happens “in between”, in other words, within a myriad of liminal spaces. As a result, our minds are constantly set in motion, resisting any kind of fixity or established order. In line with the concept of “plateau”, *Baitogogo* involves a kind of “uninterrupted intensity”¹³⁸. While the work seems to be contained by the exhibition space, its structure of tracteries, excrescences and nodes seems to respond to a logic that far exceeds human understanding and control. Henrique Oliveira puts us in the presence of that “Moebius strip” that Bruno Latour refers to with regards to Gaia¹³⁹, a force we think we can dominate, despite being tightly caught in its inescapable grip.

¹³⁶ Ibid.

¹³⁷ Ibid.

¹³⁸ Ibid., p. 17. (my translation)

¹³⁹ LATOUR Bruno, *L'Anthropocène et la destruction de l'image du globe*, in: HACHE Émilie, Ibid., p. 32. (my translation) / *The Anthropocene and the Destruction of the Image of the Globe*, Gifford Lectures, *Facing Gaia-Six Lectures on the Political Theology of Gaia*, Edinburgh, 2013



Figure 6. Henrique Oliveira, Baitogogo, 2013

Angelika Markul

Angelika Markul portrays ravaged environments; her works capture the effects of a tremendous power that surpasses us to an infinite degree. Through her installations and films, the artist leads us to experience “the intrusion of Gaia”¹⁴⁰ both through an interwoven combination of Western and Aboriginal cultures¹⁴¹ and an encounter between adulthood and childhood. Her works give rise to an aesthetic of the sublime typical of our time. Angelika Markul invites us to meditate on what makes us the “people of Gaia” and on what connects us to a shared issue, the Earth itself. Her works invite us to think about a contemporary cosmology, which we have yet to invent.

Born in 1977, Angelika Markul is an artist of Polish descent who has been working on a body of intense and gruesome works since the 2000s. The artist works with video, sculpture and installation. Through her exhibitions, we are confronted with the devastation of ravaged environments. Angelika Markul does not shrink from shooting her films in damaged areas, including Fukushima, Chernobyl and Baghdad. Her works lead us to experience a dull and mighty force beyond our control, a relentlessly gripping form of “metaphysical terror”¹⁴². In 2014, she named her exhibition at the Palais de Tokyo in Paris *Terre de Départ / Earth of Departure*. These words reference a belief shared by the Indians of Chile, whereby human beings are merely passing through Earth, as they would a transit zone or a mere beginning, before heading towards the stars. The exhibition included a video titled *Bambi à Tchernobyl / Bambi in Chernobyl*, made in 2013. In a departure from the genre of testimony and the documentary, the artist filmed a silent landscape waiting for something. This piece exhibits the total silence of a deserted environment as well as latent anxiety. The invisible harm that has settled in these places, spreading across the entire site, thus, implicitly, takes shape. Through a reference to the famous Disney cartoon (*Bambi*, 1942), the artist connects a childish fear with the fear that goes hand in hand with nuclear catastrophe. In this respect, she brings the latter closer to us, making it more “accessible”, while simultaneously conveying its incommensurable dimension. This stunningly beautiful snow-clad landscape induces a feeling of sublime dread. The absence of humans, who are nevertheless responsible for the catastrophe, echoes the absence of radioactivity, which remains imperceptible. The aesthetic experience produced by this artist stands out by way of a particular form of sublime typical of the Anthropocene: through an excessive disruption of their environment, human beings replace nature, sparking a sense of wonder and

¹⁴⁰ STENGERS Isabelle, Ibid., p. 48.

¹⁴¹ Aboriginal people in Chile.

¹⁴² The expression is borrowed from Déborah DANOWSKI and Eduardo VIVEIROS DE CASTRO, in: *L'Arrêt de monde*, in: HACHE Émilie, Ibid., p. 242. (my translation)

amazement. In her installation *Gorge du Diable / Throat of the Devil* (2013-2014), Angelika Markul presents a post-apocalyptic landscape that is also devoid of human presence. Within enveloping darkness, the artist arranges inanimate elements, evoking representations of the end of time. At the centre of this stage-like arrangement appears a projection of a film of the Iguazu Falls¹⁴³, the course of which has been reversed. Viewers are invited to witness a reversal of time, an experience that limits them to a very particular kind of attention, a new system of perception. This journey against the current of time subjects us to an experience of what is “already there”, soaring above our heads like a furious and threatening mother, impervious to all forms of plea or excuse. The *Throat of the Devil* “grabs” us the way the intrusion of Gaia¹⁴⁴ “grabs” us, and this new experience of the sublime fills us with awe. Images like these, which succeed in truly embodying the complexity and gigantism of a notion such as Gaia are rare. In Angelika Markul’s installation, however, we are well and truly faced with this fearsome and enigmatic power. The anxiety of thought thus becomes a permanent state, welcoming the possible birth of a new cosmology.

¹⁴³ The Iguazu Falls are located in the middle of the tropical forest, on the border between Brazil and Argentina. They have featured in the UNESCO World Heritage list since 1984.

¹⁴⁴ STENGERS Isabelle, *Ibid.*, p. 48.



Figure 7. *Angelika Markul, Throat of the Devil, 2013-2014*

Conclusion

A pre-Impressionist painter, Turner put himself in direct contact with the elements he wished to depict on canvas. During the 1840s, a critic encountering his paintings claimed that one of Turner's seascapes could only have been created with "soapsuds and whitewash". The painter furiously replied, "What would they have? I wonder what they think the sea's like. I wish they'd been in it"¹⁴⁵. Turner had indeed experienced the sea, having lashed himself to the mast of a boat during rough weather to prevent himself from taking refuge in the hold. The interest of the story lies in the fact that the observer was not safely separated from the raging storm. Turner voluntarily immersed himself in the natural phenomenon in a way that prevented any means of separation. As discussed previously, the sublime of the Anthropocene, as well as that of Gaïa, specifically involves a state of entanglement between the spectator and the actual spectacle.

Despite this not being an exhaustive set, each work presented here seems to exhibit a specific connection to the notions of Anthropocene and Gaïa through an aesthetic of the sublime. We have identified a system of echoes and links between artworks and concepts through which artists become witnesses of the torpor that we are seized by when faced with the change of geological era. Through their connection to the Anthropocene and Gaïa, some artworks open up new ways of feeling and thinking about the world. Although it seems necessary to distance ourselves from the notion of "Anthropocene" because of its theoretical and practical implications, the sublime nevertheless emerges here as a manifestation of the paralysis that seizes us when faced with current and impending catastrophes.

In Etienne Souriau's words, every work "sets a world down"¹⁴⁶ following the regime of an "existential pluralism"¹⁴⁷. We are thus led to discover the multiplicity of the modes of existence that the artwork virtually carries. These open up possible answers to our questions: how can we inhabit our world at the time of the Anthropocene? How can we reinvent our way of being in the world? In response to the Anthropocene and of the "intrusion of Gaïa", artists compel us to *dream* the world differently: they urge us to reinvent our way of inhabiting it, to reconsider the constraints

¹⁴⁵ THORNBURY George Walter, *The Life of J.M.W. Turner*, Franklin Classics, 2018, p. 207.

¹⁴⁶ SOURIAU Etienne, *L'Instauration philosophique*, 1939, F. Alcan, in: Ngô-Tiêng-Hièn, *Art et vérité dans l'œuvre d'Etienne Souriau*, Revue Philosophique de Louvain, 1971, Volume 69, p. 79. (my translation)

¹⁴⁷ SOURIAU Etienne, *Les différents mode d'existence*, 1943, Puf, collection Métaphysiques, 2009, p. 82. (my translation) / *The Different Modes of Existence*, Univocal Publishing, 2015

we exercise on Earth. Today we must take a look at the way we act on this Umwelt¹⁴⁸, as well the irreverence with which it has and continues to be approached. According to Didi-Huberman, when faced with an artwork, we find ourselves “in front of something similar to a liquid or aerial expansion, a cloud without contours that evolves above us, while constantly changing form. Yet, what can we know about a cloud, if not guessing it, without seizing it completely?”¹⁴⁹. Through art, it could be possible to rebuild some links that attach us to our environment and to compose a new world to come. How can we deal with the world while showing it our attachment? How can we reinvent what our reality could be? As many questions to which artists outline some answers in the field of affect, at the core of this “braid of knowing and not knowing” that constitutes the artwork. Past this time of stupor triggered by the experience of the sublime, it becomes possible to produce knowledge about environmental crises by way of a slowing down. This will be the subject of our second chapter.

¹⁴⁸ The notion of *Umwelt*, which is at the intersection between biology and semiotics, refers, according to Jacob von Uexküll, to the concept of “own world”, which applies to both human beings and animals. *Umwelt* brings together all the semiotic processes of an “organism”, thus offering a unified vision of the world, including humans and non-humans.

¹⁴⁹ DIDI-HUBERMAN Georges, *Ibid.*, p. 10.

CHAPTER 2 – Locally situated anthropo-histories¹⁵⁰

Introduction

James Turrell uses light as his material. In 1977, he acquired a volcanic crater, the Roden Crater, which he gradually transformed into a vast astronomic observatory, calling on our attentional capacities. The space includes a dozen rooms set up to enable the observation of celestial events. Light becomes the protagonist of this site-specific work, establishing a new regime of perception. The artist invites us to experience a time of suspension and contemplation, in line with the temporality of the ecological mutation, as well as with Isabelle Stengers' injunction to go through a general process of slowing down. We will explore this idea later.

¹⁵⁰ BONNEUIL Christophe, JOUVANCOURT de Pierre, *Ibid.*, p. 61. (my translation)



Figure 8. James Turrell, Roden Crater, 1977-2018

Let us base our argument on the assessment that the ecological catastrophe does not intervene as a major and punctual event but rather as a slow and progressive process. Eduardo Viveiros de Castro and Deborah Danowski refer to a process of “slow violence”¹⁵¹, leading us to a “physically and metaphysically degraded existence”¹⁵². How can this process be defined? In what ways can knowledge about environmental crises be produced? The “slow violence” mentioned above could coincide with the “coming barbarism”¹⁵³, which goes hand in hand with a process of resistance. This leads us to call the idea of environmental rupture into question, following Donna Haraway’s statement: “All the stories are too big and too small”¹⁵⁴. This decisive expression refers to the possibility of telling stories in a situated manner, that is to say, stories that are just big enough to be locally apprehended. While searching for ways to produce knowledge about environmental crises, Stengers also invites us to abandon the epic style, that of the great narratives of emancipation that characterise Modernity. Following Isabelle Stengers, Christophe Bonneuil and Pierre de Jouvancourt highlight the fact that the Anthropocene reflects this same type of narrative; and urges us to “forgo the epic”¹⁵⁵ in favour of “locally situated anthropo-histories”. The Anthropocene appears indeed as a great epic narrative encompassing the entire history of humanity. While it is described as “a story shared by everyone, by a “we” as the human species”, it is also a “Great modern Narrative”¹⁵⁶. We must also acknowledge other possible narratives, including a history of non-occidental ways of inhabiting the Earth¹⁵⁷. In this chapter, we will study the production of knowledge about environmental crises through a set of narratives, each of which is relevant to a given situation.

While we rediscover the strength of our intellect through situated narratives, we will now endeavour to follow Isabelle Stengers’ approach, according to whom, before Gaïa, we must stop and think, slow down in order to act differently. Stengers proposes a “political ecology of slowing down”, which implies hesitation, attention and diplomacy. Following the words of Deleuze and Guattari, the latter introduces the notion of “involution”¹⁵⁸, but also the necessity to “think through

¹⁵¹ The expression is also introduced by Rob Nixon in his book: NIXON Rob, *Slow Violence and the Environmentalism of the Poor*, Harvard University Press, 2011

¹⁵² DANOWSKI Déborah, VIVEIROS DE CASTRO Eduardo, Ibid. p. 123. (my translation)

¹⁵³ STENGERS Isabelle, *Au temps des catastrophes*. Ibid., p. 130. (my translation)

¹⁵⁴ HARAWAY Donna, *Staying with the Trouble: Making Kin in the Chthulucene*, Duke University Press Books, 2016, p. 138.

¹⁵⁵ BONNEUIL Christophe, JOUVANCOURT de Pierre, Ibid. (my translation)

¹⁵⁶ Ibid. (my translation)

¹⁵⁷ Ibid., p. 104-105.

¹⁵⁸ STENGERS Isabelle, *Penser à partir du ravage écologique*, in: HACHE Émilie, Ibid., p. 180-181.

the middle”¹⁵⁹, in order to repopulate the “devastated desert of our imaginations”¹⁶⁰. Secondly, we will explore different ways of producing knowledge about environmental crises in a situated way. This implies a new regime of attention as well as a study of the creation of knowledge.

I will go on to attempt to mourn for the global in order to approach local situations. We live with the belief that the earth is round and that we should be able to hold it in our hand like the representation of Atlas by Mercator. The global, an impossible ambition, is an obstacle to considered thought, inasmuch as it excludes the local plurality. Finally, we must consider the current reversal between “form” and “content”, “actor” and “décor”¹⁶¹. Nature has ceased to be being a mere backdrop of human action, to become an “actor” in its own right. While our environment provided us with the necessary resources for infinite growth, it was almost imperceptible. However, since natural resources have revealed themselves to be limited, unable to carry and feed our endless development, we now see it as one of the crucial actors of our history.

¹⁵⁹ STENGERS Isabelle, *Au temps des catastrophes*, Ibid., p. 110. (my translation)

¹⁶⁰ Ibid.

¹⁶¹ LATOUR Bruno, in: *Les Grands Entretiens*, Ibid.

I. 'Slowing down' as presented by Isabelle Stengers

In response to the “intrusion of Gaïa”¹⁶², Isabelle Stengers invites us to waste our time. Does the construction of knowledge imply a slowing down of sciences? Stengers believes so. According to her, we should start by adopting a “political ecology of slowing down”¹⁶³, in other words, stopping in order to think, slowing down in order to act differently. Isabelle Stengers proposes a slowing down of the sciences in favour of hesitation, attention, and diplomacy. The environmental crises put us in a situation of rupture that comes with an extreme difficulty to understand and to act. As a response to this situation, we should “slow the reasoning down”¹⁶⁴ and deploy a new sensitivity with regards to the problems we face. Gaïa demands a form of slowing down inasmuch as it draws us into a new type of attention, the particular attention of a “powerful and ticklish being”¹⁶⁵. Beyond the necessity to become “attentive” to this new being, a “political ecology of slowing down”¹⁶⁶ is necessary to learn how to “compromise with” with Gaïa. Moreover, the “triple ecological devastation”¹⁶⁷ discussed by Félix Guattari in his *Three Ecologies* (1989) distinguishes itself through its tendency to induce a state of alert.

According to Donna Haraway, we must let ourselves be affected by “the dense entanglement of malaises and hesitations that “terrestrial” situations impose on us”¹⁶⁸. What is at stake here is relearning the art of connections, compositions, and symbiosis, while avoiding “simple values”¹⁶⁹. Isabelle Stengers invites us to “confer to that which does not have a simple solution the power to repopulate our imagination, to build new connexions, new modes of entanglements, new relationships”¹⁷⁰. The term of “involution”¹⁷¹ coined by Deleuze and Guattari seems appropriate to describe the slowing down that we must adopt. Pointing neither to progression nor to regression, involution always creates a relation between two heterogeneous beings, expressing an alliance

¹⁶² STENGERS Isabelle, *Au temps des catastrophes*. Ibid., p. 48.

¹⁶³ VIVEIROS DE CASTRO Eduardo & DANOWSKI Deborah, Ibid., p. 328. (my translation)

¹⁶⁴ STENGERS Isabelle, *Cosmopolitiques II*, 1997, La Découverte, Paris, 2003, p. 195. (my translation) / *Cosmopolitics II*, 2011

¹⁶⁵ STENGERS Isabelle, *Penser à partir du ravage écologique*, in: HACHE Émilie, Ibid., p. 150. (my translation)

¹⁶⁶ VIVEIROS DE CASTRO Eduardo & DANOWSKI Deborah, Ibid., p. 328.

¹⁶⁷ GUATTARI Félix, *Les Trois Écologies*, 1989, Éditions Galilée, February 2008, (my translation); The “triple ecological devastation” includes: that which affects “nature”, that which affects the “socius”, and that which affects the “individual psyche”. / *The Three Ecologies*, Continuum, 2008

¹⁶⁸ STENGERS Isabelle, Ibid., p. 153. (my translation)

¹⁶⁹ Ibid., p. 167.

¹⁷⁰ Ibid.

¹⁷¹ Ibid., p. 180-181.

between two terms. In other words, it is about “thinking through the middle”¹⁷², that is to say, thinking “between”. These involutive alliances are necessary in order to regenerate our “milieus”. This regeneration can start anywhere; just like Deleuze and Guattari’s rhizome, it can spread in any direction. “Thinking through the middle” could enable the production of new knowledge, allowing us to tell our stories differently. The process of slowing down leads us to develop new stories, enabling us to contribute to the construction of the world we share, which we think of as a “work to do”¹⁷³. This time of suspension, which includes difficulties, hesitations, choices, and mistakes, is a necessary step towards repopulating the “devastated desert of our imaginations”¹⁷⁴. In the face of Gaïa, we must slow down, forging alliances between heterogeneous beings and “honouring divergences”¹⁷⁵. Finally, it seems relevant to highlight the current debate surrounding the “speed of history”¹⁷⁶. This polemic drives supporters of accelerationism – which we will approach in our fourth chapter – against promoters of the “slowing down” as presented by Isabelle Stengers.

A. Slow Art

In the field of art, both the practice of contemplation and the encounter with the artwork imply a form of slowing down. When faced with an artwork, we must embrace this “political ecology of slowing down” to experience it in a singular and meaningful way. This allows both receptive and critical approaches to the work to emerge. According to a study of the American Psychological Association, led by Pablo Tinio, Jeffrey and Lisa Smith and published in 2007, a museumgoer spends about twenty-eight seconds before each artwork. This study, conducted at the Art Institute of Chicago, can be compared to a similar observation made at the Metropolitan Museum in New York. It was led between 2001 and 2017 across a wide typology of spectators and a selection of artworks from various periods and genres. More or less developed explanatory labels sometimes accompanied these artworks. The age and the genre of the visitors were taken into account, as well as the group that they were part of.

Since 2017, this study has been conducted by 166 museums across the United-Kingdom, Canada, Australia and United States. In April 2019, a range of institutions organised the “Slow Art Day”.

¹⁷² STENGERS Isabelle, *Au temps des catastrophes*, Ibid., p. 110. (my translation)

¹⁷³ Ibid., p. 118.

¹⁷⁴ Ibid.

¹⁷⁵ Ibid., p. 129.

¹⁷⁶ VIVEIROS DE CASTRO Eduardo & DANOWSKI Deborah, Ibid., p. 328. (my translation)

“Slow Art” had, in fact, existed since 2009, when Phil Terry first asked exhibition visitors to focus their attention on a work for ten minutes. During these ten minutes, they were invited to concentrate on the details of the work and to develop their own critical perspective. Following these ten minutes, Phil Terry would start a group discussion. From 2009 onwards, he organised over 1500 “Slow Art” events in the world. “Slow Art” seems to echo mindfulness meditation and the experience of the present moment. Indeed, while Isabelle Stengers invites us to a slowing down in the scientific field, we experience the same process by spending time with an artwork. The artworks we are about to use as examples were chosen for the specific time of contemplation they require.

B. Slowing down as it is perceptible in the art field

Charlotte Charbonnel

Charlotte Charbonnel’s¹⁷⁷ works are rooted in a range of scientific experiments. She indulges in the art of listening and attention. This is how she makes herself sensitive to the mysteries at the core of natural elements, which she explores through laboratory apparatuses. Charlotte Charbonnel borrows from disciplines including meteorology, astronomy, geology or acoustics. In doing so, she aims to orchestrate the renewal of an aesthetic that has a strong impact on our environment. Through sonorous and sometimes immersive installations, she guides us into new fields of knowledge with fictional, psychical, and poetic dimensions.

In 2015, with *Kyklos*, she created a work similar to a well or a vortex to be viewed from above. Through this work, the artist sought to represent a cyclone’s eye, provoking a hypnotic spectacle. Through a system involving the suction and exhalation of water, created a closed circuit, producing an endless whirlpool. This magnetic spectacle invites us to take the time to experience a natural phenomenon transposed into the artificial space of the gallery. *Kyklos*, refers to the pioneer of meteorology, Henry Piddington, who compared the cyclone to a circling snake (in Greek “Kyklos”). The phenomenon of the cyclone, modestly transposed on a small scale, encourages us to meditate on our submission to natural forces. Through this installation, we witness an attempt at objectification, that of a cyclone transformed in a way that allows us to embrace it visually. This

¹⁷⁷ Born in 1980, Charlotte Charbonnel lives and works in Paris. She graduated from the Ecole Supérieure des Beaux-Arts of Tours (2004) and from the École Nationale Supérieure des Arts Décoratifs (2008).

work once again involves an aesthetics of stupor; it too comprises a sudden confrontation with a phenomenon that escapes our understanding. It is an invitation to think about an immeasurable force, which is rendered sensitive to us through a reduction of scale. It also leads us to engage with a process of “slowing down”¹⁷⁸ in favour of a new regime of attention.

¹⁷⁸ STENGERS Isabelle, *Another Science Is Possible: A Manifesto for Slow Science*, Polity Press, 2017, p.106.



Figure 9. Charlotte Charbonnel, Kyklos, 2015

Cildo Meireles

Born in 1948 in Rio de Janeiro, Cildo Meireles belongs to a generation of Brazilian artists who associate a conceptual approach with a sensorial dimension. Lygia Clark and Lygia Pape founded this movement, referred to as “Neo-concretism”, at the end of the 1950s; it continued to develop until the 1960s with figures such as Helio Oiticica. Cildo Meireles became known for his socially engaged art practice in the 1960s and 1970s. Driven by a strong reaction against his country’s political oppression, that of Brazilian military dictatorship, he developed an artistic practice characterized by a protest.

From the 1980s to the present day, Cildo Meireles has been developing large-scale installations. *Marulho*, produced in 1991, comprises 17,000 booklets of three different sizes, arranged on the ground, each featuring a photograph of the sea. Thus arranged, they produce the impression of a maritime landscape. A wooden dock hangs over this imaginary sea, allowing us to get closer to the installation’s core. This is where we adopt the appropriate viewpoint to experience the work. We then discover the soundtrack, which is an essential component of the installation. We hear the word “water” whispered in fifty different languages by children and adults. This collection of murmurs creates a sound that resembles the noise of backwash, gathering voices from all over the world. The work exhibits a poetic vastness; it brings about a meditative state, a kind of silence, a form of reverence. *Marulho* leads us to experience a time of suspension, a moment of contemplation, which is self-contained. It invites us to slow down, to let our minds rest, to simply be in the presence of an aesthetic experience, one that evokes both a natural environment and a shared world in evoking beings gathered in front of the ocean. It is possible to link a contemplative experience of this kind with Isabelle Stengers’ invitation to engage in a form of involution through a “political ecology of slowing down”¹⁷⁹. We must truly “waste time”. As Stengers reminds us, before Gaïa, we have to stop in order to think, slow down, and act differently.

¹⁷⁹ VIVEIROS DE CASTRO Eduardo & DANOWSKI Deborah, Ibid. p. 328.



Figure 10. Cildo Meireles, Marulho, 1991

Hamish Fulton

Born in London in 1946, Hamish Fulton lives and works in Canterbury. Since the end of the 1960s, he wanders around the world on foot, having completed to this day over a hundred walks, which he calls *artistic walks*. This physical commitment integrates the artist within nature, which he involves in his artistic process. Unlike Land Art artists, he neither leaves a trace on the landscapes he travels through nor brings any objects back. The walk itself is the work, an “artistic experience” which, according to him, cannot compete with an artwork in the traditional sense of the term.

During his expeditions, Hamish Fulton selects photographic shots from key moments of his travels and documents the itineraries, obstacles, and duration of each of his walks through note-taking. This is how he contributes to the art scene, through exhibitions constructed from individual works, as “traces” of his *artistic walks*. Fulton associates photographs with textual inscriptions, and his *Wall Paintings* inform visitors of the duration, itinerary or conditions of the walk. For example, the *photo-texts* series includes photographs accompanied by inscriptions indicating the place and date of each shot, the duration or length of the walk, as well as topographic, climate-related, or natural data. Moreover, some inscriptions point to elements absent from the images, such as the presence of animals, the wind’s direction, the temperature, etc. Lastly, a set of gouache drawings or minimal installations list the journeys and their peaks.

The walker’s journey through time and space is an ancient motif in art history, associated with a vast iconography. However, in the work of Fulton, the walking artist is removed from view, as the exhibition only presents a series of factual elements. Visitors of Fulton’s exhibitions will know nothing of his subjective experience, nor his psychical state or tiredness. In this sense, Fulton’s practice embraces some conceptual art characteristics, such as only exhibiting methods, factual descriptions, and certificates. Fulton’s physical displacement can be seen as the ultimate condition of any artistic reality; the walk itself is the root of his practice, in his own words: “I am an artist who walks, not a walker who makes art”¹⁸⁰.

Fulton carefully avoids talking in the first person, directing all his energy towards his own disappearance and the erasure of his subjectivity. As highlighted by Thierry Davila, Fulton seeks to

¹⁸⁰ KASTNER Jeffrey (dir.), *Land and Environmental Art*, London, Phaidon, 2010, p. 242.

erase any proof of the presence of his body walking¹⁸¹. However, in his text *Into a Walk into Nature*¹⁸², Hamish Fulton evokes the “transformative” potential of the walk, the journey of which “optimizes the perception and the receptivity of the landscape”. In this sense, the walk implies a situated aesthetic. In an interview with Thomas A. Clark in 1989, Fulton talks about the movement of his mind, evoking a loss of identity occurring through his journeys: “One ends up losing the sense of self”¹⁸³. Engaged in the continuity of his psyche, Fulton seems to be the spectator of the withdrawal of his own interiority. His stripped-down approach in terms of materials thereby reflects the psychological approach¹⁸⁴ that leads him to turn the walk into a transformative spiritual exercise. The figure of the walker moves noticeably from the Cartesian subject to the stripping down of a living and moving being in the landscape¹⁸⁵, similar to an empty shell. In that sense, the walking subject progressively withdraws, thereby nullifying any form of opposition to nature, any separation between “subject” and “object”, “culture”, and “nature”. How far does the interior erasure of Fulton go? Are we witnessing a disappearance of the subject, absorbed into the world and transformed into a thing among things?¹⁸⁶ While Fulton performs a kind of involution and slowing down through his walks, such a withdrawal of the subject gives rise to the reactivation of a “world without us”: that of Eden, or Wilderness. Could Fulton be leading us towards a pre-objective world and pre-subjective humanity? His work seems to edge towards a new form of representation, a shared world that we have yet to compose.

In both scientific and artistic fields, the slowing down process allows us to engage in the study of the construction of an entirely novel form of knowledge concerning the latent crisis in which we find ourselves. In the next section, I will attempt to approach “perspectivism” as well as “situated knowledge” in relation to the imperative of producing knowledge of the environmental crises.

¹⁸¹ DAVILA Thierry, *Marches avec figures absentes selon Hamish Fulton*, Les Cahiers du Musée National d'Art Moderne, n°134, Hiver 2015-2016

¹⁸² *Into a Walk into Nature*, in: KASTNER Jeffrey (dir.), *Land and Environmental Art*, London, Phaidon, 2010, p. 8.

¹⁸³ A. CLARK Thomas, *Des pierres levées et des oiseaux chanteurs en Bretagne*, Interview with Hamish Fulton, *Hamish Fulton*, Art Centre of Kerguehennec, 1989, p. 24-25.

¹⁸⁴ DAVILA Thierry, *Ibid.*

¹⁸⁵ *Ibid.*

¹⁸⁶ DANOWSKI Déborah, VIVEIROS DE CASTRO Eduardo, *Ibid.*, p. 242.



Figure 11. Hamish Fulton, Public group shows, 1967- the present

II. Perspectivism and situated knowledge

A. The “Standpoint” and the “Situated knowledge”

Following the moment of stupor accompanied by an aesthetic of the sublime, it is possible to adopt a situated aesthetic, that is to say, a way to embrace the ecological catastrophe both intellectually and through our points of view. The sublime plunges us into a state of intellectual paralysis that we must now call into question in order to approach the environmental issue through the study of specific situations. How can we define this “situated knowledge”? In 1887, Nietzsche published *On the Genealogy of Morality*, a book in which he uses the term “perspectivism”¹⁸⁷. Feminist thinkers Sandra Harding and Donna Haraway reintroduced this issue through notions of “standpoint” and “situated knowledge”. In 1986, Sandra Harding published *The Science Question in Feminism*¹⁸⁸. In this book, she defends the idea according to which a researcher’s position requires them to create a perspective, a way to see the world differently. In other words, this position, that of the researcher, allows objectivity to grow by enabling discoveries and the construction of unprecedented scientific narratives. The story that Vinciane Despret tells us about primatologists women is a good example of the “standpoint”. Upon entering the field, they revolutionised the study of great apes by considering what the apes themselves were urging them to analyse¹⁸⁹.

Donna Haraway adds the notion of “situated knowledge” to Sandra Harding’s position, a Marxist and feminist concept, which implies trans-species connexions and filiations. In her text titled *Situated knowledge as the proposition of another objectivity*¹⁹⁰ (*Les savoirs situés comme la proposition d’une autre objectivité*), Benedikte Zitouni¹⁹¹ defines “situated knowledge” through the example of the Oncomouse. The OncoMouseMD is the protagonist of Haraway’s book *Modest_Witness@Second_Milennium*, published in 1997¹⁹². Genetically modified, the mouse is predisposed to developing cancer. Haraway shows us that we are related to this animal, as we, too, are likely to die from cancer. The mouse works with us and for us; it is seen as our “hybrid sister”¹⁹³.

¹⁸⁷ NIETZSCHE Friedrich, *On the Genealogy of Morality and Other Writings*, Cambridge University Press, 2017, p. 213.

¹⁸⁸ HARDING Sandra, *The Science Question in Feminism*, Ithaca, Cornell University Press, 1986

¹⁸⁹ DESPRET Vinciane, *Quand le loup habitera avec l’agneau*, Paris, Les Empêcheurs de penser en rond, 2002

¹⁹⁰ ZITOUNI Benedikte & co, GECO – Groupe d’Études Constructivistes, *Whith which blood were my eyes crafted ?* (D. Haraway), *Les savoirs situés comme la proposition d’une autre objectivité*, Université Libre de Bruxelles (ULB), Présentation at ERG – École de Recherche Graphique, Brussel, November 30th, 2010 (my translation)

¹⁹¹ Ibid., p. 3.

¹⁹² HARAWAY Donna, *Modest_Witness@Second_Milennium.FemaleMan©_Meets_OncomouseTM.Feminism and Technoscience*, New York & London, Routledge, 1997

¹⁹³ ZITOUNI Benedikte & co, Ibid.

The relationship we develop with the OncoMouseMD, and the knowledge it brings, allows us to reach “situated knowledge”.

Jan Dibbets

With *Domain of a robin/Sculpture* (*Domaine d'un rouge-gorge/Sculpture*, 1969), Jan Dibbets engages with a robin to create a sculpture in an Amsterdam park. The bird appears as the protagonist of the work, leading to a reversal between “actor” and “décor”, while the aesthetic situation echoes the production of a “situated knowledge”.

Born in 1941 in Weert, Jan Dibbets is a Dutch artist often affiliated with conceptual art. At the end of the 1960s, he turned to photography, which eventually became his primary medium, with motif, perspective and framing growing into his practice’s core elements. In 1969, Jan Dibbets produced a significant work entitled *Domain of a robin/Sculpture* (*Domaine d'un rouge-gorge/Sculpture*). From April to June 1969, he engaged with a robin’s territory in the Vondelpark of Amsterdam. His intervention involved moving boundary markers — bird perches used by robins to progressively widen their territories — every day. In parallel, Dibbets used white sticks to delineate the new area. In doing so, he created a sculpture in collaboration with the bird. The artwork is situated at the “crossroads of between works staging natural and cultural processes”¹⁹⁴. While the sculpture cannot ever be perceived in its entirety, its photographic documentation acts as proof, allowing us to recreate its form in our minds, allowing us to reproduce a work we will never fully encounter. By involving an animal in his artistic practice, Jan Dibbets develops a truly “situated” aesthetic. The robin literally takes part in the sculpture’s construction, defining its evolution and its production process. Not only does the bird appear as the protagonist of the aesthetic situation at hand, but this very situation also echoes the “situated knowledge” described by Donna Haraway.

¹⁹⁴ VERHAGEN Erik, *Jan Dibbets, L'œuvre photographique, 1967-2007*, Éditions du Panama, Paris, 2007, p. 53. (my translation)

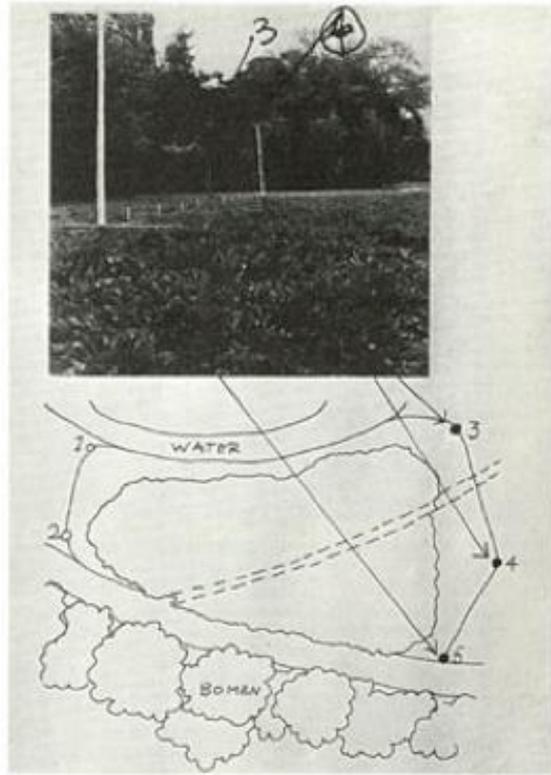
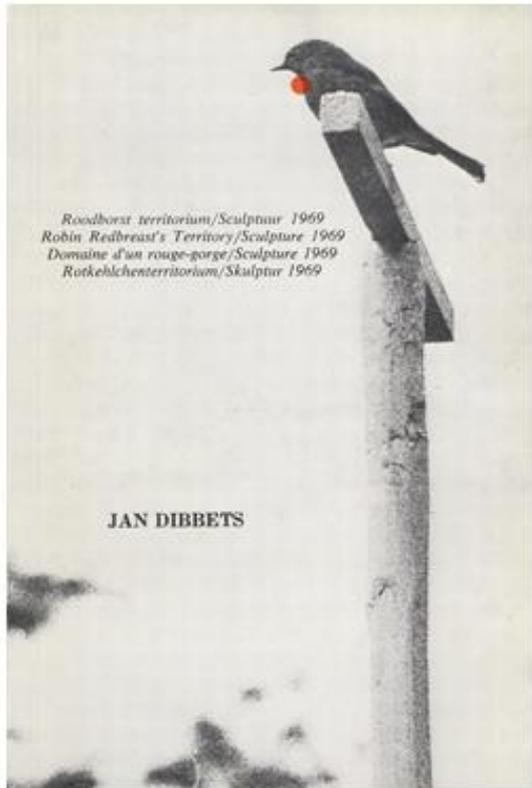


Figure 12. Jan Dibbets, *Domaine d'un rouge-gorge/Sculpture*, 1969

Furthermore, we must advocate for the production of local and settled knowledge; which is the way feminists insist on the positioning of any construction of knowledge. In her essay *Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective*, Donna Haraway¹⁹⁵ proposes to incorporate vision, substituting the visual for the material. While no vision is passive or innocent, our ways of seeing evoke ways to “organize the world and to live in it”¹⁹⁶. Donna Haraway invites us to multiply knowledge through a perspectivist approach and to define the conditions of the multiplication of hybrid alliances to come. Connecting with other points of view involves engaging with “other ways of seeing and living”¹⁹⁷, as well as embracing contradictions and interferences. Lastly, we must learn to recognise actors with which we have to create an alliance¹⁹⁸ in any object of knowledge.

B. Towards a new regime of attention

The necessary conditions of a situated aesthetic include approaching different ways of rendering us “attentive” or, better still, “considerate”¹⁹⁹ in our attitude towards environmental issues. However, we live in a world where our attention is subjected to financialisation, where one can speak of an “economy of attention”. Indeed, our attention, which is continuously pulled in multiple directions, is the subject of constant calculation, a financial conversion that spreads to every aspect of everyday life. The aesthetic relationship we can form with an artwork, which Yves Citton describes as an “attentional vacuole”²⁰⁰, seems to be the only way to avoid this process. Aesthetic contemplation seems, indeed, free from any financialisation, although this very assessment can appear naïve inasmuch as encounters with artworks still involve economic elements: travel, hotels, museum ticket sales, etc²⁰¹. How can we react to this “economy of attention”? In this context, we must learn to resist the economy of attention, favouring a political ecology of our attentional capacities²⁰² in its stead. This ecology’s aim, at the time of the Anthropocene, would be to establish

¹⁹⁵ HARAWAY Donna, *The Science Question in Feminism and the Privilege of Partial Perspective*, *Feminist Studies*, volume 14, n°3, p. 575-599, 1988, in: *Simians, Cyborgs, and Women: The Reinvention of Nature*, Free Association Books, London, 1991, p. 188-191

¹⁹⁶ ZITOUNI Benedikte & co, *Ibid.*, p. 7.

¹⁹⁷ *Ibid.* (my translation)

¹⁹⁸ HARAWAY Donna, *Ibid.*, p. 198.

¹⁹⁹ LAUGIER Sandra, *L'éthique comme attention à ce qui compte*, in : CITTON Yves (Dir.), *L'économie de l'attention, Nouvel horizon du capitalisme ?*, La Découverte, Paris, 2014, p. 252. (my translation)

²⁰⁰ CITTON Yves, *Pour une écologie de l'attention*, Seuil, 2014, p. 244. (my translation) / *The Ecology of Attention*, Polity Press, 2016

²⁰¹ Moreover, there are also other “attentional vacuoles”, such as the contemplation of a natural landscape.

²⁰² CITTON Yves (Dir.), *L'économie de l'attention, Nouvel horizon du capitalisme ?*, La Découverte, Paris, 2014, p. 28.

“an attention constantly open to defining what constitutes the *true life* of human community”²⁰³. We will focus our attention on environmental threats in order to “redefine ecological struggles around attentional problems”²⁰⁴.

How can we define the “ethics of attention”²⁰⁵ that are necessary to approach environmental crises? Sandra Laugier puts forward Wittgenstein’s statement concerning philosophy’s aim to “redefine and move our idea of the importance, of what matters and what we must pay attention to”²⁰⁶. Sandra Laugier proposes to subvert the use of this “counting” economy of attention in favour of the demonstration of “what counts”, that is to say, to focus on what “deserves to be counted”²⁰⁷. She believes this is how we should pay attention to the human and non-human actors involved in the ecological catastrophe at the time of the “intrusion of Gaïa”. As Sandra Laugier points out, Wittgenstein’s ethics are “based on an essential articulation between attention and importance”. Relying on an “ethics of perception”²⁰⁸ will allow us to fully grasp the importance of environmental issues, which we often “let accumulate in a tragic indifference”²⁰⁹ instead. Indeed, the ethics of attention appears as a means to overstep the economy of attention and reveal the importance concealed in our everyday life. There is a multiplicity of non-human beings situated in the background of human action. While they are often neglected and threatened with extinction, they are central elements of our history and deserve both our attention and care.

James Turrell

Born in 1943 in Los Angeles, James Turrell is an American artist who works primarily with space and light. Since the end of the 1960s, he has been creating environments using natural or artificial light. They are often referred to as often “perceptual environments”, which appeals to our attentional capacity. While he often works with large-scale built spaces, the experience of his work itself includes no tangible objects.

As mentioned in this chapter’s introduction, in 1977, James Turrell acquired a volcanic crater in the Northeast of Flagstaff in Arizona. He initiated a vast project destined to transform the site into

²⁰³ Ibid. My translation.

²⁰⁴ Ibid., p. 30.

²⁰⁵ LAUGIER Sandra, Ibid. (my translation)

²⁰⁶ Ibid.

²⁰⁷ Ibid., p. 257.

²⁰⁸ Ibid.

²⁰⁹ CITTON Yves (Dir.), Ibid., p. 30. (my translation)

an immense astronomical observatory. Since then, the volcano has been gradually transformed into a gigantic sensorial apparatus, light being the protagonist of the piece's artistic experience. This 400-meter-high crater, situated 1600 meters above sea level, has been extinct for the past 300 000 years.

Constructed as a *Sensing space* of cosmic scale, the *Roden Crater* is composed of a dozen rooms with open ceilings, allowing for the observation of celestial variation according to their orientation. Starting at its base, a semi-circular tunnel stretches through the crater to reach a room entitled *East Portal*. Turrell followed the advice of an acoustic engineer in order to give the steps and the speaking a sonic dimension. A set of steps leads to the peak of the volcano and to the centre of the crater. Forming a dome-like structure, four thick slabs of stone surround a circular base that matches the crater's size and invite the visitor to lie down and gaze at the sky. Each of the rooms offers a specific experience. The room of the East and the one of the West offer an intense view of the sunrise and sunset. Another enables us to contemplate the stars as if they were very close to us, while yet another room allows us to observe the reflection of the sky on a body of water.

The Roden Crater appears as the ultimate outcome of Turrell's work with light. According to the artist, every light is "not carrying some revelation, but is a revelation in itself"²¹⁰. Through its monumental nature, which fits its dimension, *Roden Crater* could be connected to Earth Art. However, Turrell's approach involves an unprecedented meditative and contemplative dimension due to its multiple visual experiences. Although light is the artist's primary material, human perception seems to be of equal importance, as both the recipient and medium of this work. The artist invites us to look elsewhere, to take in the sky's immensity and its multiple variations. The work's natural space and celestial light structure the artistic situation. By choosing this crater in particular and then attributing a specific view of a celestial event to each room, Turrell establishes a "situated aesthetic" which calls for our attention. Not only is Turrell's work site-specific – and therefore situated –, it is also conceived as a vast apparatus of views of the cosmos.

²¹⁰ TURRELL James, *Interview with Suzanne Pagé*, in: Exhibition Catalogue, *James Turrell*, ARC, Musée d'Art moderne de la Ville de Paris, 1984. (my translation)



Figure 13. James Turrell, Roden Crater, 1977-2018

What is the “framing of attention”? According to Goffman²¹¹, the theory of the “framing of attention” implies that each message needs to be framed, in order to be interpreted. This forms a collective, an “us” that Pierre Le Quéau designates as a shared “province of signification”²¹². In other words, the process of framing represents more than the determination of a viewpoint and a focal field “conditioning a certain perception of reality; it participates equally in the dividing of communities that look at a certain reality from a certain type of attentional framing”²¹³. While addressing environmental issues through the prism of attentional problems, it might be possible to outline a response to the question of the “us” involved in both a changing geological regime and our imminent collision with Gaïa. It is through the performative recognition of this “us”²¹⁴, with a process of attentional framing, that we might be able to define the “Demos” of Gaïa. This topic will be developed in further detail in my fifth chapter.

C. Site-specific art

How can one define Site-specific art? In his book entitled *One Place after Another, Site-Specific Art and Locational Identity*, Miwon Kwon shares a critical history of site-specific art. Site-specific artworks first appeared at the end of the 1960s in reaction to the commodification of art as well as its so-called autonomy. Institutions adopted the term site-specific uncritically. Most of the artists involved in this emergence insist on the indissoluble connection between a work and its context, prompting Richard Serra’s famous statement: “to remove the work is to destroy the work”. The term site-specific has gradually infiltrated numerous catalogues, essays, press releases, and magazines reviews to, eventually reach the general public. However, the relevance of the term “site-specific” now seems to be called into question due to the very concept of “site” having weakened throughout the last three decades. The aesthetic discourse lacks a theoretical and historical basis in order to defend the notion of site-specific.

In his book, Miwon Kwon approaches site-specificity not exclusively as an artistic genre but also as a problem in itself, implying a politics of space. He reframes site-specificity as a mediation of social, economic, and political processes, organising urban space. Besides, a work can be considered as the extension of a network of social relations, as its installation is made possible by a

²¹¹ GOFFMAN Erving, *Frame Analysis: An Essay on the Organization of Experience*, Northeastern University Press, 1986.

²¹² LE QUÉAU Pierre, *Formes et cadrages de l'attention*, in : CITTON Yves (Dir.), *Ibid.*, p. 211. (my translation)

²¹³ *Ibid.*, p. 212.

²¹⁴ *Ibid.*

community's approval²¹⁵. A site-specific artwork is, above all a, situated work engaging with our viewpoint, which is dependent on its context. While artists respond to the globalized artistic network's increasing demand for contextual works, site-specificity has grown to involve the impermanence and transience of works instead of their permanence and immobility. Site-specific works have now reached the general public and developed in urban spaces such as squares, parks, and office lobbies. Finally, today site-specificity implies the resurgence of notions related to modernism, such as originality, authenticity, uniqueness and authorship, despite these notions having been explored during the years 1970 and 1980.

D. The making of knowledge

How does the construction of knowledge operate? Establishing a new regime of attention and a new ethics of perception leads us to analyse the distinctive features of site-specific artworks, their situated nature and their intimate connection to their context. Moreover, questions of viewpoint and the idea of a new regime of attention also relate to the conditions of knowledge creation. From the 17th century's scientific revolution to the present day, a vast gap has grown between scientific theory and practice²¹⁶. In the name of Science – with a capital S -, this rift distances us from the reality of laboratory life and of knowledge making. Furthermore, a major correspondence seems to be forming between the world and the discourses on the world, with both merging to the extent of becoming confused²¹⁷. We will endeavour to differentiate these two modes so as to bring them together without confusing their intersection with total fusion²¹⁸.

Conducting an ethnography of laboratories is a necessary step towards building an understanding of the rift between “Science” and “the sciences”, so is unpacking the risk of confusion between the world itself and the utterances about the world. An inquiry concerning the place we should give to the notion of the scientific institution is equally necessary²¹⁹. We must therefore rely on the practice of “science studies”, which appeared in the 1970s and seek to understand “through what instruments, what machinery, what material, historical, anthropological conditions” it is “possible

²¹⁵ However, the concept of “community” is ambiguous and problematic: while, in the context of a site-specific project, a community may require institutional support, others may remain self-sufficient and develop projects independently.

²¹⁶ LATOUR Bruno, *Enquête sur les modes d'existence*, La Découverte, 2012, p. 80.

²¹⁷ *Ibid.*, p. 81.

²¹⁸ *Ibid.*, p. 91-92.

²¹⁹ *Ibid.*, p. 18-19.

to produce objectivity”²²⁰. Bruno Latour defines the laboratory as “the anti-bifurcation weapon par excellence”²²¹. As the place of the scientific experience, it appears as the site knowledge making, necessarily implying an observing subject and an observed object. However, the very essence of the experience would be to create some “existing beings with uncertain status”²²², which in their irresoluteness escape the “great division” of the bifurcation. In *Laboratory Life*, Bruno Latour and Steve Woolgar²²³ endeavour to study science in the making, investigating the field of an American laboratory in the manner of anthropologists conducting an inquiry within an extra-western community. Through a meticulous description of scientists’ daily practices, they highlight the processes of production of data. The researchers appear then as “translators” transcribing an environment and its resulting narratives. The laboratory thus becomes a form of socio-cultural framework, comprising a form of daily life, a range of practices, as well as a variety of beliefs and traditions.

Jeff Wall

In 1992, Jeff Wall created a laboratory scene, *Adrian Walker, artist, drawing from a specimen in a laboratory in the Dept. of Anatomy at the University of British Columbia, Vancouver*, which explored the distinction between observing subject and observed object. The image conveys the stakes of the “bifurcation of nature” as defined by Whitehead and encourages a meditation on the necessity of “science studies”.

Born in 1946 and living in Vancouver, Jeff Wall is a major figure of the contemporary art scene. After having completed a PhD thesis about the Dada movement, he now teaches art history in Canada. Jeff Wall established the founding principles of his work in the 1970s and chose photography as his medium. Wall’s projects depict “modern life”. All his photographs involve extremely elaborate stagings, often the result of numerous shots. The characters are actors who often pose for weeks, as they would for a painter. In this sense, one can think of Wall’s photographs as “film photographs” or even easel paintings, in that they result from meticulously calculated staging. His images are installed in lightboxes, similar to the ones used for billboards. Jeff Wall started to develop his practice, which went on to influence the work of numerous photographers

²²⁰ Ibid., p. 17. (my translation)

²²¹ Ibid.

²²² Ibid.

²²³ LATOUR Bruno, WOOLGAR Steve, *La vie de laboratoire : la production des faits scientifiques*, Éditions La Découverte, 2005 / *Laboratory Life: the Social Construction of Scientific Facts*, Sage, Los Angeles, 1979

in the 1980s and 1990s. His work questions ideas of representation and demonstrates that every image is a construction that contains issues and ideas.

In line with Wall's preference, *Adrian Walker* (1992) is a large Ektachrome installed in a lightbox, with a fluorescent light lighting the image from behind. The work features a laboratory scene in which an artist endeavours to draw a human body part with extreme precision. A man viewed from the side is lit by a natural light coming from a window situated to the right of the composition. The work is tied to a specific context, that of the emergence of large-scale photography in the artistic field. Photographs are now hung on museum walls, much like easel paintings. Jeff Wall is seen as a major figure of this development.

According to Michael Fried, the *Adrian Walker* photograph could be associated with the tradition of genre painting²²⁴. The work's main characteristic is the character's deep absorption in his activity, preventing him from paying attention to the spectator or reacting to the fact that he is being observed. *Adrian Walker* thus echoes Michael Fried's writings on theatricality and on the "absorbed" mode that characterizes the characters of numerous paintings of the end of the 18th century. Michael Fried refers to Chardin, but also to Greuze, in contrast with the theatricality that emerges with Manet's work²²⁵. The characters portrayed in these paintings are immersed in their own world and are completely indifferent to our presence as spectators. Through these works, artists seem to establish an "ontological fiction according to which the spectator doesn't exist", as if "the character and the spectator were to inhabit different worlds"²²⁶. However, the portrait of *Adrian Walker* hasn't been captured on the spot; indeed, each element of the photograph is the result of meticulous planning, the work has been conceived and composed methodically. The intention for the image to be seen is apparent, which lends it an "ineluctable theatricality", operating both through the scene itself and in the act of presenting the work²²⁷. *Adrian Walker* can therefore be seen as a photographic hybrid of reality and fiction.

Through this work, Jeff Wall highlights the gap between the model and copy, a gap the mysterious quality of which is intensified by the technique of photography itself. Moreover, the artist underlines the distinction between the "observing subject" and the "observed object", in other

²²⁴ FRIED Michael, *Jeff Wall, Wittgenstein et le quotidien*, in: Les Cahiers du Musée national d'art moderne, n°92, Paris, Summer 2005, p. 5.

²²⁵ FRIED Michael, *De l'anti-théâtralité*, in: *Contre la théâtralité, Du minimalisme à la photographie contemporaine*, 1998, Gallimard, 2007, p. 142-143.

²²⁶ FRIED Michael, *Jeff Wall, Wittgenstein et le quotidien*, Ibid., p. 7. (my translation)

²²⁷ Ibid., p. 8.

words, between “culture” and “nature”, a distinction specifically relevant to laboratory life. Wall thus conveys a key characteristic of the Western aesthetic of the last three centuries through a single image. *Adrian Walker* invites us to meditate on the gulf that separates subject and object, culture and nature, a core element of our visual and scientific practices. The question of perspective in the realm of scientific studies thus merges with the question of perspective in the field of art.



Figure 14. Jeff Wall, Adrian Walker, artist, drawing from a specimen in a laboratory in the Dept. of Anatomy at the University of British Columbia, Vancouver, 1992

Environmental issues often seem to call the objectivity of our experiences into question. This mistrust underlines the urgent necessity of redefining the ways in which we produce knowledge in order to restore the legitimacy of scientific institutions²²⁸. In his *Inquiry into the Modes of Existence*, Bruno Latour considers multiple “modes”, or “keys with which one judges truth or falseness”²²⁹. He describes his inquiry as a “rational” project, through which he explores various types of experiences, evaluating the truth and inaccuracy of each of their “modes”²³⁰. Knowledge, which has its own particular “mode”, appears as a network evolving alongside other trajectories with which it constantly intersects²³¹. Moreover, knowledge echoes an ontological pluralism or a regional or local ontology. Objectivity, according to Latour, involves considering “the being as other”.

E. Introduction to a situated aesthetic

The visual arts are often tied to questions of perspective: we observe an artwork from a certain point of view while the work itself establishes its own perspective system. In the Western tradition, the most ancient perspective is the Euclidian perspective, which is also a system of thought. However, modernity and contemporary art have contributed to calling this perceptive model into question in multiple ways, including through the use of aerial viewpoints or by multiplying viewpoints. Site-specific art appears as another way to subvert the Euclidian perspective as the work relies on its context as well as on the visitor’s viewpoint. Site-specific work is thereby *situated* both with regard to its environment and to the spectator who encounters it. It is, therefore, possible to position site-specific art at the intersection between situated knowledge and perspectivism in the Nietzschean sense. Thirdly we will approach the necessity of “mourning for the globe”, as seen by Bruno Latour. This will allow us to analyse artworks portraying local situations through the lens of Sandra Harding’s “standpoint”, and Donna Haraway’s “situated knowledge”.

²²⁸ LATOUR Bruno, *Enquête sur les modes d'existence*, Ibid., p. 23.

²²⁹ Ibid., p. 29. (my translation)

²³⁰ Ibid., p. 30.

²³¹ Ibid., p. 95.

III. Mourning for the image of the globe

A. Presentation

Why should we mourn for the image of the globe? The context of environmental crises generates tensions between “globality” and a variety of local situations. Michel Serres believes that the Earth imposes “globality”. Indeed, he asserts that “global history penetrates nature” and “global nature penetrates history”²³². However, if, as stated by Patrice Maniglier, “the Earth makes its entrance on the stage of History”²³³, our interaction with this actor must follow a form of “radical ontological pluralism”²³⁴. In other words, the Earth’s uniqueness goes hand in hand with the diverging ways in which it is expressed in each given locality. The multiplicity of local situations must therefore be subjected to close scrutiny. Moreover, the “global” dimension of climate change naturally leads us to question our understanding of “globality”²³⁵. Patrice Maniglier describes the ontological turn, an intellectual movement seen as necessary inasmuch as it allows for a “radical form of ontological pluralism”²³⁶. While globality is a new actor, it comes with a radicalisation of pluralism. In fact, the Earth’s globality cannot surpass the variety of its diverging versions. In Maniglier’s words, “The Earth is one - but not the same”²³⁷. Since 2013, with his Gifford Lectures, Bruno Latour has shown that we have to mourn for the global in order to approach local situations. The global, which is presented as an impossible ambition, recalls the representation of Atlas by Mercator²³⁸. This Titan from Hesiod’s Theogony is portrayed holding the globe in the palm of his hand, symbolising both omnipotence and the scientific revolution.

²³² SERRES Michel, *Ibid.*, p. 18. (my translation)

²³³ MANIGLIER Patrice, *How many Earths? The geological turn in anthropology*, “Geontology, planetary and altermetaphysics”, Annual Meeting of the American Anthropological Association, Washington D.C. (U.S.A.), Saturday December 6th 2014, p.1.

²³⁴ *Ibid.*, p. 1.

²³⁵ *Ibid.*, p. 2.

²³⁶ *Ibid.*, p. 3.

²³⁷ *Ibid.*, p. 9-10.

²³⁸ LATOUR Bruno, *L’Anthropocène et la destruction de l’image du globe*, in: HACHE Émilie, *Ibid.*, p. 45.

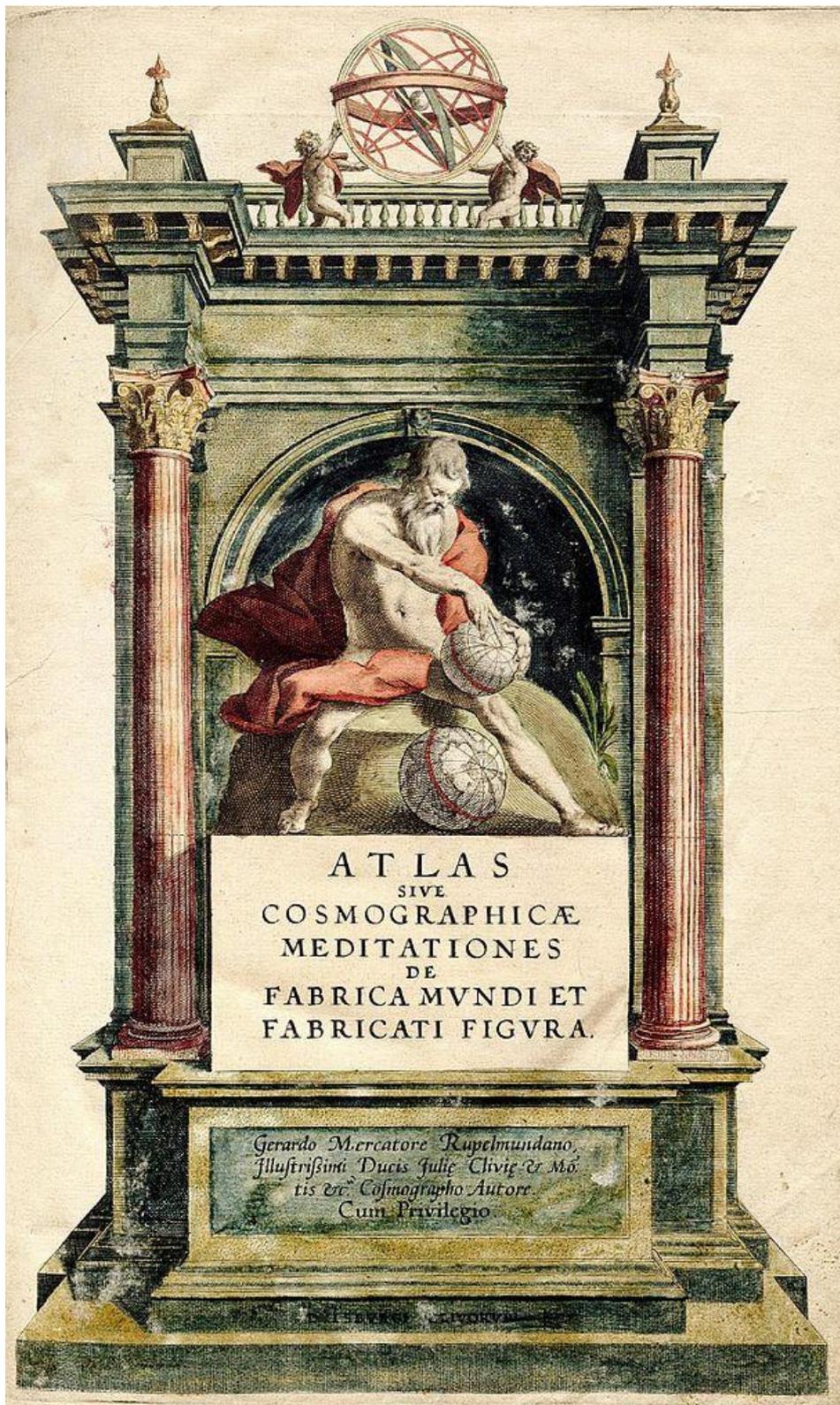


Figure 15. Mercator, *Atlas*, 1595

How can we define this globe that governs our perception of the world? Latour defines the image of the globe as the “true burden of the white man” – referring to the past three decades of Western history – and urges us to put an end to what he calls the “curse of Atlas”²³⁹. He highlights that “global thought always implies local action because no one ever thinks globally about nature or Gaia”²⁴⁰. The author points to the pragmatic impossibility of “thinking globally”. Latour adds: “One is never as provincial as when one claims to have a “global vision”²⁴¹. Furthermore, the global appears as an obstacle to our argument insofar as it excludes the multiplicity of local situations. One should, therefore, “destroy the image of the globe”²⁴² as well as the motif of the sphere. As Latour argues, “a sphere has no history, no beginning, no end, no hole, no discontinuity of any kind”²⁴³. In his three-volume study, *Spheres*, Peter Sloterdijk analyses all the bubbles that are necessary to the survival of the human species. Jakob von Uexküll’s *Umwelt* is generalised here to encompass all the bubbles invented by individuals to distinguish “interior” from “exterior”. This “environment”, as defined by Jakob von Uexküll, is divided into various bubbles that are independent yet linked to each other.

Referring to Peter Sloterdijk, Latour asks the following question: “Where are you situated when you say that you have a global view of the universe?”²⁴⁴ He adds: “What do you see? What air do you breathe? How do you keep warm, get dressed, feed yourself?”²⁴⁵ This exemplifies Latour’s fundamentally pragmatic position, whereby field and inquiry always come first.

With any supposedly “global” vision of the universe comes a local situation, one that allows us to think and act. The globe reveals itself as a platonic obsession, as the dream of total and perfect knowledge; it embodies “the ideal of ideas themselves”²⁴⁶. This platonic obsession has been “transferred to the Christian theology and left in the political epistemology”²⁴⁷. However, the notions of the globe and of global thinking imply the risk of “all too quickly unifying what must first be composed”²⁴⁸. According to Latour, we must not only destroy the globe but also our “ideal idea of the globe”²⁴⁹ as the only condition of our perception of an emerging “aesthetic”, in the

²³⁹ Ibid., p. 45. (my translation)

²⁴⁰ Ibid., p. 44.

²⁴¹ Ibid., p. 51.

²⁴² Ibid., p. 55.

²⁴³ Ibid., p. 51.

²⁴⁴ Ibid., p. 46.

²⁴⁵ Ibid., p. 46.

²⁴⁶ Ibid., p. 51.

²⁴⁷ Ibid., p. 49.

²⁴⁸ Ibid., p. 52.

²⁴⁹ Ibid., p. 55.

sense of a capacity to perceive and to become sensitive to a common problem²⁵⁰. This emergence of an aesthetic in the broader sense, as defined by Latour, is crucial and must be highlighted.

As Latour points out, “Gaïa seems extremely sensitive to our actions, and It seems to react extremely fast to what It feels and detects”²⁵¹. For that reason, we must adopt a new regime of attention so as to make us sensitive to its intrusion, to the way it manifests in our world. Referring to Sloterdijk, Latour finally invites us to embrace “monogeism”, that is to say, to assert our connection to the people who “have only one Earth but who do not know its form”²⁵². Embracing this “monogeism” will multiply our chances of defeating Gaïa.

Putting aside the idea of a unified globe leaves us with an open question: through which images can we now think about the world? Bruno Latour evokes the possibility of a substitution, the substitution of the image of a sphere for that of a loop. If the concept of the loop were to become central to our representations of the world, it would be led to do so by the necessity of an awareness: “because only when you feel that your action falls back on you do you understand how much you are responsible for it”²⁵³. Through a necessary return to its point of departure, the loop opens up a feeling of responsibility.

As stressed by Hicham-Stéphane Afeissa, environmental crises, much like the nuclear threat, know no “borders and hence perform a totalisation of the world, understood as the experience of a closing of the world on itself”²⁵⁴. Having the consequences of our actions “fall back on us” leads us to truly feel the circular nature of the Earth. We gradually become “those for whom the Earth is now one: those who have no planets to spare”²⁵⁵.

Christophe Bonneuil and Pierre de Jouvancourt evoke a narrative of Christian influence: “Earth, forgive them, they knew not what they were doing”²⁵⁶. In the context of the Anthropocene, such a maxim cannot persist. How can we reach a sensitive understanding of the consequences of the environmental crises that can already be perceived? How can we configure a consciousness, that of an *Anthropos* that does in fact “know very well what it does”?

²⁵⁰ Ibid., p. 56.

²⁵¹ Ibid., p. 55.

²⁵² Ibid., p. 56.

²⁵³ Ibid., p. 52.

²⁵⁴ AFEISSA Hicham-Stéphane, p. 49. (my translation)

²⁵⁵ LATOUR Bruno, in: AFEISSA Hicham-Stéphane, Ibid., p. 91. (my translation)

²⁵⁶ BONNEUIL Christophe & de JOUVANCOURT Pierre, Ibid., p. 74-75. (my translation)

B. The renouncement of the global through the visual arts

Piero Manzoni

Piero Manzoni, who was born in Soncino, 1933, and died in 1963, is an Arte Povera and conceptual art pioneer. He is sometimes associated with Neodada and, to some extent, with the Nouveaux Réalistes. Inspired by Yves Klein's research, he calls the nature of the art object into question and has had a decisive influence on a whole generation of artists surrounding the figure of Germano Celant²⁵⁷.

In 1959, he encountered the ZERO group from Düsseldorf and started to create conceptual objects. With Enrico Castellani, he contributed to the promotion of this movement and founded the *Azimuth* magazine, after which he named a gallery he opened in Milan in December 1959. Later, Manzoni used his own body to initiate conceptual art projects. In May 1960, he produced *45 Bodies of Air (45 Corps d'Air)*, including balloons simply filled with air as well as balloons filled with his own breath, which he calls *Artist's Breaths (Souffles d'Artiste)*. *Shit Of The Artist (Merde d'Artiste)* is one of his best-known works. On the 24th of April 1961, he put 90 cans containing his own excrement up for sale, adjusting their price according to the daily price of gold. He saw all concerns to do with form or style deployed for the production of an object of contemplation as profoundly useless²⁵⁸. Despite his caustic irony, Manzoni established the generalised desacralisation of artworks. Inspired by Marcel Duchamp's readymades, he questioned the value of artworks, following an approach that extends to the context of consumer society.

In 1961, Piero Manzoni developed his famous work *Socle du Monde / Pedestal of the World*. Destined to be installed in a park in the suburb of Herning in Denmark, the work consists of an upside-down pedestal with the following upside-down inscription: "*Socle du Monde, Socle Magic N° 3 de Piero Manzoni - 1961 - Hommage à Galilée*". It is a cube-shaped pedestal made of 293 kilograms of metal. Traditionally, a pedestal is destined to elevate a sculpture physically and symbolically, from the ground to an artistic space. However, here, the Earth itself, on which we stand, appears to be the object placed on this pedestal. In a single gesture, a simple reversal of perspective, Manzoni defines

²⁵⁷ These artists were included in the first Arte Povera exhibition, which took place in Geneva in 1967.

²⁵⁸ CRIQUI Jean-Pierre, *Piero Manzoni et ses restes*, in: CELANT Germano, PAGÉ Suzanne, *Piero Manzoni*, Musée national d'art moderne, Paris, 1991, p. 26.

the globe as a work of art that he claims authorship of by signing it. The *Pedestal of the World* can be seen as Piero Manzoni's artistic manifesto: according to him, artists shouldn't limit themselves to a restricted repertoire of so-called "artistic" materials. On the contrary, they should seize the immensity of the world and the available materials around the globe that await their discovery. Manzoni alludes to art as a "field of freedom", that is to say, as "a zone of poetic adventure"²⁵⁹.

Manzoni's *Pedestal* can be analysed in light of minimal art that was developing at the same time in the United States. It then appears as a literal cube, leading, according to Michael Fried²⁶⁰, to a theatrical situation in which the spectator is included. However, the work appears first and foremost as a masterpiece of conceptual art. It "gives presence to what is present and exhibits it tautologically"²⁶¹. In the context of our study, the *Pedestal of the World* reveals itself as a singular form of representation of the world. It mischievously exhibits a renouncement of the "global", brilliantly demonstrating the obvious locality specific to any sensory perception of the world. While Manzoni's *Pedestal* establishes the Earth's status as an artwork, this is effectively done through a specific viewpoint: in this particular park, at this precise place and nowhere else²⁶². The global approach is replaced by a local situation, determining our view of the world.

²⁵⁹ MANZONI Piero, *Per una scoperta di una zona di immagini*, Milan, December 9th 1956 (my translation)

²⁶⁰ FRIED Michael, *Art and Objecthood*, Art Forum 5, June 1967, p. 12-23.

²⁶¹ CELANT Germano, *Piero Manzoni, un artiste du présent*, in: CELANT Germano, PAGÉ Suzanne, *Piero Manzoni*, Musée national d'art moderne, Paris, 1991, p. 18. (my translation)

²⁶² For conservation reasons, the work is now in the Herning Museum of Contemporary Art.



Figure 16. Piero Manzoni, Socle du Monde, 1961

Charles and Ray Eames

Famous designers Charles and Ray Eames, who were commended by the Museum of Modern Art in New York in 1946, started focusing on their photography and film practice in the 50s. Between 1950 and 1982, Charles and Ray Eames directed over 125 short films ranging from 1 to 30 minutes in length. Through their filmic production, the couple seeks to extend the scope of creativity to a variety of subjects, including science, mathematics, and history. Their utopian project's aim is to create a society in which each individual is able to produce knowledge and to share it with a large audience. Charles and Ray Eames believe art must aim to communicate ideas and address the creation of knowledge.

The film *Powers of Ten* (1968) is one of the most famous short films in the history of film. It takes viewers on a 9-minute journey between the infinitely small and the infinitely large. It starts with a picnic scene in Chicago, featuring a couple lying in a park next to a lake. A camera hangs a meter above them and progressively moves higher, widening its field of vision. The width of the field of vision and the height of the viewpoint over the scene are multiplied by ten every ten seconds. This continuous pulling away makes us travel in space up to a point where our planet merges with the stars, then up to a moment in which our galaxy is no longer discernible and appears simply as a luminous point among others. Once the observable limits of the universe have been reached, the camera starts moving in reverse, acceleratedly, all the way back to the couple still lying on the grass. We then proceed to enter the man's skin to eventually reach the scale of the smallest known element, the quark.

Powers of Ten references a comic book by Kees Boeke called *Cosmic View, The Universe in 40 Jumps* (1957). In this comic book, each image corresponds to a specific scale, starting from the infinitely small, with a mosquito, right up to the infinitely far and large, the universe. One of the inherent principles of any comic book is, of course, the use of discontinuous frames, letting the reader's mind create its own continuity. In Kees Boeke's comic book, the reader performs a double mental montage, "jumping" from one scale to another with each image. Extremely innovative for its time, the movie *Powers of Ten* by Charles and Ray Eames has been reproduced by over forty international artists. Today it echoes Google Maps and Google Earth. In this work, a view from above replaces the Euclidian perspective and defines our perception of reality. This adventure through scalar magnitudes reminds us of our miniature place in the universe. The film also reminds us of the fact

that the Earth is composed of a variety of local situations and that it is impossible to approach the globe and the infinitely large without considering the plurality of the infinitely small.



Figure 17. Charles and Ray Eames, Powers of Ten, 1977

Gwenola Wagon

Born in 1975, Gwenola Wagon is an artist and has been a senior lecturer at the department of fine arts of Paris 8 University since 2008²⁶³. Gwenola Wagon works with virtual interactive worlds to experiment with their possible extensions in the real world via navigation systems. She thus combines physical and numerical territories. Her projects involve a singular way of questioning our experiences of post-internet alternative ways of life.

Her work *Globodrome* (2012) takes the form of a 62-minute film as well as a book. Following Phileas Fogg and Passepartout's itinerary in Jules Verne's *Around the World in Eighty Days*, Gwenola Wagon invites us to join her on a journey around a virtual globe. She uses Google Earth as a way of moving around the globe and finds inspiration in the futurist project "Jules Verne", which involved anticipating the construction of a railway running across the world. By using Google Earth, she achieves the same result while staying put. The itinerary of *Globodrome* follows the latitudes from East to West and crosses each of the globes' meridians. Phileas Fogg's travels were made possible through the emergence of new modes of transportation: railways and steamships. Gwenola Wagon decides to recreate the same journey without leaving her computer screen. This "mental" expedition, which is presented through a film as well as through a book, can be seen as a contemporary version of Jules Verne's logbook.

While Jules Verne explores the way the world is transformed by progress in terms of transport, Gwenola Wagon conducts an analysis of the revolution of telecommunication and information. The film is full of screenshots, Wikipedia articles, Street View images, JPG files, and YouTube videos. The artist's gaze alternates between views from above and local incursions, combining geographic as well as historical and economic data. Multiple zooms in and out plunge us into moments of extreme precision and explorations of specific localities. *Globodrome* thus underlines the ontological pluralism of the Earth, as formulated by Patrice Maniglier: "The Earth is one – but not the same"²⁶⁴. In Gwenola Wagon's practice, the globality of the Earth gives way to a multiplicity of perspectives. This aligns with Bruno Latour's incentive to mourn for the image of the globe as

²⁶³ A graduate of the Ecole Nationale Supérieure des Arts Décoratifs of Paris and of the Atelier de Recherches Interactives, she collaborates with the TEAMeD team (Theory Experimentation Arts Medias and Design). She completed a PhD thesis at Paris 8 University on the "Utopia of an interactive cinema". Gwenola Wagon is co-founder of the collective *Cela Etant* together with Alexis Chazard. In 2007, she co-founded the *Nogo voyage* project with Stéphane Degoutin, an experimental travel agency. In 2011, she started the research laboratory LOPH.

²⁶⁴ MANIGLIER Patrice, *Ibid.*, p. 9-10.

an ideal form of knowledge²⁶⁵. Furthermore, we encounter a range of local situations and, through them, the ontological pluralism described by the advocates of the ontological turn²⁶⁶.

²⁶⁵ LATOUR Bruno, *L'Anthropocène et la destruction de l'image du globe*, Ibid., p. 51.

²⁶⁶ MANIGLIER Patrice, Ibid., p. 3.

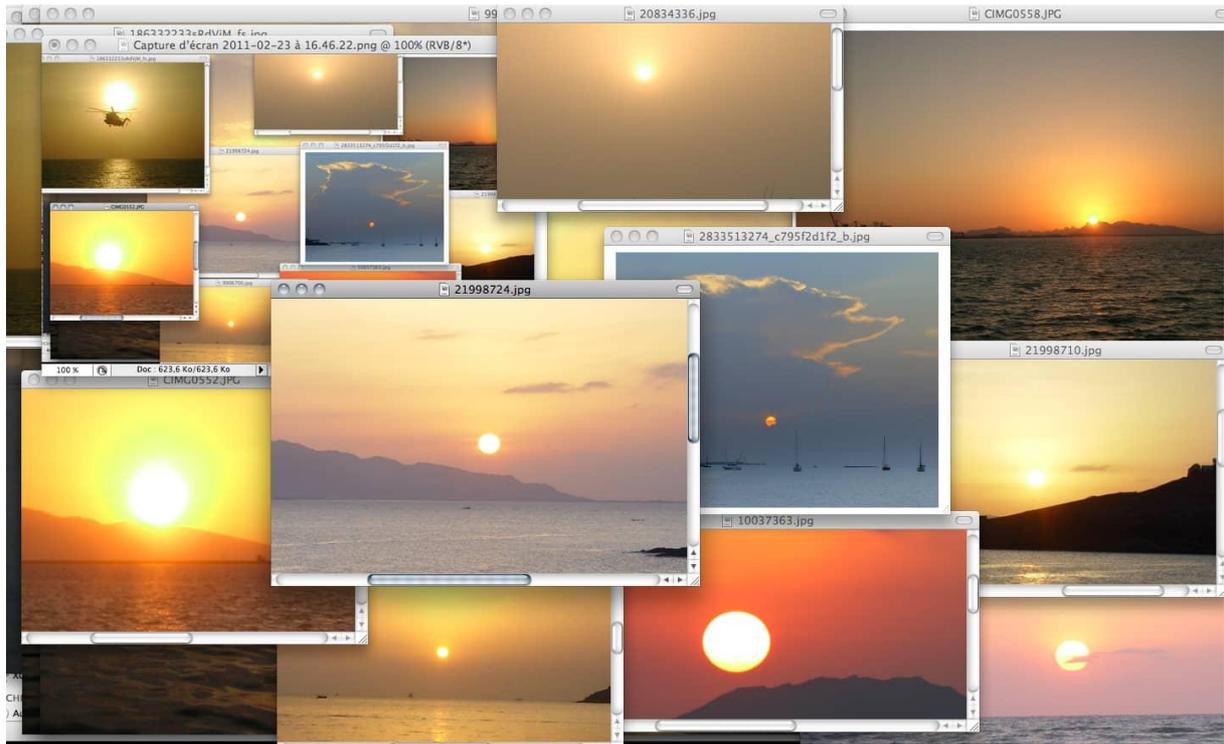


Figure 18. Gwenola Wagon, Globodrome, 2012

Mishka Henner

Born in 1976, Mishka Henner is a British artist based in Manchester. He uses devices such as Google Earth, Google Street View or YouTube in order to approach photography in the age of the Internet. Often described as a photographer without a camera, Mishka Henner develops a body of work that reflects the way in which the Internet has transformed our visual experiences. In February 2010, he presented *Photography Is*. By entering the phrase “Photography is” in a search engine, he collected its various occurrences online. He produced a 192-page book through this, gathering over 3000 responses. Since 2010 Mishka Henner has developed a multiplicity of projects mostly employing views from above through a range of tools on the Internet.

Approached in its relationship with the human viewpoint, the notion of landscape evokes issues to do with visibility and access. These issues were intensified by the emergence of Google Earth in 2005 when Google presented its service of free satellite images. Suddenly, images originally destined for astronauts, as well as engineers, geologists, and the military, became accessible to all Internet users. This technical advancement relative to our access to landscapes is characterised by the apparent omnipotence of the human gaze over the world. However, this progress is the subject of disagreements and fears, from a strictly political point of view – in the literal sense of the term –, in so far as some sites, with political, economic or military weight, become visible to everyone. From 2005, several states put pressure on the program’s founders, demanding that some parts of their territories remain concealed. This led to the appearance of a form of censorship, through the blurring, pixelisation, or whitening out of the areas in question, which is still currently in place.

Among these states, the Netherlands chooses to conceal places such as royal palaces, military sites and fuel storage locations. This led Mishka Henner to develop a series of photographs entitled *Dutch Landscapes* (2011). These images are aerial views of the censored places found in Google Earth, which are covered in military camouflage, and take the form of large multicoloured polygons. Within various landscapes, these images exhibit abstract geometric forms, which emphasise these places instead of concealing them. Through these pictures, Mishka Henner highlights humanity’s efforts to preserve its domination instead of adhering to common values. Henner both shows the failure of this endeavour and invites us to think about the shared values that we should associate with this unprecedented ability to seize our landscapes visually. The artist uses Google Earth to highlight both our new ability to visually grasp a specific locality and the censorship that accompanies it, thus raising questions concerning the conditions of our collective

life. The locality of these images, which represent specific places, contrasts with the global aspect of the Google Earth tool, allowing us to embrace the immensity of the globe. As stressed by Hicham-Stéphane Afeissa, nothing is more misleading than the illusion we experience through the use of Google Earth. It gives us the impression that we can grasp global vastness by simply zooming in, while in reality, this “global” rendering involves multiple connexions between regional points. The Google Earth tool could be seen as the pursuit of a global ideal, tainted by these censored images. Mishka Henner points to specific landscapes. In exposing the Google Earth censorship, he produces a localised and situated aesthetic, while questioning the political stakes of our visual ascendancy over the world.

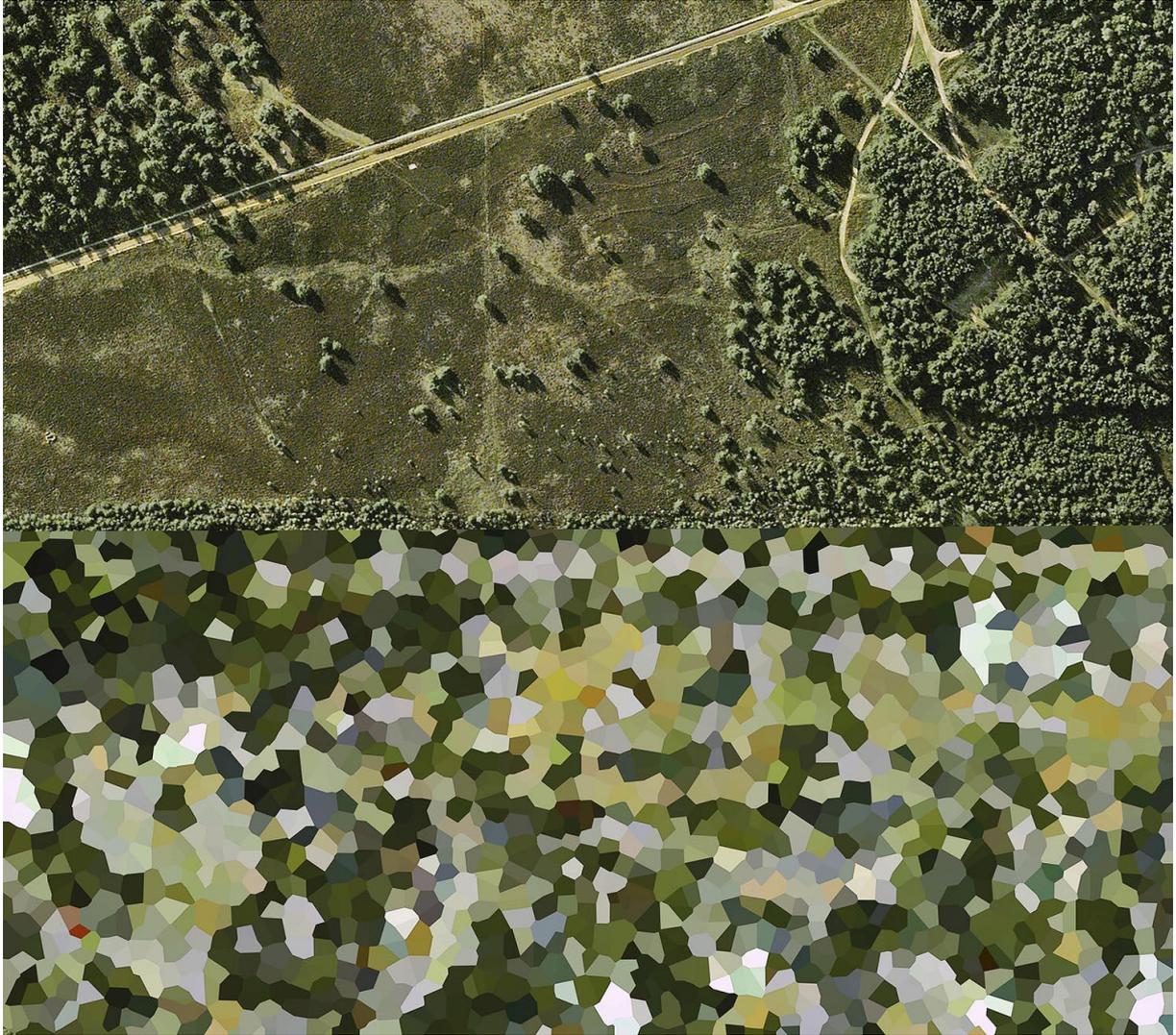


Figure 19. Mishka Henner, Dutch Landscapes, 2011

HeHe

The HeHe duo, formed in 1999, is composed of Helen Evans (born in 1972) and Heiko Hansen (born in 1970). These two artists' practices connect the spheres of digital art and contemporary art. In 2008 they won the Golden Nica at Ars Electronica in Linz. They have, since then, continued to exhibit in places dedicated to technological art as well as intervening in public space in various cities, including New York, Paris, Helsinki, and Liverpool. Their works approach various fields of experimentation, mostly addressing social or ecological phenomena. Their subjects of study are primarily linked to the conflict between the ongoing quest for energy sources and the growing fragility of natural environments. In 2007 HeHe took part in the exhibition *Air de Paris* at the Centre Pompidou. On this occasion, they presented an installation entitled *Champs d'Ozone*: a plastic film stuck to one of the windows of the sixth floor of the museum and receiving coloured lights specific to the visual codes of representation of atmospheric pollution used by the Airparif association. Connected to ozone sensors situated in the nearby area of Les Halles, the installation shows the level of pollution invisible to the naked eye. The concentration of polluted air – the major components of which are nitrogen dioxide, ozone, dust particles and sulphur dioxide – appear on the projection surface as colour gradients, from red, in case of maximal pollution, to blue, in the opposite case. This chromatic element is paired with sound design composed of various samples. The work of HeHe is characterised by its propensity to open up a sensory field revealing our relationship to urban spaces.

The *Nuage Vert* project, initiated by the HeHe collective in 2008, is a light installation that spreads across the city of Helsinki (Finland), using an icon of industrial pollution as its medium. Every evening, from the 22nd to the 29th of February 2008, a powerful green laser illuminated the vapour cloud rising from the power station of Salmisaari. This coloured cloud would grow when the residents of the neighbourhood of Ruohahahti increased their electricity consumption. The cloud, which is visible in Helsinki's sky from a distance of several kilometres, embodies the reality of its urban pollution. The projection is produced using a thermal camera linked to a laser. It both employs the smoke as a material and reveals the cloud and its movement. This "screen of smoke" appears as an unprecedented tool of awareness, both fascinating and disturbing. In 2009 and 2010, two new versions of *Nuage Vert* were installed in France, in Saint-Ouen and Ivry-sur-Seine, revealing the smoke clouds of waste incinerators. Although rapidly censured by the local authorities, these two versions of the project have sparked conversations between residents and a range of groups involved in environmental issues. By revealing the shape of the cloud, the HeHe

collective highlights its meaning and seeks to outline a process that still escapes us. The precise nature of the technological processes operating inside the incinerators is unknown to us. The cloud is the only daily interface between the incinerator and the people living around it. The duo's intervention involves a collaborative endeavour including local associations, public authorities, scientists and industries, the objective being to collectively create new conversations about the treatment of waste. Finally, on a practical level, the project's setup requires the participation of both citizens and scientific partners. The *Nuage Vert* installation has led to a range of other HeHe duo projects, which, through a transdisciplinary mix of industrial design, engineering, and ecological engagement, seek to raise citizens' awareness of atmospheric pollution issues.

The *Nuage Vert* project echoes the image of the "loop", introduced by Bruno Latour as a substitute for the image of the sphere²⁶⁷. The light projected onto the smoke cloud appears as an interface between the public and urban air pollution. In Salmisaari, the green cloud establishes a metaphorical loop linking the polluting cloud to the individual heating everyone benefits from. Thus, illuminated in Saint-Ouen, the cloud implicitly describes the loop that begins in the city's shopping centres and ends in the waste incinerator. It thus provokes a personal awareness with regard to consumption and waste processing. By tangibly revealing the repercussions of our consumption and energy production through a power station and through waste incinerators, the two artists make an unprecedented awareness possible. Their site-specific works allow us to experience the effects of our own contribution to atmospheric pollution. This mourning of the image of the globe enables us to consider nature as foregrounding our history. This leads to the emergence of a new narrative in which human beings are pushed into the background while non-humans occupy centre stage.

²⁶⁷ LATOUR Bruno, *L'Anthropocène et la destruction de l'image du globe*, Ibid., p. 52.



Figure 20. HeHe, Nuage Vert, 2008-2010

IV. Reversing “actor” and “décor”

A. Presentation

According to Bruno Latour, we are currently witnessing a reversal of the relationship between “form” and “content”, “actor” and “décor”. How does this reversal operate? In the past, nature was considered as the backdrop of human action, almost hidden, as a kind of “décor”, setting the scene for human life. However, we are now witnessing the opposite phenomenon; in other words, nature’s stage entrance as the protagonist of the history we are part of²⁶⁸. At the time of the Anthropocene, we witness the emergence of natural elements as crucial actors of our world stage. We must therefore learn to observe what is happening in the background, where the relationship between humans and non-humans is at play²⁶⁹. This décor quickly becomes a “figure” in its own right. As a result, we are confronted with the natural elements’ new status as protagonists of our history as well as with a “return to Earth”, an image that seems relevant to our time²⁷⁰. We must not only accept the demise of futurist ideas – such as the conquest of space – but also become sensitive to “the return of a ground”. In relation to Christian spirituality, Bruno Latour wonders: “Don’t I have reasons to think that our moral sense might change direction depending on whether we turn towards the sky or towards the ground?”²⁷¹.

Latour goes on to explain that the question of the end of time obstructs all forms of traditional morality²⁷². While the past is full of memories of utopias – which could bring us “elsewhere” – we are now faced with multiple situations governed by the urgency of the “here and now”. Having buried our Modern beliefs, we are left with an irruption of diverse “locally situated anthropo-histories”²⁷³. While “utopia” originally means “without ground”, today, we witness the return of a ground bristling with specific variations. With the reversal of “actor” and “décor”, emerges a need to mourn for the concept of “nature” itself. Why is this mourning necessary? As a characteristic paradigm of modernity, the notion of “nature” traps us into a mode of thought strongly rooted in the scientific revolution of the 17th century. The notion of nature firmly solidifies the distinction

²⁶⁸ LATOUR Bruno, *How to make sure Gaia is not a God of Totality? with special attention to Toby Tyrrell’s book On Gaia*, Written for the Rio de Janeiro meeting *The Thousand Names of Gaia*, September 2014, p. 1.

²⁶⁹ LATOUR Bruno, in: *Les Grands Entretiens*, Ibid.

²⁷⁰ HACHE Émilie, *Retour sur terre*, in: HACHE Émilie (Dir.) *De l’univers clos au monde infini*, Éditions Dehors, 2014, p. 18.

²⁷¹ LATOUR Bruno, *Si tu viens à perdre la Terre, à quoi te sers d’avoir sauvé ton âme?*, in Jacques-Noël Pères (dir.), *L’avenir de la Terre, un défi pour les Églises*, Paris, Desclée de brouwer, Institut Catholique de Paris, collection « Théologie à l’Université », p. 53. (my translation)

²⁷² Ibid.

²⁷³ BONNEUIL Christophe & de JOUVANCOURT Pierre, Ibid., p. 105. (my translation)

between humans and non-humans. However, this very distinction must be called into question in order to embrace a new mode of thinking. The “bifurcation of nature”, as defined by Whitehead, prevents us from thinking beyond the duality of nature/culture. Yet, allowing for the emergence of a true ecology would involve putting the very notion of nature aside and putting an end to the distinction between nature and culture²⁷⁴. Eduardo Viveiros de Castro and Deborah Danowski highlight that Amerindian people never had a concept of nature, and therefore never had to free themselves from it²⁷⁵. They distinguish themselves in the sense that they have never been modern; we can therefore use them as models.

Similarly, Donna Haraway asserts that we must emancipate ourselves from the “unitary matrix of nature”²⁷⁶, which perpetuates modernity’s systems of domination. Understood as an entanglement of humans and machines, the “Cyborg”, with its ability to exist on the borders, promises a way out of dualism. Bruno Latour’s reversal between “actor” and “décor” echoes Donna Haraway’s definition of the Cyborg through which the reversal of these elements is meant to lead them to merge. Not only are “form” and “content” reversed, they are also meant to be mixed together, thus blurring borders between humans and non-humans. We will start by examining the ways in which the reversal between “actor” and “décor”, as proposed by Bruno Latour, takes on various shapes within the field of art.

B. The manifestations of this reversal in the visual art field

Nancy Holt

Nancy Holt, who was born in 1938 in Worcester (Massachusetts) and died in 2014, is a major figure of Land Art. She was first and foremost a photographer and worked in outside spaces. In the second part of the 1960s, questioning our perception of space and time, she created monumental works that seek to reflect the natural landscape without damaging it. Her projects, which are in harmony with the environment, reach for a greater consciousness of space, of our own visual perception, and of the order of the universe. Nancy Holt’s works evoke the passage of time, often

²⁷⁴ LATOUR Bruno, AIME - *An Inquiry into the Modes of Existence*, Web-Platform: <http://modesofexistence.org/>, 4 – *Learning to make room*, [rep], Nature.

²⁷⁵ VIVEIROS DE CASTRO Eduardo & DANOWSKI Deborah, *Ibid.*, p. 282.

²⁷⁶ HARAWAY Donna, *A Cyborg Manifesto, Science, Technology, and Socialist-Feminism in the Late Twentieth Century*, in: *Simians, Cyborgs and Women: The Reinvention of Nature*, New York, Routledge, 1991, p. 149-181.

creating an intimate relationship with nature, especially with the sky, inviting us to turn towards the moon and the stars.

In 1968, Nancy Holt explored Western deserts with her husband, Robert Smithson. The *Sun Tunnels* project (1973-1976) was developed in 1973 in Amarillo during the planning of the *Amarillo Ramp*'s construction²⁷⁷. Nancy Holt acquired a field in the North-west of Utah, where she had four immense concrete pipes – 6 meters long and 2.5 meters high – installed. The four cylinders were arranged in this deserted landscape in such a way as to be facing each other in pairs, while a circle, cemented on the ground's surface, marked its centre. Nancy Holt's sculptures are oriented according to the winter and summer solstices. Over about ten days, the sun rises in the Southeast pipe and can also be seen through the Northwest pipe. During the summer and winter solstices, the sunrise and the sunset thus appear in the alignment of the cylinders. The cylinders' surfaces comprise holes combined to form constellations: Cancer, Capricorn, and so on. Each cavity's size is proportional to the scale of each star and creates a stain of light that shifts, following the sun's movements by day and those of the moon by night. Through this, one can witness a reversal of the sky: the stars being projected as light stains on earth, inside a tunnel; the night persisting throughout the day, constellations being projected through solar radiation.

In the middle of this deserted landscape, scattered with ageless rocks, Nancy Holt's work seems to be timeless. It reminds us of the feeling of belonging to the Earth's system and of our ability to perceive our planet in relation to the cosmos. By walking on a ground that has never been trodden, in a place devoid of any human convention, one experiences an Earth in motion. This experience foregrounds the work, the Earth is the protagonist, and humans are its witnesses. Although it is possible to frame the landscape through the tunnels installed by Nancy Holt, the spectacle only makes sense in relation to the axis of the sun and the displacement of the stars. According to the artist, it was important for the colour and the substance of the work's elements to be similar to those of the field they belong to. The work had to be massive and heavy, which could only be achieved through the use of concrete. The weight of the work – 22 tons – aims to convey an impression of permanence²⁷⁸. It seems important to note that this project, through which Nancy Holt projected the stars onto the Earth, was already complete in 1974 at the time of her intervention at *Art Park*. Her project *Hydra's Head* consisted of a series of wells made of cement, following the Hydra stellar constellation. Each well's distinct diameter matched the light of a star.

²⁷⁷ A project by Robert Smithson.

²⁷⁸ TIBERGHIEU Gilles A., *Land Art*, Dominique Carré Éditeur, Paris, 2012, p. 206.

In this work, Nancy Holt references an Indian legend in which waterholes were seen as “the eyes of the earth”. Similarly to *Hydra’s Head*, the *Sun Tunnels* appear to be in harmony with the spatiotemporal situation of their environment, which they reflect. Both the arid landscape that surrounds them and the solar system play the roles of protagonists. Here, we witness a reversal of the relationship between “actor” and “décor” insofar as these works make the cosmos the main actor of the artistic situation. Moreover, while the work is conceived as “site-specific”, its understanding is determined by a singular perspective, implying a situated aesthetic.



Figure 21. Nancy Holt, Sun Tunnels, 1973-1976

Robert Barry

Born in 1936 in New York, Robert Barry is one of the pioneers of conceptual art. Since the 1960s, he has constantly sought to push the limits of the art object's physical reality. The question of materiality is at the core of his creative concerns. Since 1968, he has been producing immaterial works, following a radical approach. He experiments with immaterial scientific phenomena, such as electromagnetic fields, inert gas, or ultrasound electromagnetic frequencies. With *Carrier Wave* (1968), he produced radio waves, then, with *0.5. Microcurie Radiation Installation* (1969), he released radiation in an empty gallery. Robert Barry is interested both in the materiality of objects and their context. The gallery and its codes often become the material of the work.

In 1969, Robert Barry released noble gases such as argon, helium, xenon and krypton into the atmosphere. Thus, on March the 3rd, 1969, a litre of krypton was released into the atmosphere in Beverly Hills; on March the 4th, a quarter of a litre of xenon was released onto the Tehachapi highway and a litre of argon was also released on a beach in Santa Monica on the same day. Finally, on March the 5th, 56 litres of helium were released into the atmosphere. Robert Barry defines this action as a sculpture insofar as these inert gases do not change physically, which makes it possible to consider them as unified wholes. Furthermore, Robert Barry insists on the cyclical dimension of his action: since the gases come from the atmosphere, they are part of the air we breathe. The work is also entirely conceptual since it cannot be visualised; its infinite swarm of molecules can only be grasped through our imaginations.

Infinity has always been a subject of interest for Robert Barry, who sees time as the essence of his work. In this sense, *Inert Gas Series* echoes the artist's primary concerns, both through the continuous expansion of the gases in the universe and through their strictly indeterminate lifespan. Releasing those gasses in the open air, instead of in a gallery space, is also a significant choice. Lending a specific significance to each place was important to Robert Barry. With the xenon released on the highway of Tehachapi, he alludes to the 1941 movie *The Maltese Falcon* by John Huston. In this film, the endless quest for a statuette of great value results in disappointment when the characters realise that the object is a counterfeit. When questioned by the police, they eventually describe the object of their quest as "the matter dreams are made of". According to Robert Barry, art, in its elusive dimension, is similar to this phrase and adopts a different meaning for everyone²⁷⁹.

²⁷⁹ COPELAND Mathieu, *Les idées viennent des objets, interview with Robert Barry*, in: *Vides*, catalogue d'exposition, Centre Pompidou, JRP/Ringier, 2009, p. 82.

This is why he decided to spread one of the pieces of *Inert Gas Series* on the highway that leads to the prison of Tehachapi in the film.

In 1969, Robert Barry deliberately refused to exhibit his work *Inert Gas Series*, although he made sure to distribute posters about the action. Photographs corresponding to each site where gas was released also remain and are accompanied – when exhibited – by the enigmatic phrase: “Something of which I was formerly aware and that I forgot”. These photographs are the only trace of the “situated” dimension of the action, of the perspective and the viewpoint that it involved at the time of its creation. By releasing gases that don’t mix with the air, Robert Barry adds matter to the environment – a gas which itself is natural – which never lets itself be seen. Although invisible, the inert gas occupies the position of the protagonist. We thus witness a reversal between the traditional positions of “actor” and “décor”, the invisible gas holding centre stage while the artefact literally disappears.



Figure 22. Robert Barry, Inert Gas Series, 1969

Yoko Ono

Born in 1933 in Tokyo, Yoko Ono is a member of the New York avant-garde gravitating around John Cage in the 1960s as well as part of the Fluxus movement. She develops a practice in which poetry, performance, cinema and experimental music merge.

In 1966, Yoko Ono produced a video work entitled *Sky Tv*. In it, a camera placed on the roof of the exhibition space transposes live images of the sky onto a monitor placed inside the gallery. The relationships between “form” and “content”, “actor” and “décor” are reversed, to the extent that the natural elements appear as the protagonists of the aesthetic situation. With regard to *Sky Tv*, Yoko Ono’s only comment was: “I wanted so desperately to have a sky in my apartment”²⁸⁰. *Sky Tv* reflects the conceptual approach of the artist, according to which the idea becomes the subject of the artwork. This work is one of the very first video installations in art history²⁸¹. It is created right after the emergence of the “Sony Portapak”, the first portable camera, in a context in which the television industry controls all broadcasting. The surveillance cameras that we know today will appear decades later. *Sky Tv* is a precursor of video works that use auto-reflexive technologies, transposing reality in an immediate manner; these works emerged at the end of the 1960s and at the beginning of the 1970s.

The television’s small screen is a limited tool to capture celestial immensity. Yoko Ono deliberately plays with this incompatibility and approaches the television screen as one would a window. Yoko Ono’s choice not to turn the camera towards the spectator, turning it instead towards the sky, thus forgoing the individual’s contemplation in favour of that of the infinite universe, is significant. Regarding the sky, in 1971, Yoko Ono writes about her wish to see “sky machines” at every street corner instead of Coke vending machines: “we need more skies than coke”²⁸². The sky theme reminds us of Yves Klein’s work. In 1946, he claimed the Mediterranean sky of Nice as his first monochrome. *Sky Tv* combines several media: sculpture, image and video installation. There is a tension between the ultra-modern technological tools Yoko Ono chose to use and the traditional

²⁸⁰ Images of the sky appear in the work of Yoko Ono from the beginning of the 1960s. The sky is the subject of *Painting for the Skies* (1962) and *Sky Event for John Lennon* (1968). In 1966, cards entitled “sky” were sold through her “Sky Dispenser”. *Sky Tv* relates to *Apotheosis* (1970), a film she produced with John Lennon and, more specifically, to *Painting to See the Skies* (1961), a canvas with a hole in it, through which visitors could see the sky.

²⁸¹ The first artist who used moving image technology in an art context was the Korean artist Nam June Paik, who, like Yoko Ono, was involved in the Fluxus movement. The two artists worked closely together in the 1960s and both took part in the avant-garde festival organised by Paik’s collaborator Charlotte Moorman.

²⁸² ONO Yoko, in: *Yoko Ono, Half A Wind Shown, A Retrospective*, Edition Ingrid Pfeiffer & Max Hollein, Exhibition Catalogue, Schirn Kunsthalle Frankfurt, 2013, p. 25.

Western conception of the painting as a window upon the world. This idea dates back to Leon Battista Alberti's text, *De Pictura*, published in 1435²⁸³.

With *Sky Tv*, Yoko Ono alludes to this Western tradition of painting. However, she encourages spectators to transcend the limits of their vision by undergoing a truly meditative experience. Faced with this natural element, which opens onto infinity, viewers are reminded of their status as integral parts of the cosmos. The experience of *Sky Tv* thereby echoes the movement between interior and exterior, which is a major aspect of Oriental architecture, through its spiritual dimension. The television, this fixture of daily life, is used as a shell welcoming the projection of infinite imagination.

Instead of prescribing a dogmatic interpretation of her work, Yoko Ono invites us to look beyond ourselves. We are thus free to choose in which way we wish to respond to the work of the artist. Upon entering the exhibition's interior space, visitors are presented with an exterior space. The piece thereby orchestrates a reversal between the background of human action – the sky – and the presumed actor of a museum situation – the artwork. One expects to encounter an artefact and is instead presented with the experience of a natural element, which appears as the protagonist of the aesthetic situation. In that sense, the work echoes Bruno Latour's idea²⁸⁴ that we are witnessing a reversal between “form” and “content”, “décor” and “actor”, with nature taking centre stage in the scene of our existence. Questions of viewpoint are also essential here, with Yoko Ono's choice of a specific perspective, which implies a situated aesthetic.

²⁸³ According to Alberti, a painting is like a window through which one can see the world.

²⁸⁴ LATOUR Bruno, in: *Les Grands Entretiens*, Ibid.



Figure 23. Yoko Ono, Sky Tv, 1966

Didier Marcel

Born in 1961 in Besançon, Didier Marcel²⁸⁵ lives and works in Dijon. He creates works that offer a generic experience of fragments of nature. Questioning the relationship between humanity and its *Umwelt*, he continuously plays with the natural and the artificial through models, mural sculptures and installations. While developing major questions about human intervention in the environment, Didier Marcel engages with a domesticated form of nature. He selects fragments of nature that carry traces of human labour, reproducing them through various moulding techniques, before placing them in the museum space. In seeking to “archive” the real, Didier Marcel develops a very personal relationship to the banal and ordinary. Meanwhile, the human being remains absent from his exhibitions.

Didier Marcel started developing his sculpture series, *Labours*, in 2006, following the Museum of Strasbourg’s invitation to take part in a “project room”. The *Labours* construction process starts with making a plaster impression – of a surface of 300 x 200 cm – in a ploughed field, in order to produce a positive in coloured silicon. This first finished version of the *Labours* was presented on the gallery’s floor, within a frame including ten polished stainless steel feet. A mould produced with the same cast was later used to create three identical mural prints made of acrylic resin. These works, each of which weighs 200kg, were hung like paintings, although the artist sees them as sculptures. They feature an astonishingly realistic soil surface. In November 2008, the artist made a new impression of a more finely ploughed clay soil. This incredibly detailed piece seemed to transform the furrows into strikingly detailed ornaments.

Each sculpture is a unique fragment that challenges landscape representation. The object thus produced appears as the result of an “adhesion”, of the original contact of a “material reproducing the material”²⁸⁶. The soil is then immobilised through the use of synthetic resin within the sculpture, thus preserving its natural state, following a quasi-photographic process. Thus, the *Physis* holds in the artificial. The *Labours*’ surfaces are fascinating and uncanny representations of biological reality.

²⁸⁵ Didier Marcel graduated from the School of Fine Arts of Besançon (1985) but also from University Paris I (1987) and from the Institut National des Hautes Etudes in visual arts in Paris (1989). His work is subjected to major personal exhibitions, at the MUDAM (Luxembourg) in 2009, at the Museum of modern and contemporary art of Strasbourg in 2006, or at the MAMCO in Genève in 2005. He was laureate 2008 of the international contemporary art price of the Fondation Prince Pierre de Monaco and was named for the Marcel Duchamp price the same year.

²⁸⁶ DIDI-HUBERMAN Georges, *La ressemblance par contact, archéologie, anachronisme et modernité de l’empreinte*, Les Éditions de Minuit, Paris, 2008, p. 131. (my translation)

The ploughed field is transposed with infinite precision to produce a kind of three-dimensional illusion. Didier Marcel's use of moulding seems to create a non-style and lend an unreal quality to the *maniera*. His anonymous mimetic approach invites us to experience the meaningfully minimal distance that separates us from the motif. Conscious of this unprecedented closeness between the world and its representations, Didier Marcel moves towards a kind of radical realism, reaching for an ultimate degree of resemblance. In introducing the immediacy of photography²⁸⁷ into the process of moulding, he explores the edges of mimesis. Jean Baudrillard points to "the collapse of reality in hyperrealism", evoking a form of art through which "reality evaporates"²⁸⁸. Despite being reproduced in great detail, the motif remains elusive, maintaining a form of enigmatic alterity.

By introducing the facsimile of a fragment of nature carrying the traces of human labour into the exhibition space, Didier Marcel blurs the borders between the natural and the artificial. Through a reversal of perspective²⁸⁹ – in other words, of the gaze's focus – he creates a striking experience, which excludes the possibility of a realistic viewpoint. Through his *Labours* series, Didier Marcel presents us with the "return of a ground" and its specific iterations. While artistic approaches of the past guide us towards new horizons, through utopia – which originally means "without ground" – we are now faced with multiple locally situated "anthropo-histories"²⁹⁰. In this sense, Didier Marcel's technique of impression fits within the search for a regional or local ontology. Furthermore, the natural element, this fragment of a ploughed field, acts as the protagonist of the aesthetic situation created by the artist.

²⁸⁷ BARTHES Roland, *La Chambre Claire, Note sur la photographie*, 1980, Éditions Gallimard / Éditions du Seuil, « Cahiers du cinéma », p. 120-121

²⁸⁸ BAUDRILLARD Jean, *L'Hyperréalisme de la simulation*, in *L'Échange symbolique et la mort*, Paris, Gallimard, 1976, p. 110-117. (my translation) / *Hyper-realism of Simulation*, in: *Symbolic Exchange and Death*, SAGE Publications Ltd, 2016

²⁸⁹ When the work is hung on a wall as one would a painting.

²⁹⁰ BONNEUIL Christophe & de JOUVANCOURT Pierre, *Ibid.*, p. 105. (my translation)



Figure 24. Didier Marcel, Labours, 2006-2008

Conclusion

As has been demonstrated in this chapter, environmental crises follow a slow and progressive process involving situated events. At the beginning of the 70s, Bas Jan Ader was struck by extreme manifestations of unrelenting nature. In 1971, he performed *Farewell to Faraway Friends*, a piece in which he stood in front of the ocean, establishing a time of suspension and contemplation. This image echoes a famous painting by Caspar David Friedrich, *Der Mönch am Meer / The Monk by the Sea* (1808-1810). Through this work, Bas Jan Ader produced a local angle of perception, involving a slowing down through a form of reverence and establishing nature as a crucial element of the scene.

In this second chapter, we have adopted Christophe Bonneuil and Pierre de Jouvancourt's expression: "locally situated anthropo-histories"²⁹¹. This phrase evokes the invention of new ways of telling the stories of the events we are experiencing and of replacing the idea of environmental rupture with that of a slow and progressive process, a "slow violence"²⁹².

Isabelle Stengers' call for a form of slowing, both in the context of science and, more generally, of thought, introduces this chapter. This idea involves establishing a time of suspension, taking the time to think in order to act differently. In an art context, this slowing down echoes the moment of contemplation spent with an artwork. According to "Slow Art" tenets, the work itself induces a time of suspension and contemplation. In dealing with the "intrusion of Gaïa"²⁹³, Isabelle Stengers urges us to slow down, which leads us to practice "involution"²⁹⁴. Involution, which entails neither progression nor regression, always creates a relationship between two heterogeneous beings. It is also a matter of "thinking through the middle"²⁹⁵, that is to say, thinking "between". Slowing down and forging involutive alliances are both necessary steps towards repopulating the "devastated desert of our imaginations"²⁹⁶. Echoing this injunction, Cildo Meireles' *Marulho* (1991) is characterised both by a moment of reverence and contemplation, and the evocation of the Earth's people gathered in front of the ocean.

²⁹¹ BONNEUIL Christophe, JOUVANCOURT de Pierre, *Ibid.*, p. 61. (my translation)

²⁹² DANOWSKI Déborah, VIVEIROS DE CASTRO Eduardo, *Ibid.*, p. 123. The expression is also introduced by Rob Nixon in his book: NIXON Rob, *Slow Violence and the Environmentalism of the Poor*, Harvard University Press, 2011

²⁹³ STENGERS Isabelle, *Au temps des catastrophes*. *Ibid.*, p. 48. (my translation)

²⁹⁴ STENGERS Isabelle, *Penser à partir du ravage écologique*, in: HACHE Émilie, *Ibid.*, p. 180-181.

²⁹⁵ STENGERS Isabelle, *Au temps des catastrophes*, *Ibid.*, p. 110. (my translation)

²⁹⁶ *Ibid.*, p. 118. (my translation)

The second section of this chapter presented a range of ways of acquiring a situated knowledge of environmental crises. This led us to address Sandra Harding's notion of the "standpoint"²⁹⁷, as well as Donna Haraway's idea of "situated knowledge"²⁹⁸. Producing a situated knowledge of the environment requires a new form of attention involving a new "ethics of perception"²⁹⁹. These reflexive practices echo a range of site-specific artworks, which have developed from the 70s until the present day. Producing situated narratives involves becoming "attentive" or even "considerate"³⁰⁰ with regard to environmental matters. This requires developing a new form of attention, a new political ecology of our attentional capacities³⁰¹. We need an "ethics of perception"³⁰² to surpass the economy of attention. Furthermore, the making of knowledge requires the establishment of an ethnography of laboratories through the practice of "science studies", in order to allow scientific institutions to retrieve their legitimacy. In his *Inquiry Into The Modes Of Existence*, Bruno Latour demonstrates that knowledge is characterised by an ontological pluralism, in other words, by a regional or local ontology.

Following this, we examined the necessity of mourning for the image of the globe as presented by Mercator³⁰³, that is to say, a world that is entirely in our control. The image of the globe appears as the symptom of what the Moderns suffer from, in other words, the belief that the world is an infinite reservoir of resources at their disposal. We must then replace the image of the sphere with that of a loop. While the sphere has no beginning or end, the loop starts from a specific point and returns to it. It thus embodies a possible awareness, the feeling our actions can "fall back on us". The *Nuage Vert* project (2008-2010) makes this awareness possible.

In our final section, we followed Bruno Latour's thinking regarding the contemporary reversal of "actor" and "décor", "form" and "content", with nature becoming the protagonist of our history³⁰⁴. This idea urges us to learn to see what is happening at the back, in the background of human action. We are brought face to face with a community of non-humans claiming their place in the foreground of history. Nancy Holt's *Sun Tunnels* is a work in which nature adopts the role of the

²⁹⁷ HARDING Sandra, *The Science Question in Feminism*, Ithaca, Cornell University Press, 1986

²⁹⁸ HARAWAY Donna, *Situated Knowledge: The Science Question in Feminism and the Privilege of Partial Perspective*, Feminist Studies, volume 14, n°3, p. 575-599, 1988, in: *Simians, Cyborgs, and Women: The Reinvention of Nature*, Free Association Books, London, 1991, p. 188-191

²⁹⁹ LAUGIER Sandra, *Ibid.* p. 257. (my translation)

³⁰⁰ *Ibid.*, p. 252.

³⁰¹ CITTON Yves (Dir.), *Ibid.*, p. 28.

³⁰² LAUGIER Sandra, *Ibid.*, p. 257. (my translation)

³⁰³ LATOUR Bruno, *L'Anthropocène et la destruction de l'image du globe*, *Ibid.*, p. 45.

³⁰⁴ LATOUR Bruno, *How to make sure Gaia is not a God of Totality?*, *Ibid.*, p. 1.

protagonist. Furthermore, Latour invites us to become sensitive to the “return of a ground”, with the multiplicity of its particular iterations.

With *A Line Made by Walking* (1967), Richard Long performs a minimal intervention on the landscape, tracing a line across a clearing through the simple act of walking. Drawing a line recalls the origins of artistic creation, mark-making as the principle of art itself. This line, drawn across the ground, appears then as the primitive impression of the relationship between humans and the earth. Richard Long’s interventions are ephemeral, destined to disappear. However, *A Line Made by Walking* recounts a local action through which nature takes on the role of the protagonist.



Figure 25. Richard Long, A Line Made by Walking, 1967

In order to invent new stories about our world, we must radically change our attitudes, slow down and experience involution, strive to attain situated knowledge, mourn for the image of the globe, establish the reversal between “actor” and “décor”, “form” and “content”. Adopting these new attitudes to our environment should allow us to “get over the epic”³⁰⁵ and to start repopulating our imaginations. Furthermore, “site-specific” artworks allow us to experiment perspectivism in a specific way. In his analysis, Miwon Kwon³⁰⁶ describes site-specific work as above all “situated”, involving a viewpoint that relies on its context.

Each of the works we have looked at in relation to Bruno Latour and Isabelle Stengers’ thinking establish a specific perspectivist system, a particular regime of perception. They involve a mode of perception that echoes “locally situated anthropo-histories”. While images take part in the production of knowledge of environmental crises, we must also remember that “images do not owe their efficiency solely to the transmission of knowledge. On the contrary, their efficiency intervenes in the entanglement of knowing and not-knowing”³⁰⁷. Thus, what is at stake is “not seizing the image but letting ourselves be seized by it, and thus relinquishing our knowledge of them”. After our initial stupefaction, triggered by an aesthetics of the sublime, after having analysed the conditions of the creation of situated knowledge, we can now study the beings involved in environmental crises in their co-dependence.

³⁰⁵ BONNEUIL Christophe, JOUVANCOURT de Pierre, Ibid.

³⁰⁶ KWON Miwon, *One Place after Another, Site-Specific Art and Locational Identity*, MIT Press, 2004

³⁰⁷ DIDI-HUBERMAN Georges, *Devant l'image*, 1990, Les Éditions de Minuit, Collection Critique, 2016, p. 25. / *Confronting Images: Questioning the Ends of a Certain History of Art*, Paperback Edition, 2004

CHAPTER 3 – Co-dependence

Introduction

Gego (1912-1994), a German artist who moved to Venezuela in 1939, used threads or thin sticks made of steel to develop complex shapes she called “reticulars”, in other words, “nets of little meshes”. Those fragile lines twist into each other, spread out like organic elements, following their own rhythm. Each element is connected to the others, allowing the work to form a plural structure and establish a state of co-dependence.

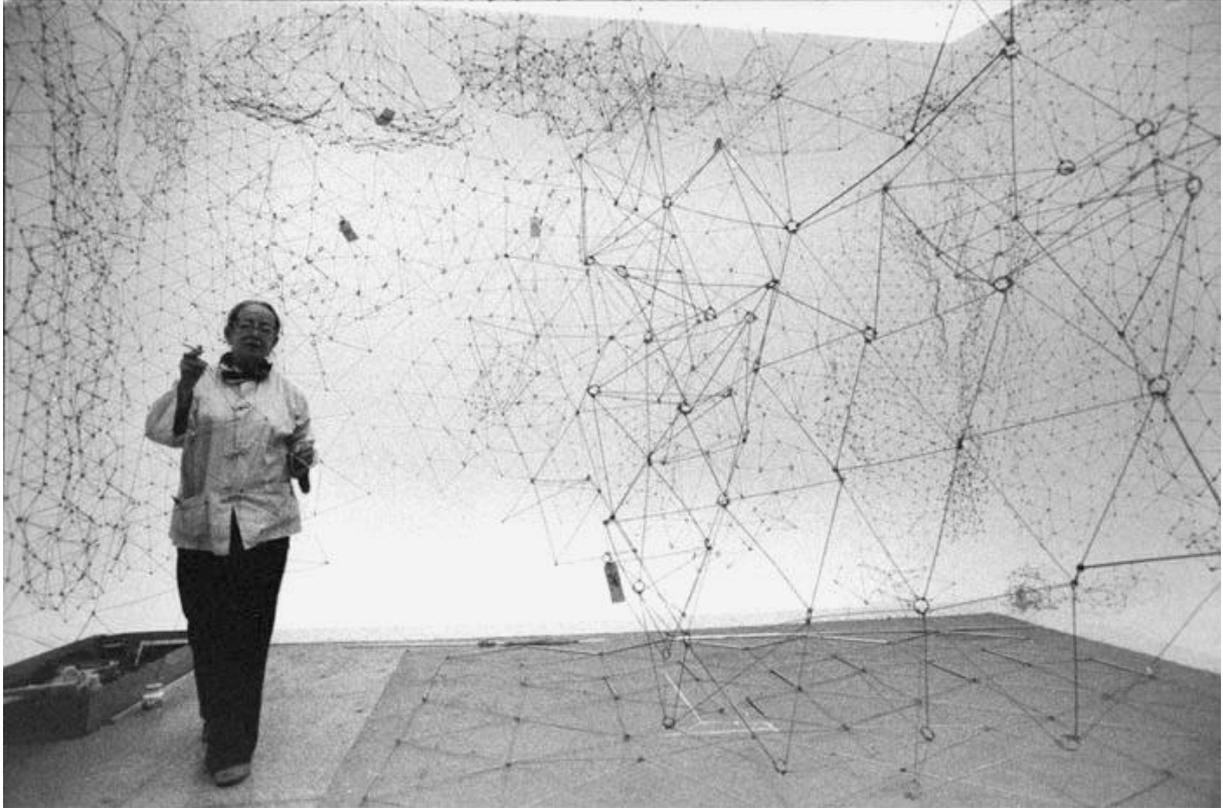


Figure 26. Gego, Reticulárea, 1969

In the previous chapter, we examined the extent to which it is possible to produce knowledge of environmental crises in line with local and situated situations. However, the beings we have encountered in the course of our reflection appear to establish a kind of co-dependence. What is the nature of this “co-dependence? All beings exist and continue to do so through a network of other beings to which they are attached. To define a being or a situation, we should not start from what they are, nor describe them per se. Instead, we should describe what they require to exist: the animal and its vegetal resources, its interspecific relationships, all the things that make its world habitable. This third chapter will examine the beings involved in the environmental crises and their state of co-dependence with other beings. This is what allows for the development of “an ecological balance between a population and its environment”³⁰⁸.

In 1920, Alfred North Whitehead rejected the theory according to which “things” exist independently³⁰⁹. Instead, he believed that “things” establish permanent links, connect, and disconnect, to form new units. Alfred North Whitehead calls this unifying process, this passage from the multiple to unity “conrescence”. Each “conrescence” leads to the entanglement of physical and metaphysical elements. Thus, all these elements evolve in a state of mutual co-dependence. Alfred Whitehead’s ideas allow us to approach the co-dependent relationships between the beings that we observe.

Moreover, Michel Serres highlights that we have lost our world and our control over “nature”, that is to say, the power celebrated at the beginning of the scientific and technical age. Today we have to create a “natural contract of symbiosis and reciprocity”, comprising nature as “our host, our symbiote”³¹⁰. Indeed, we are in a state of dependence with this host, the Earth, which appears to us as a being that “could very well exist without us”, whereas “we cannot exist without it”³¹¹. We should thus “place the things at the centre and us at the periphery, or better, them everywhere and us inside them, like parasites”³¹². According to Michel Serres, we are in a co-dependent relationship with the Earth, our host.

In their text *L’Arrêt de Monde*, Eduardo Viveiros de Castro and Deborah Danowski evoke different myths of the end of time, especially those driven by the notion of Anthropocene. They thus

³⁰⁸ AFEISSA Hicham-Stéphane, *Ibid.*, p. 81. (my translation)

³⁰⁹ WHITEHEAD Alfred North, *Ibid.*

³¹⁰ SERRES Michel, *Ibid.*, p. 67. (my translation)

³¹¹ *Ibid.*, p. 60.

³¹² *Ibid.*

approach the concept of the “Anthropos” that conveys an idea of humanity as an undifferentiated species: “The macrophysical impact of humans is an example of this ontological inseparability between form and content, the ‘living’ and their ‘environment’”³¹³. The grand narrative embodied by the Anthropocene thereby demonstrates the deep human dependence on non-humans. It is therefore impossible to consider humankind without considering its natural environment and more generally impossible to consider a being without taking its surroundings and that which makes its survival possible into account.

Bruno Latour proposes to adopt Lovelock’s Gaïa theory³¹⁴. The latter asks the following questions: how is the Earth active? How does it respond to the collective actions of humans? However, in discussing Gaïa, we must endeavour to explore connexions “without seeking totality”, in other words, without being holistic. Indeed, Gaïa is fundamentally multiple and local. In Phillip Conway’s words, “there is only one Gaïa, but Gaïa is not one”³¹⁵. Gaïa Theory can be praised for its way of putting an end to the idea of a pre-established balance of nature: “Gaïa survives thanks to the types of connexions that are historically established between the various agents that compose it”³¹⁶. Gaïa appears as an active being, both multiple and discordant.

How can we define Lovelock’s thinking? According to him, each organism manipulates what surrounds it “for its own interest”³¹⁷, the question being the nature of these interests. These interactions produce “waves of action”³¹⁸ which are neither tied to boundaries nor fixed scales: “Since all the living agents consistently follow their intentions by modifying their neighbours as much as possible, it is impossible to identify the environment that the organism adapts to or the point in which its action begins”³¹⁹. In order to define Gaïa, we should thus follow these waves of action, wherever they lead us. According to Timothy Morton, we should strive to become “fully conscious of the way humans are connected to other beings, animals, vegetables or minerals”³²⁰. This is how one should “think about democracy”³²¹. Morton evokes the notion of “strange strangers” that are connected to one another and determine democracy’s fundamental aspect of co-existence.

³¹³ DANOWSKI Déborah, VIVEIROS DE CASTRO Eduardo, *Ibid.*, p. 301-302. (my translation)

³¹⁴ LOVELOCK James, *Gaia - A New Look at Life on Earth*, 1979, OUP Oxford, 2000

³¹⁵ CONWAY Phillip, in: LATOUR Bruno, *Face à Gaïa*, *Ibid.*, p. 130. (my translation)

³¹⁶ AFEISSA Hicham-Stéphane, *Ibid.* p. 97. (my translation)

³¹⁷ LATOUR Bruno, *Face à Gaïa*, *Ibid.*, p. 131. (my translation)

³¹⁸ *Ibid.*, p. 135.

³¹⁹ *Ibid.*, p. 134.

³²⁰ MORTON Timothy, *The Ecological Thought*, Harvard University Press, 2012, p. 7.

³²¹ *Ibid.*, p. 20.

In this chapter, we will start by approaching Bruno Latour's first essay, *Où Atterrir?*³²². Latour presents the notion of "terrain of life" as the set of conditions for a being's survival. We will study the way Latour invites us into a specific form of co-dependence, necessary to the subsistence of studied beings. We will go on to examine three books by three different authors, each of which considers the notion of co-dependence in a specific way. In *The Mushroom at the End of the World*, Anna Tsing considers different modes of collaboration between humans and non-humans in the ruins of capitalism. With *Comment la Terre s'est Tue*³²³, David Abram invites us to establish an interactive relationship – close to animism – with our natural environment. Finally, in his essay *La Vie des Plantes / The Life of Plants: A Metaphysics of Mixture*, Emanuele Coccia demonstrates how plants are at the origin of our world, a world of continuous regeneration, the endless beginning of which "is constantly repeated everywhere in the world"³²⁴. We will then explore visual expressions of these notions in the field of contemporary art. We will attempt to connect these different lines of thought to artworks so as to examine them through an experiential lens.

I. Terrains of life

In his essay *Où Atterrir? Comment s'Orienter en Politique?*³²⁵, Bruno Latour takes the election of Donald Trump, on November the 11th 2016, as an opportunity to connect three phenomena, the links of which are not, at first, easy to grasp. Following the "victory against communism" at the start of the 1990s, which marked the beginning of what has since been called "deregulation" and proceeded to progressively taint the meaning of the word "globalisation", inequalities began to rise across the world. A systematic negation of the existence of climate change began to develop simultaneously. These three phenomena seem to be symptomatic of the same historical situation. Latour highlights that the elite's awareness of global warming dates back to the end of the 1980s. The development of a new Climate Regime came with the realisation that the planet might not survive long enough for the dream of modernisation to come true. Nevertheless, this very elite endeavoured to deny global warming and proceeded to take hold of wealth in order to take refuge outside the world. Trump thus withdrew from the Paris Agreement on climate change, promising wealth and

³²² LATOUR Bruno, *Down to Earth: Politics in the New Climatic Regime*, Polity Press, 2018

³²³ ABRAM David, *The Spell of the Sensuous: Perception and Language in a More-Than-Human World*, Pantheon Books, 1996

³²⁴ COCCIA Emanuele, *La vie des plantes, Une métaphysique du mélange*, Bibliothèque Rivages, Paris, 2016, p.1. (my translation) / *The Life of Plants: A Metaphysics of Mixture*, 2018, Polity Press.

³²⁵ LATOUR Bruno, *Down to Earth: Politics in the New Climatic Regime*, Polity Press, 2018

prosperity for America alone, and closed its borders. Great Britain's withdrawal from the European Union followed a similar movement. Latour goes on to outline a survival alternative, illustrated by a series of sketches. He examines the axis of progress, tightly drawn between the modern "Global" ideal and the "Local" pull of our connection to land. Latour adds a third pole he defines as "Terrestrial", which could allow the local to open up and the global to call its infinite ambitions into question. Latour seeks to combine attachment and detachment: we must both forgo the illusion of a "Great Outside" and that of boundaries: "The ground allows us to become attached, the world allows us to become detached. Attachment frees us from the illusion of a Great Outside; detachment frees us from the illusion of boundaries"³²⁶. The objective is first to become aware of a common challenge – that of losing the Earth –, and to then transform the world into a common world we can all share. In the last part of his essay, Bruno Latour evokes the notion of "terrain of life", allowing for existence as a people. Describing an earthling's "terrain of life" entails establishing a list of what it needs to survive and "therefore, what it is ready to guard, if needed, with its life"³²⁷. Latour makes a distinction between the system of production and the system of engendering; the system of engendering must have the upper hand, although it involves a specific difficulty insofar as "animated beings constantly overlap and intertwine"³²⁸. In order to define our terrains of life, we must know how many other beings we need to survive. Each being must also adopt a specific way of differentiating between that which is global and local so as to understand its entanglement with others³²⁹. This monitoring crosses all scales of space and time, reaching beyond any form of classical spatial, legal, administrative, and geographic unity. Territory does not limit itself to a single kind of agent: it encompasses a group of animated beings for which presence is vital to the survival of an earthling³³⁰. Through the notion of "terrain of life", Bruno Latour introduces a specific mode of co-dependence.

Tomas Saraceno

The situation of co-dependence that draws us to our "terrain of life" seems to be reflected by Tomas Saraceno's practice. From September 2011 to January 2012, Tomas Saraceno exhibited a vast installation, occupying the entire space of the great hall of the Hamburger Bahnhof museum in Berlin. The artist merges art, architecture and science, to produce a collective experience. Among

³²⁶ LATOUR Bruno, *Où Atterrir? Comment s'orienter en politique*, La Découverte, Paris, 2017, p. 118. (my translation)

³²⁷ Ibid., p. 120-121.

³²⁸ Ibid., p. 106.

³²⁹ Ibid., p. 118-119.

³³⁰ Ibid., p. 121.

other things, Saraceno's work is inspired by utopian projects like those developed by Richard Buckminster Fuller during the 20th century. Moreover, Saraceno is fascinated by particular properties of scientific phenomena, such as spider webs and soap bubbles, as well as by recent scientific discoveries. This leads Katharina Schlüter to use the term "biomimetic"³³¹ when referring to this aspect of his installations. Katharina Schlüter mentions that Otto Schmidt coined this term in the 1950s. It refers to new developments, technologies and projects that imitate natural processes and structures. As installations or sculptures, the works of Saraceno are "biomimetic" constructions, works in which the artist incorporates and adapts natural principles.

Saraceno installed about twenty balloon-shaped works he calls "biospheres"³³², that is to say, spaces containing life, in the space of the Hamburger Bahnhof. These "biospheres", conceived initially as autonomous works, were gathered there and connected for the first time. As a result, the entire great hall of the Hamburger Bahnhof itself looked much like a gigantic biosphere composed of balloons of different sizes, held by a network of cables and nets. Some of them contained only a little water, while others, such as *Biosphere 05* or *Biosphere 06*, were actual hanging gardens suspended in the air. In *Biosphere 06*, the biological system of a Tillandsia plant lives inside an acrylic sphere, regularly watered through a pump system. This system is based on the phenomenon of symbiosis, which informs most of Saraceno's works. Following the principle of symbiosis, the artist establishes systems of co-dependence, often including the long-lasting association of two specific organisms, each of which is considered a "symbiote". Among the spheres that compose the installation, two are accessible to the public. *Observatory, Air-Port-City* (2008) is comprised of a geodesic dome based on parameters developed by Buckminster Fuller. One can sit inside it or lie down on inflatable cushions and observe and interact with its environment, all while experiencing something close to flying. Moreover, one can experience the sculptural dimension of other works, such as *Large Iridescent Planet* (2009): an object covered in iridescent foil.

The motif of the cloud is an essential element of Saraceno's practice: the metaphor of the cloud evokes a sustainable development of the human environment, an environment that is not limited to the earth but devised to reach other spaces. The Hamburger Bahnhof installation questions notions of space, time, gravity, traditional ideas of urban layout, and the foundations of

³³¹ SCHLÜTER Katharina, *Tomas Saraceno, Cloud Cities*, Exhibition catalogue, Hamburger Bahnhof – Museum für Gegenwart, Berlin, September 2011-January 2012, p. 244.

³³² In theory, the term "biosphere" refers to every ecosystem on Earth, including the atmosphere, hydrosphere, and lithosphere, where life is present. Saraceno uses the term "biosphere" at the reduced scale of his balloon-shaped works. Each balloon embodies a microscopic variation of what we usually call "biosphere".

architecture. In this work, Saraceno creates a spatial system through which the biospheres inhabited by plants or visitors are connected. According to Bruno Latour, Saraceno's exhibition evokes two theories, which can at first seem incompatible, simultaneously: the *actor-network* theory (Latour) on the one hand, and the *Spheres* (Sloterdijk) theory on the other³³³. In sociology, the actor-network theory stands out through its integration of non-humans. They are approached as actors in their own right, as well as entities, without ontological distinction. The *Spheres* theory, for its own part, analyses the emergence of multiple bubbles, which are presented as survival spaces for humans and non-humans. In Saraceno's exhibition, the interdependence established between the works and the notion of biosphere relate to Latour's definition of the concept of "terrain of life", understood as a selection of elements that are vital to the survival of an earthling.

³³³ LATOUR Bruno, *Tomas Saraceno, Cloud Cities*, Exhibition Catalogue, Hamburger Bahnhof – Museum für Gegenwart, Berlin, September 2011-January 2012, p. 229.



Figure 27. Tomas Saraceno, Cloud Cities, Hamburger Bahnhof, Berlin, 2011-2012

Helen Mayer and Newton Harrison

The definition of the conditions of survival of an earthling through its 'terrain of life' echoes the practice of the artist duo Helen Mayer and Newton Harrison. For four decades, Helen Mayer and Newton Harrison have developed a practice driven by a sense of common accountability regarding the natural world. They have established and maintained an ongoing conversation concerning environmental issues with scientists of various fields. The Harrisons are influenced by the conceptual art movement, according to which the primary purpose of art is to make us think, and art cannot be an object in the conventional sense. At the very beginning of the 1970s, Helen Mayer and Newton Harrison developed a set of works entitled "Survival Pieces", which pointed to the ultimate conditions of our being in relation to the world.

At the origin of this series, *Making Earth* (1970) established the foundations of their practice. This project, which literally involved "making earth", was developed through a ritualistic process across four years. Newton dug up leaves, sawdust, sludge, manure, dust, as well as other industrial products. He arranged these elements into seven piles, which he mixed and watered every day. This repeated action became a kind of ritualistic exercise, directly linked to a natural process.

In February 1971, Helen Mayer and Newton Harrison presented *Survival Piece #1, Hog Pasture*, at the Museum of Fine Arts in Boston. The work is composed of a wooden box filled with soil, above which hangs a light of the same shape and size. Newton sows the earth according to Roland H. Shumway's original method, "R. Shumway Seedsman's Annual Hog Pasture Mix". Once the device is put in place, the two artists watch the weeds grow. The artists initially planned to include a hog in the installation, which would have enlarged the natural cycle of the installation and improved the quality of the soil through its manure. The museum, however, declined the Harrisons' request. *Hog Pasture* stands out through its way of establishing the necessary conditions for the survival of a particular ecosystem, destined to welcome hogs.

On the occasion of the exhibition programme "Art & Technology", run by the Los Angeles County Museum of Art (LACMA), Helen Mayer and Newton Harrison presented *Survival Piece #2* (1971). They titled this work "Notations on the Ecosystem of the Western Salt Works with the Inclusion of Brine Shrimp", or *Shrimp Farm* for short. Following a discussion with planktologists Richard Eppley and Michael Mullin – both working in the Food Chain Research Group at the Scripps Institute of Oceanography –, the artist duo devised an experimental ecosystem of micro-algae

(Dunaliella), shrimp (Artemia) and saltwater. This work is placed outside, in front of the museum's main entrance, in four interconnected ponds. The shrimp develop in hypersaline conditions; they feed on algae, following a self-regulated and dynamic system. In these same conditions, algae produce carotene, which transforms the blue-green of the water into pink, orange, and red blooms. Each pond contains algae, water, and a specific amount of salt. The water's colour changes according to the quantity of salt, thus creating an artwork that uses natural systems to develop colourful plains. The shrimp are introduced towards the end of the exhibition, and as they consume the algae, the water's colours disappear. In a broader sense, the work represents a feedback loop, or what the critic Jack Burnham calls "system aesthetics"³³⁴, emerging through the existing relationships between living organisms. *Shrimp Farm* only became a *Survival Piece* later on – at the time, the Harrisons were not aiming to create a series. The work intended to examine the survival of organisms on the scale of a micro-ecosystem.

In 1972, following an initiative of the California State University of Fullerton's gallery, Helen Mayer and Newton Harrison presented *Survival Piece #5*, a piece called *Portable Orchard*. The artists arranged twelve hexagonal boxes and hung lighting devices of the same shape and size above them. The boxes, filled with soil, contained fruit-bearing trees, including lemons, limes, kumquats, oranges, mandarins, and avocados. Photosynthetic light allows the trees to develop. This work is, therefore, a practical experiment. The fruit trees grow in a closed space, evoking a post-agricultural world. The artists were interested in observing which trees would bear fruit and which ones would not survive. The avocado tree lost its leaves from the beginning of the exhibition while the other trees thrived. Exhibition visitors were invited to walk among the trees and to pick fruit. Twenty years after the exhibition's opening, a significant number of these trees, replanted outside since, still bear fruit. *Survival Piece #5* portrays the ultimate survival conditions of these trees, showing the elements necessary to their development in a context where their life sources are reduced to a minimum. The Harrisons' practice thus echoes the notion of "Terrain of life" as presented by Bruno Latour. They also evoke an idea of "precariousness", which we will develop in the next section of this chapter through Anna Tsing's book *The Mushroom at the End of the World*.

³³⁴ BURNHAM Jack, *Systems Aesthetics*, Artforum, September 1968.



Figure 28. Helen Mayer Harrison and Newton Harrison, Survival Piece #5, Portable Orchard, 1972

II. The notion of co-dependence in the writings of Anna Tsing, David Abram and Emanuele Coccia

A. Collaboration according to Anna Tsing

Following a very different approach, with *The Mushroom at the End of the World*³³⁵, Anna Tsing combines ethnographic and ecological studies to trace the commercial trajectory of a singular mushroom, the Matsutake, which is very popular in Japan. Between the end of the 19th century and 1945, the industrial exploitation of Japanese forests led to its complete extinction. However, in the 1970s, the Matsutake was rediscovered on the other side of the Pacific Ocean, in the devastated forests of Oregon. Attracted by this source of profit, which also represents freedom, numerous and heterogeneous foragers gathered them. They included illegal immigrants from Latin America, as well South-East Asian minorities. Taking these foragers' lives into account is an essential step towards understanding the notion of precariousness by examining their inventions of new ways of life on the ruins of capitalism. Anna Tsing recounts the journey of Matsutake from the forests of Oregon to their commercialisation in Japan.

The book moves through continents, providing a series of situated scenes, approaching each aspect of the mushroom industry. Capitalism, which once promised stable employment and constant progress, has created uncertain conditions, causing damage. The author gathers multiple individuals' stories and captures them remarkably, conveying a message of hope: that of the possibility of creating a life in the ruins of capitalism. Matsutake mushrooms remind us of the necessity of collaboration between individuals and between species, since they develop mainly in the presence of pines. Anna Tsing thus highlights the way different species – humans and non-humans – live together and collaborate. Despite the inherent precariousness of mushroom picking, the mushrooms themselves are trophies symbolising their foragers' freedom, and their connection with this freedom amplifies their value. In the ruins that she describes, Anna Tsing highlights the care and attention of collaboration rather than the accumulation of wealth.

It is from this collaboration between different species in devastated landscapes that freedom emerges. For the foragers, these peculiar individuals who carry various stories, mushroom picking is less of a job and more of a “quest”, a “spirit of freedom”. Anna Tsing stresses that this quest for

³³⁵ LOWENHAUPT TSING Anna, *The Mushroom at the End of the World – On the Possibility of Life in Capitalist Ruins*, Princeton University Press, 2015

freedom and its commercial process are inseparable. Anna Tsing's book does not constitute a complete analysis of post-capitalist processes. Instead, it outlines a creative, collective, and free life involving fruitful collaboration between humans and non-humans.

Pierre Huyghe

The devastated landscapes and the collaborative processes on the ruins of capitalism that Anna Tsing describes echo a recent installation by Pierre Huyghe. For the Skulptur Projekte of Münster in 2017, Pierre Huyghe transformed a former skating rink of Münster into a landscape of cataclysm (*After Alife Ahead*, 2017). In this work, the collapsed concrete ground reveals shreds of concrete, mud, large puddles, moss, algae, and weeds. Pierre Huyghe invites us to descend into the pit and wander through the small hills of its devastated landscape. We encounter bees, for which two clay beehives have been installed, as well as a few peacocks.

At the centre of the site stands an enigmatic aquarium, which contains a *Conus* textile, a very peculiar mollusc whose venom is lethal to humans. However, the aquarium's opaque panes make catching sight of it almost impossible. The presence of the *Conus* plays a significant role in the exhibition: its shell, composed of dozens of triangles, is the source of the computing system that controls the entire installation. Indeed, the *Conus*' movements determine the opening and closing of awnings – themselves triangular-, placed under a skylight in the ceiling. They both flood the space with light and produce intermittent sounds. On the edge of the skating rink lies an incubator containing HeLa cancerous cells. Invisible sensors record the bees' and peacocks' movements, as well as CO₂ levels and the number of bacteria in the space of the skating rink. All this data is then fed into an algorithm, which calculates the average vitality of the space. The information is delivered to the incubator containing the cancerous cells, which, according to the apparent activity, increases or slows down the cells' reproductive rate.

The skating rink is thus transformed into a complex biotope, a living organism, much like an autopoietic machine. In this devastated landscape, each element plays a specific role and becomes dependent on the rest of the ecosystem. Pierre Huyghe's installation echoes Anna Tsing's book insofar as it involves a landscape of ruins in which all elements interact. Each of these elements is controlled by systems that evolve in the same context. Moreover, this work seems to convey the same precariousness and the same hope, that of the possibility of living on the ruins of capitalism.



Figure 29. Pierre Huyghe, After Alife Ahead, Skulptur Projekte, Münster, 2017

Paul Duncombe

Born in 1987, Paul Duncombe lives in Caen. After studying at the École Nationale Supérieure des Arts Décoratifs in Paris (2009-2014), he began producing sculptures that could be described as “performative”. During his numerous travels (including to Japan and Canada), he discovered sites that had been damaged by natural catastrophes or the effects of pollution. While his art flirts with science, Paul Duncombe takes an interest in collapsology. At the Montrouge fair in 2018, he presented one of the works from his series *On the Possibility of Life*. It featured an old, rusted Citroën 2CV, in which he instigated a process of vegetal colonisation. Through an automatic system of horticultural lighting and atomisers, he established the conditions for vegetal development within the car. Paul Duncombe started by introducing plants he called “coloniser” or “first plants” while also allowing for the proliferation of numerous insects. While the Citroën embodies the golden age of the “Trente Glorieuses³³⁶”, its state of decay evokes the end of capitalist prosperity. The work portrays life’s takeover of the ruins of capitalism by creating a microcosm in a closed space.

Paul Duncombe’s work evokes a form of post-apocalyptic archaeology in staging micro-phenomena capable of endless development. The object is destined to slowly self-destruct, gradually eroded by natural elements. Following an endless process, Paul Duncombe shapes microcosms as well as their microscopic manifestations. In doing so, he investigates complex relationships between diverse realities: animal, vegetal and mineral. Furthermore, he also questions the nature of artistic activity, which he sees as a form of disruption triggering the development of new ecosystems. Paul Duncombe’s installation *Tomorrow Borrowed Scenery* (2018) brings together several wrecked cars containing plant proliferations. The space is plunged into darkness, establishing a disturbing environment. It is full of vehicles that look like they may have crashed into each other. Paul Duncombe’s watering system evokes smoking motors, while plants have already invaded the space. As a whole, this installation, which includes fog, luminous oscillations, as well as layers of sound, is very cinematic. In each of his installations, Paul Duncombe establishes an ecosystem within which elements connect. His work creates a strong feeling of precariousness while also depicting the continuation of life on the ruins of capitalism.

³³⁶ The “Trente Glorieuses” is a French expression used to refer to the 30 years of post-war economic growth.



Figure 30. Paul Duncombe, Tomorrow Borrowed Scenery, 2018

B. The *Life-World*³³⁷ according to David Abram

With *Comment la Terre s'est Tue / The Spell of the Sensuous: Perception and Language in a More-Than-Human World*, David Abram establishes the report of an inquiry conducted with people of various oral traditions through which he reflects on the way we have lost our connection to the Earth, to our natural environment. By basing his inquiry on the phenomenology of Husserl and Merleau-Ponty, he proposes to re-examine our experience with the “Life-World”, that is to say, a reciprocity of perception as well as an “animist” language³³⁸. In one of his chapters, David Abram urges us to reflect on the relationships between words and the Earth’s sounds, as well as on the relationships between language and places. Aboriginals orient themselves through song, using lyrics as aural maps to guide them across the country. Singing the verses of the right dream allows them to find their way across a region. Earth and language thus become inseparable. While the animated Earth speaks to them, what the Aboriginals say is only a part of a much larger discourse. Nature itself is full of non-human intentionalities, which see, hear and perceive the human being while also being perceived themselves. Listening to the forest is, first and foremost, a matter of feeling listened to *by* the forest; observing the forest implies feeling “observed by the forest”³³⁹.

Numerous people of oral tradition have a cyclical conception of time, through which past and future are given the same value. Time cannot be separated from “the circular life of the sun and the moon, of the cycle of the seasons, of the death and rebirth of animals – of the eternal return of the earth, each year verdurous, rejuvenated”³⁴⁰. David Abram mentions that some aboriginal languages have no term for past and future: everything, therefore, lies in the present. Moreover, there is often no distinction between time and space. Upon his return to the West, David Abram seems perplexed by the lack of understanding of his close friends and relatives, unaware of the phenomena to which he had to become sensitive in order to communicate with indigenous magicians: “the interior life of all that we perceive in the open field of the living present - the grasses and the aspen leaves, the ravens, the buzzing insects and the drifting clouds”³⁴¹. David Abram insists on the specific local character of this sensuous world, “the world with which we interact directly, without instrument”³⁴², which contrasts with the West’s global and technologically

³³⁷ ABRAM David, *The Spell of the Sensuous: Perception and Language in a More-Than-Human World*, Pantheon Books, 1996, p. 40.

³³⁸ *Ibid.*, p.263.

³³⁹ *Ibid.*, p. 68.

³⁴⁰ *Ibid.*, p. 185.

³⁴¹ *Ibid.*, p. 226.

³⁴² *Ibid.*, p. 14.

interconnected environment. He sees it not as “going backwards” but as “letting the vision of a common world root itself in our direct, participatory engagement with the local and the particular”³⁴³.

Carsten Höller

David Abram’s invitation to renew our relationship with the “Life-World” relates to an installation by the German artist Carsten Höller. In 2010, in the great hall of Berlin’s Hamburger Bahnhof, Carsten Höller installed a gigantic living tableau. It includes twelve reindeer, placed between two enclosures, across the entire length of the former railway station. Two aviaries containing twelve canaries, six male and six female, stand upright, facing each other, connected by two central scales. The installation also involves flies, as well as mice evolving in laboratories similar to playgrounds. Moreover, the installation also includes a rare mushroom species: the fly agaric, a toxic mushroom characterised by its soporific and hallucinogenic properties. Following shamanic tradition, the artist feeds the hallucinogenic mushroom to the reindeer. He then collects their urine to obtain the mythical beverage, after which the exhibition is named: Soma. The artist invites visitors to drink this beverage, which is put at their disposal in flasks stored in refrigerators. Soma is a magical and shamanic drink, which provides a broken-up perception of reality. It was traditionally used by Hindus of the Indus valley ³⁴⁴ and is seen as one of the first hallucinogens in human history. Soma is also the name of a kind of God or sacred world in which people from Nordic and Asian steppes used to believe.

The entire space of the Hamburger Bahnhof is divided into two identical parts. In one of them, the reindeer are fed with fly agaric, and in the other, they are not. This structure recalls a scientific experiment; it involves two groups of six reindeer: one test group and one control group. Carsten Höller offers the possibility for people to rent a bed situated twelve meters above the ground, at the core of the exhibition, for a night. This sizeable round bed serves as an observation point. The exhibition implements a shamanic cohabitation of species that it brings together. A co-dependent relationship is established between the reindeer and the mushrooms and between animals and humans; spectators become key factors of the installation as they take part in this living tableau. The exhibition combines a scientific vision and a shamanic vision, in other words, experimentation

³⁴³ Ibid., p. 270.

³⁴⁴ BRILL Dorothée, *Carsten Höller, Soma*, Hamburger Bahnhof Museum für Gegenwart, Documents, Hatje Cantz, Berlin, 2010, p. 41.

and magic. Through its shamanic dimension, Carsten Höller's installation echoes David Abram's book, especially in its way of inviting us to renew our relationship with other forms of life³⁴⁵.

³⁴⁵ However, we must highlight the contrasting detachment of Carsten Höller's exhibition.



Figure 31. Carsten Höller, SOMA, 2010

Joseph Beuys

The way David Abram's book advocates for the re-establishment of our connection with other forms of life recalls one of Joseph Beuys' most significant actions. In 1965, Joseph Beuys presented his first action, *'How to explain pictures to a dead hare?'* at the gallery of Alfred Schmela, a famous art dealer, in Düsseldorf. The artist proposed an inaugural visit of the exhibition « ...*n'importe quelle corde...* »; in which members of the public observed the scene from outside, through patio doors and a live video broadcast. Beuys appeared, without his usual hat, his head and face covered with gold leaf and honey. Over three hours, he carried a dead hare in his arms and moved slowly in the gallery space, showing the surrounding pictures to the animal. An iron sole was attached to his right foot and flapping on the ground. Later on, Beuys sat on a stool, one of the legs of which was wrapped in felt. The artist whispered incomprehensible words to the hare, which were amplified through two microphones installed in the space, one of which was attached to one of the stool's legs.

Through this piece, Beuys seems not only to attempt to deeply reconnect with language but also to regenerate thought, which he considers rigid and dominated by reason. The idea of the need for a rebirth of humankind is an overarching principle and core element of this piece. The hare embodies intuition and imagination, faculties Beuys considers to be overlooked. The gold represents a material and cultural good that can be measured. The quantity of gold covering the head of the artist is worth about fifty dollars. Honey is a natural and nutritious substance and the product of a transformation of plant-based elements by animals, thus embodying a principle of evolution and organic connection. The combination of gold and honey on the artist's head symbolises the transformation of thought. As the material becomes spiritual, we witness an evolution from reason to intuition. Thought comes alive through the illumination of Beuys' head. The magnetic iron sole, combined with the insulating felt wrapped around one of the stool's legs, evoke the ground's healing and resuscitation. As an impure material, iron is used to symbolise the soiled mother Earth, which the artist transforms into gold and honey: symbols of the completion of a transcended, ideal nature.

This action introduces us into an "enlarged" conception of art, an idea both social and therapeutic, according to which the artist is a driving force, like a shaman. Through this action, Joseph Beuys invites us to connect to the source of life itself.



Figure 32. Joseph Beuys, How to explain pictures to a dead hare?, 1965

C. The life of plants

Following *The Life-World* as presented by David Abram, Emanuele Coccia invites us to reconnect with other forms of life in a unique way. In his essay entitled *La Vie des Plantes*, Emanuele Coccia observes that plants have been the object – until very recently – of an obvious oversight, both in the field of philosophy and in that of contemporary biology. In response to this omission, the author evokes a “return of the repressed” and invites us to look at the world as a product of plant life³⁴⁶. According to Emanuele Coccia, understanding plants allows us to understand what “being in the world” means. In fact, in discussing plants, we discuss the origin of the world, its perpetual beginning, continuously renewed, through every moment, in each part of the globe.

The author highlights that the genesis of the world is not a sudden event situated in the past, but an ongoing process, constantly renewed. Plant life appears as “life as integral exposure, in absolute continuity and global communion with the environment”³⁴⁷. Plants merge with the world they live in, making it easier for them to change and adapt, and they do this solely thanks to seeds. It is through vegetal life that life is created and perpetuates. Similarly, photosynthesis is responsible for the composition of our atmosphere, with the high oxygen levels that enable the production of the energy necessary for the survival of animal organisms.

The act of breathing embodies a fundamental form of reciprocity: “I now contain what I am contained by, and vice versa, I am contained in what I contain”³⁴⁸. Moreover, the author stresses that there is no distinction between humans and non-humans, between us and the world. There is no separation between us and the physical world and, beyond this, all of our bodies also cross paths: we live thanks to others lives. Emanuele Coccia evokes a form of parasitism and cannibalism specific to the domain of the living³⁴⁹, whereby we are constantly inhabited and inhabiting all others. Before even being earthlings, we inhabit the atmosphere, a cosmic fluid “in which everything communicates, joins together and extends”³⁵⁰. This leads us to see life as a divine phenomenon, with everything on earth possessing a divine nature, divine origins. Plants create a perfect continuity between the sky and the earth, between our planet and the sun, which protects life. We live in a world composed of atmospheric elements in which everything mixes with everything. Therefore,

³⁴⁶ COCCIA Emanuele, *La vie des plantes, Une métaphysique du mélange*, Bibliothèque Rivages, Paris, 2016, p. 31.

³⁴⁷ Ibid., p. 17. (my translation)

³⁴⁸ Ibid., p. 23.

³⁴⁹ Ibid., p. 19.

³⁵⁰ Ibid., p. 51.

life “is never compartmentalised in a single milieu; instead, it radiates in every milieu; and makes one world out of all those milieus, a cosmos, the unity of which is atmospheric”³⁵¹. In this sense, the exploration of plant life is a condition of every new cosmology.

Living together requires a body that is physiologically and metaphysically inseparable from other bodies as well as from the planet, the sun, and the sky. The author dedicates his last chapter to flowers, which he describes as “active instruments of the mixing”: “every encounter and every union with other individuals is made through it”³⁵². He defines flowers in their sexual dimension, considering sex as a movement of the cosmos in its totality³⁵³. By involving the earth and the sky in the same body, plants become reflections of the world in its totality, demonstrating that everything is in everything; and that all matter exists as spirits.

Henrik Håkansson

Emanuele Coccia’s essay echoes Henrik Håkansson’s practice. This Swedish artist takes an interest in the relationships between humans, animals, insects and plants. By adopting a biologist’s role, he attempts to make us more receptive to natural processes. He uses natural elements with both an artistic and scientific approach. His works involve signs or hints of what the future might hold for humanity. The artist acts as a soothsayer, reminding us of what we are connected to at the core of our being. Beyond our infrastructures and our ideological barriers, a vast and mysterious world appears, a world threatened by the environmental crises caused by our collective action. Henrik Håkansson approaches this accountability, which is ours, by removing nature from the soil it is rooted in.

On the occasion of his exhibition at the Palais de Tokyo in 2006 – *Through the Woods to Find the Forest* –, he exhibited plants torn from their underground lives and created new conditions of life for them. About a hundred orchids hung in the air, with humidifiers ensuring their survival. Further on, several large trees lay horizontally. At the back of this vegetal apparatus, their roots were trapped in plastic pots. Through this work, Henrik Håkansson establishes a situation where human forces confront natural forces, seeking out a new balance of life. He puts nature to the test through a cultural apparatus – an art centre – and extreme living conditions by reversing and uprooting

³⁵¹ Ibid., p. 104.

³⁵² Ibid., p. 129.

³⁵³ Ibid., p. 137.

them. This disconcerting spectacle also puts his audience to the test and invites them to cast a new eye on other forms of life. In this work, vegetal life holds the lead role of the aesthetical situation. Gliding between earth and sky, plants reveal the atmospheric dimension of the world as described by Emanuele Coccia.



Figure 33. Henrik Håkansson, Through the woods to find the forest, 2006

Michel Blazy

Michel Blazy's art practice offers yet another way to approach plant life. He works with the living and the ephemeral, using modest materials and objects. Between Informal Art and Arte Povera, his practice can be seen as research insofar as it involves multiple tests and experiments. Michel Blazy's work involves an obvious scientific dimension, and his studio is similar to a laboratory. The artist gathers extensive knowledge in various fields, including avocado farming and the societal organisation of ants. An ethical dimension and a political commitment accompany the interest he takes in nature.

On the occasion of his exhibition at the Frac Île de France – Le Plateau -, entitled *Le Grand Restaurant / The Great Restaurant* (2015), he started to explore the theme of nutrition as the condition of the survival of species. He approaches parasitism, symbiosis, and commensalism, and within his exhibitions each living organism and each visitor is considered equally. The exhibition included an avocado tree – *Avocat*, 1997 – which has a singular history. The tree, which was planted in 1997, was subjected to frost during the winter of 2009. The pot fell and broke. Nevertheless, in spring 2010, the plant began to grow again. This avocado tree involves a long process, typical of the artist's practice. For about fifteen years, Michel Blazy assembled a collection of avocado trees. Repurposing the leftovers of our consumer culture, he salvaged avocado pits that were destined to be thrown away. Thanks to his efforts, they became bushes. The artist successfully took on the challenge of growing exotic trees in a temperate milieu, thus creating a "small forest". The avocado tree presented in the exhibition is evidence of the regeneration of these pits.

Moreover, the exhibition also included a monumental installation entitled *La Grotte / The Cave*. This piece was a wood and metal structure covered in cotton and felt, containing lentil seeds, sprouting over time. We were invited to enter this installation, which came alive through a slow transformation. The surface was watered with lentil juice and developed according to humidity, light, and warmth. This organic sculpture evokes an archaic and primitive habitat, and visitors enter it much like parasites. Appearing as a kind of enigmatic skin, it enables the lentils to grow, a process requiring patience and maintenance. The visitor's experience is a sensory, tactile, visual and olfactory journey. With his avocado tree and his installation *La Grotte*, Michel Blazy invites us to engage with the perpetual regeneration of plant life.



Figure 34. Michel Blazy, La Grotte, 2015

Abraham Cruzvillegas

Born in 1968, Abraham Cruzvillegas is a Mexican artist. He is known for his work with found objects and his long-standing project « autoconstrucción » (« self-construction »). This series of works was inspired by Mexican people from the same generation as his parents, who left their rural area in the 60s to move to the capital. They built their own houses with found objects. Abraham Cruzvillegas' artistic practice echoes a certain precariousness: living as one can and using what one finds in the streets. Abraham Cruzvillegas' practice includes a form of uncertainty and impermanence; it involves a distinct art of salvaging, not knowing where we are going, and developing an aptitude for amazement. By using what is thrown away and abandoned, the artist taps into an inexhaustible resource.

Abraham Cruzvillegas presented the monumental installation *Empty Lot* in Tate Modern's Turbine Hall in 2016, from the 13th of October to the 3rd of April. The Hyundai Commission, which invites a new artist to occupy the museum's hall every year, selected this work. Faced with this vast space, 35 metres in height and 52 metres in length, Abraham Cruzvillegas arranged an enormous scaffolding structure, which held up two triangular platforms. The artist installed 240 triangular containers filled with soil. This soil had been extracted from 36 parts of London, including Hampstead Heath, Peckham, Haringey, and Westminster. Not one seed was planted in this geometrical garden, so nobody knew if anything would grow. The artist announced: "We will see the finished work on April the 3rd". Visitors were thereby invited to observe the work's development. The installation's entire lighting system was built with recycled materials. In Abraham Cruzvillegas' own words: "This installation is composed of soil, water, light, scaffolding and hope". Visitors were invited to walk around the scaffolding and, more importantly, to gaze at the work from a bridge situated at the centre of the great hall.

This work opens up a reflection on plant life in urban spaces and, more generally, on luck, change, and hope. Situated in the middle of one of London's commercial districts, this installation creates a space where nothing is produced, inciting us instead to focus our attention on change. This piece embodies Abraham Cruzvillegas' artistic career. Alive and unpredictable, it is in constant motion, despite its invisibility. While it transforms and is renewed every day, the work establishes an organic connection with the city of London and its green spaces.

The installation involves a set of interests specific to the artist: “Seed Bombing”, “Guerilla Gardening”, and ancient “chinampas”, an agricultural technique used by Nahuas, especially Aztecs, in what we now call Mexico City. The triangular shape of the composition resembles a vast compass and evokes diagonal shapes used by the Russian avant-garde, including El Lissitzky, among others. Furthermore, one can also find a reference to the famous Buckminster Fuller’s geodesic domes, which involve triangular elements that cut across each other. *Empty Lot* can be seen as an invitation to regenerate our connection with plant life in observing their continuous cycle of change.



Figure 35. Abraham Cruzvillegas, Empty Lot, 2016-2017

Liliana Motta

Liliana Motta is an Argentinean artist who teaches at the École Nationale Supérieure du Paysage, in Versailles. Having created numerous gardens, she sees herself as an artist-botanist. She is mainly known for her interventions at the 7th International Festival of Gardens of Chaumont-sur-Loire in 1998 and the Cité Nationale de l'Histoire de l'Immigration in Paris in 2012. She represented France with Patrick Bouchain at the Venice Biennale in 2006. She has been working on experiments entitled “Laboratory of the Outdoors” since 2010.

Following Gilles Clément's Landscape Charter of Vassivière, she developed a project entitled “Outdoors”, comprising brief and modest interventions. The site of Vassivière is, therefore, similar to 17th-century “theatres of greenery”. Liliana Motta is particularly interested in Polygonums, some of which are known to be “invasive”. She attempts to protect these unwanted species that are often relegated to the category of “weeds”. In 2015, Liliana Motta created *La Maison des Plantes – The House of Plants* –, a vegetal installation implemented in the site of the Cesaria-Evora High School in Montreuil. Conceived by the MAP Agency (Marseille Architecture Partners), the High School itself is a model of ecology: the building is equipped with photovoltaic panels and with various heating sources (wood, gas). Liliana Motta's artwork is located near the garden and pedagogical pond, next to a compost area. The artist describes the space as an extraordinary site, but also fragile and devastated in some parts.

Since the 17th century, multiple varieties of peaches have grown there, including *La Grosse Mignonne*, *La Téton de Vénus* or *La Prince of Wales*. Destroyed or abandoned, the plots dedicated to the cultivation of peaches gradually disappeared in the urban milieu. *La Maison des Plantes / The House of Plants* is surrounded by an eight-meter high wrought-iron structure on which climbing plants grow. Its impressive façade, overlooking small working-class houses, allows it to be seen from the surrounding districts. Its narrow structure includes two doors, which allow us to enter it. The work gathers six types of plants, all of which produce edible fruit. Among them, “*Actinidia arguta* Weiki” bears small, red and sweet kiwis. Originally from the Himalayas, the “*Holboellia latifolia* Wall” gives fruit the yellow pulp of which is edible, while “*Holboellia coriacea* Diels” produce purple bunches. Imported from Japan or China, the “*Akebia quinata* Cream Form” gives white and mallow flowers, which turn into fleshy fruit in the summer. Moreover, Liliana Motta introduced “*Schisandra chinensis* (Turcz.) Bail”, that is to say, an arborescent creeper from the North-East of China and Mongolia into the installation. Its fruit are edible, and it is used in traditional Chinese

medicine. Liliana Motta takes on the challenge of imposing herself in the face of the impressive building of the High School, meant to receive 600 pupils, in the listed site of “Murs à Pêches”.

La Maison des Plantes rapidly became a place to meet and interact, both for pupils and inhabitants. Botanical labels enable the implementation of a pedagogical approach focused on the study of other forms of life. Furthermore, the structure’s lighting allows it to remain visible at night. The work incites us to think about nature in an urban context; it is seen as a space for cultural and social experiments. The work allows us to reconnect with other forms of life in ways that put us in touch with each other as a group of individuals sharing the same environment.



Figure 36. Liliana Motta, La Maison des Plantes, 2015

Conclusion

In the 16th century, anatomical research led us to discover the multiple networks of our circulatory system. Although Andreas Laurentius' (1558-1609) representation remains quite basic, it depicts a multiplicity of intertwined ramifications. While the heart is seen as a crucial element of the circulatory system, the blood's flow appears as an entangled web of rhizomes, all the elements of which are connected.



Source gallica.bnf.fr / Bibliothèque nationale de France

Figure 37. Andreas Laurentius, *Anatomic plate*, 16th century

In this third chapter, we have studied the way beings live in a state of co-dependence. Eduardo Viveiros de Castro and Deborah Danowski demonstrate the impossibility of considering a human being without considering what surrounds it and what makes its survival possible³⁵⁴, in the same way, as it is impossible to consider a being without looking at its natural environment. We studied four books, each of which took on a different approach to co-dependence.

We studied Bruno Latour's essay *Où Atterrir?*, in which he presents the notion of "terrain of life" as the necessity to draw up the list of what a being needs for its survival. Tomas Saraceno's installation *Cloud Cities* allowed us to approach the notion of "symbiosis". "Symbiosis" is a close relationship between two or more different organisms, which is either mutually beneficial or vital to their survival. Moreover, Helen Mayer Harrison and Newton Harrison present the ultimate survival conditions of a selection of trees in an enclosed space, which can be seen as a literal illustration of the notion of "terrain of life". As "earthlings", we must therefore define our terrain of life, that is to say, evaluate the number of other beings we need in order to survive and define our relationship with them.

Secondly, we have studied three books, each approaching the notion of co-dependence in its specific way. Each demonstrates how "the inside and the outside of each border is subverted"³⁵⁵. With *The Mushroom at the End of the World*, Anna Tsing explores modes of collaboration between humans, as well as between humans and non-humans, in landscapes marked by the ruins of capitalism. Pierre Huyghe establishes a landscape of cataclysm characterised by a constant interaction between each of its elements. Anna Tsing combines ethnographic inquiry and ecological study to demonstrate how capitalism, which once promised prosperity, has, instead, produced uncertain conditions and ruins. Both Anna Tsing's book and Pierre Huyghe's installation evoke a kind of precariousness, involving a specific mode of collaboration between beings that requires care and attention.

With *The Spell of the Sensuous: Perception and Language in a More-Than-Human World*, David Abram invites us to re-examine our experience with other forms of life to perceive it as an interactive relationship, similar to animism³⁵⁶. In the great hall of Berlin's Hamburger Bahnhof, Carsten Höller creates a large living tableau rooted in a vision both scientific and shamanic. In doing so, the artist

³⁵⁴ DANOWSKI Déborah, VIVEIROS DE CASTRO Eduardo, *Ibid.*, p. 301-302.

³⁵⁵ LATOUR Bruno, *Enquête sur les modes d'existence*, *Ibid.*, p. 69. (my translation)

³⁵⁶ ABRAM David, *Ibid.*, p. 93.

invites us to pay attention to non-Western ways of inhabiting the Earth. Through *How to explain pictures to a dead hare?* (1965), Joseph Beuys seeks to connect us to the source of life. Inspired by Husserl and Merleau-Ponty's phenomenology, David Abram invites us to rediscover our connection to the Earth, to renew our experience of the "world of life".

In *La vie des Plantes / The Life of Plants*, Emanuele Coccia considers vegetal life as the source of our world, a world of constant regeneration, in which there is no distinction between human and non-human, each of our bodies crossing paths with one another. Henrik Håkansson and Michel Blazy present plant life inside art centres, giving them new living conditions. Speaking of plants equates to speaking of the origin of the world, its endless renewal, in each moment and each part of the globe. Understanding plants allows us to understand the meaning of "being in the world".

In this third chapter, we explored various ideas in relation to contemporary artworks. The notion of co-dependence is embodied by Bruno Latour's ideas; and also inhabits the books of Anna Tsing, David Abram and Emanuele Coccia in various ways. Furthermore, it echoes *Gaïa Theory*, introduced by Lovelock in his book *Gaïa - A New Look at Life on Earth* (1979). Indeed, according to Lovelock, and as mentioned earlier, each organism manipulates what surrounds it "for its own interest"³⁵⁷. We are reaching a turning point in the history of our species, a philosophical crossroad in which we must choose between pursuing the path mapped out by Modernity or attempting to reconnect with our natural state. Hicham-Stéphane Afeïssa highlights that "we never knew in the past that we needed to breathe in order to live"³⁵⁸. According to Cyril Dion, we need to experience silence, feel our breath and pay attention to the constantly changing states of our bodies. Such an experience requires a form of presence in the moment and calls upon all our senses and focus. Only then can a mind free itself; only then can we see our bodies for what they are, extraordinary ecosystems, inextricably linked to other forms of life, and feel the extent to which we are one with nature³⁵⁹.

The artworks that we have studied throughout this chapter are part of a discourse concerning the necessity of a "co-dependence" and a revival of our relationship with other forms of life. However, this highlights one of the paradoxes of visual art. The latter "troubles us because we do not know what about it troubles us, which trouble it is and what it can signify"³⁶⁰. This trouble is nothing but

³⁵⁷ LATOUR Bruno, *Gaïa, Figure (enfin profane) de la nature*, in: *Face à Gaïa*, Ibid., p. 131. (my translation)

³⁵⁸ AFEÏSSA Hicham-Stéphane, Ibid., p. 90. (my translation)

³⁵⁹ DION Cyril, *Petit manuel de résistance contemporaine: Récits et stratégies pour transformer le monde*, Actes Sud, 2018, p. 135.

³⁶⁰ DIDI-HUBERMAN Georges, *Devant l'image*, 1990, Les Éditions de Minuit, Collection Critique, 2016, p. 181.

the work itself, which refuses to be contained despite all the efforts of the great discipline of “art history”. After studying how beings involved in environmental crises live with each other, we can now explore ways of “acting on them”, in other words, “reacting” in the face of ecological catastrophe.

CHAPTER 4 - Reacting to Environmental Catastrophe

Introduction

In 1965, artist the Alan Sonfist produced *Time Landscape*. He worked in a neglected part of a natural park in New York, in which he planted the kinds of vegetables that could have been found there before the invasion of colonisers in the 16th century. He transformed this wilderness, focussing equally on its rock formations and plants, growing walnut trees, oaks, birches and multiple bushes. These plants absorb rainwater, which allows them to produce oxygen and reduce the surrounding air pollution.



Figure 38. Alan Sonfist, Time Landscape, 1965

In this fourth chapter, I will attempt to address various ways of reacting to environmental crises. We will start by assessing our current situation and discussing ideas such as Singularity and Accelerationism as alarming symptoms of the situation itself. In a second stage, we will outline an answer to the question: “Why aren’t we doing anything?”, taking into account the “religion of growth” and the narratives we evolve in. In our third section, we will examine the conditions of action; this will allow us to explore a range of contemporary modes of resistance that have already been implemented. Lastly, we will attempt to introduce Gaïa as a force pushing us to resist and “live against ourselves”, as Isabelle Stengers urges us to do³⁶¹.

In an article published in the journal *Science* (1967)³⁶², the mediaevalist historian Lynn Townsend White wrote about the “historical roots of our ecological crisis”³⁶³. The gradual development of our relationship with nature could already be detected in the 9th century’s *Calendrier Franc* or *Frankish Calendar*. In it, we see men who dominate the world that surrounds them: they work the land, harvest, cut down trees, and slaughter pigs. From then on, we have witnessed a separation between man and nature, with man gaining control over the world. Philosophical writings reveal the slow transformation of the way we look at nature. Francis Bacon³⁶⁴ (1561-1626) claimed that power depends on knowledge; he saw science as a tool to “push the limits of nature in every way” in favour of human activity. Furthermore, Descartes (1596-1650) announced a programme that would infinitely transform nature. In his treatise *The World*³⁶⁵, he seemed to consider “Nature” as “matter”, in other words, that which we can inform and transform by our activities. The value of that which is given to us lies in its potential to be transformed and used by humans. According to Hegel³⁶⁶ (1770-1831), mastering nature — through labour and technology — is the driving force of history, seen as a dialectical journey towards freedom. He referred to a process of transformation of natural facts, meant to culminate in the highest possible degree of civilisation. He accordingly praised the scientific and technical mastery of nature. Lastly, Marx (1818-1883) believed that the establishment of communist cities would depend on the development of productive forces³⁶⁷. He placed the development of science and technology at the heart of contemporary history. He advocated for the maximal growth of productive forces, assuming that nature was entirely in our

³⁶¹ STENGERS Isabelle, *Au temps des catastrophes*. Ibid., p. 48. (my translation)

³⁶² BOURG Dominique, Article, *La Vie*, April 26th, 2018

³⁶³ Jr WHITE Lynn Townsend, *The Historical Roots of Our Ecologic Crisis*, *Science*, Vol. 155, March 10th, 1967

³⁶⁴ BACON Francis, *The New Organum*, 1620, Jonathan Bennett, 2017, p. 4.

³⁶⁵ DESCARTES René, *The World and Other Writings*, 1633, Translation by Stephen Gaukroger, New York, Cambridge University Press, 1998

³⁶⁶ HEGEL, *Lectures on the Philosophy of History*, 1822-1830, Wordbridge Pub, 2011

³⁶⁷ BOURG Dominique, Ibid.

control. Karl Marx, who had always been conscious of Hegel's intellectual legacy, held a similar belief in humankind's dominance over its natural environment.

The challenge we face today is that of preserving our environment from the destruction of ecosystems. The term "ecosystem" was introduced in 1935 by Sir Arthur George Tansley, a British botanist and plant ecology pioneer. The word "ecosystem" describes "a certain type of relationship between beings located in spaces of different scales, in living environments, whatever their nature might be"³⁶⁸. The word "ecocide", meaning the "murder of ecosystems" appeared in the 1960s, when the United States destroyed Vietnamese forests using Agent Orange. We will study these "ecocides" as part of our appraisal of the current environmental situation.

³⁶⁸ France Culture, *Philosophie de l'écologie*, November 26-29th, 2018. (my translation)

I. Establishing an Assessment of the Current Situation

A. A Catastrophic Record

What is the current state of environmental crises? In his *Petit Manuel de Résistance Contemporaine*³⁶⁹, Cyril Dion refers to a *New York Magazine* article by the American journalist David Wallace-Wells. The latter's work has focused on listing all the impending consequences announced by the climate science community concerning the coming decades if we fail to take action with regards to environmental crises. We have now reached 1.2 degrees and are undoubtedly heading towards 4 degrees, potentially 8. The 2-degree goal established by the Paris Agreement therefore seems utterly illusionary. Heat, food shortages, the development of diseases, and lower air quality are the consequences of global warming and are becoming the causes of the disappearance of a part of life on earth³⁷⁰.

Numerous actors are responsible for this tragedy. "Non-conventional" methods of extracting shale gas and oil are incredibly polluting and provide "the best argument for restrictive regulations"³⁷¹. Moreover, the extraction of gas releases methane, the warming effects of which are 86 times higher than that of CO₂ (carbon dioxide) over the 10-15 years following its emission. In addition, the fracking of shale represents a ground-breaking event: "We have discovered the equivalent of two Saudi Arabias in the form of natural gas in the United States"³⁷². Lastly, over 15 million Americans live less than two kilometres away from a well dug after 2000³⁷³. With its coal consumption, "China has become the 'world's chimney', with 48% of its emissions caused by the production of exported goods"³⁷⁴.

The damage of ecosystems prevents the reproduction of certain species, threatening their long-term survival. In addition, maintaining soil fertility is hampered by industrial farming methods, which damage land and contaminate water over vast areas. Lastly, we now have to fight to preserve water resources because oil production technologies call for immense amounts of water. Naomi Klein points out that 2.3 barrels of water are required to produce a single barrel of oil³⁷⁵. Everyone

³⁶⁹ DION Cyril, *Ibid.*

³⁷⁰ *Ibid.*, p. 22-24.

³⁷¹ KLEIN Naomi, *This Changes Everything: Capitalism vs. the Climate*, Penguin Edition, 2014, p. 143.

³⁷² *Ibid.*, p. 312.

³⁷³ *Ibid.*, p. 312.

³⁷⁴ *Ibid.*, p. 467.

³⁷⁵ *Ibid.*, p. 346.

should be made aware of this disastrous situation so as to spark concrete actions against the destruction of our natural environment.

In order to understand the supremacy of polluting industries, we must look at the subsidies that petrol industries benefit from, as well as assess the illusionary 2 degrees goal, and finally examine the increasing development of the pollution market. Not only do oil companies receive subsidies — between \$775 billion and \$1 trillion a year worldwide — they also have the right to use the atmosphere as a massive free-of-charge rubbish dump. A study from the Carbon Tracker Initiative, which analyses the activities of several polluting companies, reveals that their gas, coal and oil combustion rates result in the emission of five times more CO₂ in order to reach the amount needed to comply with the 2-degree goal. Therefore, the struggle against ecological crises is up against the most profitable industrial activity in the world.

The year 1997 saw the beginning of the pollution trade: a new system provided emission permits, which could be used or sold to parties whose emissions exceed the fixed quota. This led to the establishment of an incredibly competitive international coal market. In the name of the environment, new violations of basic human rights emerged. Multinational companies thus maintained and developed their “right” to pollute the atmosphere³⁷⁶.

The Kyoto Protocol was implemented in 1997, while, in 2001, China joined the WTO, marking the high point of trade and investment liberalisation. These are two conflicting events, marked by apparent contradictions and made evident by their short and long term consequences. We should highlight that every effort was made to prevent trade liberalisation and economic globalisation from being regulated by any form of political climate. Moreover, emissions resulting from the international transport of goods cannot be ascribed to any State; thus, they have not been addressed. Consequently, from 1990 to the 2010s, container ship traffic has risen by 400%³⁷⁷.

Naomi Klein describes the reckless use of natural resources with the term “extractivism”³⁷⁸. This activity rose drastically during the colonial period, seeing the world as a vanquished territory. Extractivism³⁷⁹ is marked by contempt for ecosystems, based on a belief in infinite resources. This

³⁷⁶ Ibid., p. 222

³⁷⁷ Ibid., p. 79.

³⁷⁸ Ibid., p. 25.

³⁷⁹ The notion of “extractivism” was the subject of a study led by Macarena Gomez-Barris: *The Extractive Zone*, Duke University Press, 2017

process, which involves the destruction of life, goes hand-in-hand with the endless growth of the capitalist system, while the oceans and the atmosphere are regarded as rubbish tips for use by all and sundry. An economy based on renewable resources remains to be invented and implemented. There are many related risks, and several catastrophes have provided evidence of this. Indeed, in 2010, a BP drilling platform exploded in the Gulf of Mexico, resulting in a massive gush of oil. Other examples of this kind include an oil pipeline leak in Enbridge, Michigan, in 2010, which caused a gigantic spill into the Kalamazoo River. Moreover, in 2012, over 6000 incidents causing oil spills occurred in the context of oil and gas drilling operations in the United States. This illustrates the extent of the damages induced by extractivism.

B. The Singularity Thesis

Symptoms of this disastrous state of affairs are gradually coming to light, including the theories of Singularity and Accelerationism: both of which must be studied with great caution. According to those representing the Singularity school, the culmination of the Anthropocene will lead to the glorious transfiguration of the humankind, which will be technically magnified. Humankind will soon be transfigured by technology. The Singularity thesis is akin to trans-humanism, a line of thinking announcing an imminent transition into post-humanism. The latter, which appeared in the late 20th century, consists in the study of the human relationship with technology, involving the possibility for human beings to defy the limits of their own biological death.

Advocates of Singularity posit the emergence of technologies powerful enough to become independent and free themselves from their designers. This theory is based on the development of new intelligent machines, robots, and clones. It urges us to challenge the limits between human and technological forms of intelligence, and projects the production of artificial intelligence powerful enough to self-organise, thereby becoming independent from all forms of human intervention.

John Von Neumann introduced the notion of Singularity in the 1950s. At the end of the 20th century, Ray Kurzweil³⁸⁰ replaced him and set up the Singularity University (2009)³⁸¹. Scientists struggle to reach a consensus in situating the age of Singularity. Kurzweil sees the moment in which

³⁸⁰ KURZWEIL Ray, *The Singularity Is Near: When Humans Transcend Biology*, Penguin Books, 2006

³⁸¹ Founded with Google and NASA's support, this University offers a nine-week course on the subject to 120 students every summer.

super-computers become more powerful than the human brain as its starting point. The idea that super-intelligent machines might be able to create new machines with even greater leads to the belief that “the first ultra-intelligent machine is the last invention that man need ever produce”³⁸². In his essay “Technological Singularity” (1993), Vernor Vinge predicted an exponential spiral of progress, leading to the end of current human civilisations³⁸³.

Trans-humanists anticipate a new form of humanity, transformed by biotechnologies and nanotechnologies. They imagine the “transplanting of human identities into super-computers”, as well as “the integration of extremely powerful artificial faculties within human bodies”. Some advocates of Singularity believe in our ability to gain absolute control over our environment, while others believe that the rise of machines might cause us to lose control. The incredibly powerful artificial intelligence anticipated by trans-humanists could involve machines reaching autonomy to the detriment of human control.

However, the idea of Singularity and its unprecedented technical acceleration must be challenged. Moreover, this ideology, through which competitiveness becomes the ultimate goal, gives rise to the emergence of “useless people”. In addition to this, Singularity disregards issues concerning limits, which are nevertheless very real³⁸⁴. Technological advancements might consequently be developed through geoengineering programmes, synthetic biology and the conquest of space. However, advocates of Singularity posit the existence of infinite resources without considering their obvious limits.

According to Theodore Modis³⁸⁵, advocates of Singularity practice a form of para-science and overlook the rigorous scientific methods of genuinely experimental processes. Beyond their lack of scientific evidence, Singularity’s hypotheses have attracted pointed criticism regarding the economic limits of technology and the limits of the human brain. According to Jonathan Huebner, “the pace of innovation reached a peak about a century ago and is now waning”³⁸⁶. Technological progress is supposedly slowing down at a rate that increases every year. Furthermore, the purpose of such technological advances is to serve the interests of human society, and thus involves an

³⁸² GOOD Irving John, *Speculations Concerning the First Ultraintelligent Machine*, Academic Press, New York, 1965, p. 33.

³⁸³ VINGE Vernor, *The Coming Technological Singularity: How to Survive in the Post-Human Era*, Whole Earth Review, 1993

³⁸⁴ VIVEIROS DE CASTRO Eduardo & DANOWSKI Deborah, *Ibid.*, p. 258.

³⁸⁵ O’CONNELL Mark, *To be a machine: adventures among cyborgs, utopians, hackers and the futurists solving the modest problem of death*, Doubleday, 2017

³⁸⁶ HUEBNER Jonathan, *A Possible Declining Trend for Worldwide Innovation*, article, in: *Technological Forecasting and Social Change*, October 2005, p. 980.

absolute limit never to be surpassed, that of human needs, which are not infinite. Singularity collides with an indissoluble limit, that of the zenith of human society. These issues of limits and self-limitation cannot be ignored, and the Singularity thesis must therefore be subjected to close and rigorous analysis. We will therefore consider it as an alternative only to be approached with a cautious amount of distance. Nevertheless, it does bring up a significant philosophical issue: is humankind destined to be surpassed by technology? This question regarding the potential loss of control over our future is political as well as personal, and closely tied to the neoliberal economic system.

Ian Cheng

In April and May 2018, in the Serpentine Gallery, in London, Ian Cheng exhibited his installation *Emissaries*, as well as his latest work titled *BOB (Bag of Beliefs)*. Cheng's simulations are created using a computer tool typical of video games. The exhibition included a video game, playing itself, with no human input. The computer-generated works on show were filled with various figures, the organic lives of which interacted with open narratives. Cheng's simulations infinitely evolve as autonomous ecosystems. Since 2013, he has been developing a series of simulations exploring artificial intelligence and the capacity of an agent to evolve within a forever-changing environment. The installation *Emissaries* consists of a trilogy of simulations introducing the environmental condition that underpin it through three interconnected episodes. Each of these episodes is focused on the life of an "emissary", caught between old realities in the process of breaking down and strange new realities.

Ian Cheng's practice involves devising worlds, leading him to use the term "Worlding". He creates infinite games by establishing a present state, as well as a past narrative, and simulating a future. When caught in strange transitional phases, creating worlds becomes a vital activity. Cheng's works undergo transformations he is no longer capable of thoroughly controlling. He describes his practice as "neurological gymnastics". In encountering his works, viewers experience confusion, anxiety and forms of cognitive dissonance, as well as ongoing change.

Ian Cheng's praxis does not consist solely in the exploration of new technologies. It also explores these tools' abilities to create ways into chaotic forms of existence. In this situation, simulation is used as a medium applied to artistic practice. The content Cheng produces through algorithms creates unpredictable dynamics, oscillating between order and chaos within a complex system.

Using “live” simulation prevents him from imagining any form of predetermined result. *Emissaries* introduces a narrative agent, namely the ability to create a narrative, which clashes with the simulation’s resulting chaos. The work’s title echoes ideas of “harbingers”, “ambassadors”, “diplomats”, embodying the artist’s virtual reality to offer an account of it.

Cheng draws inspiration from the narrative nature of consciousness, described by Julian Jaynes in *The Origin of Consciousness in the Breakdown of the Bicameral Mind*³⁸⁷. In 2018, at the Serpentine Gallery, Cheng presented *BOB (Bag of Beliefs)*, a creature drawn from artificial intelligence whose personality, body and life evolve throughout his shows. *BOB (Bag of Beliefs)* appears as a one-off model of artificial intelligence, associating a sensory experience through a proliferation of miniature agents called “demons”. While each demon competes with the others to control BOB’s body, we are invited to send our own stimuli to BOB by way of an application called *BOB Shrine*. BOB embodies our ambivalent relationship with evolving technologies destined to emancipate themselves from their creators, thus echoing the notion of Singularity.

³⁸⁷ JAYNES Julian, *The Origin of Consciousness in the Breakdown of the Bicameral Mind*, Mariner Books, 2000



Figure 39. Ian Cheng, BOB (Bag Of Belief), 2018

Marshmallow Laser Feast

We Live in an Ocean of Air was created in 2018 by the Marshmallow Laser Feast collective in collaboration with Natan Sinigaglia and Mileece l'Anson. This London-based collective creates immersive experiences, extending perception and exploring our connection with the natural world. Using architectural tools and contemporary image-producing techniques, they also put on performances involving tactile forms. MLF sculpts spaces that remain dormant until brought to life through playful investigation. Fuelled by their joyful energy and individual research practices, MLF's members break through boundaries to reveal worlds that reach beyond the limits of our senses. *We Live in an Ocean of Air*³⁸⁸ is an immersive multisensory installation, highlighting a vital connection between humans and plants. Through the use of virtual reality headsets as well as breathing and cardiac rhythm sensors, artists from MLF allow us to visualise gaseous exchanges that we share with trees.

Thus, visitors find themselves entirely immersed in a world that exceeds all human perception. Using unique technologies that stem from virtual reality, devices used to monitor heartbeats, and breath-detectors, they focus on examining bodily activity. The MLF artists invite us to follow the trajectory of our own breath and our own body, to extend this experience into the realm of plants and, by extension, the rest of the world. The artists prepare a three-dimensional world through which the systems and connections that intimately connect all life on Earth become visible. By exploring the space between art, science and technology, the MLF installation offers a rare opportunity to become acquainted with the symbiotic systems of nature as well as to explore nature in real-time. The human cardiovascular system interacts with the natural networks of the forest, placing our breath — inhalation and exhalation alike — within a larger reciprocal system. Visitors are invited to share their own breath with the forest in order to witness novel connections between plants and humans. All organisms are symbiotic, a network of entangled and embodied relations. These connections bring plants, humans, and the natural world together through a rhythm that underpins life on Earth. The MLF artists thus produce an alternative platform that enables us to contemplate the challenges our planet must tackle in the 21st century: they help us to consider our reliance on organisms whose environments we share. The protection and regeneration of ecosystems are fundamental parts of our collective future. MLF's work starts with a question: can we connect with other forms of life through technology? They explore technological processes as

³⁸⁸ This work by Marshmallow Laser Feast is very similar to *Osmose* (1995), an installation by Canadian artist Char Davies.

ways of working with perception and exploring our bond with the natural world, thereby blurring boundaries between reality and the virtual.



Figure 40. Marshmallow Laser Feast, We Live in an Ocean of Air, 2018

Eduardo Kac

Born in Rio de Janeiro in 1962, Eduardo Kac spent the first part of his artistic career in Brazil before settling in Chicago in 1989, where he now teaches at the *School of the Art Institute*. In the early 1980s, he explored experimental literature and swiftly realised that the traditional frames of the page and the printed document had reached their limits. He thereby sought to find ways of extending poetic writing into the three dimensions of physical space. Eduardo Kac's use of technology in an effort to revitalise poetry and the links between visual art and language is a distinctive feature of his artistic practice. He is interested in "the relation between the way words underpin and convey meaning and the fact that they are essentially lines, signs on a surface"³⁸⁹. In the 1980s and 1990s, he experimented with visual poetry, first by using a typewriter and pictograms, then through the video-text network (Brazil's Minitel), digital technology, and finally holography. This part of his work is closely bound up with telecommunication and the technical advancements it goes through. In the 1990s, he turned towards transgenic art. However, experimental literature and poetry remained the core of his approach. After thoroughly exploring the potential of telepresence, Kac started to work with genetics and biotechnologies, illustrating a desire to associate the body with technology.

In 1999, Eduardo Kac started a groundbreaking project called *Genesis*. The artist developed what he calls an "artist's gene", which he obtained by translating a verse of the book of *Genesis* into Morse code: "Let us make mankind in our image, in our likeness, so that it may rule over the fish in the sea and the birds in the sky, over the livestock and all the wild animals, and over all the creatures that move along the ground"³⁹⁰.

Converted into DNA base pairs, this synthetic gene, which bears a divine message, was injected into bacteria. The gene also contained a GFP sequence, making the bacteria fluorescent. During the exhibition period, the public was encouraged to interact with the system. Through the Internet, they could turn on an ultraviolet lightbox in the gallery, which was designed to mutate the bacteria³⁹¹. Through this, visitors simultaneously altered the biblical discourse, thus changing the meaning of a sacred phrase legitimising human domination over non-human terrestrial creatures.

³⁸⁹ Interview with Annik Bureau, December 2006.

³⁹⁰ Genesis, 1:26

³⁹¹ The entire thing was inside a UV-protective wall, thus making the bacteria harmless to gallery visitors.

Beyond its visual dimension, the work thus reveals a relative ambiguity. While the artist invites us to use biotechnologies, in other words, our power of domination over the living world, he simultaneously urges us to call the authority of human beings over their environment into question. The only way we can challenge the ideology of human domination is by activating the genetic mutation of bacteria. Kac develops a biotechnological style of writing. His practice connects to the notion of artificial intelligence as envisaged by the advocates of Singularity. The works of Kac convey an ideal, that of the transfiguration of humans through technology. They also open up a line of questioning concerning the borders between human and technological intelligence. Despite their differences, the thesis of Singularity goes hand in hand with that of Accelerationism as they both embody radical and highly debatable alternatives to facing environmental issues.

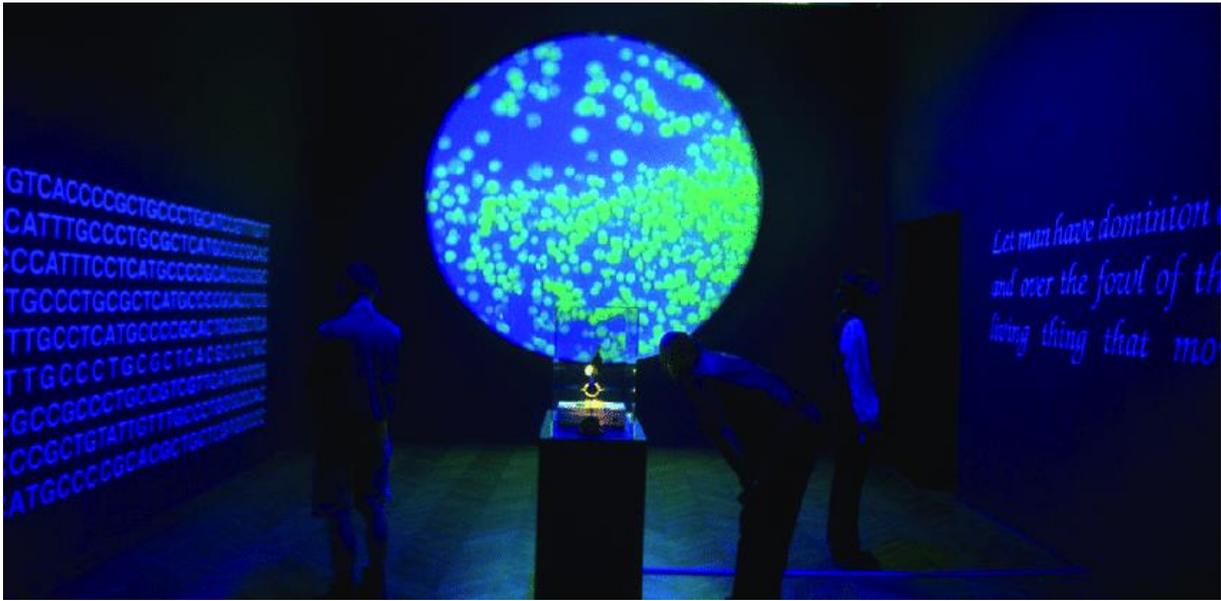


Figure 41. Eduardo Kac, *Genesis*, 1999

C. Accelerationism

Accelerationism too can be regarded as a symptom of the ecological disaster to which it attempts to provide a solution. We will start by analysing the solution this theory offers and go on to adopt a critical approach to it. Accelerationism implies questionable standpoints insofar as it excludes the question of non-humans.

According to the theory of Accelerationism, acceleration should be accelerated until the capitalist machine destroys itself to then build a radically new world. While it is rooted in the principle of economic growth, capitalism is marked by ever more state-of-the-art technological advancements and by competition, which leads to growing social inequalities. According to philosopher Nick Land, the future will be marked by “an unprecedented increase in technological developments”³⁹². Yet, while we move forward at high speed, we remain confined within the limits of the capitalist economic system: added value, labour, and the free circulation of capital.

While Nick Srnicek and Alex Williams have signed the Accelerationist Manifesto, Marx appears as the paradigmatic thinker of this intellectual trend. Indeed, he saw capitalism as a highly advanced economic model, the facts and figures of which should not be overturned but rather speeded up beyond the limits of the system itself. In 1918, Lenin declared: “Socialism is inconceivable without large-scale capitalist engineering based on the latest discoveries of modern science”³⁹³. In any case, it is not a question of returning to the age of Fordism, but instead of pushing the principle of capitalism itself beyond its own limits and the conditions of its survival. The founding principles of capitalism lie in the prioritisation of the free market and private companies, in line with a dogmatic pursuit of profit, promoting private property and entrepreneurial freedom.

According to the advocates of Accelerationism, only then can we imagine a post-capitalist world. The current neo-liberal infrastructure appears as the foundation for a radically new future. While it is necessary to encourage technological progress, technology itself does not embody the future, and advancements in this area must follow social advances. The Accelerationist agenda involves building a new socio-economic system: production processes, financial practices, logistics, and

³⁹² SRNICEK Nick, WILLIAMS Alex, *Accelerate Manifesto: For an Accelerationist Politics*, May 2013, in: MACKAY Robin, AVANESSIAN Armen (Eds), *Accelerate*, Urbanomic Media, 2014, p. 351

³⁹³ LENIN Vladimir Ilitch, “*Left-Wing*” *Childishness*, 1918, *Lenin’s Collected Works*, 4th English Edition, Progress Publishers, Moscow, 1972 Volume 27, pages 323-334, Part. 4.

consumerist habits will all have to be re-organised in order to fulfil post-capitalist ends. Democracy itself will have to be rethought based on a logic permitting collective self-mastery.

The ultimate goal of Accelerationism involves the need for a new ideology, a shared vision of what is desirable. Nick Srnicek and Alex Williams advocate a deep-seated reform of the media and challenge the fundamental principles underpinning social classes³⁹⁴. Acceleration would also involve implementing a synergy between infrastructural, ideological, social and economic forms of processing. The bases of post-capitalism would usher in a new techno-social platform and a Promethean policy for controlling society, the sole conditions for abolishing capital.

Accelerationists imagine freeing technological growth from all limits, including those of the Earth and those of our bodies. We must now take on a very critical approach to this notion and its implications. Accelerationism has considerable flaws. However, one must approach this trend through its reaction to environmental crises. The advocates of this movement are, it seems, nostalgic for “a rationalist, imperialist and triumphalist past”³⁹⁵. The hope they invest in the “liberating virtues of technical progress”³⁹⁶ stems from a decisive oversight concerning the intrusion of Gaia. Furthermore, they ignore non-modern humans as well as all non-human entities³⁹⁷.

Cao Fei

Born in 1978, Cao Fei is a Chinese multimedia artist. In 2007, she directed the film *RMB City: A Second Life City Planning*. It displays a proliferation of architectural elements, echoing the capitalist frenzy, which spurs the excessively rapid growth of Chinese cities. Cao Fei finds part of her inspiration in virtual reality, as seen in *Second Life*³⁹⁸. She takes ownership of this virtual world and alludes to the impact of contemporary global communication on our collective imagination, as well as our values and lifestyles. In doing so, she opens up a new field in artistic production by introducing new ways of image-making.

³⁹⁴ SRNICEK Nick, ALEX William, Ibid.

³⁹⁵ VIVEIROS DE CASTRO Eduardo & DANOWSKI Deborah, Ibid., p. 329. (my translation)

³⁹⁶ Ibid.

³⁹⁷ Ibid., p. 331.

³⁹⁸ Many artists have used Second Life, among whom Gazira Babeli.

Her aesthetic is inspired by the young people of China, Asian Pop music, and the new technologies of the age of globalisation. The film's title echoes the name of China's currency, the *renminbi* (Yuan), evoking escalating economic growth and, indirectly, the future of Chinese cities. The work's manifesto goes as follows: "New orders are born, so are new, strange wisdom[s]"³⁹⁹. This slogan is applied to the new virtual reality, as displayed on the *Second Life* platform. By choosing their avatars, *Second Life* users can buy and sell products, construct urban infrastructures, and interact with other avatars within an artificial utopia with apocalyptic undertones. The film presents an imaginary island full of monuments scrambling to fill it. They include the Monument to the Heroes of the People (Beijing), the Great National Theatre (Beijing), factories from northern China, the CCTV tower (China Central Television) by Rem Koolhaas, a Buddhist temple, a statue of Mao, the Three Gorges Dam, and the National Stadium in Beijing. This collision between traditional communist symbols and capitalist symbols reflects the complexity of contemporary China. The country's frenzied economic growth, as presented in *RMB City: A Second Life City Planning*, echoes the theory of Accelerationism by depicting the escalating development of a city that seems on the verge of implosion.

³⁹⁹ China Tracy (aka: Cao Fei), "RMB City Manifesto", RMB City project website, May 26, 2009



Figure 42. Cao Fei, RMB City: A Second Life City Planning, 2007

Malachi Farrell

Born in Dublin in 1970, Malachi Farrell is an Irish artist who lives and works in the Parisian suburb Malakoff. In 1972, his parents decided to leave Ireland and settle in Paris. Malachi Farrell's artistic practice involves installations informed by political challenges and cybernetic dimensions. Using sound effects and light, he creates choreographic pieces in which machines and objects are set in motion by complex electronic circuits. He combines a DIY approach with state-of-the-art technology, welcoming visitors into immersive systems.

As viewers, we find ourselves facing our own involvement in a society, the violence and brutality of which is revealed by the artist. Malachi Farrell's works are infused with wit; they employ satire and caricature, while also being informed by a strong political standpoint. The artist's "electromagnetic" dances reveal the conditioned aspects of our behaviours, drawing inspiration from various legacies, including punk culture. His practice, which strongly relates to street theatre, stands out through its unique intermingling of cultures and influences. At the exhibition *L'Argent / Money* held at the Plateau-Frac-Ile-de-France, in 2008, Malachi Farrell presented *Money Money*, an installation involving bank notes connected to a mechanical system leading them to perform a frantic dance while simultaneously sweeping the flour-covered floor. Through this satirical celebration of money, the artist orchestrated a witty tribute to the age of capital.

Malachi Farrell's installation echoes Andy Warhol's work *200 One Dollar Bills* (1962). Warhol's piece was made up of \$1 bills printed in black-and-white and arranged in ten columns across twenty rows. The repeated motif, which filled the canvas, echoed the all-over theory presented by Clement Greenberg in the context of abstract paintings produced by artists such as Jackson Pollock. Malachi Farrell and Warhol share a satirical approach to money and the capitalist economy. While Warhol ironically celebrated the hegemony of economic growth during the booming post-war years, which stretched to the mid-1970s, Malachi Farrell applied the same witty approach to a context of neoliberal crisis. While the supporters of Accelerationism advocate an "acceleration of acceleration", *Money Money* responds to this injunction through satire. The bank notes' mechanical dance alludes to a form of "cult" of capital, while their sweeping renders them ridiculous and trivial.

This terrifying analysis of the current situation leads to the conclusion that the religion of progress prevents effective reactions regarding environmental crises. The notion of "Capitalocene" could be a means to subvert this cult of economic growth, which prevents us from considering the

survival of species and our environment. The following section will examine the reasons why we do not react in the face of environmental crises.



Figure 43. Malachi Farrell, Money Money, 2008

II. Why Aren't We Doing Something?

A. The Religion of Growth

Why is it so hard to react to ecological crises? Everything seems to suggest that we know but “don’t believe what we know”⁴⁰⁰. Why does knowledge not spark action? Isabelle Stengers highlights that our leaders are gripped by “chilling panic” and consequently send overtly conflicting messages: “Consume, growth depends on it”, but “think about your ecological footprint”⁴⁰¹. These kinds of contradictions are a fixture of governmental behaviours. While they appear capable of taking decisive action when it comes to fighting drones or implementing worldwide markets, making considerable investments to rescue banks or large industries, they seem powerless when reacting to environmental crises, which embody the ultimate threat.

The tyranny of short-term political gain and the religion of growth appear to be the most influential fictions of our age. Governments find themselves in deadlock, incapable of working any manner of substantial change. In addition to this, the desire to win the next elections pushes them to take swiftly effective measures⁴⁰². Politicians are thus paralysed by the total alienation of growth. The fact is that the only way of preventing environmental catastrophe is to introduce radical forms of de-growth.

The world we live in is trapped in a fundamentally capitalist logic that turns all forms of life into nothing more than a kind of merchandise, while “being appears as a moment of Great Reification”⁴⁰³. The “Great Reification” turns human activity into merchandise. In the capitalist economy, this transformation culminates in nothing less than a fetishisation of the object, the exchange value of which completely overpowers its use. In 2014, the philosopher and sociologist George Marshall published the book, *Don't Even Think About It: Why Our Brains Are Wired to Ignore Climate Change*⁴⁰⁴. He attempted to answer the question in its title: why are we not spurred to action in the face of environmental crises? Through a range of numerous conversations (with scientists, ecologists, climate sceptics), George Marshall highlights that we are psychologically conditioned by our backgrounds and by a consumerist ideology, the roots of which run so deep that it cannot be

⁴⁰⁰ France Culture, *La Philosophie de l'écologie*, November 26-29th, 2018. (my translation)

⁴⁰¹ STENGERS Isabelle, *Au temps des catastrophes*, Ibid., p. 22. (my translation)

⁴⁰² DION Cyril, Ibid., p. 36.

⁴⁰³ BOURRIAUD Nicolas, *Coactivities - Notes for The Great Acceleration*, Taipei Biennial 2014. (my translation)

⁴⁰⁴ MARSHALL George, *Don't Even Think About It: Why Our Brains Are Wired to Ignore Climate Change*, Bloomsbury USA, 2014

overcome. Furthermore, we cannot fully experience climate change because, as a scientific narrative, it is too disconnected from our daily lives⁴⁰⁵.

Resisting environmental catastrophe would involve implementing policies that are not reconcilable with a deregulated form of capitalism, yet we live in a world where multinationals have unlimited power. They benefit from a significant legal tool, namely the “international agreements” of trade and investment. These agreements enable them to take steps against any attempt to restrict the exploitation of fossil fuels. In theory, commercial law protects industries against all quantitative restrictions concerning the free circulation of goods on international scales. However, the scope of these agreements largely depends on each State’s goodwill. They include many obscure points, which seem to give each government the power to limit the frenzied trade of gas and oil. Furthermore, it would be necessary for States to take action, not only against the privatisation of the public sector but also against the deregulation of markets and, lastly, against lowering public expenditure.

In the United States, the climate-sceptical right, also known as climate change deniers, regards the discourse around climate change as a device designed to do away with both capitalism and the American way of life⁴⁰⁶. People are also assessing the aim of free-market agreements and the creation of the WTO, designed to promote unfettered capitalism that ignores environmental threats. More broadly, the capitalist ideology stifles us both politically and culturally, preventing us from putting up an effective fight. In other words, it makes us incapable of “being spurred to action”. In Naomi Klein’s words, “only when we identify these chains do we have a chance of breaking free”⁴⁰⁷. The economic system in which we currently live essentially involves an addiction to GDP growth. Capital is thus turned into a fetish, leading us to blissfully ignore its human and environmental consequences. Consequently, it is easier to imagine ecological collapse than a repeal of capitalism’s basic logic. It is shocking to note that people often use the current economic crisis forgo all efforts concerning international aid and the struggle against global warming. This can be observed in both the United States and Europe. Nevertheless, if we consider that stemming the climate crisis involves suspending the use of oil, we must also acknowledge that it would cause actual economic collapse⁴⁰⁸. However, rather than simply ignoring our seemingly insoluble situation, it seems essential to urgently implement alternatives to fossil fuels.

⁴⁰⁵ DEGEORGE Patrick, in: ZARACHOWICZ Weronika, *Penser la terre pour penser notre avenir*, Télérama, 3 May 2013

⁴⁰⁶ KLEIN Naomi, *Ibid.*, p. 31.

⁴⁰⁷ *Ibid.*, p. 63.

⁴⁰⁸ DION Cyril, *Ibid.*, p. 26.

The advocates of fossil fuels and nuclear energy declare that sources of renewable energy lack reliability. They argue that these sources depend on various factors such as sunlight, wind power and river currents. However, this is a common misconception. Indeed, thermal power stations need to be constantly supplied with fossil fuels, making them very vulnerable. On the other hand, once adequate systems are put in place, renewable resources will just require free raw material, such as wind and sun, for an unlimited period.

We will now attempt to highlight the ways in which we are conditioned by the narratives we evolve in and identify the structures that determine our lifestyles. The word “structure” is used here to point to the set of essential factors that govern our lives, regardless of whether or not we are aware of them. Jean-François Noubel⁴⁰⁹ describes these structural factors as “invisible architectures”, which usually determine our lifestyle and our behavioural patterns. The religion of growth seems to be one of the most powerful fictions of our age. According to Timothy Morton, not only have the foundations of the Western capitalist economy caused the environment to deteriorate considerably, “they have had an equally damaging effect on thinking itself”⁴¹⁰.

Several factors of inertia can be identified; first, the necessity to “earn a living” appears and then, the pressure to become consumers, which lead us to dream of accessing a whole host of goods and reaching a certain social status. Then comes our demand for entertainment: in the world we live in, our attention is the subject of nothing less than an economy involving considerable profits. Lastly, we must acknowledge our submission to laws championed by an allegedly democratic system. It could be helpful to subject our current democracy to an in-depth appraisal and to raise the following question: “Are we really living in a democracy?”. This brings to mind the European Constitution, which despite being rejected by Europe’s citizens in 2005, was adopted regardless, in the form of a treaty, four years later, without consulting the population⁴¹¹. Additionally, the desire to “make something of oneself life”— to succeed — which affects us all far too often involves a frantic consumerist pattern of behaviour: such an ideal gives rise to a frenzied destruction of the world around us.

⁴⁰⁹ NOUBEL Jean-François, *Use Essence rather than Function*, article, website of the author, 2010

⁴¹⁰ MORTON Timothy, *Ibid.*, p. 4.

⁴¹¹ DION Cyril, *Ibid.*, p. 77.

Our freedom and the survival of ecosystems are threatened by the usurpation of power by a minority bent on defending a narrative of economic growth and profit maximisation⁴¹². However, according to Jean-Pierre Dupuy, the worst is not to come; it is already here⁴¹³. While we are conscious of the danger surrounding us, we refuse to believe in this reality. The fact is that catastrophe is no longer merely “possible”: it is now “inevitable”.

B. Capitalocene

In our current situation, the ability to subvert the “religion of growth”, as well as other narratives, is essential. The theory surrounding the Capitalocene notion allows us to construct a plan to reach this goal. The term “Capitalocene” shifts the now widespread use of the term Anthropocene substantially. Here, the condemnation of the alienation that comes with labour, as defined by Marx, finds its “biological” extension — starting with non-humans having become objects of speculation. The environment itself is thus seen as capital. The “great acceleration” can then be seen as a process of “naturalising capitalism”, with the latter appearing to be the “natural law” of the Anthropocene.

The word “Capitalocene” sheds light on the overlap between capital and non-humans. It was introduced by Andreas Malm, during a lecture given in Lund (Sweden) in 2009. The inclusion of environmental issues within a history of capitalism is also Jason Moore’s aim. Going back as far as the end of the Middle Ages, Moore places the exploitation of natural resources at the heart of his study. He uses the notion of “Capitalocene” as part of a critical approach to the ideology that determines our relation to the living world⁴¹⁴. Donna Haraway⁴¹⁵ used this same term in her own way, expressing her conviction that a form of exorcism is necessary in order to “become alien, in one’s perceptions, one’s attachments, and one’s imagination, to productivism and its inexhaustible ideology of progress”⁴¹⁶.

The neologism “Capitalocene” echoes the speculation applied to non-humans as well as the fabrication of awareness. Financial speculation is thus applied to the production of knowledge. Indeed, the production of knowledge seems to have become entangled with financial stakes,

⁴¹² Ibid., p. 78.

⁴¹³ DUPUY Jean-Pierre, *Pour un catastrophisme éclairé*, Seuil, 2004

⁴¹⁴ MOORE Jason, *Capitalism in the Web of Life*, Verso Books, 2015

⁴¹⁵ HARAWAY Donna, *Staying with the Trouble: Making Kin in the Chthulucene*, Duke University Press, 2016, p. 2.

⁴¹⁶ HACHE Émilie, *Retour sur terre*, in: HACHE Émilie, Ibid., p. 19. (my translation)

particularly in the development of private research, which is used to fulfil the market's agenda. For example, synthetic biology can be seen as the production of a living world designed to perform commercial activities⁴¹⁷. According to Dominique Bourg, we must give up on the idea that human life cannot develop without technological advances. Furthermore, the ideal of economic growth must be fundamentally called into question, insomuch as it traps us in a deadlock⁴¹⁸.

Isabelle Stengers addresses what we now see as an “economy of knowledge”. Many scientists have agreed to the implementation of partnerships with the industrial sector, in particular through the production of patents. In doing so, they have erased the boundaries between public and private research⁴¹⁹. Likewise, computer scientists have been confronted with financial speculation focusing on their area of work. Unlike other scientists, they have responded with effective resistance through the famous “general public licence” (GNU). This allows for the creation of free software that everyone can download, thus uniting “users” through their shared ways of thinking, imagining and creating. Although computer scientists do not claim responsibility for an anti-capitalist movement, their form of resistance can be associated with a recent political creation referred to as “user movements”⁴²⁰. We are now in need of emancipated researchers capable of maintaining their independence from their funding bodies.

Christophe Bonneuil defines the Capitalocene as an “eco-Marxist narrative”⁴²¹. While Marx studied an early contradiction of capitalism, its inability to reproduce the force of labour, the eco-Marxist narrative sees the Anthropocene as the result of a second contradiction within capitalism: its inability to preserve nature. The Anthropocene embodies the intolerable dimension of any capitalist “world system”. The “world system” concept was developed in the 1970s by Immanuel Wallerstein to describe the economy's internationalisation and to define its inherent asymmetries and inequalities. According to Immanuel Wallerstein, capital, which has far more power than species do, is its driving force. The fact that the rise of industrial capitalism has introduced a disparity in terms of wealth between nations and social groups is common knowledge. The poorest 20% received 4.7% of the world's income in 1820 and only 2.2% in 1992, while the wealthiest 10%'s share rose from 43% to 53%.

⁴¹⁷ BOURG Dominique, *Une Nouvelle Terre*, Éditions Desclée de Brouwer, 2018, p. 165.

⁴¹⁸ BOURG Dominique, Article, *La Vie*, 26 avril 2018

⁴¹⁹ STENGERS Isabelle, *Au temps des catastrophes*, Ibid., p. 71.

⁴²⁰ Ibid., p.77.

⁴²¹ BONNEUIL Christophe, *The Geological Turn: Narratives of the Anthropocene*, in: HAMILTON Clive, GEMENNE François, BONNEUIL Christophe, *The Anthropocene and the Global Environmental Crisis: Rethinking modernity in a new epoch*, Routledge, 2015, p. 27.

Agnes Denes

Agnes Denes is an American artist of Hungarian descent. She works directly with landscapes, laying claim to a form of responsible and political art. Her artistic approach stems from the natural sciences, philosophy and linguistics. Her best-known works are overtly political.

In 1982, with her action *Wheatfield — A Confrontation*, the artist produced a work that aligns with both her ecological and political convictions. This second project in the “The Urban Environmental Site Program” series was commissioned by the Public Art Fund. The program itself was developed to follow the timescale of a season. Performed in New York, the action consisted in sowing wheat on a plot of wasteland nearing 8,000 square metres in Battery Park, south Manhattan. In this space, which at the time was being used as a dumping ground, a group of volunteers and assistants devoted their days to planting wheat throughout the month of May and gathering the harvest in August of that same year. Agnes Denes deliberately chose this area of New York, known for being one of the most expensive per square foot. Wheat, the basis of the human nutrition across the world, thus replaced the usual property speculations. The “confrontation” in the work’s title probably referred to the emergence of a vital phenomenon disrupting bureaucracy and financial speculation. In discussing the work, the artist spoke of a “visual philosophical concept”⁴²². The project combined two typologies of speculation, the property market and that which determines cereal prices. *Wheatfield — A Confrontation* gave rise to the production of 450 kilos/over 1,000 lbs. of wheat. The crops were then transported to the *International Art Show for the End of World Hunger* exhibition, which took place between 1987 and 1990. The grain was eventually sown in different parts of the world. Through its symbolic and political aspects, Agnes Denes’ work directly echoed the meaningful power of the alternative terminology of “Capitalocene”⁴²³.

In this work, the condemnation of the alienation that comes with labour, as defined by Marx, was applied to its “biological” extension — by taking the observation whereby non-humans have become objects of speculation as a starting point. The artist addressed the ways in which the environment is regarded as capital and produced a model of subversion, disrupting that state. Beyond the beauty of the artist’s installations, which are integrated within their natural surroundings, Agnes Denes’s approach creates an encounter between scientific and artistic

⁴²² BOZZO Ana Christina, at al., *The International Art Show for the End of World Hunger*, New York, Artists to End Hunger, Inc., 1987, p. 86.

⁴²³ HARAWAY Donna, *Staying with the Trouble*, Ibid., p. 2.

languages. Her practice is also part of an unusual and distinctive aesthetic, through which art can have an effect on the world.

In 1982, Agnes Denes designed the blueprint for a new project, *Tree Mountain—A Living Time Capsule*. The work involved planting a forest of 11,000 fir trees, following a geometric grid. On June 5th, 1992, the project was announced during the Earth Summit held in Rio de Janeiro and received financial support from the UN Environmental Programme (UNEP). The installation was inaugurated in 1996 in Finland at Pinziö, near Ylöjärvi. The trees were spread across an artificial hill, following a motif of interlacing lines inspired by a Fibonacci sequence. Agnes Denes managed to obtain a status of inalienability for that forest, thus allowing it to be safeguarded for four centuries. Each tree is associated with a person holding a protection certificate, which can be passed on by being donated or inherited. Through this project, Agnes Denes seems to be implementing a process of reconciliation between mathematics — symbolising the power of our intellect over other forms of life — and nature itself, which we are endangering. The Fibonacci sequence adds a unique structural feature to Agnes Denes' forest. Pinecones and sunflowers are particularly striking elements of the piece, as their shapes are reminiscent of the Fibonacci sequence. The work itself escapes the usual relationships between capital and non-humans. In its use of the “Capitalocene” notion⁴²⁴, this project pushes against the “naturalisation of capital” by regenerating and preserving a site that connects a considerable amount of people.

⁴²⁴ HARAWAY Donna, *Ibid.*



Figure 44. Agnes Denes, Wheatfield—A Confrontation, 1982

Amy Balkin

Amy Balkin studied at Stanford University and is now based in San Francisco. Her groundbreaking practice combines cross-disciplinary research with social criticism. Her works address issues of environmental justice and invite us to question the public domain's current legal framework. Amy Balkin challenges the privatisation of shared resources and exposes the ideological limits of the international pollution rights laws.

In 2004, she began developing the project *Public Smog*. This work consisted in a fragment of the atmosphere developing in space. In the artist's own words, it was a "park" built through financial, legal and political procedures in order to be accessible for public use. To make the park possible, the artist had to purchase CO₂ shares so that they were no longer available in the polluting industry market. The work's size varied depending on the amount of purchased emission rights and the duration of the contract. The seasonal fluctuations in air quality also had to be taken into consideration. *Public Smog* opened in California in 2004, in the *South Coast Air Quality Management District* (AQMD), through the purchase of an emission permit for 24 pounds of nitrogen oxide (NO_x). It later opened in Europe, between 2006 and 2007, through the purchase of an emissions permit for 51 tons of CO₂. The Park was sensitive to wind and the effects of aerosols and gas transportation. It was an area of pure air within a fluctuating environmental space. *Public Smog* was shared through a website, communication campaigns, exhibitions, and actions in public spaces.

Carbon emission trading is designed to encourage industries to reduce their polluting activities. The financialisation of SO_x and NO_x emissions⁴²⁵ started 25 years ago in the United States; however, the greenhouse gas market is a relatively recent phenomenon. The commercialisation of polluting gases has been developing since the ratification of the Kyoto Protocol. This financialisation of air stems from the principle whereby industries need financial incentives to develop less polluting activities. It involves assigning a value to pollution production and enables industries to sell "pollution credits" that have not been used. This system is problematic, firstly because it does not impose defined limits on global pollution, and also because the logic of air privatisation is part of the transformation of all resources into tradeable and commercial goods, making it difficult to determine who profits from this system. The financialisation of air does not

⁴²⁵ OECD's statistics about environment, database: <http://dx.doi.org/10.1787/data-00598-fr>.

offer an adequate solution to the problem of pollution. *Public Smog* itself as a subversive alternative, highlighting the necessity for a new model.

The *Public Smog* project deals with two distinct challenges. Firstly, it responds to the development of gases in the lower layers of the atmosphere — at least 5 km/3 miles above the ground —, seen as a combination of particles such as soot, invisible toxic gases including ozone, CO, SO², and carcinogens. Ozone, for example, is produced through the photochemical processing of nitrogen oxide (NO_x). Secondly, *Public Smog* responds to the exponential concentration of greenhouse gases (CO₂, CH₄ and N₂O) in the upper layers of the atmosphere — over 20 km/12 miles above the ground. The latter imprison the rays of the Earth, consequently heating the planet to a catastrophic degree. The concentration of greenhouse gases in the atmosphere is constantly rising, resulting in a rise in average temperatures, which can have a catastrophic effect on the Earth's climate balance. Amy Balkin's work, which involves both the lower part of the atmosphere and its upper layers, subverts the system of financialisation.

Through *Public Smog*, Amy Balkin is developing a subversive body of work that challenges the financialisation of natural resources. The alternative she presents involves denouncing atmospheric pollution and giving the public the means to buy back the air they breathe. Her project deals with the “Capitalocene” notion in implementing a subversive infiltration of the established system.

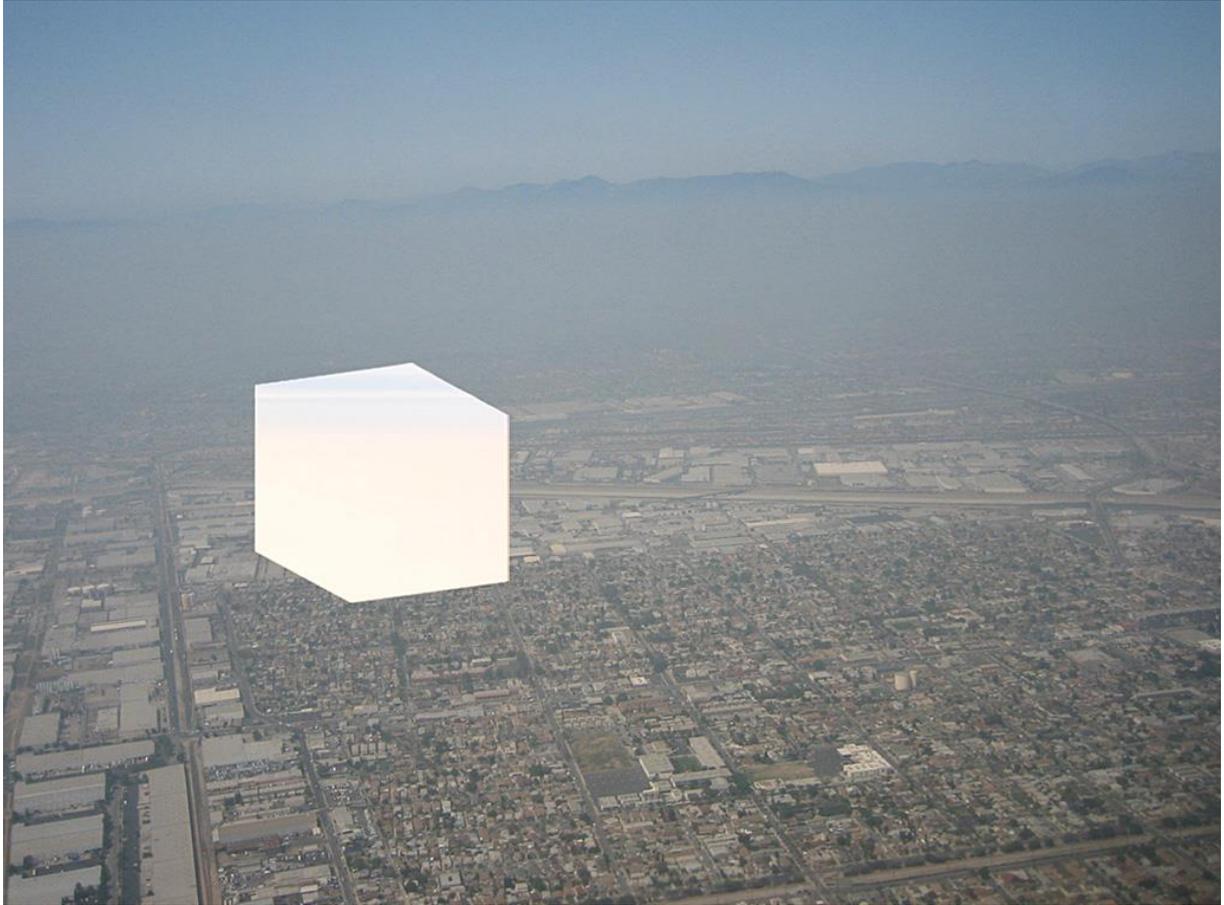


Figure 45. Amy Balkin, Public Smog, 2004

Olivier Darné

Born in 1971, Olivier Darné is a founding member of the collective *Le Parti Politique / The Political Party*. He is also involved in a programme developed for the area known as *zone sensible / sensitive zone*, situated at Saint-Denis (France). His artistic approach is informed by a keen awareness of environmental issues. Using the lexical field of money and finance, he attempts to inform the public of the consequences of the alarming state of bees on our ecosystem and strives to redefine the notion of wealth.

In 1996, Olivier Darné submitted an advertisement: “Beekeeper looking for bees”. A month later, he installed a colony comprising 60,000 worker bees and a queen on the flat roof of his house in Saint-Denis. In 1997, he harvested 40 kg/100 lbs. of honey and handed out 100 pots in his neighbourhood. This marked the start of “Miel Béton” / “Concrete Honey”, which went on to win four medals at the regional agricultural show the following year. Olivier Darné subsequently installed thirty hives on the roofs of the Saint-Denis city hall and invited the city’s inhabitants to share the honey they produced. Three hundred different kinds of pollen were harvested, in parks, squares and gardens. The artist thus began to transform his urban area into a local production area.

In 2009 the project expanded through the implementation of “The Honey Bank” in various European countries. The “Honey Bank” is a creative system involving the participation of “members” or “stakeholders” who invest money in the project. With a minimum deposit of 10 Euros, it is thus possible to open a “bee savings account”. The money is immediately invested in the production of new hives, and the harvested honey is shared between members. The Bee Savings Account was the first step of a larger project, namely, the FMI (which, in French, also stands for International Monetary Fund) or International Honey Fund. The FMI offers longer-term investments across the globe, making it possible to connect subscribers to beekeepers and bee colonies across the globe. Following the project’s system, beekeepers receive equipment and bees and endeavour to dispatch a portion of their yearly production over the first two years to the “World Honey Fund”. After these two years, the beekeepers become the owners of the hives and bees, which are handed over by the WHF. Much like an investment fund, the “World Honey Fund” turns into a “world honey centre”. This monetary vocabulary appears as an effective way of subverting financial capitalism.

In 2012, Olivier Darné received the COAL Art & Environment prize for his project, *La Banque des Reines/The Queen Bank*, an urban project about bees. The project started in September 2014 in Saint-Denis and was also implemented in various European cities. The banks, installed in urban settings, are composed of buildings measuring 8 metres x 3 metres/25 x 10 feet, including a pollination area, a strong room with an airlock, and about 200,000 bees. These pollination and queen-rearing centres are designed to repopulate hives in the countryside. According to data collected by the CNRS⁴²⁶, bees in rural areas currently produce four to five times less honey than bees located in cities of 200,000 inhabitants. Indeed, cities seem to reach greater biodiversity⁴²⁷ than many rural regions, which are marked by the widespread use of herbicides and pesticides. Through his practice, Olivier Darné challenges financial speculation as applied to resources, wealth re-distribution, and the disappearance of natural species. His work focuses on bees, whose survival as a species is under threat and who seem to be vital to human life. Indeed, their pollination is necessary to the production of over 70% of our food in terms of fruit and vegetables, and as a result, this process is valued at \$153 billion per annum⁴²⁸. The *Queen Bank* can therefore be seen as a “life bank”, following on from the initial *Honey Bank* project, a “guarantee fund” for the living world.

Olivier Darné’s practice addresses challenges that affect the cultural, social and urban diversity of the city. As an effective indicator of environmental deregulation, bees call our intensive farming production and our resulting land management into question. By combining scientific research with poetic gestures, the artist builds a connection between our monetary system and the principle of the “public service of pollination”⁴²⁹. In the 1960s, the artist Robert Filliou defined the principles of the Poetic Economy, based on a new value system, geared towards the creation of a new “art of living”. Inspired by the Filliou project, Olivier Darné has been developing an activist response that surpasses artistic action by directly engaging with social issues. His programme, which involves collaborating with environmentalists, scientists and politicians, is a form of environmental resistance. The overarching financial metaphor of Olivier Darné’s global project echoes the notion of Capitalocene. Indeed, it subverts the speculation on natural resources, which leads to intensive and destructive farming practices. When examining these artistic projects, it seems important to define the conditions of action.

⁴²⁶ REGERT Martine, CNRS, *Abeilles, une histoire intime avec l’humanité*, Cherche Midi, 2019.

⁴²⁷ Ibid.

⁴²⁸ Ibid.

⁴²⁹ Ibid.



Figure 46. Olivier Darné, La Banque des Reines, 2012

III. Conditions for Action / Envisaging Ecological Alternatives

In this third phase, I will attempt to define the conditions of action that help us envisage ecological alternatives. Changing our current situation would require millions of us to take action. In order to do so, we must invent a future, just as much as it is necessary to dream about a better future. Cyril Dion highlights the political impact of utopias⁴³⁰, which allow us to imagine shared prospects.

Furthermore, he believes in implementing “step-by-step” methods, underlining the potential for successions of small steps, small struggles, and small strategic challenges to culminate in major changes. In Jonathan Kozol’s words, we should “Choose battles that are big enough to matter, but small enough to win”⁴³¹.

A. A state of war

In order to start defining principles of action, let us adopt a belligerent metaphor: according to James Lovelock, human beings have declared war on the earth. Emilie Hache underlines that Lovelock uses this warmongering metaphor to push us to take action⁴³². We have yet to define the nature of the adequate and effective mode of action we require. Violent controversies regarding the truth of global warming pit the GIEC⁴³³ scientists against climate sceptics and deniers. Indeed, millions of dollars are being invested, particularly in think tanks, in order to reject the environmental crisis. Climate sceptics see global warming as a threat to the survival of their world, which is tied to principles of economic growth and frenzied consumption. Thus, “Earthlings”, Latour’s term for the “people of Gaia”, must learn to identify their enemies as their allies. We must acknowledge the variety of people who are in a “state of war”⁴³⁴ in order to start imagining the conditions for peace.

This metaphor allows us to approach various principles of action. Srdja Popovic⁴³⁵ mentions several, including that while it is important to think big, it is necessary to start small⁴³⁶. Furthermore,

⁴³⁰ DION Cyril, *Ibid.*, p. 126.

⁴³¹ *Ibid.*, p. 116. (my translation)

⁴³² LATOUR Bruno, in *Les Grands Entretiens*, *Ibid.*

⁴³³ DION Cyril, *Ibid.*, p. 21.

⁴³⁴ LATOUR Bruno, *L’Anthropocène et la destruction de l’image du Globe*, *Ibid.*, p. 36.

⁴³⁵ POPOVIC Srdja, *Blueprint for Revolution: How to Use Rice Pudding, Lego Men, and Other Nonviolent Techniques to Galvanize Communities, Overthrow Dictators, or Simply Change the World*, Random House, 2015, p. 29.

⁴³⁶ “Dream Big, Start Small”, in: POPOVIC Srdja, *Ibid.*

our vision for the future must be capable of bringing crowds together. It is crucial to identify the current pillars of power if we are to subvert them. In order to be implemented, the movement must unite people around a common goal. The strategy we will introduce here requires a variety of steps. While we must embrace a non-violent approach, we must nevertheless fight right to the bitter end⁴³⁷. This strategy echoes John Dewey's book, *The Public and its problems*⁴³⁸, in which Dewey shows how important it is to establish a concerned "public" rallied around a clearly identifiable question.

Within this state of war, new environmental ethics seem to be emerging among "Earthlings". According to John Baird Callicott, it implies an obligation to preserve a "common good", modes of co-existence between humans and non-humans. In this sense, let us define Gaïa's interdependence and interaction with our world⁴³⁹. These new ethics are core to the emergence of new narratives, which transform our understanding.

B. Fictions and narratives

Fiction is the most powerful driving force. Action can only become possible if human beings agree to transform their outlook in favour of a specific cognitive apparatus. Our societies are usually rooted in narratives — which call upon the "emotional brain"— making them sensitive to behavioural models. We must therefore develop new narratives and transform the mental structures which determine our lifestyles. Philosophical, ethical and political changes have always been led and driven by histories and narratives. Revolutions always involve the adoption of new narratives as effective modes of resistance⁴⁴⁰. We are constantly surrounded and informed by narratives including "myths, fables, sagas, historical narratives, tragedies, comedies, pictures, dances, stained-glass windows, films, social histories, fairy-tales, novels, scientific plans, comic strips, conversations, and newspaper articles"⁴⁴¹.

Our liberal and consumerist society has not evaded this process: its political victory has been determined by the narratives of our imaginations, and more broadly, Western culture. Our

⁴³⁷ DION Cyril, *Ibid.*, p. 121.

⁴³⁸ DEWEY John, *The Public and its Problems*, 1927, Swallow Press, 2016

⁴³⁹ DEGEORGE Patrick, in: ZARACHOWICZ Weronika, *Penser la terre pour penser notre avenir*, Télérama, May 3rd, 2013

⁴⁴⁰ DION Cyril, *Ibid.*, p. 14.

⁴⁴¹ *Ibid.*, p.49. (my translation)

relentless exploitation of natural resources, leading to the extinction of a whole host of species, is also the result of some forms of fiction. This brings us to ask ourselves how we can implement new narratives. Furthermore, if we want to persuade crowds of people to join us, we must offer them a narrative of ecological future: a horizon is crucial. George Marshall highlights the fact that stories have a major cognitive function. Through them, emotions permeate our understanding, influencing our choices and impacting our lifestyles. Narratives convey values and carry beliefs that give meaning to our dreams, thoughts, hopes, and fears. This ability to come together through shared stories and beliefs sets us apart from non-humans. These fictional structures, which have evolved through the ages, have had an extensive impact on our worldview.

C. Defining a desirable future

It seems crucial to define a desirable future. However, we are faced with an inescapable cultural battle insofar as our minds need images. Any action against global warming and climate change requires us to define an appealing future. To put it simply, we need to dream. First and foremost, we must imagine “the houses we might live in, the cities we might evolve in, the ways in which we might commute or travel, how we might produce our food, how we might live together, and share our planet with all living beings”⁴⁴². It then comes down to finding ways of “positively contaminating minds”⁴⁴³. Such a process may be implemented through artistic creation. However, other people also demonstrate a capacity to intervene in beneficial ways, including “entrepreneurs and businessmen, engineers, economists, elected officials, collectives, journalists...”⁴⁴⁴. Much like the standardisation of imagination, the colonisation of minds must be pushed aside to make way for the hope of slowing down, limiting, and even putting a stop to the destruction of ecosystems⁴⁴⁵.

Besides, it is essential to include a spiritual dimension in these new narratives, as this dimension significantly impacts our societies. In his Encyclical “*Laudato si*” (2015), Pope Francis declared, “We are called upon to recognize that other living beings have their own value before God (69)”⁴⁴⁶. The pope rejects despotic approaches to nature and goes on to express his conviction that “everything is connected in the world”⁴⁴⁷ (16) and that we should move beyond the nature-culture

⁴⁴² Ibid., p.82.

⁴⁴³ Ibid., P.82.

⁴⁴⁴ Ibid., p.82.

⁴⁴⁵ Ibid., p. 84.

⁴⁴⁶ Pope FRANCIS, *Laudato si'*, *On Care for Our Common Home*, Encyclical Letter, ORBIS Edition, 2016, p. 61

⁴⁴⁷ Ibid., p. 20

“dualism” that governs our relationship to the environment. We must reread The Book of Genesis to return to the origins of our relationship with other forms of life. God’s Creation is offered to us on the condition that we take good care of it and that we treat humans and non-humans equally. Spirituality thus aligns with the law in regarding nature as a “Subject of Rights”.

In his book *Les Arbres Doivent-ils Plaider? / Should Trees Have Standing?*⁴⁴⁸, published in 1972, Christopher Stone supports the idea that a river or a mountain should be considered a “Subject of Rights”, with the ability to file a lawsuit in any trial against any multinational corporation. This initial idea, put forward by Christopher Stone, with regard to the rights of nature, has evolved over the years and is now a public subject of debate. How are we to consider nature’s interests, and what legal tools can we use to do so? The issue of nature’s rights has become increasingly relevant in the context of recent verdicts. On the 15th of March 2017, the New Zealand government recognised the Whanganui River as a legal person. Similarly, on the 20th of March 2017, the High Court of Himalaya State in India decreed that the Ganges and Yamuna rivers would henceforth be regarded as living entities and gave them the status of legal persons too. We could therefore consider granting all species an extension of human rights, which would include the possibility of legal representation. This kind of initiative echoes the implementation of a renewed relationship with other forms of life, which David Abram describes as “The Life-World”⁴⁴⁹. Furthermore, it invites us to reflect on our economic system, which often prioritises excessive and damaging consumption.

D. Ecological Alternatives

The conditions of action we have examined open up the possibility of developing ecological alternatives. These alternatives are rooted in the development of environmental ethics, which involve considering the intrinsic value of non-humans. This would involve adopting a “biocentric logic”, which puts life at the core of any value system. Furthermore, environmental ethics involve the principle of ecocentrism, an approach through which ecosystems are no longer seen as resources but as “patients” requiring our moral attention⁴⁵⁰. Dominique Bourg established a connection between the critique of individualism and the acknowledgement of the dignity of natural elements. We are tied to a form of interdependence that includes non-humans. Our

⁴⁴⁸ STONE Christopher, *Should Trees Have Standing?: Law, Morality, and the Environment*, Oxford University Press, 2010

⁴⁴⁹ ABRAM David, *The Spell of the Sensuous: Perception and Language in a More-Than-Human World*, Pantheon Books, 1996, p. 40.

⁴⁵⁰ BOURG Dominique, *Une Nouvelle Terre*, Éditions Desclée de Brouwer, 2018, p. 198.

economy should take the limits of our terrestrial resources into account by introducing principles such as permaculture. This “orphic” technique involves respecting the complementary nature of species and thus of ecosystems so as to form autonomous gardens which require no labour⁴⁵¹. Furthermore, we must establish a distinction between organic farming and agroecology. While the first implies a refusal of the industrial model, the second involves transforming our relationship with natural resources by regenerating soil and living in harmony with our surroundings. Environmental ethics are a necessary foundation for the implementation of ecological alternatives. These alternatives can operate on a variety of scales and in many different territories.

The ecological alternatives we need involve considerable interventions, which include sizeable subsidies for businesses adopting ecological solutions, major fines for those who refuse to comply with new rules, taxes tailored to pollution levels, the re-nationalisation of private companies, and the introduction of new public works programmes⁴⁵². In order to implement an effective form of resistance to the economy and the principles of modernity, it seems necessary to apply concrete alternatives.

Cities seem to be effective areas of action. Indeed, their scale allows them to implement change faster than states do. As potential sites of “cultural revolution”⁴⁵³, cities hold more than half of the world’s population and are responsible for 70% of greenhouse gas emissions. Despite Trump’s decision to withdraw from the Paris agreement, dozens of American mayors have announced their compliance with the agreement on a local scale⁴⁵⁴. These cities, which are home to over 68 million Americans, have embarked on this journey. Some have even taken their actions further; for instance, the mayor of Los Angeles and the “Under 2 Group” have tried to unite as many regions as possible to join them in their mission to stay below the 2-degree mark. Today, we can confirm the signatures of 175 local authorities in 35 countries on six continents⁴⁵⁵. As president of the C40 (City Climate Leadership Group), Anne Hidalgo (Mayor of Paris) is a leading figure of a programme including mayors of many major international cities. “The Alliance of Carbon-neutral Cities” includes Paris, Oslo, Stockholm, San Francisco, Sydney, Yokohama, Berlin and Rio de Janeiro,

⁴⁵¹ Ibid., p. 224.

⁴⁵² KLEIN Naomi, Ibid., p. 39.

⁴⁵³ DION Cyril, Ibid., p. 127.

⁴⁵⁴ *461 US Climate Mayors commit to adopt, honor and uphold Paris Climate Agreement goals*, in: <http://climatemayors.org/>, November 27th, 2019.

⁴⁵⁵ DION Cyril, Ibid., p. 128.

among others. Movements such as “cities in transition” and the “Transition Network”⁴⁵⁶, which advocate for a petroleum-free future, are developing. In parallel, the Incredible Edibles turn towards cities filled with gardens and vast vegetable plots, setting up eco-villages, and introducing alternative currencies.

While drastic interventions, including a permanent ban on polluting activities, must be implemented, we must also be wary of the temptation of using the kinds of high-risk technologies that are being introduced by geoengineering. This type of technological intervention makes a distinction between humans and non-humans, despite their undeniable connection. Advocates of geo-engineering believe in implementing initiatives on a planetary scale in order to lower the global temperature. Their proposed methods include “the Pinatubo option”, which involves the pulverisation of sulphur particles into the atmosphere. This method could result in the creation of a permanent layer of fog around the Earth. Geoengineering’s alarming technologies tend to focus on the consequences of our harmful effects on plants, to the detriment of the primary cause of the environmental crisis.

Bonnie Ora Sherk

San Francisco-based Bonnie Ora Sherk defines herself as a landscape designer, educator, and artist. Her practice combines environmental and artistic activities. Inspired by the notion of community, she strives to create a creative world where environmental awareness is made possible. In 1974, Bonnie Ora Sherk and her collaborator Jack Wickert created “Crossroads Community”, commonly known as “The Farm”. Unfortunately, the project came to an end in 1987, when municipal authorities expelled the project’s participants. Over 28,000 square metres/300,000 square feet in size, “The Farm” was situated under a vast freeway intersection in San Francisco: Army Street freeway, Highway 101, Cesar Chavez and Potrero. With the help of a community of collaborators, they turned two depots into an *in situ* sculpture. The space housed animals (goats), as well as plants, vegetables and flowers. A nursery school was established there, and the project brought together artists, poets, dancers, punks, and gardeners. People went there to watch performances and dance shows. The San Francisco Mime Troupe, Make-a-Circus, and The Jones Family visited the place and eventually moved there.

⁴⁵⁶ Moreover, some American governors have founded *The United States Climate Alliance*, a coalition gathering U.S. states committed to upholding the Paris Climate Agreement. Members include New York Governor Andrew Cuomo, California Governor Edmund G. Brown Jr., and Washington State Governor Jay Inslee. In: <https://www.governor.wa.gov/>, June 2017

“The Farm” brought together a community of inhabitants, including people living in nearby neighbourhoods, as well as members of the artistic community. Everyone was invited to participate in a range of activities, such as interdisciplinary events with environmental focuses. Bonnie Ora Sherk’s goal was to create a radical ecological model involving the development of non-hierarchical interactions. All those who visited “The Farm” or lived there were considered as part of its ecosystem. The project reflected Sherk’s “Life Frame” concept, the idea of a practice that turns into a microcosm. The performances and installations that were presented in the space conveyed relationships between humans, animals and the natural environment. In 1981, Lucy R. Lippard declared that “The Farm” was “the most ambitious and successful work of ecological art in this country”⁴⁵⁷. In a world dominated by money, technology and the search for power, “The Farm” project portrayed a desirable future.

When Bonnie Ora Sherk began to develop “The farm” in 1974, she established “freedom” and “community” as the project’s fundamental values. “The Farm” was one of the first communities to bring together people, animals, plants and resources, offering a new form of ecological thinking in a city marked by exponential industrial growth. At the crossroads of several approaches, The Farm embodies the possibility of “living together”, a topic that we will address in our fifth chapter. On a small scale, Bonnie Ora Sherk successfully implemented the conditions of action in response to environmental crises.

⁴⁵⁷ BLANKENSHIP Mirjana, from her essay: *The Farm by the Freeway*, in the anthology *Ten Years That Shook the City: San Francisco 1968-78*, edited by Chris Carlsson, City Lights Foundation, 2011



Figure 47. Bonnie Ora Sherk, The Farm, 1974

Mel Chin

In 1990, Mel Chin embarked on his *Revival Field* project in St Paul, Minnesota, in collaboration with his partner Rufus L. Chaney. This project's development (1990-1993) involved working with scientists to clean up plots of land that he described as works of art. On those plots, the artist noticed ground pollution and an abnormal concentration of "heavy metal" residues such as chrome (Cr), lead (Pb), nickel, cadmium (Cd), zinc (Zn), uranium (U), mercury (chemistry) (Hg) and arsenic (As).

The artist used "hyperplants" which attract heavy metals. He followed the process of "phytoremediation", planting plants that absorb heavy metals through their roots. The residues of polluting metals were then diffused through the aerial parts of those same plants through "phytoaccumulation". Sunflowers (*Helianthus annuus*) have high phyto-accumulation capacities. While soil pollution stems from organic compounds, they are transformed into non-toxic substances by enzymatic reactions in the soil or the plants being grown in it. This is called "phytoextraction". When the pollutant evaporates, vanishes into thin air, so to speak, in a non-toxic form, the process is referred to as "phyto-volatilisation".

Some plants secrete substances that increase the activity of microorganisms close to their roots (at the level of their rhizospheres) and thus contribute to the deterioration of polluting elements. For *Revival Field*, Mel Chin marked out an 18 x 18 m./60 x 60 ft. square patch of ground on a site seriously polluted by an abnormal concentration of heavy metal residues: zinc (Zn) and cadmium (Cd). He surrounded this plot of land with metal fencing, following the methods of scientific experiments. Within this area, the artist drew a circle in which he grew plants designed to decontaminate the earth. The circle itself was divided into six areas in which various species developed. The project involved the participation of scientists as well as a community of residents concerned about the environment. In following scientific principles, the circular part of the work was considered a "test area" while the remaining parts of the square were seen as "control" parts. The site could be accessed through tracks intersecting at the centre of the work. When viewed from above, the entire piece resembled a target. The work was devised as an invisible sculpture, its materials being biochemistry and agriculture.

The work's final outcome involved barely perceptible visual effects resembling minimalist forms. This minimal aesthetic was to be closely examined by scientists capable of assessing the quality of

soil regeneration. Eventually, the piece became more visible, as the plants grew and nature thrived. This work's conceptual dimension encouraged a novel form of ecological awareness.



Figure 48. Mel Chin, Revival Field, 1991

SUPERFLEX

The Danish collective SUPERFLEX became known in 1997 by creating a biodigester designed for communities in developing countries. A biodigester or “anaerobic biodigester” is a device used to produce biogas, in other words, a mixture of gases — primarily methane — produced by bacteria that digest organic matter in anaerobic conditions⁴⁵⁸. A bio-digester thus consists in a chemical reactor, the reactions of which are rooted in biological processes.

SUPERFLEX thus developed a biogas unit capable of producing enough gas to fulfil a family’s cooking and lighting needs. Their first biogas system was installed in 1997 on a farm in Tanzania, in partnership with the African organisation SURUDE (Sustainable Rural Development). In 1998, the Supergas project was presented to the public at the Louisiana Museum of Modern Art in Denmark through videos, written statements, campaign visuals, and posters. That same year, they set up a holding company, Supergas A/S, to develop the biogas system and promote it in various developing countries. SUPERFLEX’s work is marked by a collaborative work method and a strong conceptual strategy. They started by introducing Supergas in Tanzania and Cambodia and went on to extend their programme to Mexico.

In 1997, as members of the collective SUPERFLEX implemented the prototype of their biodigester in Africa, they involved individuals and institutional representatives who strongly believed in the substantial social, economic, cultural and environmental impact of the project. Supergas has been installed in Mexico thanks to the efforts of exhibition curators and a number of organisations, including Patrick Charpenel, TOA (Taller de Operaciones Ambientales), and the Alumnos47 Foundation. While many people see Supergas as a humanitarian project, members of the SUPERFLEX collective approach biogas users as consumers. They consider the implementation of the biodigester as a micro-economic situation. This project fits within the logic of micro-finance, which, at the time, was in its infancy and therefore represented a new way of thinking and acting.

The collective is influenced by the work of Thomas R. Preston, one of the founding fathers of biogas systems in the 1970s, who developed his programme in China and India. However, they

⁴⁵⁸ The term ‘anaerobic environment’ describes an environment in which there is no oxygen in the form of dioxygen (O₂). The living conditions required by organisms living in an environment without oxygen are known as ‘anaerobiosis’. A living organism or an anaerobic mechanism does not need air or dioxygen to function. For example, a digester produces biogas in an anaerobic state.

managed to come up with a new system, which is far easier to transport and more sustainable than Preston's. During their research in Denmark, they met the Danish engineer, Jan Mallan. Taking advantage of his help to develop this new system, they combined his knowledge and experience with their own ideas. The members of SUPERFLEX met Patrick Charpenel in Sao Paulo in Brazil. Charpenel was interested in the Supergas concept, the idea of an artwork with a function. Patrick Charpenel⁴⁵⁹ sees the Supergas project as one of the most radical artistic interventions, especially considering its worldwide social impact. His help was crucial to making the development of the project in Mexico possible in 2011.

Supergas involves many challenges, including making sure that it is accessible to consumers. It is also necessary to evaluate the project's social and environmental impact, and in particular, the role it could play as a tool within a larger system. Supergas is designed to be used by communities and collectives as well as individual families. It can supply the energy required by a family of 6-8 people. The main goal is to set it up in places such as schools and community centres, where it acts as a strategic communication tool and is used to inform people and teach them how to use the system. Supergas must be financially accessible, easily transportable, and capable of being installed in different settings. Members of the SUPERFLEX collective have explored all types of recipients and all types of materials in search of affordable solutions and possibilities for repeated use. The outcome is the result of multiple different collaborations: with designers, engineers, physicists, chemists, industrialists, financial experts, graphic designers, biologists, and architects. Supergas is never finished: the project involves a search for the right people and favourable conditions. It explores the idea of art being used as a tool, making it possible to understand and, sometimes, solve social problems. It is both a utopian and viable project, with a decisive effect on the lives of populations on various levels. This kind of work invites us to respond to environmental crises through a logic of resistance.

⁴⁵⁹ CHARPENEL Patrick, MC CLEAN Daniel, *SUPERFLEX, The Corrupt Show and the Speculative Machine*, Fundacion / Coleccion Jumex, Mexico, 2013-2014.



Figure 49. SUPERFLEX, Supergas, 1997

IV. Adopting a Logic of Resistance

A. Living “against ourselves”

Resist the “coming Barbarism”⁴⁶⁰.

How can we embrace a logic of resistance with regard to environmental crises? In facing a new climate regime, Isabelle Stengers invites us to live “against ourselves”, in other words, to resist the “coming Barbarism”⁴⁶¹. Gaia embodies this “barbarism”, a “fearsomely powerful” force we must learn to “think and come to terms” with⁴⁶². Significant damage can already be observed. Our current challenge involves halting the acceleration of the capitalist system through a process of resilience and, to a far greater degree, “regenerating, repairing and stimulating the healing process”⁴⁶³.

To quote Pope Francis, in his encyclical *Laudato Si’*, we must question “the dominant technocratic paradigm and the place of human beings and human action in the world”⁴⁶⁴. This means developing a new policy and a new way of thinking, as well as a “spirituality” of resistance⁴⁶⁵. Isabelle Stengers invites us to invent a post-growth life, which will involve new ways of feeling, imagining and thinking. This programme entails betraying the role of confident consumers that we are being assigned⁴⁶⁶ in favour of becoming “growth objectors”⁴⁶⁷. While it is impossible to fight Gaia, it is nevertheless necessary to fight to escape capitalism’s grip⁴⁶⁸.

In Naomi Klein’s words, we are currently living in “decade zero”, in other words, in the brief period available to us to stop climate change. We must adopt drastic measures on a planetary scale, which involves convincing the most lucrative corporations in the world to turn their backs on billions of dollars of profit and refrain from extracting the fossil fuels available to them. This is based on the observation that the world’s economic elite will inevitably have to suffer sizeable

⁴⁶⁰ STENGERS Isabelle, *Au temps des catastrophes*. Ibid., p. 48. (my translation)

⁴⁶¹ Ibid.

⁴⁶² STENGERS Isabelle, *Penser à partir du ravage écologique*, in : HACHE Émilie, Ibid., p.147. (my translation)

⁴⁶³ DION Cyril, Ibid., p. 88. (my translation)

⁴⁶⁴ Pope FRANCIS, Ibid, p. 75.

⁴⁶⁵ BOURG Dominique, *Une Nouvelle Terre*, Éditions Desclée de Brouwer, 2018, p. 115.

⁴⁶⁶ STENGERS Isabelle, *Au temps des catastrophes*, Ibid., p. 14.

⁴⁶⁷ Ibid., p. 15. (my translation)

⁴⁶⁸ Ibid., p. 43.

financial repercussions. The struggle against global warming must therefore drive the implementation of existing programmes, thus transformed into a vast global grouping.

Two Degrees of Intensity: Radical Ecologists and Conservative Ecologists

We will now distinguish two degrees of intensity among ecologists. Those who are radical are, for the most part, disciples of degrowth, anti-capitalists, and at times anarchists. In their opinion, neo-liberal society should be quite literally dismantled. Radical ecologists campaign for blocking refineries and preventing the construction of new airports as well as nuclear power stations; they see these infrastructures as symbols of the religion of capitalist growth. The Deep Green Resistance (DGR), an ecologist organisation founded by Derrick Jensen, Lierre Keith and Aric McBay in 2011, certainly shares these beliefs. Their members seek to restore ecosystems and are eager to dismantle Western consumerist society. Deep Green Resistance members raise a quintessential question: “Do human beings hold a special place in the Earth’s ecosystem, or are they just a species among others, no more or less important than the rest?”⁴⁶⁹ Moreover, as a member of the Deep Green Resistance’s steering committee, Derrick Jensen asserts that we, humans, are merely animals, among others. Arne Naess⁴⁷⁰, the founder of deep ecology, breaks away from an anthropocentric vision of ecology while highlighting the intrinsic value of other forms of life.

On the other hand, conservative, ecologists campaign for green growth and sustainable development without calling the capitalist model itself into question. They evoke the possibility of implementing different behaviours, including making recycling systemic and sharing certain objects. Their goal is to develop various ways of transforming our economies to make them less damaging to the environment. They demand that these economies be called into question in favour of circular and “permacircular” economies. The first founding principle of a “permacircular” economy is its global dimension, combined with multiple local interventions. It triggers human inventiveness on different scales, associating the development of high-tech tools with practices such as permaculture. It involves promoting a great change in our ways of life through an economy rooted in solidarity.

Three Scales of Action: Individual, Collective and Political

⁴⁶⁹ DION Cyril, *Ibid.*, p. 45.

⁴⁷⁰ NAESS Arne, *The Shallow and the Deep, Long-Range Ecology Movement*, *Inquiry*, n°16, 1973, p. 95-100.

Three distinct forms of active resistance can be identified: individual, collective and political resistance. These different kinds of action clearly need to be applied simultaneously.

As individual consumers, we have the power to influence the market in direct ways: if polluting industries produce consumer goods designed for us, we can simply choose not to buy them. If enough people refuse to buy a product, its production decreases⁴⁷¹. Consumerism can only exist as a result of our agreement to take part in it. We just need to persuade a sufficiently large number of people to jointly turn their backs on frenzied consumption. Cyril Dion founded the “Colibris (Humming-Bird) Movement” in 2006, with Pierre Rabhi, Isabelle Desplats, and Jean Rouveyrol, among others. This movement is named after a Native American legend: “Once upon a time, legend has it, there was a huge forest fire, and all the terrified and devastated animals witnessed the disaster powerlessly, except for a small hummingbird who wandered off in search of a few drops of water to carry in its beak and throw on the fire. After a while, the armadillo, irritated by this absurd activity, exclaimed: ‘Hummingbird! Are you crazy? You won’t ever be able to put out the fire with those drops of water!’ The hummingbird replied: ‘I know, but I’m doing my bit’”⁴⁷².

The state of our environment is the result of the sum of each of our actions. Like the hummingbird, each one of us can “do our bit”. The same applies to “Happy Sobriety”, founded by Pierre Rabhi with a view to individually and radically cutting back on consumerism, and focussing instead on the further development of human qualities such as intelligence, empathy, and joy.

Collective resistance encompasses a broad spectrum of actions. Beyond Deep Green Resistance, let us consider the Nicolas Hulot Foundation’s Ecological Pact — issued in 2007 —, the World Wildlife Fund for Nature (WWF), and various movements involving cities in transition. There are multiple struggles, including Greece’s opposition to the Eldorado Gold company, an extraction project involving gold and copper mines. Romania has seen a relentless struggle against the Chevron company, which was going ahead with shale gas extraction. In Canada, there is a similar struggle against the SWN resources company involved in fracking. In England, in the Arctic (with the help of Greenpeace), in Inner Mongolia, and Australia’s coal mines, there have been similar struggles. Lastly, in Canada and the United States, there have been major demonstrations against

⁴⁷¹ DION Cyril, *Ibid.*, p. 38.

⁴⁷² *Ibid.*, p. 31.

all projects associated with the tar sands of Alberta⁴⁷³ and the Keystone XL oil pipelines⁴⁷⁴, which are currently being built by TransCanada and Northern Gateway, at Enbridge⁴⁷⁵.

If individual action and collective civic action does not suffice, a major political undertaking should have substantial consequences. We, therefore, need bold political leaders, and they, in turn, need to be backed by millions of citizens. In 1992, the Earth Summit held in Rio de Janeiro appeared to be a decisive step. Furthermore, the COPs (UN Climate Change Conferences: 2015 in Paris, 2016 in Morocco, 2017 in Fiji, 2018 in Poland) have shown significant progress. In 2007, the Nicolas Hulot Foundation implemented the Ecological Pact. Signed by 900,000 people, it was disseminated by 70 NGOs and resulted, in December of that same year, in the Grenelle Pour l'Environnement/Environment Round Table in Paris.

Lastly, in 2010, the World People's Conference against Climate Change drew up the Universal Declaration of the Rights of Mother-Earth, and its advocates demanded that the UN's General Assembly adopt it. In tandem, on a national scale, it would be important to apply a "selective degrowth"⁴⁷⁶, based, among other things, on a lower number of working hours and a basic minimum income guaranteed for one and all. It would also be necessary to challenge and reverse the free-market ideology and the belief that private services are more efficient than public ones. The development of new forms of renewable energy necessarily requires the participation of governments and public services.

Alternative practices

As we understand it, Plan A involves considerable measures, including giving large subsidies to companies implementing ecological practices, large fines for those who do not comply, the introduction of taxes matching pollution levels, the re-nationalisation of private companies, and the introduction of new public programmes. The rapid growth of opposition movements has been stimulated by risks associated with contemporary extraction technologies, including fracking, deep water drilling, and shale oil, which turns out to be volatile and corrosive, and lastly, mini-earthquakes caused by fracking. In order to inspire a real fight against the economy and the principles of modernity, it seems necessary to apply concrete alternatives capable of heralding a

⁴⁷³ March 2020

⁴⁷⁴ February 2014, Portland, Oregon.

⁴⁷⁵ January 2013

⁴⁷⁶ KLEIN Naomi, *Ibid.*, p. 93.

desirable ecological future. Such a transition calls for financial resources that will have to be taken from the profits of industries extracting fossil fuels.

Movements against fossil fuels are growing in India, and major protests against the construction of new coal-fired power stations are taking place in China. In 2009, Mark Z. Jacobson and Mark A. Delucchi set up a programme that demonstrates how “100% of the total energy consumed in the world could be supplied between now and 2030 by wind farms, hydroelectric installations, and solar farms”. Such a programme included heating, transport, refrigeration and air-conditioning requirements. The technology we have access to already seems to allow for the implementation of such a reversal: “we really need to just decide collectively that this is the direction we want to head in as a society”⁴⁷⁷.

B. Resistance and its manifestations in the art field

Practices of resistance concerning global warming and the pollution of our ecosystems strongly resonate through some of the practices currently developing within the field of visual art. We will now endeavour to study a non-exhaustive selection of these artistic practices.

Asa Sonjasdottir

Born in Sweden in 1966, Asa Sonjasdottir lives in Tromsø (Norway) and Berlin (Germany). She is a professor at the Academy of Contemporary Art in Tromsø, Norway. Between 1996 and 2006, she was one of the founding members of *Women Down the Pub*, an action group combining art and feminism. Her practice engages with political issues to do with biodiversity and democracy. She has been looking at the cultural, political, and economic implications of growing potatoes since 2005.

In 2014, she received the COAL Art and Environment Prize for her *High Diversity* project. The COAL prize's theme that year was “Paris”. *High Diversity* involved re-introducing a dozen potato varieties that had appeared during the 18th and 19th centuries back into Paris and its surrounding area. The artist established a connection between the evolution of tubers and French political history. She selected potatoes brought to France during the French Revolution, echoing the

⁴⁷⁷ KLEIN Naomi, *Ibid.*, p. 102

emergence of freedom and equality in Western society. In her study of relationships between food and politics, she focuses on preserving historical memories attached to harvested plants. Agricultural industrialisation has led to the rejection of certain vegetable varieties. The potato varieties that are prohibited from circulating freely within the European Union can be seen as signalling the start of a line of thinking about monoculture and its effects on the environment. European regulations⁴⁷⁸ are resulting in an imminent loss of diversity, as monoculture upsets the balance of ecosystems. She both takes an interest in the potatoes' conditions of inclusion to the list of national varieties approved by the European Union and applies a logic of resistance to the standardisation of food production.

In the development of her project in Paris, the artist identified five possible cultivation areas, including the Jardin des Plantes, the Tuileries gardens, the Maronville Farm, the shared garden of Bois Dormoy, and the shared communal garden of Cambrai. She adopted the principle of shared gardens⁴⁷⁹, studying the links between people and plants. The outcome was an installation that she presented at Le Centquatre in Paris between the 18th and 26th of October 2014. The installation, which looked like a market, seemed to be the result of a participatory project. It illustrated a line of thought relating to social justice issues, environmental concerns, and the sustainability of food production. By growing, preparing, sampling and creating new potato recipes, some of which involved ancient varieties, she evoked elements of our shared history. Asa Sonjasdotter's approach is rooted in the idea that food is closely bound up with real social issues.

In this installation, each potato variety evoked a specific historical moment and a specific socio-economic development. Growing this food both involved cultivating these ancient varieties of potatoes and became a way of building a shared awareness, a shared anxiety concerning our living conditions. From Thursday 21st of May to Saturday 26th of September 2015, the artist exhibited her installation in the inner courtyard of the Museum of Hunting and Nature. Her project was also shown in Paris, as well as in Copenhagen, Berlin and Los Angeles.

During her exhibitions, visitors were invited to harvest potatoes and take them home. She adapts the selection of potatoes to each of the places in which she exhibits her work. Thus, the varieties

⁴⁷⁸ Founded in 1962, the Common Agricultural Policy (CAP) involves establishing standardised forms of agriculture, often leading to monocultural practices. The debates surrounding it tend to stretch through time, with the 2013 reform only being implemented in 2015. The current discussions are now focused on measures to be implemented between 2021 and 2027.

⁴⁷⁹ Shared gardens are collectively created and managed gardens. One of their objectives is to encourage the development of social bonds through common activities and pedagogical events.

of potatoes harvested in Los Angeles were closely linked to the agricultural context and history of the United States. The varieties she works with are varieties that are not tolerated or accepted by the European regulations for commercial distribution. These ancient varieties do not belong to anyone; they are collectively owned. Through *High Diversity*, Asa Sonjasdotter simultaneously raises ecological awareness and actively protects biodiversity.



Figure 50. Asa Sonjasdotter, *High Diversity*, 2014

Joseph Beuys

Born in 1921 in Krefeld, Germany, Joseph Beuys taught at the Düsseldorf Academy of Fine Arts from 1961. His influence on the thinking and work of generations of future artists remains substantial. During the Second World War, when he was a Luftwaffe pilot, Joseph Beuys was badly wounded in 1943 at the Russian front in Crimea. This incident and the controversial narrative Beuys drew from it became major elements of the symbolic structure of his oeuvre. While one story suggests that he was found by a German soldier, who took him to the hospital, Beuys claims that he was taken in by Tartar nomads⁴⁸⁰. The latter fed him with honey, covered him in fat, and wrapped him in felt blankets. These elements, which allegedly saved his life, became recurring motifs of his body of work.

Beuys consequently used materials like felt and fat in memory of this incident. In the 1960s, he established a recurring set of materials specific to his practice: felt, copper, wood, honey, sulphur, fat, bone. These elements came to form a metaphorical language with a mix of physiological and symbolic energy. His oeuvre is also infused with various traditions such as Christianity, Nordic myths and legends, shamanism, the alchemy of Paracelsus, and the anthroposophy of Rudolf Steiner. While developing his theory of “social sculpture”, Beuys also displayed a renewed belief in the idea of the total work of art (*Gesamtkunst*), in other words, a form of art that calls upon all the senses and that aims to produce a more just society. Despite being a very distinctive figure, Beuys was involved in many art movements that emerged in the 1960s, including Fluxus, Happenings, and Process Art.

Before long, he began to develop actions, the principles of which he defined in tandem with the notion of expanded art. In the 1970s, Beuys took part in building the *Die Grünen* (The Greens) party in Germany, and environmental concerns became central to his work. It eventually became difficult to differentiate between the figure of the artist and that of the politician, preacher, and scientific theorist. Beuys was deeply invested in the fate of the Earth.

In 1982, at Documenta 7, in Kassel, he started a groundbreaking project that involved planting 7,000 oak trees in the urban space. The *7000 Oaks* action’s aim was to raise people’s awareness of the yet little-known issue of deforestation. The artist took on a shaman-like role; he wanted to

⁴⁸⁰ This story is a kind of legend and nobody will ever know if it is true or not.

revitalise the Earth, which he saw as a “spiritual mother”⁴⁸¹. Beside each tree, he placed a basalt stele, each of which was about 1.20 metres/4 feet high. This marking system was designed to lend the oaks a monument-like quality. While the volume and height of the stones remained unchanged, the oaks associated with them grew taller. Thus, conjuring a future age, Beuys’ action incorporated the evolution of the natural world. The work directly affected the division between the constructed (stones, asphalt, concrete) and the natural elements operating within urban space.

During the planting process, the mayor of Kassel and representatives of the administration acknowledged that only the intervention of an artist such as Beuys could have made such an undertaking possible, in particular through his thwarting of numerous bureaucratic restrictions. The action’s success also stemmed from the collaborative input of the many participants involved in the project. Without the help of Kassel’s citizens, planting these oak trees would have been impossible⁴⁸².

In the artist’s own words, planting those oak trees was not an end in itself. While the work represented a vital action for the biosphere, its ultimate purpose was to raise far greater awareness of the fate of our natural environment. His action, devised as an interrupted process, was meant to develop over the years⁴⁸³. *7000 Oaks* fit within Beuys’s concept of expanded art, which he called “social sculpture”, and which also included his work with the Greens. The artist combined two non-human elements, one from nature, the other from culture: oak and stele. The tree embodies the uninterrupted movement of the living world, which is under threat, while the stone embodies the stability of what is built and the original essence of human intervention within the environment.

Through this pairing, we are invited to reflect on the oak’s existence, acknowledge its presence, and bear witness to its value among future generations. Isabelle Stengers urges us to “resist”⁴⁸⁴, in other words, to “live against” the situation that underpins the concept of Anthropocene. Let us recall the etymology of the German word for “object”: *Gegenstand*, which literally means “placed against”. By arranging each tree “against” a stone stele, Joseph Beuys seems to have staged a system of resistance, and the extent of its meaning comes to light through the “intrusion of Gaia”⁴⁸⁵. The

⁴⁸¹ Similarly, the slabs of rock that compose the sculpture *La Fin du XX^{ème} siècle* (1983) are arranged on the ground like a field of ruins or graves, inviting us to consider the fate of the Earth, somewhere between apocalypse and resurrection.

⁴⁸² SCHOLZ Norbert, *Beuys: 7000 oaks in Kassel*, Anthos: Zeitschrift für Landschaftsarchitektur, N° 3, *Trees: the sign of life in the city*, 25, 1986, p. 34.

⁴⁸³ *Ibid.*, p. 32.

⁴⁸⁴ STENGERS Isabelle, *Au temps des catastrophes*, *Ibid.*

⁴⁸⁵ *Ibid.*, p. 48. (my translation)

work's immemorial quality is accompanied by its aspect of symbolic “resistance” and Isabelle Stengers’ invitation to “dream other dreams”⁴⁸⁶.

⁴⁸⁶ STENGERS Isabelle, *Une autre science est possible ! Manifeste pour un ralentissement des sciences*, Paris, La Découverte, 2013, p.125. (my translation) / *Another Science Is Possible: A Manifesto for Slow Science*, Polity Press, 2017



Figure 51. Joseph Beuys, 7000 Oak Trees, 1982

Maria Thereza Alves

Maria Thereza Alvas was born in Brazil in 1961, during the dictatorship of Castelo Branco. Before long, her family settled in New York, where she studied. She very swiftly started to actively engage with political issues such as the rights of indigenous minorities, de-colonisation, and ecology.

During the 1980s, she co-founded the Brazilian Green Party (Le Partido Verde)⁴⁸⁷. It was then that she produced her first shows, often involving a collaborative approach: her practice engages with local cases, building an “aesthetics of resistance” addressing ecological challenges. Her work is radically conceptual and anti-formalist. Today, she is internationally renowned: her works have been shown at Documenta 13 in Kassel in 2012 and at the Sao Paulo Biennial in 2017.

She uses a whole host of media, including film, text, drawing and photography, through which she usually produces elaborate installations. Her exhibitions are like travelogues, records of her travels around the world. In 1992, during the commemoration of Christopher Columbus’ arrival in America, together with Jimmie Durham and Alan Michaelson, she performed *Veracruz/Virginia* in Monterey, London, and Madrid. The three artists wore metal helmets, which prevented them from speaking, evoking the stifled voices of colonised peoples. They walked through streets seeking out reactions to their silence. Between 1991 and 2014, Maria Thereza Alves developed a work called *The Return of the Lake*, responding to the history of Lake Chalco, 25 miles from Mexico City. This lake was drained by the Spanish in the early 20th century, resulting in harmful consequences for the region’s environmental balance. Through vast installations made up of information boards, objects, and photographs, she paid tribute to this site, which had become a victim of ecological catastrophe.

In 1999, Maria Thereza Alves inaugurated the project *Seeds of Change*, a work situated at the crossroads of colonisation, slavery, and ecology. In the 19th century, slaves were sold in the Antilles and forced to work in sugarcane plantations. The slave-ships then sailed back from the Caribbean to Bristol, England, forming a triangle between Bristol, Africa, and the Antilles. Thanks to a group of experts at Bristol University, the artist discovered that seeds brought by ships during the slave trade could remain dormant for hundreds of years in the sediment of watercourses. This gave Maria Thereza Alves the idea of retrieving shoots originating from those seeds and replanting them in large western cities. She thus began to explore the ambivalent history of globalisation.

⁴⁸⁷ Between 1997 and 1994, she lived with her partner, artist Jimmie Durham, in Cuernavaca, Mexico.

Maria Thereza Alves implements a form of “resistance” to the dominant capitalist discourse and its origins. In 2018, she started a collaborative project with the Botanical Gardens in the city of Bristol with the German designer Gitta Gschwendtner, planting seeds to create a floating garden. This garden echoed the commercial triangle that marked Bristol’s history, denouncing the origins of Western capitalism. Maria Thereza Alves’s work involves an ethical dimension; through it, she seeks to raise political, ecological and social awareness, which in this case is relevant to environmental crises.



Figure 52. Maria Thereza Alves, Seeds of Change, 1999

Conclusion

Artists show us that it is possible to develop practices that react to environmental catastrophes. This is particularly well illustrated by Cecilia Johnson's work⁴⁸⁸. In 2013, she produced *The Iron Ring*, a work based on her exploration of the Rio Tinto, a river tinged with red located in southeast Spain. NASA scientists had previously studied this ecosystem, which shows similarities with Mars. The region is marked by the intensive mining of copper, silver, gold, and other minerals, which has made the Rio Tinto extremely acidic. The water, which has low oxygen levels, is made dense by the presence of suspended metals. The river's red colouring is due to the iron which dissolves in it. Cecilia Johnson's action consisted in collecting a large quantity of grasses growing on the banks of the Rio Tinto, in particular the species known as *Imperata Cylindrica*. This very invasive plant is also a hyper-accumulator of iron. It absorbs the iron in its soil and keeps it in its leaves, stalks and roots. The artist gathered 24 kg/more than 50 lbs. of *Imperata Cylindrica* and collaborated with scientists, technicians and farmers to extract the iron ore inside the plants. She then went on making an iron ring from the metal thus collected. Five years of hard work resulted in the production of a piece of jewellery that weighed 2 grams. The work involved stabilising the soil and opened up the possibility of introducing other plants to it so as to restore biodiversity. Through this work, the artist shows us that it is possible to intervene within our environment, in reaction to a highly alarming situation⁴⁸⁹.

After observing the current situation, I have presented a critical analysis of environmental crises through the thesis of Singularity and Accelerationism. We have then addressed the following question: "Why aren't we doing something?" and discussed the religion of growth, which should be undermined. Following this, we have proposed a non-exhaustive inventory of the conditions of action that could enable us to consider ecological alternatives, highlighting examples within the art field. Lastly, following Isabelle Stengers' thinking, we have discussed how we must now respond to Gaïa's call by resisting the Anthropocene and living "against ourselves".

Reacting to the ecological catastrophe also involves constructing a "common model", which we will discuss in the next chapter. In Timothy Morton's words, "ecology includes all the imaginable

⁴⁸⁸ Born in 1980 in Sweden, Cecilia Jonsson lives and works in Bergen, Norway. Her art practice involves installations and sculptures as well as kinetic works. Inspired by scientific methods, she works with chemistry and living organisms. She produces in situ installations and is interested in natural phenomena, especially the physical properties of elements that are essential to human life. She merges objective research methods and her own subjective experience.

⁴⁸⁹ Cecilia Jonsson's practice echoes that of Mel Chin.

ways of living together. Essentially, ecology talks about co-existence⁴⁹⁰. To use this author's words again, "ecological thinking imagines interconnectivity", which he calls "the mesh". In other words, nothing exists on its own, and ecological thinking calls upon multiple "strange strangers"⁴⁹¹. In order to illustrate this phrase, Morton uses the example of animals, who are deeply strange to us, even "strange" in their own "strangeness"⁴⁹². We must deal with these entangled beings in order to reimagine a common world.

⁴⁹⁰ MORTON Timothy, *Ibid.*, p. 4.

⁴⁹¹ *Ibid.*, p. 15.

⁴⁹² *Ibid.*, p. 41.

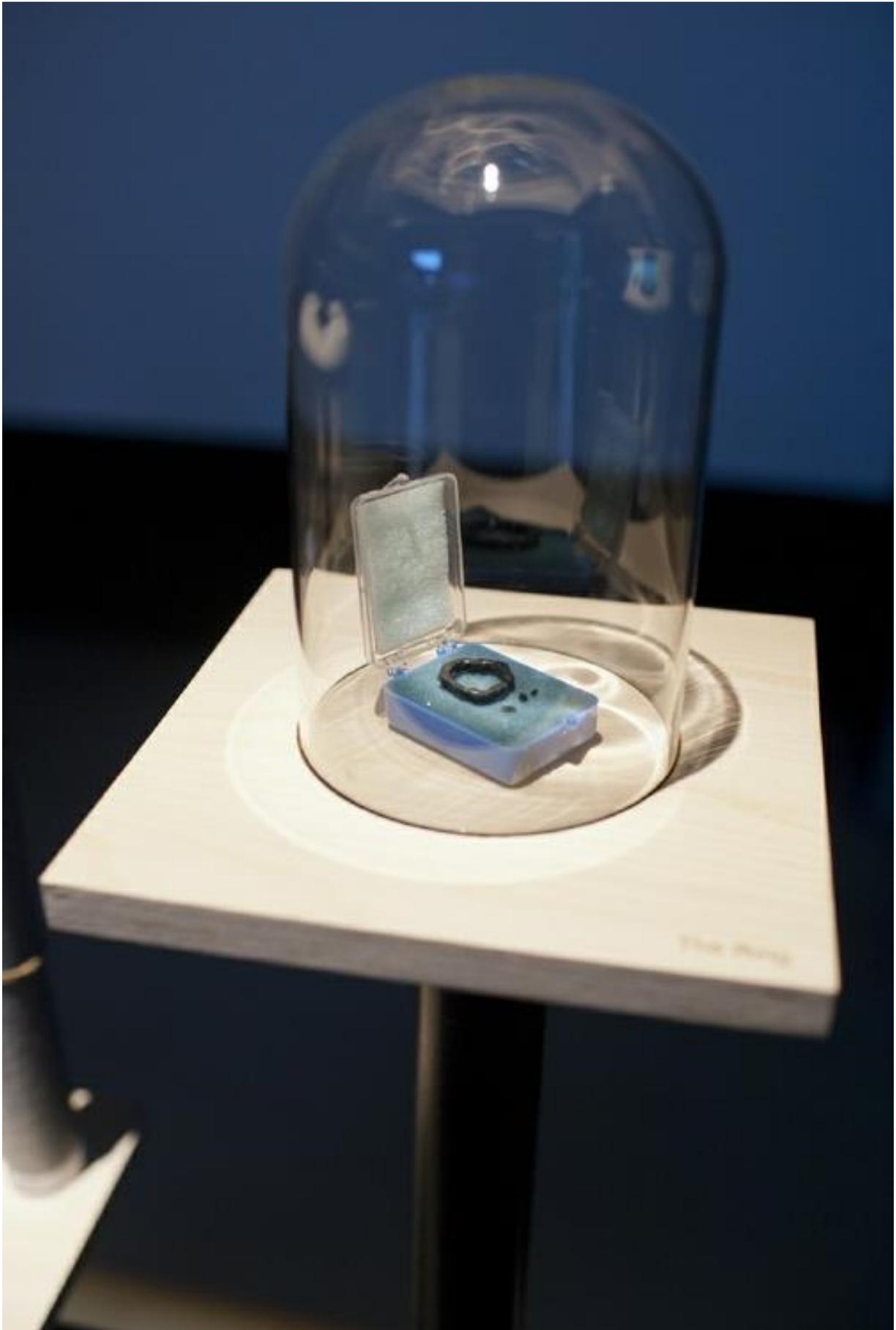


Figure 53. Cecilia Johnson, The Iron Ring, 2013

CHAPTER 5 - Living together at the time of environmental crises

Introduction

How can a “common world” be developed at the time of the Anthropocene? Let us start from the observation that our “common world” is the subject of multiple definitions. As Timothy Morton puts it in *The Ecological Thought*, ecology encompasses all ways of living together: “Basically, ecology talks about coexistence”⁴⁹³. Ecological thought describes how all beings interact⁴⁹⁴. Morton adds that this interconnectivity is nothing other than a form of “mesh”, connecting an “entangled multitude of strange strangers”⁴⁹⁵. According to him, this network can be observed in all fields related to life: social, scientific, psychological, etc.: “as everything is interconnected, there is no defined background, and therefore no defined foreground”⁴⁹⁶. Each element of the network interacts with all others. The “strange strangers” encompass various beings, including animals: “Their very strangeness is strange. We can never fully decrypt them”⁴⁹⁷. As “strange strangers”, non-humans embody otherness in a radical way. We must build a common world with this “network”, which includes a diverse range of “strange strangers”.

How can we envisage the future of society? First and foremost, we must stop in order to think differently, in line with “slowing down”, which was a central element of this thesis’ second chapter. In Isabelle Stengers’ words, we should “Learn to think and tell our stories in a way that repopulates the imagination”⁴⁹⁸. One observes that a “Concern of thought”⁴⁹⁹ is necessary in order to disturb our cognitive habits and re-learn “The art of connections, compositions, symbiosis, risky trust”⁵⁰⁰. This “situated” concern confronts us with the need to produce new relationships and new entanglements. In order to do this, we must avoid what is obvious to us in favour of what troubles us, embrace the art of “staying with the problem”, in line with Donna Haraway’s formula. These complexities and entanglements are vital to the regeneration of our environments and imaginations.

This common world can only exist under specific conditions. William James expresses another point of view through what he terms the “circle of faith”⁵⁰¹. He uses the metaphor of a leap in or

⁴⁹³ MORTON Timothy, *Ibid.*, p. 4.

⁴⁹⁴ *Ibid.*, p. 30.

⁴⁹⁵ *Ibid.*, p. 15.

⁴⁹⁶ *Ibid.*, p. 28.

⁴⁹⁷ *Ibid.*, p. 41.

⁴⁹⁸ STENGERS Isabelle, *Penser à partir du ravage écologique*, in : HACHE Émilie, *Ibid.*, p. 154. (my translation)

⁴⁹⁹ *Ibid.*, p. 162.

⁵⁰⁰ *Ibid.*, p. 162.

⁵⁰¹ *Ibid.*, p. 180.

towards a world"⁵⁰² while also demonstrating that such a world can only exist if we trust it at first sight. Therefore, William James believes in "A requisite of the factory of the world", which is closely tied to the intimate relationship between the leaper and the leap itself"⁵⁰³. This principle will guide us through our approach to the possibility of "living together" at the time of environmental crises.

Let us now ask ourselves the following question: how could spirituality play a part in implementing new ways of living together? This could lead us to imagine a potential society that respects the given state by harnessing a spiritual dimension adapted to their time. Revisiting spiritual concerns does not equate to returning to past religions, nor does it involve abandoning modern techniques. Moreover, environmental crises are closely bound up with spiritual concerns; they push us to question the meaning we ascribe to life on Earth. Many scientists find themselves immersed in an abyss of wonder and mystery as a result of their dedication to the study of life. Spirituality is a starting point and point of convergence for all societies, and its nature leads it to resist all forms of delineation and classification. Spirituality is similar to ecology in that it confronts society from the outside, in other words, in its wider context.

Moreover, spirituality is not situated within the social system but rather outside its borders or at the point where the system meets its outer limit. Modernity's spirituality, driven by the exploitation of nature for consumption, is a source of spiritual shame⁵⁰⁴. Indeed, consumerism appears as a form of spirituality tailored to the religion of economic growth, the ultimate goal of which is material consumption. This highlights the urgent need to create a new form of spirituality for our time⁵⁰⁵. Pope Francis' encyclical, *Landato si'*, offers a new reading of Genesis through which he draws three main interpretations: humans are invited "to have dominion"⁵⁰⁶ over nature, all of god's creatures possess intrinsic value, and finally, men are made of the same material as other animals and therefore cannot claim superiority⁵⁰⁷. Humans thus take on the role of "guardians of creation." Pope Francis highlights a principle that is central to scientific ecology, namely, that of the interdependence of all things, to the detriment of the idea of a purely external God detached from nature and of humanity's superior point of view⁵⁰⁸.

⁵⁰² Ibid., p. 180.

⁵⁰³ Ibid., p. 180.

⁵⁰⁴ BOURG Dominique, *Une Nouvelle Terre*, Éditions Desclée de Brouwer, 2018, p. 77.

⁵⁰⁵ Ibid., p. 48.

⁵⁰⁶ Genesis, 1 :26-28

⁵⁰⁷ BOURG Dominique, Ibid., p. 107-108.

⁵⁰⁸ Ibid., p. 111

Our task is thus to take care of the Creation that we have been made responsible for. In this sense, spirituality induces a specific mode of “living together”. Pope Francis’ spiritual injunction sits at the crossroads between actions led by the advocates of the environmental cause and legal initiatives that develop in parallel.

Does Globalisation create a liveable world?⁵⁰⁹ While the Modern Epoque is marked by the injunction of progress, its spatial identity is characterised by an integration of geographic surfaces. Geographic maps are not a sufficient representation of our "Lived territory"⁵¹⁰. As seen in our third chapter, Latour offers an alternative, defining territory through a list of entities we rely on for our survival. However, the "Territory" of necessary elements cannot be reconciled with our geographical "territory". The Latourian territory is a network covering areas that are distant from each other, of different scales and multiple rhythms. Natural beings depend on a network of connections in order to exist. The list of beings that we rely on to subsist is necessarily heterogeneous as well as symmetrical: "Leave humans, you will find things, leave things, you will pass by humans"⁵¹¹. In that sense, one observes that humans and things are inherently entwined.

In addition, we must recognise that there is no such thing as "global" and no "worldwide" in the sense of a "large territory" either. According to Sloterdijk, when we had a globe - a representation of nature and a map - globalisation had not yet occurred. However, now that globalisation exists, we no longer have a globe to hold it⁵¹²: thus, we have no more territory in which to establish ways of living together. Therefore, we can say that globalisation does not "make the world". On the contrary, globalisation implies a lack of familiarity, comfort, traceability, and reference points. The phenomenon becomes increasingly disconcerting as its pace accelerates, leading it to encompass non-humans who were once part of "nature". Before outlining the potential “Demos” of Gaïa, we must acknowledge the fact that we live in a world of waste.

⁵⁰⁹ LATOUR Bruno, *La mondialisation fait-elle un monde habitable ?*, Territoire 2040, Perspectives périurbaines et autres fabriques de territoire, Revue d'étude et de prospective n° 2, DATAR, 2009, p. 9-18. (my translation)

⁵¹⁰ Ibid., p.13.

⁵¹¹ Ibid., p. 13.

⁵¹² Ibid., p. 17.

I. Living in a world of waste

Everything suggests that we are destined to live in a world of waste. Our current consumer society forces us to coexist with waste and be spectators of the process that leads each object to obsolescence. Indeed, our society appears to be a machine that produces waste, and despite our efforts to exclude it from our daily life, it constantly returns to remind us of its presence. Pope Francis speaks of a “culture of waste”. However, the word “waste” does not only apply to objects. It can also be used to describe many neglected human beings excluded from the capitalist system we live in. Economist Pierre-Noël Giraud calls these individuals “useless men” and uses this expression to point to those who cannot live from their work⁵¹³. According to Nicolas Bourriaud, we should invent forms of life that are “exforms”⁵¹⁴, in other words, beings that are rejected but always keep coming back to reclaim their place.

Nicolas Bourriaud references Walter Benjamin, who developed the philosophy of the “chiffonier of History”, as well as Louis Althusser’s theory of exclusion. Through this, Nicolas Bourriaud tackles the problem of exclusion, specifically presenting the historical evolution of this process, which has changed considerably over time. How can we approach that which is rejected from the sphere of the visible and bearable today? In approaching this question, we must keep in mind that any assertion inevitably implies forms of denial, refusal, modes of exclusion. Within thought and materiality, we must face the inevitable process whereby excluded beings refuse to disappear. Waste always returns to haunt us. Interestingly, recycling practices both seem to be undergoing an unprecedented revival within our daily lives and have become a widespread feature of artistic practice. Nicolas Bourriaud invites us to consider contemporary artworks exploring the idea of waste.

Arman

Following the Second World War, the “Trente Glorieuses” were marked by unprecedented economic growth, leading to unbridled consumerism. However, movements of resistance against consumerism’s resulting waste and pollution have been developing ever since the 1960s. Moreover, scientists, economists and artists have also been challenging this new way of life through their work. In 1959, the Franco-American artist Arman was one of the first artists to incorporate waste into

⁵¹³ BOURG Dominique, *Une Nouvelle Terre*, Éditions Desclée de Brouwer, 2018, p. 113.

⁵¹⁴ BOURRIAUD Nicolas, *The Exform*, Verso Edition, 2016

his works. He defined himself as a member of the *Nouveaux Réalistes / New Realists*, and his series "Trash Cans" consists of installations containing household litter found on the street. In 1961, he produced a work entitled "Poubelle des Halles" / "Halles trash can". This work orchestrates a critique of consumerism by displaying everyday objects, often destined to end up in recycling centres. He invites us to look at these objects in a new way and to question their use.

Christoph Büchel

Born in 1966, Christoph Büchel is a Swiss artist whose subversive practice is known for its political angle. His works reveal the excesses of capitalism with an emphasis on overconsumption and the rise of inequalities. He often responds to marginalised places he has travelled to⁵¹⁵ through immersive installations. In 2008, he produced *Dump*, a monumental work devised for the Palais de Tokyo's *Superdome* exhibition in Paris. A huge pile of rubbish filled the entire space at the back of the Art Centre, flowing right to our feet. In line with its literal meaning, *Dump* appears to be a form of public dump. It includes newspapers, cans, and plastic bottles, among a vast range of objects having become obsolete.

Visitors enter the installation through a 13-meter-long corrugated iron hose. In pairs, they experience a labyrinthine journey through an oppressive and lurid world, constantly bumping into each other as they travel through a maze of confined and unsanitary spaces. First, they discover what looks like a clandestine slum, then a sweatshop, a mechanical workshop, an immigrant family's home, all full of clothes, mattresses, plastic bottles, and recovered cans. Lights and electrical devices, still plugged in, suggest that residents have only just left the premises. Several communities seem to coexist within these confined spaces: Asian, Arab and Eastern European communities live alongside each other in this mass of waste, teeming with furniture and everyday objects. As they experience this confusing hyperrealist fiction, visitors seem to be intruders, engaging in a kind of voyeurism. Through this piece, Christoph Büchel establishes a critique of illegal immigrants' working conditions, presenting them as modern slaves. This bleak reality reveals incredibly precarious working and living conditions.

This intense multisensory experience produces both physically and psychologically discomfort. The visual saturation of the piece is combined with physical challenges as our bodies shuffle, bend,

⁵¹⁵ Including Mexico.

drop, and squat. Furthermore, the smell of lubricating oil adds a substantial olfactory dimension. The work portrays areas of extreme poverty, provoking a feeling of revulsion as well as disgust and sadness. Its skilful production goes hand in hand with its critical discourse. At the end of this journey, we return to our own reality but remain deeply struck by this unique experience, which combines a feeling of intense claustrophobia with a horrific spectacle. Christoph Büchel denounces the inequalities and environmental consequences of the capitalist economy's overconsumption. His work echoes Nicolas Bourriaud's notion of waste⁵¹⁶. In addition, it invites us to take action in response to this reality, which we can no longer ignore.

⁵¹⁶ BOURRIAUD Nicolas, *Ibid.* p. 3.



Figure 54. Christoph Büchel, Dump, 2008

Tim Noble and Sue Webster

British artists Timothy Noble and Susan Webster's collaborative practice explores mass consumption. Timothy Noble and Susan Webster were born in 1962 and 1967, respectively. They met in 1986 while studying fine art at the University of Nottingham Trent and graduated in 1989. In 1997 they started working together and signing their works "Tim Noble & Sue Webster". Between 1997 and 2000, they collaborated on a series called *Shadow Work*. These works use waste to highlight the damaging excessiveness of our consumerist society. Works such as *Miss Understood & Mr Meanor* (1997), *Dirty White Trash* (1998), and *Wasted Youth* (2000) are both aesthetically pleasing and repulsive.

The *Shadow Work* series consists of a set of three-dimensional sculptures projecting two-dimensional shadows. The sculptures are made of piles of waste, and their shadows project sitting or lying silhouettes on the wall. In order to create these works, the artists start by posing in front of an overhead projector in order for a third person to trace the shape of their shadows on the wall. Once the drawing is complete, they produce a composition of waste that fills the shadow down to the finest detail. Drawing cast shadows is an ancient practice dating back to Pliny (1st century AD), and the origins of Western art. In his *Natural History*, Pliny states: "The daughter of Dibutade, potter of Sicyone, wanting to preserve the image of her lover, decided to trace the outline of his shadow cast on the wall; her father then covered the wall with clay, thus preserving the portrait by embossing it." In Tim Noble and Sue Webster's work the beauty and finesse of the cast shadows contrast with the repulsion induced by piles of waste. In a 2007 interview, Tim Noble described it as: "a two-sided work, with a light side and a dark side, as a way of reflecting our double personality."

The *Shadow Work* series questions our generation's legacy for future generations by highlighting our overconsumption and disrespect for biodiversity. This work equally embodies the most beautiful and awful things humans are capable of. Other artists have addressed this theme of waste, through singularly beautiful works, including El Anatsui, who works with bottle caps, the Guerra de la Paz collective, who salvages various materials, and finally, the London-based artist Nick Gentry, who produces paintings with old computer discs. All of these artists remind us that waste is part of our society and that we must learn to deal with its presence instead of ignoring it. Acknowledging waste's place as an integral part of our environment is a necessary condition to

approach modes of common life. Moreover, these modes of common life require us to rethink our politics in every way.



Figure 55. Tim Noble and Sue Webster, Shadow Works, 1997-the present

II. Rethinking politics in the broad sense

How can politics help us to build a common world at a time of environmental crises? As Hicham-Stéphane Afeissa points out, we must start by asking ourselves the following question: “What remains of politics?”⁵¹⁷. Political ecology tends to erase distinctions, disregard local situations in favour of a universal political approach. Through this globalisation of the Anthropos, the Great Anthropocene narrative produces a new form of political deconstruction, an “unprecedented form of depoliticisation of the public sphere”⁵¹⁸. Additionally, we are currently witnessing the emergence of “post-politics”, the ousting of the political and its replacement with what we call “governance”⁵¹⁹. However, post-politics is rooted in the belief that there is no alternative to the capitalist system and, therefore, no point in challenging it. In Fredric Jameson’s words: “It is much easier to imagine the end of the world than to imagine the end of capitalism”⁵²⁰. We are simultaneously witnessing “a naturalisation of humankind”, which seems to be shedding its historical status to become a “biological species”. According to Hicham-Stéphane Afeissa, we must now “Put ecological issues back into the centre of political discussions”⁵²¹; in other words, tell the story of the environmental crisis that threatens us so as to develop the power to act on it. Although we are just a species among others, it is our responsibility to join together in building a common world, which environmental issues are central to.

In order to address environmental crises, we must rethink our value system as well as politics in the broader sense. According to Peter Sloterdijk, “It is no longer just politics, it is climate policy that is destiny”⁵²². We thus have no choice but to place climate politics at the centre of our discourse. In his work *Le Principe Responsabilité / The Principle of Responsibility*⁵²³ (1979), Hans Jonas highlights how humans draw considerable power from their knowledge of technoscience. However, this power inevitably comes with a new form of responsibility: it should be made available to all and be used to prevent the destruction of our environment and the endangerment of all future life on Earth. In addition, practical solutions to the ecological crisis, allowing for the development of a better economic system, should be implemented.

⁵¹⁷ AFEISSA Hicham-Stéphane, *Ibid.*, p. 245. (my translation)

⁵¹⁸ *Ibid.*, p. 249.

⁵¹⁹ *Ibid.*, p. 248. This term also relates to Foucault and the post-foucauldian debate on governmentality.

⁵²⁰ JAMESON Fredric, *Future City*, *New Left Review*, n°21., 2003, p. 73.

⁵²¹ AFEISSA Hicham-Stéphane, *Ibid.*, p. 250. (my translation)

⁵²² VIVEIROS DE CASTRO Eduardo & DANOWSKI Deborah, *Ibid.*, p. 267. (my translation)

⁵²³ (my translation)

This would transform the public sphere, create many jobs, and push the struggle against the world of industry and finance forward. However, we face a significant challenge: convincing corporations to relinquish large parts of the energy sector by adhering to a process implying their imminent disappearance. Once renewable energy has completely replaced fossil fuels, our goal of phasing out nuclear power will become achievable. However, this argument relies on the assumption that such a transition requires government intervention. In this regard, it might be necessary to set up a decentralised public service, managed by the communities that use it, in other words, cooperatives. According to Naomi Klein, an ecological transition can only be achieved through legislation: “to fund the kind of social programs that will make a just transition possible taxes will have to rise for everyone but the poor”⁵²⁴.

The free-market ideology is subject to heavy criticism due to its impact in terms of inequalities and corruption across the last few decades⁵²⁵. We must therefore devise an alternative political action as well as building a new understanding of the world, focused on "Interdependence rather than hyper-individualism, reciprocity rather than domination, cooperation rather than hierarchy"⁵²⁶.

Climate change calls the system of democracy itself into question, urging us to consider whether or not it can help us manage ecological issues. The fact is that ecological crises lead to a rise of inequalities, and democracies are no longer fit to imagine the future. Since the law determines the principles that govern our collective life⁵²⁷, it should also enforce environmental protection. Within the European Union, the European Citizens' Initiative (ECI) allows a million citizens from seven countries to propose a law for debate before Parliament. This opens up the possibility of successfully implementing a new power balance. The measures we should take include establishing a universal income, implying a disconnection of income from work. This kind of initiative goes hand in hand with creating a desirable future in which human beings can live in harmony with their environment. It would involve leaving jobs that are forced upon us in favour of ones we would freely choose⁵²⁸. The majority of the Earth's population seems to be dominated by a small minority of individuals. However, the silent majority could very well choose to intervene globally.

⁵²⁴ KLEIN Naomi, *Ibid.*, p. 119.

⁵²⁵ *Ibid.*, p. 465.

⁵²⁶ *Ibid.*, p. 462.

⁵²⁷ DION Cyril, *Ibid.*, p. 96.

⁵²⁸ *Ibid.*, p. 100.

Jacques Loeuille

Born in 1983 in Chambray-Les-Tours, Jacques Loeuille is a French artist based in Paris. In 2018, he received the COAL Art and Environment Prize for his project *The Birds of America*. He was also awarded the Prix Louis-Lumière, formerly known as “Villa Médicis Hors Les Murs”, for the same project. Mass extinctions and environmental degradation have had a symbolic and political impact on some countries. For instance, in the United States, certain species of birds are national symbols, leading their extinction to result in a crisis of the country’s image.

The French naturalist painter Jean-Jacques Audubon is an essential reference of Jacques Loeuille’s. Audubon was born on April 26th, 1785, in Les Cayes (Saint-Domingue), and he died on January 27th, 1851, in New York. He was the first New World ornithologist and the father of American ecology. He received financial support from the Academy of Sciences, George Cuvier, and the Duke of Orleans — who would later become King Louis Philippe — to carry out an ambitious project: drawing all the birds of the United States, in their natural environments. One hundred fifty years later, his masterpiece *The Birds of America* is the most expensive art book in history. Nevertheless, Audubon is almost entirely unknown in France. Only in the United States did he become a key figure: the largest American environmental association, including 600,000 members, was named after him and his portrait now hangs in the White House.

He is a figure associated with the myth of nature, which the American Government is rooted in. He was one of the first (even before Henri-David Thoreau) to express concern regarding the consequences of human behaviour on the natural world. Today, a large proportion of the species in Audubon’s drawings have disappeared. The Mississippi Flyway, the continent’s main migratory corridor, is now nothing more than an empty air path. Jean-Jacques Audubon was close to Andrew Jackson, the first southern American president. He ordered an expedition to Texas, annexed as a result of a war with Mexico, to allow the painter to add the birds of this new state to *The Birds of America*. Through Audubon’s inventory of the richly diverse plant and animal life of the continent, Jackson was able to durably tie the American identity to representations of the wild.

Jacques Loeuille's films⁵²⁹ focus on the links between Audubon's work and the history of natural devastation, a by-product of the United States' industrial development. These films are documentaries that tell the stories of the last birds having disappeared and portray their relationships with humans. Jacques Loeuille collects their words and their stories: feelings and impressions, rather than absolute truths. Through his practice, he conducts a philosophical and experiential "quest" on the subject of endangered species, following in the footsteps of Audubon, with references to the rooster as a symbol of the French Republic.

Echoing Audubon's work, Jacques Loeuille designed an installation comprising seven films, each dedicated to a bird that has disappeared from the United States' territory. By using the symbolism of birds in the United States, the artist establishes a form of "political counter-history" of America. The migrating American pigeon⁵³⁰ has disappeared as a result of firearms; as for the Grouse, it died out in 2012, chased from its meadows by gas exploitation. Jacques Lœuille wishes to share Audubon's masterpieces, the accuracy of which is unfortunately topical in an era where we are confronted with the mass extinctions of various animal species.

Since the creation of the national parks project in 1864, the American government has endeavoured to build a mythical representation of nature to cement the country's history and cultural identity. They chose the Bald Eagle as the emblem of the American nation, a raptor having become rare due to the country's industrialisation. Its very survival depends on a system for protecting endangered species, a federal subsidy and a protection program. By highlighting the disappearance of these species, Jacques Loeuille addresses political fabrication in a broader sense, pointing to that which ties the American nation together through a system of symbols from the animal world.

⁵²⁹ *Menaces en Mers du Nord* (2018), *Victor Hugo, un siècle en révolutions* (2018), *Kupka - Pionnier de l'art abstrait* (2017), *La Pesense d'or* (2017), *Rubens, peindre l'Europe* (2017), *Le Journal de Théodore Krackélite* (2016), *Marguerite Yourcenar, alchimie du paysage* (2014), *Balade américaine en Flandres* (2009).

⁵³⁰ These birds are commonly referred to as 'passenger pigeons'.

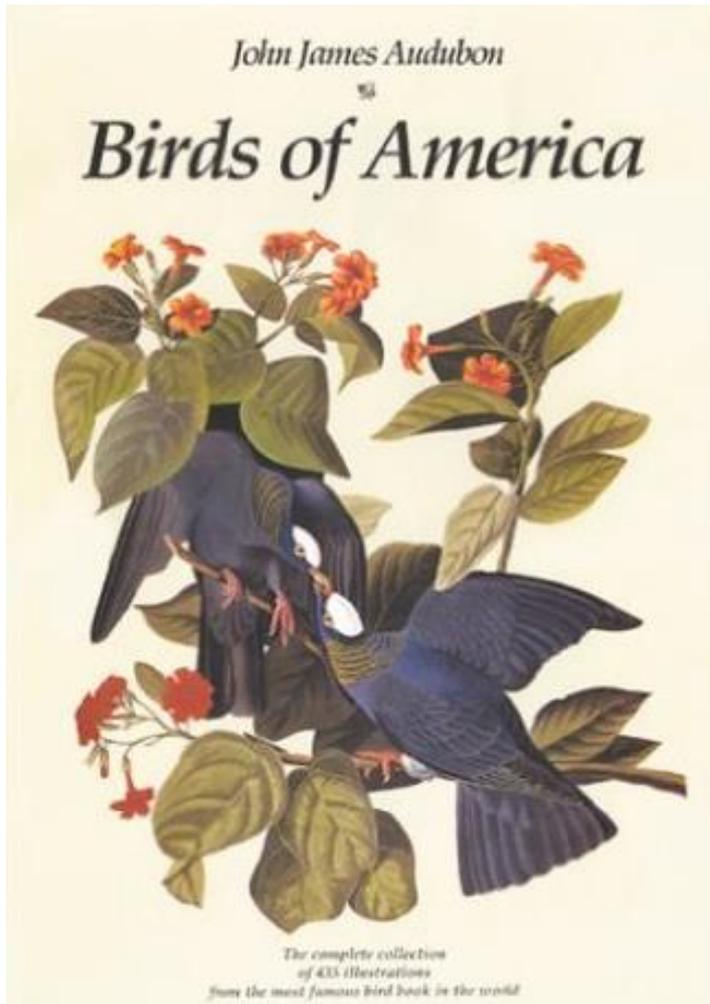


Figure 56. Jacques Loewille, *The Birds of America*, 2018

III. The Cyborg as emancipation from nature

What is the Cyborg, and how can it help us? Donna Haraway defines the Cyborg as “a cybernetic organism, a hybrid of machine and the living, a creature of social reality as well as a creature of fiction”⁵³¹. The figure of the Cyborg plays an important role in defining our ontology as well as our politics. Driven by feminist thinking, the Cyborg appears as a creature living in a “post-gender world”⁵³². It originated in response to the emergence of machines at the end of the 20th century, blurring the distinctions between natural and artificial, body and mind.

The Cyborg world is a world in which our double kinship with animals and machines is celebrated. Feminists representing the Cyborg set out to demonstrate our necessary emancipation from the unitary matrix of nature. More broadly, the Cyborg represents the end of humankind in the Western sense⁵³³, as well as the ancient dichotomies opposing body and mind, organism and machine, public and private, nature and culture, man and woman, primitive and civilized⁵³⁴.

Communication and biology both involve technical and natural objects of knowledge. These give rise to the near-complete removal of the distinction between machine and organism. In response to "The computer science of domination", Donna Haraway underlines the urgent need for a “socialist feminist politics”⁵³⁵. The author pleads for the dissolution of the differences between organisms and machines and all other structural dualisms of Western identity. She believes that these simultaneous dissolutions will explode the matrix of domination. She also highlights the need to tell the stories of our roots differently, thereby subverting the founding myths of Western culture. Advocates of the Cyborg celebrate illegitimate alliances between animals and machines. These hybrids make the notions of Man and Woman problematic. They thus subvert the structure of Western identity.

While we must forgo the traditional notion of “nature”, we must also free ourselves from persistent dualities typical of the Western tradition, all of which play a part in the systems of domination that women, people of colour, nature, and animals are subjected to.

⁵³¹ HARAWAY Donna, *A Cyborg Manifesto: Science, Technology, and Socialist- Feminism in the Late Twentieth Century*, 1985, in: Simians, *Cyborgs and Women: The Reinvention of Nature*, New York; Routledge, 1991, p. 149.

⁵³² Ibid., p. 150.

⁵³³ Ibid., p. 160.

⁵³⁴ Ibid., p. 163.

⁵³⁵ Ibid.

High technologies are one of the fields in which these dualities are called into question: "It is not clear who makes and who is made in the relation between human and machine"⁵³⁶. While in Western culture, monsters have always defined the boundaries of the community, today, we begin to see ourselves as cyborgs, hybrids, chimaeras. "We are responsible for the boundaries; we are the boundaries"⁵³⁷. The Cyborg puts us on the path towards regeneration, conditioned by "the hope of a monstrous world without distinction of gender"⁵³⁸. At this time of environmental crises, we must relearn how to live together in line with the figure of the Cyborg.

Tetsumi Kudo

The Japanese artist Tetsumi Kudo (1935-1990) developed an artistic practice involving multiple hybrids. These beings are a mix of elements of nature and machine; they live in ambiguous universes, both organic and manufactured. In autumn 2015, the Hauser & Wirth gallery in London devoted a monographic exhibition to the artist. Tetsumi Kudo's works, full of joyful and emancipated obscenity, invite us to experience a dissolution of boundaries between the physiological and the mechanical, the natural and the artificial. In his work *Your Portrait* (1966), we discover an eyeball emerging from a piece of cotton fibre, generating an almost repulsive sense of strangeness. The work also includes artificial fragments of the human body, including a hand and an ear, connected by electric wires. At the centre of the installation (*Portrait Ionesco*, 1971), a bald head appears to grow in a pot of soil connected to other plants. Among them, a penis, tilted like a flower, exhibits a pink and fluorescent tip, letting out a drop of semen, ready to sow the soil. Visitors experience this exhibition by walking among these unusual beings. The show displays a significant period of the artist's production; the first ten years Tetsumi Kudo spent in Paris, between 1963 and 1972. The entire gallery space, including the pedestals, is covered in an artificial lawn that conveys a form of pleasurable cynicism unique to this artist. Kudo's works produce a kind of fascination through imaginative profusion. They bring us to the confines of hybridisation, where thought seems to be removed thanks to a magnetic spell.

The impotent penis, sometimes tied up, sometimes caged, or even on a drip, is a central motif of Tetsumi Kudo's practice. The artist, whose aversion to modernist, imperialist, and progressive ambition is well known, is bent on subverting "phallic" power, the symbolic weight of which is

⁵³⁶ Ibid., p. 173.

⁵³⁷ Ibid. p. 175.

⁵³⁸ Ibid., p. 176.

closely tied to the patriarchal domination of Western capitalism. Deeply affected by the nuclear disaster, Tetsumi Kudo uses control mechanisms to portray the spectacle of a post-apocalyptic world. The artist's works include devices used to control nature, such as the greenhouse, the incubator or the cage, which are intended to preserve the remains of a ravaged humanity. While morbid and cadaverous elements are placed beside residues of organic elements, they put on an infusion inside visual regulation devices, producing a kind of determined, conditioned focus. Tetsumi Kudo's works evoke a post-human world and announce the rise of a culture he calls "the new ecology"⁵³⁹. All this is conveyed through a mixture of cruel irony, morbid refinement, and grating absurdity.

By staging the biochemical survival of fragmented humanity, the artist urges us to think about the new world that is developing without our knowledge. He pushes us to face the emergence of the Cyborg⁵⁴⁰, the hybrid described by Donna Haraway, which is already infiltrating our way of life. Through its subversion of the dualities of Modernity, the Cyborg induces the emancipation we need to regenerate environmental thought. Observing contemporary apocalyptic tension through the prism of the notion of Cyborg opens up new perspectives, free from the authoritarian figures of humankind, Nature, the Body. Through its subversive power, the Cyborg, as presented in the work of Tetsumi Kudo, allows us to live "on the boundaries" and to invent new ways of living together at the intersection of organism and machine.

⁵³⁹ This phrase also appears in *Grafted Garden / Pollution-cultivation-nouvelle écologie*, a series of installations the artist produced between 1970 and 1971.

⁵⁴⁰ HARAWAY Donna, *Ibid.*, p. 149.



Figure 57. Tetsumi Kudo, Portrait Ionesco, 1971

Nathaniel Mellors

Born in December 1974 in Doncaster (Yorkshire, England), Nathaniel Mellors is a British artist and musician based in Amsterdam. He creates installations including sculptures and absurd and psychedelic theatre in addition to satirical films.

In 2010, he started producing a video series called *Ourhouse*, which consists of a mixture of television dramas and absurd comedies. The title "Ourhouse" refers to a video by Mellors, a surreal sitcom about an eccentric family, with two central characters: "Daddy" and "the Object". These films take place in a bohemian house in the English countryside and involve the Maddox-Wilson family and an unusual visitor, an Object, which suddenly appears and begins to eat and regurgitate the family's books.

Hippy Dialectics (2010), a sculpture depicting two robotic heads connected by strands of hair, echoes the film series. The heads shake from side to side, uttering lyrics from "Daddy", the central character in the *Ourhouse* series. The sculpture is accompanied by a soundtrack of strange and repetitive conversations that echo Samuel Beckett's plays and Monty Python's surreal comedies. It can be described as a schizophrenic dialogue, both humorous and slightly disturbing. *Hippy Dialectics* features two versions of the character "Daddy": one blue, the other yellow. The two heads come to life through an electronic system and a computer program such as animatronics. In this sense, they refer to the figure of the Cyborg as portrayed by Donna Haraway as a mix of humans and machines. The two robotic heads are moulded to resemble one of the characters in the film. They utter words of encouragement, including compliments, such as: "God, you're looking buff. No, seriously, you look great!" and "cool, you are cool!" before reaching an absurd conclusion.

Hippy Dialectics echoes the blurring of borders between humans and non-humans as typical of the Cyborg; thus, the work resembles a double, hybrid, and chimeric being, as discussed by Donna Haraway. Nathaniel Mellors orchestrates an altercation between a hybrid being and its alter ego, thus pointing to alterity as the prerequisite of any form of collective life.



Figure 58. Nathaniel Mellors, *Hippy Dialectics*, 2010

Mark Leckey

Born in 1964, Mark Leckey is a British artist working between collage, music, video, exhibition and design. Mark Leckey became known mainly through his work *Fiorucci Made Me Hardcore* (1999), followed by *Industrial Light and Magic* (2008), for which he received the Turner Prize in 2008. He became famous at the end of the 1990s, primarily through his focus on the radical effects of technology on popular culture and by articulating a transition between analogue and digital. Through his practice, he reflects on elements of British culture that are often underrepresented or simply forgotten. This leads him to explore ideas to do with popular and collective history. The film *Fiorucci Made Me Hardcore* (1999) uses elements of musical culture from the 1970s to the 1990s, following the example of *Dream English Kid* (1964-1999), which described a key event of his own life.

GreenScreenRefrigerator.Action (2010) is a performance in which a refrigerator describes its usual tasks, explains how it works and discusses its cooling and freezing abilities. It also describes its cosmological relationship with the stars, the sun, the moon and the sky. This piece relates to the Cyborg figure since the machine is personified, thus blurring the borders between humans and non-humans. The monologue is based on extracts of the Mayan book *Popol Vuh*, a treatise on Marcel Duchamp, written by Calvin Tomkins, and fragments of technical descriptions of the refrigerator's functions. Moreover, the refrigerator tries to make friends with other household appliances, including smartphones, game consoles, and computers. It speaks in Leckey's voice, which is altered through digital modulation. It attempts to define itself, what it represents, and to do the same for the world around it. The performance begins with the artist's inhalation of the gases used to cool the Samsung refrigerator. The work is quite dreamlike; it produces a self, absorbed into the identity of the refrigerator, that is to say, a non-human which appears as an image and mixes with other objects. Mark Leckey stages a world in which things come alive, start to communicate, and transform our environment through digital ecosystems. The refrigerator is a kind of robotic character, voicing both thoughts and dreams.

For *GreenScreenRefrigerator.Action* the gallery is transformed into a television studio filled with cameras and screens intended for playback. The performance is broadcasted through a large screen, as well as through devices surrounding the stage. Dressed in a white shirt and red trousers, Leckey stands in front of a mixing board. On his right, the image of the large refrigerator is meant to be projected on a stage. In a setting that is both humorous and elegant, the fridge enumerates the elements it

contains. Through a technical malfunction, which turns out to be deliberate, the start of the performance creates a disconcerting effect: a grunt-like song is heard. It is the fridge's love song to cybernetics: "Standing here. Beside myself. Out of my mind. I liken myself to other things: dark mirror; a walled garden; a monstrous insect; a Spearmint Rhino; Don Giovanni's Stone Guest; the staff of Hermes".

The artist wraps his head in green cloth and disappears from the screen. The banal and ordinary appearance of the refrigerator evokes the fragile relationships between the body and technology. Instead of remaining visible, the artist disappears behind the screen, making his last statement to the crowd: "My batteries died, that's it, done". Mark Leckey's work links to the concept of Cyborg in that it combines the machine with the human, revealing their interconnectedness. While the Cyborg teaches us about the alterity necessary to any kind of "living together", it seems necessary to think about the people for whom this kind of entity, that of the Cyborg, and, more broadly, Gaïa, raise concern.



Figure 59. Mark Leckey, GreenScreenRefrigeratorAction, 2010

IV. Defining the “Demos” of Gaïa

Who are the people that feel united by and invested in (Ok) the entity of Gaïa? This way of thinking implies recognising our status as “Earthlings”⁵⁴¹ (Latour), a people capable of showing “resistance to the present” and thus creating a “new world”. However, in his *Genealogy of Morals*, Nietzsche declared that: “We are unknown to ourselves, we men of science”⁵⁴². Are we then cursed to remain strangers to ourselves? However, everything suggests that humanity is turning into a *whole*, “through the total threat to its existence”⁵⁴³. According to Hicham-Stéphane Afeïssa, “The alliance between humans is incomparably wider than it has been in the past – it is in fact broader than it has ever been”. He refers here to an “Alliance of generations”, a “Global solidarity”.⁵⁴⁴

We have yet to define the “human” of the Anthropocene. In order to do so, we must start by examining the Earth’s “Anthropos”. Unlike what the Great Tale of Modernity could lead us to believe, it is not a homogenous and unified entity. Indeed, some humans have opposed and conflicting interests, live in diverse worlds, and go to war against each other. According to Bruno Latour, “We are in Babel after the fall of the giant tower”⁵⁴⁵. This brings to mind the violent controversies relative to the reality of climate change, which oppose the scientists of the IPCC and climate-sceptics. Political opponents are investing millions of dollars in war machines, such as think tanks, in order to challenge global warming. Climate sceptics have understood that the Anthropocene theory and its implications denote the end of their world of growth and consumption.

In order to build a unified audience, ready to act and subvert consumer hegemony and the destruction of ecosystems, it seems relevant to refer to John Dewey's book, *The Public and its Problems*. According to Dewey, the “public must come out of the shadows”; it must express and know itself.

In addition, “The public’s work towards self-constitution has always to be resumed”⁵⁴⁶: “The purpose of politics itself is for the public in the passive sense to become active, because that will

⁵⁴¹ LATOUR Bruno, in: VIVEIROS DE CASTRO Eduardo & DANOWSKI Deborah, *Ibid.*, p. 306. (my translation)

⁵⁴² NIETZSCHE, *Genealogy of Morals*, 1887, Penguin Classics, 1996, p. 3.

⁵⁴³ AFEISSA Hicham-Stéphane, *Ibid.*, p. 50.

⁵⁴⁴ *Ibid.*, p. 68.

⁵⁴⁵ LATOUR Bruno, *L’Anthropocène et la destruction de l’image du Globe*, in : HACHE Émilie, *Ibid.*, p. 36. (my translation)

⁵⁴⁶ ZASK Joëlle, *Introduction à John Dewey*, Paris, La Découverte, collection Repères, 2015, p. 56. (my translation)

allow the process of individuation in global society to be restored"⁵⁴⁷. In this sense, it is possible to consider all "Earthlings"⁵⁴⁸ as an audience united by the same sense of belonging against "Humans", which remain within the Great Tale of Modernity. We need to identify our enemies and our allies: on one side, the "people of Gaïa", who call themselves "Earthlings", and on the other, those who merely call themselves "Humans". Once this distinction is made, we will be able to recognise the diverse range of people who come into conflict.

According to Isabelle Stengers, the act of naming Gaïa is an operation that seeks to provoke and stir an "us". This "we" refers to those who define nature as the site of human stories, that is, those who behave responsibly regarding ecological crises. The Anthropos of the Anthropocene appears as a universal and abstract "Human"⁵⁴⁹, while the Demos of Gaïa manifests itself according to "involutive alliances"⁵⁵⁰, complex and tangled relationships. Isabelle Stengers evokes the image of "People on the street". A "Labyrinth of interconnected alleys should replace the major boulevards which lead to places of power".

We should strive to congregate around that which pushes us to think and imagine together, around "common"⁵⁵¹ causes. We have to learn to think "In our circles"⁵⁵². Isabelle Stengers' descriptions of the experience are close to Deleuze's ways of defining it: a way of thinking that matters politically, that operates in the collective sense, "each with other", "each through other"⁵⁵³. According to Eduardo Viveiros de Castro and Deborah Danowski⁵⁵⁴, we should strive to imagine a New People (un nouveau peuple, apparenté au « Peuple qui manque » tel que défini...) similar to the "Missing People"⁵⁵⁵, as defined by Deleuze and Guattari. Among this New People, the ideas of those who are already victims of climate change should be heard. This aligns with Argo Collective's approach.

Argos Collective

⁵⁴⁷ Ibid., p. 57.

⁵⁴⁸ LATOUR Bruno, in: VIVEIROS DE CASTRO Eduardo, DANOWSKI Deborah, Ibid., p. 305.

⁵⁴⁹ STENGERS Isabelle, *Penser à partir du ravage écologique*, in: HACHE Émilie, Ibid., p. 150.

⁵⁵⁰ Ibid., p. 179. (my translation)

⁵⁵¹ STENGERS Isabelle, *Au temps des catastrophes*, Ibid., p. 85.

⁵⁵² Ibid., p. 117. (my translation)

⁵⁵³ Ibid.

⁵⁵⁴ VIVEIROS DE CASTRO Eduardo & DANOWSKI Deborah, Ibid., p. 339.

⁵⁵⁵ DELEUZE Gilles, *L'Image-Temps*, Éditions de Minuit, 1985, p. 281. (my translation)

The Argos collective, founded in 2001, includes seven journalists. With a documentary approach, they represent various changes in our world, whether economic, ecological, local or global, harmful or hopeful. Human beings are at the heart of their stories. In 2004, the collective decided to tackle the subject of the consequences of climate change, focussing on populations that are most directly affected. Among other initiatives, they reach out to those who have chosen to reduce their carbon footprint, including people living in the United States, the Netherlands, Cape Verde and Bangladesh.

Their objective is to get as close as possible to people who are invested in the issue. They focus on building trust, and their objective is to develop a tool for democracy. The Argos collective acts as a laboratory; they seek to spread their practices in a world in which the media is in the midst of a revolution. In 2004, they set out to meet the first victims of climate change. In doing so, they gave a voice to those who were already suffering from the consequences of climate change, thus highlighting the urgency of the situation: the rising waters, the advancing desert, the intensification of cyclones, the thawing of ice, in hopes of sparking discussions on possible solutions.

The Argos collective is supported by the French organisation ADEME (Agence de l'environnement et de la maîtrise de l'énergie / French Agency for the Environment and Energy Management) as well as the *Ministère Français du Développement Durable / French Ministry of Sustainable Development*. Their editorial project, *Réfugiés Climatiques / Climate Refugees*, which was reissued in 2010, is also supported by the Mairie de Paris (the Mayor of Paris).

Another project called *The Maldives: A Nation at the Water's Edge* (2005-2007) consists of a series of photographs documenting the lives of the Maldives' residents and their fragile environment. Journalist Guy-Pierre Chomette declares: "Our job is to tell stories we have heard and to bear witness to what we have seen". Argos collective's documentary portrays the domestic environment of Maldives residents and their ways of cooking. While some photographs simply feature people playing on the beach and swimming, the series also includes images of their threatened environment, such as coastal deterioration and coral reef bleaching. 60% of the inhabitants of the Maldives are young people under the age of fifteen. During their lifetime, they will probably experience mass exile, and be forced to leave the area due to rising sea levels. 80% of the island is less than a meter above sea level.

Studies predict that the island will be entirely submerged over the next hundred years. In addition to floods and thunderstorms, the negative effects of rising sea levels include coastal erosion and the destruction of protective coral reefs. The salinisation of water resources and the extreme weather also threaten human infrastructures, health, agriculture and trade. While emphasising the victim status of populations devoid of political self-determination, the collective advocates immediate international cooperation in order to stop climate change. However, they assume that this alone will not stop sea-level rise, and that we must prepare for the harmful consequences of global warming. This impending humanitarian disaster urges us to prepare for the mass migration of climate refugees that will mark the 21st century.

The 2010 exhibition *Avec les Réfugiés Climatiques / With Climate Refugees*⁵⁵⁶ included an approach of remembrance with regard to that which is at risk of disappearing as a consequence of global warming. It was also a forward-looking work aiming to raise awareness among the general public, the message being that there is still time to act in ways that will help to preserve the future. The risks are particularly high for poor populations whose relationship with their environment is already precarious. Global warming is thus a critical additional factor, which threatens certain parts of the population. This exhibition also became an opportunity to define the notion of “refugee” and to examine it more closely. It seems relevant to integrate these populations into our thinking concerning the “people of Gaïa”.

⁵⁵⁶ An exhibition of the Argos Collective having taken place at the Centre of Armenian Heritage of Valence in 2010.



Figure 60. Argos collective, The Maldives: A Nation at the Water's Edge, 2005-2007

Yesenia Thibault-Picazo

Certain contemporary artistic practices echo this new geological age characterised by the notion of the Anthropocene and make us sensitive to its immeasurable scale. Furthermore, these practices help us to understand the "Demos" of Gaia. In this respect, Yesenia Thibault-Picazo's practice is particularly significant. This young London-based artist conducts a variety of experiments mixing scientific discourse and aesthetic visualisation. Her work involves collaborations with geologists, oceanographers, anthropologists, and craftsmen. In 2013, Yesenia Thibault-Picazo produced *Craft in the Anthropocene*, a speculative design project intended to spark debate around the Anthropocene theory. In this project, the artist presents an acceleration of geological time, including new materials drawn from our contemporary context, such as plastic, metal, glass, and concrete. This speculation involves "Fossils of the future", which reveal the traces of human activities responsible for our entry into the Anthropocene. This projection into the future barely mentions human presence: as stated above, the Anthropocene is likely to finish without us.

Another project of Yesenia Thibault-Picazo's *Géo-mimicry Collaborative* (2014) examines plastic deposits on seabeds and creates an artificial crust that transforms the seabed's geology. In response to an invitation from the Musée des Abattoirs in Toulouse to create a "Monument" to the Anthropocene, she imagined the distribution of five systems in different coastal cities around the world. Each installation consists of a container representing the ocean in miniature, portraying the seabed and its composition. The container hosts a sedimentation process similar to that which takes place in a natural environment. Visitors are invited to participate in the metaphorical sedimentation of plastic, thereby actively participating responsibly in the pollution of the seabed and the geological process on a worldwide level. Through an experiment involving the visitor's imagination and participation, the project's aim is to make the immeasurable notion of the Anthropocene and geological time tangible. Yesenia Thibault-Picazo's work thereby offers us a new experience of time through the geological temporality introduced by a new era of the Earth's System. She invites us to contemplate our share of responsibility, sketching the outlines of Gaia's "Demos".

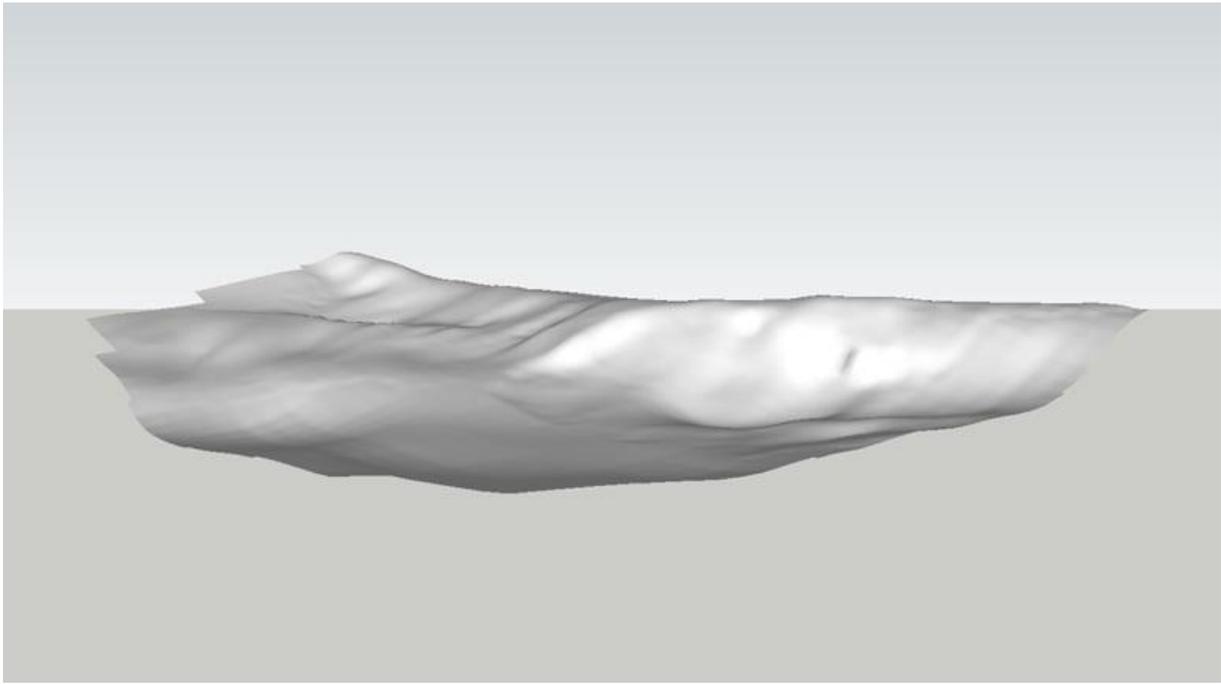


Figure 61. Yesenia Thibault-Picazo, Géo-mimicry Collaborative, 2014

V. Embracing a symmetrical anthropology

What is symmetrical anthropology? Embracing symmetrical anthropology implies studying the collective without distinguishing between humans and non-humans, culture and nature. According to Philippe Descola, and as previously demonstrated, at the time of the Anthropocene, we must abandon the “Nature-Culture” dualism. We are one with the ecosystems that we destroy, leading our own "living environments" to disappear. Concerning the Anthropocene, the human-nature dualism can no longer be maintained; it is no longer possible to distinguish between two types of reality, each with its own dynamic, that of human history and that of the Earth’s evolution⁵⁵⁷. Dominique Bourg rejects both the human-nature dualism and the body-mind and matter-thought dualisms. He sees humanity as an entanglement of thought and matter⁵⁵⁸.

Firstly, we must approach the concept of "Nature" as a modern paradigm from which we must separate ourselves. In his *Politics of Nature -How to bring the sciences into democracy*, Bruno Latour⁵⁵⁹ invites us to relinquish this concept, which traps us into a thought process rooted in the scientific revolution of the 17th century. As Whitehead claims, the "Bifurcation of nature"⁵⁶⁰ prevents us from thinking beyond the “nature-culture” dualism. According to Latour, “a politics of nature, and thus an ecology, can only be initiated by setting aside (the notion of) nature”⁵⁶¹.

Human beings are entangled in a vast network of relationships, in which they are a single element among many. Therefore, we should rethink our current vision of the network of relationships surrounding humans by introducing non-humans into it. This new way of thinking implies creating relationships between heterogeneous beings, thus inducing a form of metamorphosis. Ecology is the science of living conditions entangled relationships that shape beings that do not have a clearly defined identity⁵⁶². Deleuze and Guattari introduce the expression “involution”⁵⁶³. This concept, which denotes neither progression nor regression, is used in the context of species, disciplines, and techniques to point to the relationship between heterogeneous entities that are constantly evolving

⁵⁵⁷ BOURG Dominique, *Une Nouvelle Terre*, Ibid., p. 44.

⁵⁵⁸ BOURG Dominique, Article, *La Vie*, 26 avril 2018

⁵⁵⁹ LATOUR Bruno, *Politiques de la nature. Comment faire entrer les sciences en démocratie*, La Découverte, 1999, p. 14.

⁵⁶⁰ WHITEHEAD Alfred North, *The Concept of Nature*, The Tarner Lectures Delivered in Trinity College, November 1919, p. 26.

⁵⁶¹ LATOUR Bruno, AIME - *An Inquiry into the Modes of Existence*, Web-Platform: <http://modesofexistence.org/>, 4 – *Learning to make room*, [rep], Nature.

⁵⁶² STENGERS Isabelle, *Penser à partir du ravage écologique*, in : in : HACHE Emilie, Ibid., p. 174.

⁵⁶³ DELEUZE Gilles, Ibid., p. 265.

between two states. This idea invites us to think of Gaïa as having its own regime of activity, to see it as a network of intertwined processes in which each process' variation deeply affects all others⁵⁶⁴.

Considering nature as a subject of law leads us to see humans as its ambassadors. Let us now return to the question of nature's rights. In his work *Les Arbres Doivent-Ils Plaider? / Should Trees Have Standing?*, published in 1972, Christopher Stone developed the idea that a river or mountain should be considered a "Subject of rights" and thus become a civil party in a lawsuit against any corporation. This first has since become a subject of debate within the public sphere. How can we consider nature's interests as ends in themselves, and what legal means can we employ to achieve this? In recent judgments across the world, nature's rights have become an increasingly common subject of debate. We could expand this phenomenon by giving each natural non-human an extension of human rights, thus opening up the possibility of legal representation.

In *Le Contrat Naturel / The Natural Contract*⁵⁶⁵ (1990), Michel Serres recognizes a new equality between the force of our global action and our global world: as human history enters into nature, nature returns to human history⁵⁶⁶. This establishes a natural metaphysical contract, as global as the Social Contract. Moreover, science can also be seen as a contract, the object of which is visible. Scientific truth thus presents itself as a contract between humans, in which objects testify in person. Michel Serres' text was published while the IPCC was being set up, in the context of this worldwide collaboration between scientists, which resulted in an unprecedented encounter between science and politics. This encourages us to believe in the possibility of forming an unprecedented coalition between humans and other beings, including animals, plants, the atmosphere, and minerals.

There seems to be a building overlap between the sphere of objects and that of thought, while interactions between representations and the physical entities of the world multiply.⁵⁶⁷ Dominique Bourg offers a reflexive monism, suggesting that reality is neither pure materiality nor pure spirit but rather psychophysical. It is presented to us in this double dimension, and we cannot experience it otherwise⁵⁶⁸.

⁵⁶⁴ STENGERS Isabelle, *Au temps des catastrophes*, Ibid., La Découverte, 2009, p. 34-35.

⁵⁶⁵ (my translation)

⁵⁶⁶ SERRES Michel, *Le Contrat Naturel*, 1990, Flammarion, 1992, p. 18. / *The Natural Contract*, The University of Michigan Press, 1995

⁵⁶⁷ Ibid., p. 118.

⁵⁶⁸ Ibid., p. 127-128

We have now moved away from “naturalism”, which Philippe Descola defines as a “composition of the world” that separates us from other living things. Instead, we now experience an entanglement of nature and culture, object and subject. This shift echoes through the practices of artists such as Dominique Gonzalez-Foerster.

Dominique Gonzalez-Foerster

In the early 1990s, Dominique Gonzalez-Foerster became known for her *Chambres*, colourful environments resembling empty theatre sets. In making *Île de Beauté* (1996), her first 35mm film, with Ange Leccia, the artist adopted the state of an "on the spot" spatio-temporal experiment. The film brings us from the shores of Corsica to Japan through a fictional drift. The artist also applies this kind of motionless travelling in the way she devises her exhibitions, through which she attempts to explore "Ledges". In 2001, at the Dijon Consortium *Cosmodrome*, Dominique Gonzalez-Foerster created a vast environment imbued with a total aesthetic. Through films such as *Atomic Park* (2004) or *Marquise* (2007), Dominique Gonzalez-Foerster creates the premises of stories, the rest of which we are left to invent. The film itself welcomes the audience's mental projections.

When invited to exhibit in the Tate Modern's Turbine Hall, Dominique Gonzalez-Foerster set the scene for an imaginary piece of science fiction. *The Unilever Series* (2008-2009)⁵⁶⁹ told a tale of incessant rain, forcing Londoners to take refuge in the vast space of the museum. The artist filled the space with two hundred makeshift beds, each paired with a book, as well as a set of replicas of monumental sculptures. Dominique Gonzalez-Foerster's installation leads us to reflect on the ongoing catastrophe; it highlights the precariousness of our current situation.

During her exhibition at the Hispanic Society of New York in 2009⁵⁷⁰, Dominique Gonzalez-Foerster presented three large dioramas, which she placed at the centre of the exhibition space. Inspired by the traditional displays of natural history museums, the artist portrays three “territories” of the American continent: the tropics, the desert and the North Atlantic. These landscapes bear the marks of human intervention. She included architectural ruins and books in specific spots, connecting them to texts placed on the outer parts of the walls. Dominique Gonzalez-Foerster's require meticulous work; she follows traditional techniques to create perfect reproductions. The

⁵⁶⁹ The whole title of the installation comprises: *T.H 2058*.

⁵⁷⁰ GONZALEZ-FOERSTER Dominique, *Chronotopes & Dioramas, DLA at the Hispanic Society*, New York, September 23rd 2009 – April 18th 2010

scattered books of 20th-century literature can be seen as decaying relics of a glorious past. To render a relevantly complex image, the artist combines realism and fiction while simultaneously blurring our perception of time, thus adding a science-fiction element to the experience of her works. This allows her to add paradoxical traces of human presence to her landscapes, which create a greater sense of emptiness.

Dominique Gonzalez-Foerster turns the Modern abyss between nature and culture into an interval of uncertainty. Her diorama installation rejects a positivist reading of the Earth's sciences. Instead, it dives into the strangeness of the hybridisation of objects and subjects, integrating visitors themselves into the landscapes they observe. Gilles Barbier's work also exhibits a singular form of hybridisation.



Figure 62. Dominique Gonzalez-Foerster, Chronotopes & Dioramas, 2009

Gilles Barbier

Born in 1965 in Vanuatu, in the South Pacific, Gilles Barbier lives and works in Marseille. He is known for casting his own body, a hyperrealist technique he favours. In working with imprints of his own physical form, he uses a body that is constantly at his disposal. Through this practice, which he has developed over many years, he creates a physical performance through a radical mimesis.

In 2013, Gilles Barbier started developing a series called *Still People*, which features his body covered in moss, lichen, mycorrhizal fungi, ivy, and other climbing plants. These pieces seem to portray a human allowing nature, which has been dominated and domesticated for centuries, to take over. The man, surrounded by plants of all kinds, is shown in a meditative seated position. Gilles Barbier spent the first 18 years of his life on the island of Vanuatu, home to luxuriant vegetation. "Still" was inspired by the flourishing vegetation of this archipelago. In his latest works, *Still Memory*, plants spread into piles of books. Mimesis and the presence of books echo Dominique Gonzalez-Foerster's artworks. Gilles Barbier revisits still lifes, a recurring subject in classical painting. The artist combines an imminent temporality - that of reading - with an elongated temporality - that of the uninterrupted growth of vegetation.

Through his hyper-realistic techniques and humorous approach to the world, Gilles Barbier endeavours to portray nature regaining its rights and imposing its pace. While the *Still Memory* series pairs books with proliferating plants, Barbier's work *Still Library* involves a whole library invaded by this same vegetation, thus creating a complex and complete environment. Gilles Barbier's pieces combine elements of nature and culture, pointing to their inherent entanglement.



Figure 63. Gilles Barbier, Still Memory 7, 2013

VI. Indigenous collectives as portrayal of the future

To what extent could indigenous people be considered as “portrayal of the future”? We have a lot to learn from the indigenous people, whose world is already dead, and who continue to resist in an impoverished world that isn’t theirs. As Eduardo Viveiros de Castro and Deborah Danowski have said, it is interesting to note that Native American peoples never had a concept of Nature and therefore never experienced the need to free themselves from it. In this sense, we can assert that they have never been modern⁵⁷¹.

The defence of the territorial rights of Aboriginals communities in Canada and the United States has presented a significant obstacle for companies specialising in fossil fuel extraction. In September 2007, the United Nations adopted the Declaration on the Rights of Indigenous Peoples⁵⁷², with 143 votes against 4⁵⁷³.

As Eduardo Viveiros de Castro points out, Native American’ thought involves a perspectivist dimension. While they see us as non-humans, animals and spirits see themselves as humans⁵⁷⁴. The outward appearance of each species is a mere shell concealing an internal human form. This reality is only visible to members of the species themselves or to "Interspecific beings", also called shamans. Native American thinking involves "A unity of mind and a variety of bodies"⁵⁷⁵. This idea underpins "An original state in which there is no distinction between humans and animals"⁵⁷⁶.

Perspectivism is particularly relevant to large predators and scavengers, as well as human prey such as peccaries, monkeys, fish, deer or tapirs. The relationships between predators and the prey are a core element of the Native American perspective, to which the Amazonian ontology of predation is central. There is a significant distinction between the way humans see animals and all other beings that inhabit the Earth and how the latter see themselves and humans. According to Native American thought, animals are people and see themselves as people.

⁵⁷¹ VIVEIROS DE CASTRO Eduardo & DANOWSKI Deborah, *Ibid.*, p. 282.

⁵⁷² KLEIN Naomi, *Ibid.*, p. 376.

⁵⁷³ USA, Canada, Australia and New-Zealand.

⁵⁷⁴ VIVEIROS DE CASTRO Eduardo, *Perspectivisme et multinaturalisme dans l’Amérique indigène*, in: *A inconstancia da alma selvagem*, Sao Paulo, 2002, p. 4.

⁵⁷⁵ *Ibid.*, p. 2. (my translation)

⁵⁷⁶ *Ibid.*, p. 7.

The nature-culture dualism that underpins Western modernity cannot be applied to Native American peoples, whose perspective shields them from the vast majority of modern dualisms: "Universal and particular, objective and subjective, physical and moral, fact and value, given and constructed, necessity and spontaneity, immanence and transcendence, body and spirit, animality and humanity, and many more"⁵⁷⁷. Native American multi-naturalism and modern multi-culturalism are, in this sense, opposed.

In Native American mythology, bodies and names, souls and actions, the self and the other are entangled as a result of being immersed "In the same pre-subjective and pre-objective environment"⁵⁷⁸. Humanity seems to be considered as the original state of both humans and animals. Animals are, in fact, ex-humans, while humans are those who have evaded transformation. Humanity is the original state from which all categories of beings and things in the universe have emerged.⁵⁷⁹.

Shamanism is marked by an ideal of knowledge that is opposed to the objectivist epistemology of Western modernity. According to Native American shamanism, the fabric of knowledge implies personifying or adopting "The point of view of what must be known" since "the form of the other is the person"⁵⁸⁰. The symbolic value of hunting and the importance of shamanism appear to be the two core principles of Amazonian peoples. This implies that the universe is inhabited by a variety of extra-human intentionalities with independent perspectives. While acting as translators in the context of inter-specific dialogue, shamans cross physical barriers by adopting a particular perspective. They have the ability to mediate the relationships between beings and return to tell the tale.

Native American cosmology teaches us to free ourselves from the nature-culture dualism and all the dichotomies that underpin the capitalist West, all while being opposed to multi-naturalism and multi-culturalism. By refusing to separate humans and animals, it challenges Western objectivism. According to Eduardo Viveiros de Castro and Deborah Danowski, Native Americans, with their comparatively small populations, their relatively simple technologies, and openness to syncretic arrangements of high intensity, represent "the future" instead of a "survival of the past"⁵⁸¹.

⁵⁷⁷ Ibid., p. 2.

⁵⁷⁸ Ibid., p. 7.

⁵⁷⁹ Ibid., p. 8.

⁵⁸⁰ Ibid., p. 11.

⁵⁸¹ VIVEIROS DE CASTRO Eduardo & DANOWSKI Deborah, Ibid., p. 339. (my translation)

Native American peoples situate the end of the world in 1492, when Christopher Columbus “discovered” America. While the environmental apocalypse is slow and gradual, the Native American apocalypse was brutal and violent. As we have seen, in Native American cosmology, everything is seen as human, and there is, therefore nothing, exceptional about being human, which is a ubiquitous state. According to Native American mythology, it is therefore impossible to imagine a world without people. The destruction of the world and the destruction of humankind are one and the same. Humankind is “consubstantial with the world, co-relational with the world”. There can be no world after humankind⁵⁸². This mythology of the end of time, specific to Native American thinking, echoes various apocalyptic narratives we will study in our next chapter.

Nadia Myre

Nadia Myre is a Canadian artist, and an Algonquin, a member of the Kitigan Zibi Anishinaabeg nation. She lives and works in Montreal. For over a decade, her multidisciplinary practice has been inspired by the commitment of participants, as well as by the themes of identity and memory. Her work is an opportunity to revisit the history, as well as the political and social struggles of the First Nations. It is particularly influenced by traditional Native American techniques such as beading. Her series *Meditations on Red* (2013), which explores Aboriginal identity, is a set of photographs representing the craft of beading. Through it, the artist offers a critical reflection on identity by blood and the racist conceptions of the "white man" and the "red". Through her wallpaper work *Contact in Monochrome (Toile de Jony, 2018)* and *Pipe* (2017), a bronze cast of a tobacco pipe, she responds to the history and evolution of the tobacco trade.

In 2017, Nadia Myre’s work was exhibited at the Art Mûr gallery in Leipzig. In this exhibition, she presented her latest collection, *Code Switching* (Permutation de codes). This collection was inspired by a trip to London during which she walked along the Thames, right next to Tate Modern, and found small pieces of clay, which turned out to be remains of 19th-century tobacco pipes, on the riverbank. Back then, in England, these pipes were disposable consumer products. Finding them reminded Nadia Myre that the natives were the first to smoke tobacco, a plant they also used for its healing qualities. These traditions seemed to have inspired the former British Empire.

⁵⁸² Ibid., p. 287.

The Art Mûr exhibition included the first pieces she created using pipe fragments found in Great Britain. She used the ends of pipes to make ropes by stringing them through nylon thread like beads (*Pipe Bone Cord*). The exhibition also included works made of ceramic tubes, through which she attempted to reproduce the shape and beige colouring of the pipe pieces.

Nadia Myre assembled these ceramic parts to create baskets and receptacles. The latter evoked Native American techniques used to make wicker containers to preserve and transport dried tobacco. She employed the same technique in producing *Beaded Net*, a kind of fishing net that she placed on a cube made of metal frames. The resulting installation intertwines indigenous traditions, knowledge and skills. The exhibition also includes soundscapes that aim to recreate the sounds of nature, thus connecting Nadia Myre's works to her sources of inspiration.

In 2014, Myre received the Sobey Prize. She also won the Montreal Public Art Bureau's nationwide competition for which artists were invited to create a work of art for a grassy area of the Bonaventure islet, between William Street and Ottawa street. She was subsequently invited to contribute alongside Catalan sculptor Jaume Plensa and the Montreal visual artist Michel de Broin. Nadia Myre's sculptural work *Dans l'Attente / While awaiting* responds to the Grande Paix de Montréal (The Great Peace of Montreal), an agreement between French colonisers and forty indigenous nations, signed in 1701. The piece is a set of bronze sculptures representing Aboriginal leaders' signatures, as scrawled on the document marking this historic alliance. The twenty sculptures, composed of threadlike forms, evoke animals, rivers and human figures.



Figure 64. Nadia Myre, Mother Tongue, 2018

Jimmie Durham

Born in 1942, Jimmie Durham is an American artist who claims that he is descended from the Cherokee community. Throughout his studies at Austin University (Texas) and Geneva School of Fine Arts, between the 60s and 70s, he was an active member of the civil rights movement. Upon his return to the United States in 1973, Jimmie Durham became an active member of the Native American Movement.

During the 1980s, while living in New York, he started to make sculptures using Cherokee imagery. Through these works, Jimmie Durham demonstrates the need for a plural discourse, which is not restricted to high-brow Western culture. In her essay *Jimmie Durham: Post-American*, Anne Ellegood quotes the artist's words in 1987: "When you (other people) think of the world, you consider yourselves not only at the centre of it but also as the norm, which makes any conversation with you a little difficult". It feels necessary to acknowledge that subtle and decisive cultural codes condition the art world itself. These codes, which stem from Western Modernity, underpin distinction and recognition. As demonstrated by Maxence Alcade, the leading agencies for validating art are still primarily subject to western evaluation criteria. This adds to complicating the "challenges of the representation of a deliberately non-exotic *autochthonous* world"⁵⁸³. Jimmie Durham's 1980s works attempt to convey forms of socio-cultural duplicity. They are made of wood, stones, bones, skulls, fur, leather, feathers and teeth, often combined with manufactured objects.

In 1985, Jimmie Durham showed *Tlubn Datsi* ("puma" in Cherokee), a sculpture included in the exhibition *A Matter of Life and Death and Singing*, held in New York. At the time, he was inspired by the complexity of identity, the violent history of colonisation, and the stereotypes Native Americans were subjected to. The artist saw this work in particular as the outcome of a collaboration with the animal world, in this case, a puma. The assemblage was composed of a puma's skull, shells, feathers and fur, which were placed on a wooden base. Through it, Jimmie Durham appropriated the way the Cherokee honour the dead. He tried to think from the puma's perspective and wondered what its feelings were about death; or rather what it is like to be dead.

⁵⁸³ ALCADE Maxence, *Jimmie Durham, critique de l'artiste autochtone*, Marges, Contemporary art and Cultural Studies, n°16, 2013, p. 12. (my translation)

He thus adopted a perspectivist position, considering the puma as he would a human and abandoning his own subjectivity in favour of the animal's. The work acted as a translation of the puma's viewpoint on death. This death also echoed the death of the Cherokee people, stripped of their lands and their world. The work also referred to the death of the artist himself through the death of his Cherokee identity. In response to this reality, Jimmie Durham declared that he wished to be an orphan with neither roots nor home and made it his mission never to feel "at home". In this work, the death of the artist echoes Native American narratives of the end of the world. This strongly relates to the performative prophecies we will go on to study in our next chapter.



Figure 65. Jimmie Durham, *Tlubn Datsi*, 1985

Conclusion

In 1974, Joseph Beuys performed *I like America and America likes me*. In this piece, he was entirely covered in felt and blindfolded, and an ambulance picked him up in Düsseldorf. He travelled thus to New York, endeavouring not to see the American territory – as a form of protest against the war of Vietnam. He eventually arrived at the René Block gallery, where he spent a few days in a claustrophobic atmosphere with a coyote. Native Americans see coyotes as sacred animals embodying the painful history of white people’s arrival into American territory. During the performance, the artist and the animal developed a way of cohabiting, highlighting the necessity of “living together”. While visitors were invited to observe the performance behind a fence, Joseph Beuys and the coyote devised a mode of coexistence between human and non-human, comprising repetitive gestures as well as rituals together⁵⁸⁴.

⁵⁸⁴ Every day the American newspaper Wall Street Journal was delivered to them, and the coyote would urinate on it. They shared the same straw, and the coyote tore up Beuys’s hat.



Figure 66. Joseph Beuys, I like America and America likes me, 1974

In this chapter, we examined the ways in which it is possible to live together in times of environmental crises. Firstly, Joseph Beuys' piece displays a form of fraternal cohabitation between a man and an animal, thus offering a symbolic example of "living together". We began by highlighting the ways in which we live in a world of waste, both material waste from our consumer society and humans rejected by a society in which they do not fit. We went on to question our current democratic system and its ability to constitute a force of resistance in the face of environmental crises. Hicham-Stéphane Afeissa demonstrates that the public sphere is subject to a process of "Depoliticisation"⁵⁸⁵ facing the development of an Anthropos considered as a universal subject. Following this, we studied the notion of Cyborg introduced by Donna Haraway⁵⁸⁶, which unites humans and non-humans through their emancipation from Nature. Fourthly, we outlined a possible "Demos" of Gaïa, which involves recognising each other as "Earthlings"⁵⁸⁷ (in the words of Bruno Latour). Subsequently, we looked at a process that could allow our contemporaries to embrace symmetrical anthropology, a mode of thought that no longer distinguishes humans and non-humans, Culture and Nature. Finally, we attempted to demonstrate how Native American collectives could be seen as a "Portrayal of the future"⁵⁸⁸ by helping us to free ourselves from the nature-culture dualism.

In 2013, during the Gifford conferences, Bruno Latour identified two poles: "Humanity" (Demos) and the "World" (Nature)⁵⁸⁹. He demonstrated that these two poles should not be considered separately, that they should be seen instead as two entangled actors: "Humanity is not on the back of being, it is not the negative of the world, just as the world is not the "context "of a Subject which counter-defines it as Object"⁵⁹⁰.

Bruno Latour rejects the idea of an "Anthropos" of the Anthropocene, a unified and universal subject "Able to act as one people"⁵⁹¹. Indeed, adopting the idea of such an Anthropos would prevent us from considering the plurality and locality of a multitude of contradictory and heterogeneous actors. On this subject, it seems relevant to evoke what Latour describes as "collectives", groups including a variety of peoples, as well as non-humans, involved in the current situation of environmental crises.

⁵⁸⁵ AFEISSA Hicham-Stéphane, *Ibid.*, p. 249.

⁵⁸⁶ HARAWAY Donna, *A Cyborg Manifesto*, *Ibid.*

⁵⁸⁷ LATOUR Bruno, in: VIVEIROS DE CASTRO Eduardo & DANOWSKI Deborah, *Ibid.* p.300

⁵⁸⁸ VIVEIROS DE CASTRO Eduardo & DANOWSKI Deborah, *Ibid.*

⁵⁸⁹ *Ibid.*, p. 300.

⁵⁹⁰ *Ibid.*, p. 300. (my translation)

⁵⁹¹ *Ibid.*, p. 304.

We live in a time of war (Latour), a war involving two categories of individuals: those who “prepare to live like Earthlings in the Anthropocene” and those who “decided to stay Human in the Holocene”⁵⁹². It might then be necessary to declare war in order to later engage in “peace negotiations”⁵⁹³. Indeed, declaring war might be a necessary condition for the emergence of a “common world for inhabitants of the planet now under the aegis of Gaïa”⁵⁹⁴. The “Humans” Latour speaks of are, of course, the Moderns who, having rejected their Earth, continue their flight forward.

We can therefore define the “Demos” of Gaïa as the people “who feel united and summoned by this entity”⁵⁹⁵, as “Earthlings” who mourn the “infinite universe” in order to embrace the “closed world”⁵⁹⁶ of the Anthropocene. Let us note that the term “Earthlings” relates to “Missing people” as described by Deleuze and Guattari, a people with the potential to engage in “resistance to the present” and thus create a “new world”⁵⁹⁷.

Furthermore, following Donna Haraway’s point of view leads us to see the people of Gaïa as a collection of “chimaeras” or even “cyborgs”⁵⁹⁸; in other words, hybrid beings forming a “monstrous world” which escapes gender distinctions as well as modern dualisms. Moreover, Timothy Morton discusses what he calls “Hyperobjets”⁵⁹⁹ as well as “strange strangers”⁶⁰⁰. “Hyperobjets” threaten our social and natural environment and urge us to relinquish notions of “Nature” and “World” in order to create better connections between humans and non-humans. As for “strange strangers”, they fill the lack of “being” of the individual: “Je est un autre” / “I is Another”⁶⁰¹. They allow us to contemplate, or even embrace, the radically inhuman: “the strangely strange core of the human”⁶⁰². Can artworks fit within this category? If so, we would need to question how we approach them, that is to say, art history. However, as Didi-Huberman highlights, “art historians, through all their gestures, whether humble or complex, as tedious as they might seem, keep making philosophical choices”. Although “the invariably predominant Kantian

⁵⁹² Ibid., p. 306.

⁵⁹³ Ibid., p. 299.

⁵⁹⁴ Ibid., p. 299.

⁵⁹⁵ Ibid., p. 304.

⁵⁹⁶ AFEISSA Hicham-Stéphane, Ibid., p.199.

⁵⁹⁷ VIVEIROS DE CASTRO Eduardo & DANOWSKI Deborah, Ibid., p.309.

⁵⁹⁸ HARAWAY Donna, *A Cyborg Manifesto*, Ibid., p. 151.

⁵⁹⁹ MORTON Timothy, Ibid., p. 19.

⁶⁰⁰ Ibid., p. 15.

⁶⁰¹ RIMBAUD Arthur, *From a letter to Paul Demeny*, 15th May 1871

⁶⁰² Ibid., p. 92.

aesthetic has a tendency to digest the sensitive into the intelligible, and the visible into the Idea”⁶⁰³, artworks both remain largely mysterious and can convey invisible things, making them deeply strange. Freeing ourselves from the Kantian authority would involve seeking an independent relationship with artworks, which might bring us further than the concepts do.

In our next chapter, we will apply a performative approach to narratives of the end of the world. In Hicham-Stéphane Afeissa’s words, thinking about the end of the world can “unite the world through the assumption of common destruction”⁶⁰⁴.

⁶⁰³ DIDI-HUBERMAN Georges, *Devant l’image*, 1990, Les Éditions de Minuit, Collection Critique, 2016, p. 130.

⁶⁰⁴ AFEISSA Hicham-Stéphane, *Ibid.*, p. 149.

CHAPTER 6 - Performative end-of-the-world prophecies

Introduction

In the previous chapter, we tried to study how it is possible to live together at the time of the announcement of the end of the world. We must now establish a performative prophecy of the end of the world so as to prevent it from occurring. In the biblical tradition, a prophecy is a form of spoken or written revelation. For Christians, prophecies are mostly found in the words of Jesus and can be about the past, the present, or the future. A prophet is an individual who has received a divine message and passes it on to someone else. ‘Apocalypse’ comes from the Latin word for “revelation”. It is a literary genre found in Judaism since the 2nd century BC and early Christianity since the 1st century BC. According to the last canonical book of the New Testament, in the Christian tradition, the Apocalypse is usually attributed to St. John and reveals the destiny of God’s people in the afterlife.

According to Hicham-Stéphane Afeissa, it is essential to distinguish between a “prophet” and a person “announcing an apocalypse”: while the prophet addresses an audience, the person announcing an apocalypse does not address anyone in particular. “A prophecy becomes apocalyptic inasmuch as it is removed from any historical context”⁶⁰⁵. According to Afeissa, both apocalypse and prophecy involve a “literature of resistance with a political scope”⁶⁰⁶. Furthermore, the discourse about the end of the world is not new; it dates back to the origins of human history. The apocalyptic imagination, rooted in eternal repetition, is “one of the most noteworthy cultural constants that historians and anthropologists can observe”⁶⁰⁷.

Afeissa refers to the great historians of Rome and their deep sadness and regret regarding their world’s predicted decline. However, we must establish a clear distinction between these past imaginations and the current ecological apocalypse. Indeed, the latter is secular and involves geology as well as our immediate environment.

Bruno Latour quotes Günther Anders, according to whom: “We are only apocalypse announcers because we are wrong. Only to enjoy the good fortune of still being here on each new day,

⁶⁰⁵ AFEISSA Hicham-Stéphane, *Ibid.* p. 163.

⁶⁰⁶ *Ibid.*, p. 157.

⁶⁰⁷ *Ibid.* p. 241.

ridiculous but still alive and kicking”⁶⁰⁸. The end-of-the-world prophecy must be announced in a “performative” way so as not to become a reality. Eduardo Viveiros de Castro and Deborah Danowski have observed that among certain Native American peoples, bad dreams are to be publicly recounted once the dreamer awakes so as to prevent the events foreshadowed in them from actually happening⁶⁰⁹. In this sense, prophetic utterance seems to take on a pragmatic dimension⁶¹⁰; it plays an active role in preventing the apocalypse from occurring. Hicham-Stéphane Afeissa uses the notion of “sin”, which underpins all Christian theology, a sin for which we must repent even before committing the crime is: “We must repent for the crime before it is committed in order to find the will not to commit it, within repentance itself”⁶¹¹.

Many performative end-of-the-world prophecies can be found in the arts, including Hiroshi Sugimoto’s 2014 exhibition at the Palais de Tokyo. The exhibition’s title “Aujourd’hui le monde est mort” [The world died today], references the opening sentence of Albert Camus’ novel *L’Etranger/The Outsider*: “Aujourd’hui Maman est morte” [Mother died today]. Sugimoto’s project, which he had been developing for the past ten years, consisted in the presentation of a world after the end of humankind. The Palais de Tokyo’s architecture, resembling an abandoned ruin, seemed thoroughly suited to exploring the theme of the decline of civilisation. Sugimoto established a maze-like route within the Palais de Tokyo’s spaces, which he filled with objects from his own collection as well as some of his photographs. He presented 33 end-of-the-world narratives. This number was chosen in reference to the “Pavilion of the 33 Windows” in Kyoto, representing the afterlife. In Buddhist thinking, 33 represents infinity and evokes the cycle of birth, death, and rebirth.

⁶⁰⁸ LATOUR Bruno, *Face à Gaïa*, Ibid., p. 282. (my translation)

⁶⁰⁹ VIVEIROS DE CASTRO Eduardo & DANOWSKI Deborah, Ibid., p. 298.

⁶¹⁰ AFEISSA Hicham-Stéphane, Ibid. p. 162.

⁶¹¹ Ibid. p. 103.



Figure 67. Hiroshi Sugimoto, Aujourd'hui le monde est mort, 2014

This set of narratives was presented as a collection of fictitious scenarios recounted by human survivors after the end of the world. In each room, visitors discovered a text, always starting with the same words: “The world died today. Or maybe yesterday, I don’t know”. The various authors of these fictional texts included an astrophysicist, a beekeeper, a politician, a geneticist, a theologian, and so on. Each narrative was presented as a testament addressed to future recipients. However, the words “The world died today” made each one a performative prophecy, thereby suggesting that the apocalypse could still be avoided. At exhibition’s entrance, there was a short text: “*In this exhibition you will find the worst-case scenarios stemming from my imagination, to do with the future of humankind. It is up to the younger generations to take all possible steps to stop this from becoming reality*”.

These performative end-of-the-world prophecies must be capable of conjuring some hope of rebirth. According to Jaspers⁶¹², we should be able to turn our panic into an ability to act, working towards salvation for all. We should therefore aim to reach a state of “creative anxiety”. In fact, according to Timothy Morton, the “alleged end of the world” is nothing other than the beginning of history, a history involving the end of the “human dream that reality is significant to them alone”⁶¹³. From then on, we would have to live in a state of co-dependence with non-humans, as stated throughout our third chapter.

Moreover, a connection can be made between the end of the world announced by nuclear energy and the cause of environmental crises. In *Le Temps de la Fin/End-Time* (1960), Günther Anders analyses the future of political theology in the age of the atomic mushroom cloud. He thus emphasises the shift from “the threat of nuclear holocaust to ecological change”⁶¹⁴. Timothy Morton describes global warming as a “nuclear bomb exploding in slow motion”; he adds “the most fearsome thing is that we are discovering global warming precisely when it is already here”⁶¹⁵.

Thinking about the atomic bomb seems like a laboratory reflecting on the ecological crisis. Indeed, in 1945, Hiroshima, the end of the world was imagined for the first time as a “really possible end, fundamentally distinct from the end of Christianity”⁶¹⁶. Indeed, atomic energy defies borders, leading it to awaken a form of world summation. Additionally, with the atomic bomb, the world closes in on itself: there is no planet B. While the consequences of our actions will soon “come

⁶¹² Ibid. p. 59.

⁶¹³ MORTON Timothy, *Hyperobjects: Philosophy and Ecology after the End of the World*, University of Minnesota Press, 2013, p. 128

⁶¹⁴ LATOUR Bruno, *Face à Gaïa*, Ibid., p. 282. (my translation)

⁶¹⁵ MORTON Timothy, *Hyperobjects*, Ibid., p. 123.

⁶¹⁶ AFEISSA Hicham-Stéphane, Ibid. p. 64.

back to us”⁶¹⁷, we sense the Earth’s roundness within the apocalyptic spectacle we are part and parcel of. Hans Jonas speaks of “the bomb’s shadow”. He defines the environmental crisis as a “creeping apocalypse” and the atomic bomb as an “abrupt and brutal apocalypse”⁶¹⁸. Thus, the ecological issue follows a slow and gradual process through “locally situated anthropo-histories”⁶¹⁹, as previously mentioned in our second chapter.

Thus, the most fragile ecosystems gradually die and disappear from our surroundings. Within our thinking around the ecological catastrophe, “death” occurs when “what once held together” comes undone. The elements forming this entity do not strictly die, but “what they were through their part in the system does indeed die”⁶²⁰.

Jean Tinguely

Jean Tinguely’s self-destructive machines illustrate this thinking very effectively. This Swiss sculptor, painter and draughtsman was born in 1925 in Fribourg and died in 1991 in Bern. In the tradition of Marcel Duchamp, he introduced movement into his artworks by making kinetic mechanical sculptures. In 1954, Jean Tinguely produced a variety of machines, including the drawing machine *Meta-Matic*. He began developing his series of self-destructive sculptures, monumental machines destined to self-destruct, in 1960. Tinguely was influenced by the work of Dadaists such as Kurt Schwitters and Hans Arp, as well as by his friendship with Marcel Duchamp. He saw his self-destructive works as symbols of absolute freedom, and his approach involved elements of absurdity. Tinguely’s machines were produced during the so-called *Trente Glorieuses* — three decades of post-war affluence in France — and in the context of the religion of progress. The artist attempted to subvert consumer society by using recycled materials instead of engaging in his contemporaries’ fascination for new objects.

On March 17th 1960, in the garden of New York’s Museum of Modern Art (MoMA), the artist showed *Homage to New York*, a machine that existed only for as long as it took to destroy it. Initially, the work appeared as an assemblage of eclectic objects: bicycle wheels, engine parts, pulleys, a ‘meta-matic’, radio sets, timers, a battery, and all sorts of tubes. It was a real hotch-potch driven by

⁶¹⁷ Ibid. p. 49.

⁶¹⁸ Ibid., p. 85.

⁶¹⁹ BONNEUIL Christophe, JOUVANCOURT de Pierre, *En finir avec l'épopée. Récit, géopouvoir et sujets de l'Anthropocène*, in : HACHE Émilie, *De l'univers clos au monde infini*, Éditions Dehors, 2014, p. 61.

⁶²⁰ STENGERS Isabelle, *Penser à partir du ravage écologique*, in : HACHE Émilie, Ibid., p. 157.

dozens of motors, connected to a piano obsessively repeating the same three notes. The machine, above which hovered an orange weather balloon, was painted white all over, “like a virgin before her marriage”⁶²¹. The artist himself declared that he had staged his machine’s “suicide”⁶²². The remains of the work were gathered by the audience, thus preventing it from being re-appropriated by the museum. Tinguely saw the machine’s destruction as “on one hand an allusion to life’s ephemeral aspect”, and on the other, the expression of a “complete freedom”⁶²³. These two meanings are both opposed and complementary. In the following months, Tinguely worked on a film for the American TV channel, NBC. He decided to make it in the Nevada desert, in the exact place in which the first nuclear tests were carried out. The film features Jean Tinguely and his partner Niki de Saint Phalle collecting various objects of consumer culture, such as a refrigerator, a toilet bowl and an air-conditioning unit. They then assemble this set of objects to create a monumental machine. The work, which was titled *Study for an End of the World N° 2*, exploded on March 21st, 1962, at the height of the Cold War. It thus echoed fears of humankind’s self-destruction through the atomic bomb.

The destruction of the work lasted for about half an hour and required some help from the artist himself. Jean Tinguely declared that he was satisfied with the result, commenting: “*We cannot reasonably expect the end of the world to happen the way we’d imagined!*” Herm Lewis, one of the journalists witnessing Tinguely’s performance, concluded his article in the following manner: “*we did not expect mistakes to enable Jean to become an integral part of his work. When a stick of dynamite failed to explode, he dashed into the smoke and flames to set it off himself. Later, when the danger had passed, he went back into the smoking debris and extricated a motor that could still be used. Some spectators saw this gesture as a sign that we will not manage to destroy the world entirely: humankind will rise from its ashes and, carrying a salvaged object under its arm, it will start again from square one*”⁶²⁴. Tinguely announced the end of the world through a gradual process and, despite himself, introduced a hope of rebirth. The machine’s destruction involved a certain amount of time, thus evoking an “end-time” rather than the world’s end.

⁶²¹ According to SOUTIF Daniel, *Tinguely Ltd on le crépuscule des machines*, in *Art Studio*, Fall 1991, p. 74.

⁶²² HULTEN Pontus, *Méta*, Paris, 1973. p. 15., In : ROLEZ Anaïs, *Les machines auto-destructrices de Jean Tinguely, un attentat contre l'ordre établi*, Recherche en art contemporain, 2011

⁶²³ Émission *Personnalités Suisses, Tinguely*, Georges Kleinmann, 15 novembre 1962., In: ROLEZ Anaïs, *Ibid.*

⁶²⁴ HULTEN Pontus, *Tinguely*, Paris, Centre Georges Pompidou, 1988. p.119., In: ROLEZ Anaïs, *Ibid.*

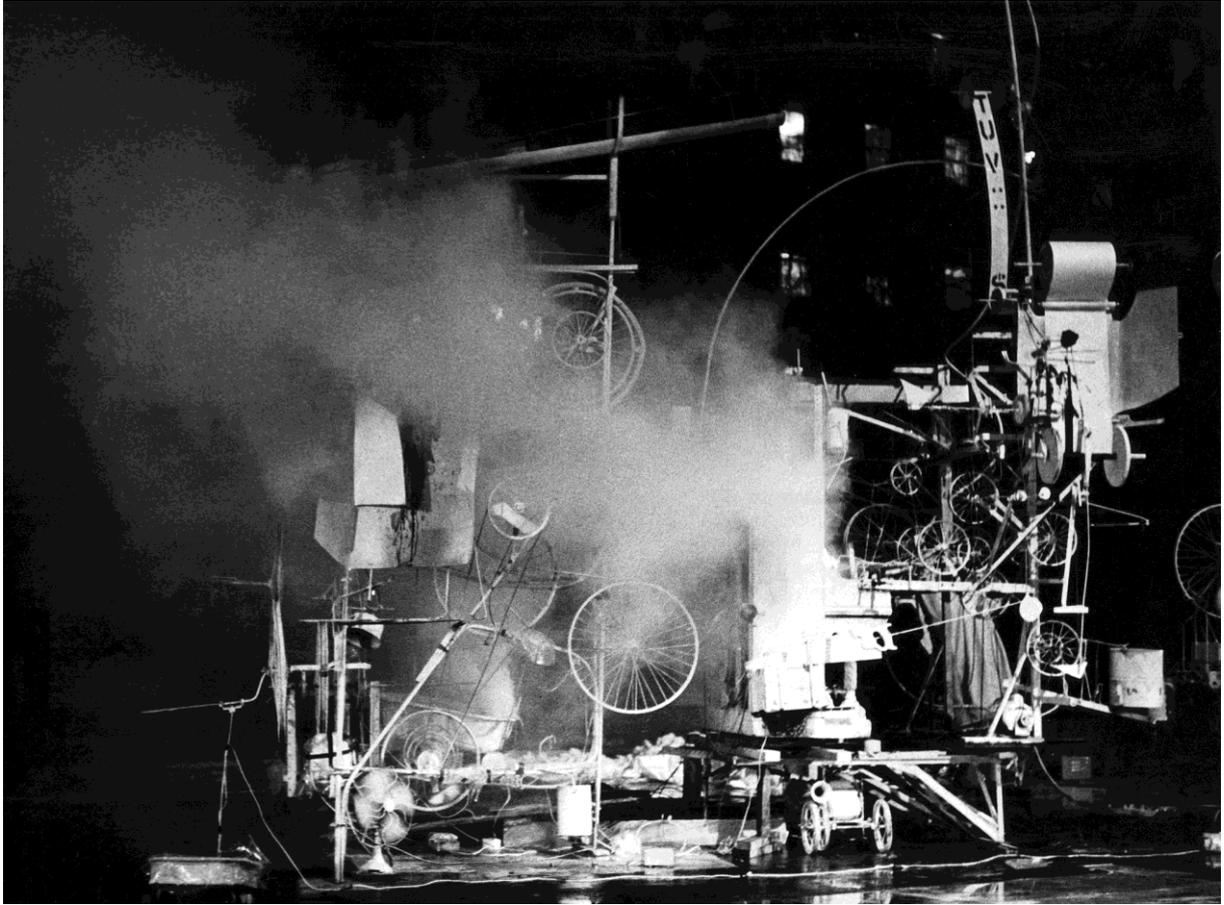


Figure 68. Jean Tinguely, Homage to New York, 1960

Timothy Morton has described the climate as lingering in our minds in a latent way, making it impossible to discuss the weather without sensing the “shadow” which surrounds us, like a “dark cloud”⁶²⁵. Following Derrida, we could regard this situation as one in which we strive to accommodate an “unknowable future”, which he calls the “*arrivant*” or “still-to-come”, “the absolutely unforeseen and unforeseeable”. Timothy Morton calls this “strange strangeness”, describing a strangeness that will always be strange, and can neither be tamed nor rationalised⁶²⁶. This strangeness embodies all the things that will change in our collective way of life, both on a local scale and across the planet. Some thinkers, such as Latour and Stengers, call it “Gaïa”, defining it as a cruel mother ready to take revenge, threatening us with a “barbaric” future.

Timothy Morton also asserts “ecological consciousness is putting an end to the idea that we are living in an environment”⁶²⁷. As stated in the introduction of our first chapter, the notion of the environment itself does not fit the current situation since it misleadingly establishes a reassuring distance between us and that which surrounds us. Furthermore, Tim Ingold defines the environment as “a zone of interpenetration within which our lives and those of others are mixed into a homogeneous whole”⁶²⁸. The interaction between beings is such that there can no longer be an all-encompassing entity.

In this sixth and final chapter, we will set out to outline the various end-of-the-world narratives that may help us to develop a mythology that fits our day and age. We shall discuss “performative” prophecies announcing the end of the world, namely, words uttered to prevent the catastrophe. We will start by establishing a critical analysis of collapsology. We will then study the current shift from narrative to myth and call on various artworks in order to do so. Thirdly, we will endeavour to distinguish between these narratives, between ideas of “end-time” and “the end of time”. Our fourth section will explore the possibilities of an “Us without a world” and a “World without us”.

⁶²⁵ MORTON Timothy, *Ibid.*, p. 120.

⁶²⁶ *Ibid.*, p. 144.

⁶²⁷ *Ibid.*, p. 148.

⁶²⁸ INGOLD Tim, *Marcher avec les dragons*, Éditions Zones Sensibles, 2013, p. 10. (my translation)

I. Collapse and collapsology

The movement we call “collapsology”, or “Collapse Theory”, is situated between the “end-time” and the “end of time”. Since 2015, with the publication of Pablo Servigne⁶²⁹ and Raphaël Stevens⁶³⁰ book *Comment Tout Peut s'Effondrer: Petit manuel de collapsologie à l'usage des générations futures/How Everything May Collapse: a short manual of collapsology for future generations*⁶³¹, this intellectual trend seems to have gained substantial significance. According to the collapsologist scenario, in the wake of a series of brutal and sudden environmental catastrophes, human beings would be forced to live in a world where their basic needs could no longer be met. The term “collapsology” embraces the multidisciplinary study of “collapse”, namely: fall, loss, tumble⁶³². This recent movement approaches the risks of a complete collapse of industrial society. It predominantly developed within the Momentum Institute, founded in 2011 by Agnès Sinäi.

The aim of this new “discipline”, which is rooted in scientific facts⁶³³, is to raise our collective awareness of imminent catastrophe. It paints an overwhelming picture that earthlings have long been acquainted with since understanding disaster as our present condition. François Thoreau and Benedikte Zitouni demonstrate that, according to collapsology theory, it will be necessary to confront the collapse of “everything”. This “everything” is problematic in that it does not account for a diverse set of local situations. The advocates of collapsology could, therefore, be seen as applying hegemonic claims to the narrative of collapse, by creating a “grand narrative”, an “adding machine”⁶³⁴ incorporating any and all factors liable to reinforce it.

Collapsologists seem to have relationships with the Intergovernmental Panel on Climate Change (IPCC) and the Club of Rome, in other words, governmental institutions intending to steer a “finally unified Planet-Earth vessel”⁶³⁵. This would thus involve a “bio-geo-physical monitoring” programme. The IPCC and the Club of Rome offer solutions to global warming through geoengineering projects, leading them to approach Earth globally as a “unified” whole. In adopting

⁶²⁹ Pablo Servigne is an agronomist engineer at Gembloux Agro-Bio Tech (Belgium) and Doctor of Sciences at ULB (Université Libre de Bruxelles).

⁶³⁰ Raphaël Stevens is an independent researcher, an expert in the resilience of socio-ecological systems. He, notably, studied at Totnes (United Kingdom), the first town in “transition”.

⁶³¹ THOREAU François, ZITOUNI Benedikte, *Contre l'effondrement: agir pour des milieux vivaces*, published in *lundimatin*#170, December 19th, 2018

⁶³² Ibid.

⁶³³ Members of the Momentum Institute base their studies on previous accounts, among which that of the geologist and biologist Anthony David Barnosky (2012).

⁶³⁴ Ibid.

⁶³⁵ Ibid.

temporal linearity, the idea that we must now strive forward and not look back, Collapsological thinking seems to involve rupture. However, environmental catastrophe is marked by its slow pace, expanding through time into the gradual disintegration of human and non-human living conditions alike.

Therefore, it seems necessary to challenge the idea that “everything might collapse” brutally and suddenly. First of all, there is no “everything”; at best, there are only “rare partial totalities”⁶³⁶. This observation opens us up to developing new narratives using the fragments available to us. While we must acknowledge that collapsologists have allowed us to discover global warming and make it public, this gives them neither the monopoly of the world’s last truth nor access to its layers of complexity and multiple situations. Moreover, collapsology involves “the presence of a higher power, an absolute moral referent, which infantilises both struggles and people”⁶³⁷. Its global approach to the Earth contradicts the “destruction of the image of the globe”, as presented by Bruno Latour and examined in the second chapter of this study. Indeed, Latour’s line of thought suggests that we should, instead, endeavour to study a wide range of local issues in order to offer solutions adapted to each situation. This involves looking at multiple narratives of the “end” in order to establish a proper mythology of the end of the world.

⁶³⁶ Ibid.

⁶³⁷ Ibid.

II. End-of-the-world narratives: inventing a new mythology.

A. Mythologies

To what extent can end-of-the-world narratives be useful to us? We will start by examining the mythological aspect of the end-of-the-world narrative so as to outline a new mythology to fit our day and age⁶³⁸. The semiotic systems of myths include an imaginary construct, the function of which is to explain cosmic and social phenomena. Myths play an essential part in societal cohesion as they embody the fundamental values at the root of social practice.

We will now endeavour to present the narrative of “ruination of our global civilisation”⁶³⁹ as predicted by environmental catastrophe. Its breadth leads it to affect a decisive percentage of the human beings living on Earth. Eduardo Viveiros de Castro and Deborah Danowski believe that “the human species, the very idea of a human species”⁶⁴⁰ is under threat. Thinking about the end of the world inevitably leads us to reflect on its beginning, as well as on “the time before the beginning”⁶⁴¹. Moreover, we must become sensitive to the present situation not to postpone the “end” in an unpredictable future.

B. Announcing the end of the world in the present

How can we announce the end of the world in the present? Timothy Morton urges us to be wary of apocalyptic narratives about the “end of time”, which, by postponing catastrophe to a hypothetical future⁶⁴², prevent us from thinking about the immediate presence of the Apocalypse. To describe this irreversible trajectory, he uses the term “Hyperobjects”. The term “Hyperobjects” refers to entities that are so incommensurable that we cannot trace their outlines, such as global warming, the biosphere, or the change of geological regime. The world’s end is indeed real; it manifests itself through these “Hyperobjects”, which have already been introduced into the psychological and social spaces of the contemporary world. If there is such a thing as the “Last Judgement”⁶⁴³, we must imagine it happening today, not at some uncertain point in the future.

⁶³⁸ VIVEIROS DE CASTRO Eduardo & DANOWSKI Deborah, *Ibid.*, p. 224-225.

⁶³⁹ *Ibid.*, p. 222.

⁶⁴⁰ *Ibid.*

⁶⁴¹ *Ibid.*, p. 232.

⁶⁴² MORTON Timothy, *Hyperobjets*, *Ibid.*, p. 123.

⁶⁴³ *Ibid.*

Hicham-Stéphane Afeissa, for his part, reminds us that we must now hear the accusations that our children will address us tomorrow⁶⁴⁴.

What is at stake here is nothing other than the “ontological human condition”⁶⁴⁵. It is, therefore, now time for us to take on the prophets’ mission, as defined in the biblical narrative, as “humans of the word” but above all “humans of the present”⁶⁴⁶. Ecological catastrophe marks a reversal of time since “the future is now looking at us and judging us”⁶⁴⁷. Hicham-Stéphane Afeissa mentions Jean-Pierre Dupuy’s book, *Pour Un Catastrophisme Éclairé/ For an Enlightened Catastrophism*⁶⁴⁸, in which the author stresses the necessity to live in the certainty of catastrophe, in the present. While it is important to imagine the environmental crisis in the present, this significantly disrupts our current time frame. Lars Von Trier’s movie *Melancholia* (2011) demonstrates how the prophecy of the end of the world applies to planet Earth from a cosmic viewpoint. Thus, following Eduardo Viveiros de Castro and Deborah Danowski, we witness “the merging of cosmological time and human historical time”⁶⁴⁹. In other words, human beings can no longer ignore their cosmic situation. However, this cosmic point of view reveals an “end of the world” that has already occurred.

Much like other contemporary thinkers, Timothy Morton⁶⁵⁰ highlights that the end of the world has already taken place. While we should think of the environmental Apocalypse in the present, we must also remember that it is already behind us, that we are constantly lagging behind, endlessly attempting to make up for lost time. The “planetary ecological collapse”⁶⁵¹ is definitely behind us, and its course cannot be reversed. However, this does not prevent us from building a narrative in the past, the present and the future. With this aim in mind, we will now examine a range of narratives that have already been established, including religious, nuclear and environmental apocalypse.

⁶⁴⁴ AFEISSA Hicham-Stéphane, *Ibid.*, p. 118.

⁶⁴⁵ *Ibid.*, p. 132.

⁶⁴⁶ *Ibid.*, p. 156.

⁶⁴⁷ *Ibid.*, p. 102.

⁶⁴⁸ DUPUY Jean-Pierre, *Pour un catastrophisme éclairé*, Points, 2004

⁶⁴⁹ VIVEIROS DE CASTRO Eduardo & DANOWSKI Deborah, *Ibid.*, p. 266.

⁶⁵⁰ MORTON Timothy, *The Ecological Thought*, *Ibid.*, p. 98.

⁶⁵¹ VIVEIROS DE CASTRO Eduardo & DANOWSKI Deborah, *Ibid.*, p. 266.

C. Religious Apocalypse / Environmental Apocalypse

How can we differentiate between environmental apocalypse and religious apocalypse? Let us define these two semantic phenomena in order to compare them. The discourse around ecological catastrophe combines a kind of religiosity with a scientific discourse about the world. Some thinkers reject this idea: Thomas Burnet, for example, believes that it is important to distinguish between these two semantic phenomena: “the religious inasmuch as catastrophe alludes to divine punishment, and the scientific inasmuch as catastrophe characterises a physical phenomenon”⁶⁵². We must nevertheless endeavour to improve our understanding of religious apocalyptic literature in “its matricial, argumentative, predicative, metaphorical, rhetorical forms...”⁶⁵³. Clairette Karakash argues that God is invariably the author and conductor of the end of time in the case of religious apocalypses. Meanwhile, in environmental apocalypses, humankind bears all the responsibility for the catastrophe⁶⁵⁴. Furthermore, unlike the biblical Apocalypse, the environmental Apocalypse will be “naked”, an “apocalypse with no Realm”⁶⁵⁵.

The period between the 13th and 18th centuries was marked by the emergence of Gnosticism in all parts of society. Gnosticism, which means guaranteed scientific knowledge⁶⁵⁶, began to rival religious truth, which cannot be proved: “Faith is what grasps you, knowledge is what you grasp”⁶⁵⁷. According to Latour, who quotes Toulmin, we are currently witnessing the emergence of a period in which people only accept indisputable truths. In this sense, religion cannot compete with scientific discourse. According to Lynn White, this has led Christians to abandon “all concern for the cosmos and focus solely on human salvation, then, among humans, solely on the soul’s salvation, before abandoning the soul itself in favour of mores”⁶⁵⁸. Latour goes on to assert that: “In believing that they cling to the Spirit, they have lost the Earth”⁶⁵⁹. This evokes the evangelical injunction: “*For what shall it profit a man, if he shall gain the whole world, and lose his own soul?*” (Mark, 8:36), which, in reverse, turns into: “For what shall it profit a man if he shall save his own soul and lose the whole world?”⁶⁶⁰

⁶⁵² AFEISSA Hicham-Stéphane, *Ibid.*, p. 25.

⁶⁵³ *Ibid.*, p. 134.

⁶⁵⁴ *Ibid.*, p. 139.

⁶⁵⁵ *Ibid.*, p. 65.

⁶⁵⁶ LATOUR Bruno, *Face à Gaïa*, *Ibid.*, p. 265.

⁶⁵⁷ *Ibid.*, p. 265.

⁶⁵⁸ *Ibid.*, p. 272.

⁶⁵⁹ *Ibid.*, p. 273.

⁶⁶⁰ *Ibid.*, p. 273.

However, the history of modernity seems to involve the development of two new types of religiosities. The first concerns Nature, which we consider as an entity that is separate from us, while also providing us with all the resources we need. Moreover, this “Nature” contrasts with the notion of “Culture”. The second type of religiosity has to do with technological and economic progress: we truly worship economic growth, which allows for the existence of the capitalist system. However, it seems urgently necessary to let go of the notion of nature, and progress embodies the terrifying forces that are currently leading us to the end-time. Whether religious or secular, the narrative of the end of the world requires us to call upon metaphors to grasp incommensurable phenomena. Only through these metaphors can true apocalyptic mythology emerge.

D. Metaphors for grasping totality

How can metaphors help us to better approach the world? Before examining myths, metaphors seem relevant for understanding incommensurable entities such as the totality of humankind. Following Afeissa’s wording, let us start by look at “absolute metaphors”, capable of representing all humans and non-humans, something that it is impossible to imagine or grasp through experience alone: “Absolute metaphors seek to stand in for the limits of objectivity”⁶⁶¹. Afeissa references the legend of the flood, in which Noah tried to assemble all of the world’s constitutive elements so as to spare them from shared destruction. This biblical narrative seems to involve a paradoxical tragedy. While the notion of “separation” is made fundamental from Genesis onward, with “the separation of light and darkness”, the flood, for its part, erased all “the divisions on which the Creation rests”⁶⁶². In Sloterdijk’s words, Noah can be seen as “the first in a long line of defenders of the animal cause to wish to confer legal rights to pre-human life. This makes him the terrestrial legislator of the first natural contract”⁶⁶³.

The contemporary ecological discourse ratifies the flood motif as the permanent threat that hangs over humans in their totality. Thus, the narrative of the flood, of which Noah is the protagonist, appears as a very effective metaphor. Moreover, the Earth, the climate, and the change in geological regime are incommensurable entities that demand the intervention of “absolute metaphors”. Similarly to the “Hyperobjects” introduced by Timothy Morton, “absolute metaphors” allow us to approach a totality that surpasses us. This leads us to think of artworks as “absolute metaphors”.

⁶⁶¹ AFEISSA Hicham-Stéphane, *Ibid.* p. 173.

⁶⁶² *Ibid.*, p. 179.

⁶⁶³ SLOTERDIJK Peter, in: AFEISSA Hicham-Stéphane, *Ibid.*, p. 185.

Cildo Meireles' *Marulho* (1991), a work we studied in our second chapter, would thus be seen as an “absolute metaphor” of the ocean. The use of these metaphors contributes to the establishment of a relevant mythology for our time.

E. The necessity of a relevant mythology for our time

There are various types of fiction: legend, tale, novel, fable, and myth. Myths have a distinctive imaginary aspect through which they explain certain phenomena and practices, such as social cohesion. As stressed by Viveiros de Castro, it is necessary to establish a “mythology that fits our time” and embodies our society's shared values. The mythology we must build can take various forms, one of which is contemporary artworks. The specificity of the mythical narrative of the end of the world is its “performativity”, that is to say, its ability to prevent the announced end from occurring.

Günther Anders wrote: “We are only apocalyptic harbingers because we are wrong”. End-of-the-world narratives, which adopt the form of tales or images, have the advantage of transforming our imaginations, which include environmental catastrophes. According to Hicham-Stéphane Afeissa, the force of the environmental Apocalypse lies in the fact that it involves a “postmodern tale”. In line with Viveiros de Castro, Jean-François Lyotard recognises that this is necessary in order to give meaning to the current day and age. Furthermore, the ecological crisis is probably “our last chance”⁶⁶⁴; it is truly apocalyptic in this sense.

Günther Anders is especially aware of the similarities between the biblical apocalypse and the nuclear apocalypse. He considers this irrefutable link as the key to imagining the environmental apocalypse. Mythological narratives to do with the nuclear apocalypse precede mythological narratives to do with the environmental apocalypse; therefore, we can connect them. These narratives and myths aim to make our own world more intelligible and to lead us to recognise our active role in this apocalyptic myth. We are now constructing numerous mythical narratives of environmental crises. It seems necessary to assess them and subject them to in-depth analysis.

As highlighted earlier, apocalyptic narratives have been a constant feature of society, from the biblical flood narrative right up to the present day. In the 18th century, the Lisbon earthquake caused

⁶⁶⁴ AFEISSA Hicham-Stéphane, *Ibid.* p. 170.

nothing less than a “philosophical tremor”, inspiring Voltaire to write his *Poème sur le désastre de Lisbonne* (*Poem on the disaster of Lisbon*)⁶⁶⁵. Among other more recent narratives, Hicham-Stéphane Afeissa mentions:⁶⁶⁶ Alfred Hitchcock, *Lifeboat* (1944), Yann Martel, *Life of Pi* (2001), Richard Matheson, *I am a Legend* (1954), Cormac McCarthy, *The Road* (2006), and *Lost: les disparus* (a TV series), and lastly, Lars von Trier’s film *Melancholia* (2001). Afeissa also mentions Oswald Spengler’s *The Decline of the West* (1918-1922), on which he writes, “The whole culture has toppled into a degree of activity that is making the earth tremble. [...] This Faustian passion has changed the image of the planet’s surface”⁶⁶⁷. Finally, Hicham-Stéphane Afeissa asserts that “the climate is always caught in a narrative, it is the medium of a narrative, it is a cultural representation”. In the context of visual art, we will look at works by Peter Buggenhout, Florian Pugnairé and David Raffini, as well as Paul Duncombe, as sensitive embodiments of these myths of the end of the world.

Peter Buggenhout

Born in Belgium in 1963, Peter Buggenhout lives and works in Ghent. He often makes monumental sculptures, associating everyday waste with various materials such as dust, metal, polystyrene, plastic, polyester, and polyurethane foam. Among various projects, he has developed a series entitled *The Blind Leading the Blind*. This work references Brueghel the Elder’s painting *The Parable of the Blind* (1568), which depicts a group of blind people on the edge of a precipice. The title itself references a quote from the Bible: “If the blind lead the blind, both will fall into a pit.” (Matthew XV, 14). This idea is strikingly relevant in our current context of environmental crises. In parallel, Peter Buggenhout developed two other series, the *Gorgo* and the *Mont Ventoux*. They all involve piles of materials reminiscent of the waste of industrial wastelands.

Displayed in the Palais de Tokyo (2012-2013), a work from the series *The Blind Leading the Blind*, depicting what appears to be a wreck discovered after a disaster, was hung in mid-air. This work is a hybrid object, arousing both attraction and repulsion, both fascination and dread. By portraying a shapeless object, a mass of debris resulting from an apocalyptic event, it evokes a form of chaos. While the work seems to depict archaeological elements, it is impossible to tell whether they are drawn from the past or the future. At the Palais de Tokyo, visitors are struck by its overwhelming presence, the powerful way in which it seems to evoke a time that will outlive us. The artist often

⁶⁶⁵ VOLTAIRE, *Complete Oeuvre*, Garnier, 1877, tome 9, p. 470-478.

⁶⁶⁶ AFEISSA Hicham-Stéphane, *Ibid.* p. 184.

⁶⁶⁷ AFEISSA Hicham-Stéphane, *Ibid.* p. 5.

adds animal blood to his sculptures, which he mixes with resin and covers in dust, adding an organic element to his pieces. As a result, they oscillate between a kind of fragility and terrifying power. In the tradition of many contemporary artists, Peter Buggenhout applies an iconoclastic approach to sculpture. While his hybrid structures, combining multiple aggregates, evoke wrecks, grottoes, and marine environments, Buggenhout's practice echoes the work of Man Ray: *Dust Breeding* (*Elevage de Poussière*, 1920). After letting Marcel Duchamp's *The Large Glass* (*Le Grand Verre*) gather dust, Man Ray took a photograph of the work, which now resembled an aerial view or a cosmic image of the moon. Similar dust is used in Yuhsin U. Chang's work *Poussière / Dust* (2008). Lastly, Peter Buggenhout's practice evokes an apocalyptic world, portraying the remains of a society of plenty, now reduced to a state of rubble. Through this, it contributes to the establishment of a mythology of the end of the world.



Figure 69. Peter Buggenhout, The Blind Leading the Blind, 2012-2013

Florian Pugnaire & David Raffini

Since the late 2000s, Florian Pugnaire and David Raffini have been jointly developing an art practice combining sculpture, video and installation, rooted in a crepuscular aesthetic. After their initial training at the Villa Arson, in Nice, the two artists attended the Le Fresnoy programme - the National Contemporary Arts Studio -, where they produced their first collaborative works.

Florian Pugnaire and David Raffini then joined forces to create deliberately nocturnal worlds full of machines and materials, some of which expand, while others vanish through stagings of their own destruction. In most cases, their works depict their own production processes while inviting us to experience unusual timeframes. Florian Pugnaire and David Raffini's exhibitions involve a form of dissidence regarding the idea of the end of a *world* — highlighting the naïve confidence of younger generations in the future. Far from the Western quest for control over the environment, they evoke a kind of silence and meditation, opening up new potential ways of living in the world. With works such as *Expanded Crash* (2008), *Manoeuvres* (2009), *In Fine* (2010) and *Energie Sombre* (2012), these two artists use the conventions of film to subvert the spectacle and consumer society codes that divert us from our reality. They invite us to contemplate a highly slowed-down representation of the end of an era, which we must accept in order to re-invent tomorrow's world.

On the 1st of July 2010, Florian Pugnaire and David Raffini put on a performance in a part of the Palais de Tokyo, which, at the time was, closed to the public. It featured the self-destruction of a vehicle attached to a Belarus backhoe, both a work tool and a symbol of the former USSR. This piece then led to the production of an installation called *In Fine*, composed of the remains of the vehicle and video of the initial performance. The video attracted particular attention for its inclusion of a fictional dimension beyond documenting the initial event. It portrayed an environment devoid of all human presence and marked by a post-apocalyptic atmosphere, leading the performance to resemble a form of mechanical ballet in which machines replaced humans.

In 2012, Florian Pugnaire and David Raffini presented a video work entitled *Energie Sombre [Dark Energy]*, featuring the trajectory of a vehicle launched at full speed, racing towards its own destruction. The vehicle in question was a small Volkswagen truck, whose race through a marshy landscape was shown through a fractured film, involving a succession of crazed accelerations and disturbing standstills. The vehicle seemed to embody the virile exaltation and omnipotence of Modernity, hurtling towards an apocalyptic end. The mad rush of the vehicle also echoed another

race, that of economic growth and the reign of capitalism. It was also a metaphor for the tragic fate of our racing economies. Indeed, the piece's title "*Dark Energy*" is also the term physicists use to refer to the forces of the universe, which were discovered in 1998. It echoes in our minds in both mysterious and frightening ways. According to scientists, this "dark energy"⁶⁶⁸ fills almost three-quarters of the universe but is distinct from "dark matter" and "black holes", which are currently studied. It, therefore, seems important to start from the observation whereby the universe is not infinite but closed: as it approaches its limits, the expansion of the universe is thus condemned to contract towards its point of origin. This leaves us waiting for a grand, final, and tragic contraction; and pushes us to ask ourselves if the mad dash towards our own destruction is irreversible. With this video, Florian Pugnoire and David Raffin establish a strong parallel between the inevitable fate of capitalist Modernity⁶⁶⁹ and that of our own physical world. By associating these two time frames, they form a narrative that connects the Katechon (end-time) with the Eschaton (the end of time).

⁶⁶⁸ However, we must note that "dark energy" is currently still hypothetical.

⁶⁶⁹ Through works such as *Expanded Crash* (2008), *Manoeuvres* (2009), *In Fine* (2010) or *Energie Sombre* (2012), Florian Pugnoire and David Raffini use cinematic codes in order to subvert those of the spectacle of consumerist society, which pull us away from reality.



Figure 70. Florian Pugnair & David Raffini, Energie sombre, 2012

III. End-time and the end of time

How can we approach the environmental apocalypse? First, one has to be able to tell the Katechon (end-time) apart from the Eschaton (the end of time), that is to say, “the ontological disappearance of time, or the end of the end”⁶⁷⁰. In Jewish and Christian traditions, the “end of time” is possible and even hoped-for. It does not involve an “end-time” but rather the inevitable end of the passage of time. However, the Christian Apocalypse, in its “revelation” sense, gradually turns into a discourse about the expectation of the end of the world, in particular in *The Book Of John*, which refers to the “end-time”⁶⁷¹.

Bruno Latour underlines the fact that a large portion of the human population is already convinced that it has already reached the end of time and is now living in a new world. Given that they situate themselves at the “end of history”, they no longer risk anything and an “absolute rupture” separates them from the past: “they are definitively, completely and forever modernised!”⁶⁷². They are, therefore, inevitably heading towards the future and must always “move further forward, never backwards”⁶⁷³. They live in a situation in which the world is stable, and the world’s end is just an idea. Latour points out that, for the Moderns, “it is impossible to go back because they think they are in a post-apocalyptic era”. Thus, “history, for them, is always already determined”⁶⁷⁴.

A. End-time

The end can be seen as a form of completion, finitude or even “revelation”, but always within the passage of time, with and in time⁶⁷⁵. As soon as we replace the “end-time” with the “end of time”, we are seized by dread at the thought of having let go of the time of finiteness and mortality. Bruno Latour references Joachim of Fiore (1130-1202), according to whom one must wait for the kingdom of the Spirit in the terrestrial sphere: “Joachim turns this waiting into the realisation *within* history of the *end* of history”⁶⁷⁶. He thus transfers eternity into human time⁶⁷⁷. The biblical message,

⁶⁷⁰ VIVEIROS DE CASTRO Eduardo & DANOWSKI Deborah, *Ibid.*, p. 232-233.

⁶⁷¹ Apocalypse of John, Book of Revelation, last Book of The New Testament, 22 chapters.

⁶⁷² LATOUR Bruno, *Face à Gaïa*, *Ibid.*, p. 254.

⁶⁷³ *Ibid.*, p. 269.

⁶⁷⁴ *Ibid.*, p. 275.

⁶⁷⁵ *Ibid.*, p. 255.

⁶⁷⁶ *Ibid.*, p. 256.

⁶⁷⁷ On the other hand, St. Augustine adopted the opposite position, asserting that one should expect nothing from the terrestrial City and everything from the Celestial City.

therefore, undergoes a major transformation: waiting for Christ's second coming implies the conviction that the Kingdom of the Spirit is destined to be reached here below. Thus, monks attempt to build the Celestial City here below and feel responsible for taking care of this new kingdom. They thereby situated themselves within the end-time, which stretches out infinitely through the terrestrial city. While the sky represents transcendence, a superior authority watching over us, the earth embodies immanence. However, transcendence appears as an achievement of ends - that is to say, the end of time, while immanence is nothing but the passage of time - and manifests as the end-time.

Now immanence is nothing other than time passing, while transcendence is the fulfilment of ends. Considering Heaven and Earth together allows us to establish "a mutual revelation between the passage of time and the end-time, the terrestrial City and the Celestial City"⁶⁷⁸. According to Frank Kermode, in *The Sense of an Ending*, "from being imminent, the end such as it is conceived in an apocalyptic style has become immanent"⁶⁷⁹ since it is fundamentally terrestrial and inscribed in the stretching of time. According to Latour, anyone who situates himself in the end-time is worthy of interest: "because you then know that you will not escape time passing. Staying in the end-time, that says it all"⁶⁸⁰.

B. The end of time

How can we apprehend the end of time? Hicham-Stéphane Afeissa refers to the great apocalypse of Isaiah. He describes the end of all life: "The Earth is shattered, broken to pieces, the Earth explodes, to bits, the earth falters, falters all over"⁶⁸¹. The end of time appears as the instant end of all earthly life and, by extension, all life in the world. Lars von Trier's film *Melancholia* portrays this end of the end. An alien planet, called Melancholia, collides with the Earth: leading us to witness "the collision between our world and the absolute Outside"⁶⁸². The film portrays a final impact, an event that destroys any possibility of future events.

⁶⁷⁸ Ibid., p. 265.

⁶⁷⁹ Ibid., p. 255.

⁶⁸⁰ Ibid., p. 281.

⁶⁸¹ AFEISSA Hicham-Stéphane, Ibid., p. 158.

⁶⁸² VIVEIROS DE CASTRO Eduardo & DANOWSKI Deborah, Ibid., p. 249.

In *End-time*, Günther Anders describes a similar end of time caused by a nuclear apocalypse. That which appears above all as an impact puts an end to time itself. Between the “imminent end and the end itself”, we observe “affects at the scale of tenths, even hundredths of a second, with maximum intensity”⁶⁸³. Gaïa is, therefore, closer to the planet in *Melancholia* than it is to the Earth itself. Like *Melancholia*, Gaïa embodies a “gigantic and enigmatic transcendence”⁶⁸⁴.

According to Günther Anders, there will be no voice to tell the story of humankind. There is no transcendent entity to save us: “If the world were to collapse, we would reach a state in which [...] *Nothing has been*, since there will no longer be anyone to remember what has been”⁶⁸⁵. Some artists offer representations of the end of time and end-time; among them are Tacita Dean, Gustav Metzger and Malachi Farrell, whose works we will now examine.

Tacita Dean

Born in 1965 in Canterbury, Great Britain, Tacita Dean currently lives and works in Berlin. After studying at the Slade School of Art (London), Tacita Dean chose to work primarily with film and photography. Her practice focuses on a desire to understand time. She explores natural processes of appearance and disappearance, rooted in time’s cyclical dimension. While she focuses on fleeting, quasi-immaterial natural phenomena, such as eclipses and green rays, her works seem to convey a kind of suspension through which time becomes almost tangible.

Since the early 1990s, Tacita Dean has been travelling the world, collecting images and sounds, which she uses as artistic materials. While natural elements are central to her work, she is also interested in traces of the past, found in abandoned objects and spaces. In 2013, she screened her 26-minute film *JG*, on loop. This work was the product of two parallel sources of inspiration. In 1997, Tacita Dean heard on the radio that Robert Smithson’s *Spiral Jetty* had re-appeared on the Great Salt Lake in Utah. This pioneering Land Art piece had been submerged, in 1972, by the lake’s rising waters and was one of the artist’s main influences. Tacita Dean was also in touch with the writer J.G. Ballard, another great admirer of Smithson’s. Through correspondence, they discussed the similarities between the *Spiral Jetty* and one of Ballard’s short stories, *The Voices of Time*. Around this time, Tacita Dean started developing her film *JG*, which embodied her quest for the meaning

⁶⁸³ Ibid., p. 251.

⁶⁸⁴ Ibid., p. 299.

⁶⁸⁵ ANDERS Günther, in: AFEISSA Hicham-Stéphane, Ibid., p. 129.

of that mythical work. In it, images of salt-lake landscapes, shot in several natural sites in Utah and California, were combined with references to Smithson's jetty and Ballard's sci-fi narrative. While the helicoidal shape of the *Spiral Jetty* echoed time itself, the circular formation of salt crystals covering the lakeside rocks echoed Ballard's story, in which the author describes a huge mandala forming in a dry salt lake. While the *Spiral Jetty* deals with time, the film was devised as a loop. It features a whirlpool, evoking the spiral of time, highlighting its origin and inevitable end.

The artist also exhibited a series of fourteen stills from her film *JG*. One of them, *The Book of the End of Time* (2013), featured J.G. Ballard's book of short stories, *The Voices of Time*⁶⁸⁶, covered in salt crystals. The work evokes the transformative forces of nature and its power over humankind. In Tacita Dean's works, time appears to freeze and seems to have reached its end: her pieces can therefore be seen as representations of the end of time.

In 2014, Tacita Dean produced a monumental five-part engraving featuring an enigmatic rockscape. This work, entitled *Quaternary*, involves a play on the word "Quaternary" and the suffix of the first name "Mary". The Quaternary was the third geological period of the Cenozoic era, the most recent geological time scale. It is divided into two geological periods, the Pleistocene and the Holocene. A third period, the Anthropocene, is currently being proposed. Tacita Dean seems to question geological forces by associating them with human fate. By introducing a human's first name into a geological era, the artist seems to merge "deep cosmological time" and "human historical time". Tacita Dean is announcing the "end-time" in a way that echoes the Anthropocene.

⁶⁸⁶ It is worth noting that Ballard's book was included in Smithson's library.



Figure 71. Tacita Dean, Quaternary, 2014

Gustav Metzger

Gustav Metzger was born in 1926 in Nuremberg, into a Polish Jewish family, exiled in England in 1939. He was deeply struck by the extreme violence of the Second World War in Europe. His works often convey an acute awareness of the human capacity for self-destruction. In 1959 and 1961, he published two manifestos with the same title: *Auto-Destructive Art*. He then abandoned painting and sculpture, which he felt were incapable of conveying the terrifying violence that was taking hold of Western civilisation. In 1961, he staged a happening called *South Bank Demonstration* in London, in which he painted acid onto nylon canvases. The work proceeded to destroy itself over the course of about twenty minutes.

This provocative gesture was a turning point in Gustav Metzger's conception of art. His aim, from then on, was to revisit the most violent events of the 20th century: the crematoria, the nuclear bombs dropped on Hiroshima and Nagasaki, the wars of Korea and Vietnam, the nuclear tests in the Pacific, and last of all, global warming. He believes that the capitalist system and consumer society are the roots of the world's self-destruction. However, Gustav Metzger could not imagine destruction without considering the question of creative renewal. With the help of a physicist, he produced a work composed of liquid crystals, which he showed in 1966 in his solo show held at Better Books⁶⁸⁷ in London. The liquid crystals were placed between two sheets of glass, which were mounted onto a projector, lighting them up and revealing their slow movement. While the light flickered on and off, the crystals were alternately heated and cooled. This led their shapes and colours to constantly evolve, thus creating what the artist saw as an auto-creative process. Gustav Metzger's most recent works explore ecology. Among them, the work *Flailing Tree* was shown in Manchester in 2009. It was a sculpture made up of 21 trees plunged face down into a block of concrete. Gustav Metzger is known as a subversive figure; his artistic practice embodies apocalyptic forces driven by humans. In his work, auto-destruction goes hand in hand with auto-creation: it both evokes "end-time" and sparks hope of a revival.

⁶⁸⁷ In 2018, ZKM held a show at Better Books, accompanied by an extensive catalogue.



Figure 72. Gustav Metzger, Flailing Tree, 2009

Malachi Farrell

We have already looked at Malachi Farrell's practice in our fourth chapter when looking at accelerationism. However, his work is particularly relevant when it comes to the idea of the end of the world. Malachi Farrell grew up in the La Ruche neighbourhood of Montparnasse, home to many artists in the 1970s. He quickly became an artist's assistant, more specifically Paolo Casolari's, and was thus introduced to Arte Povera. In 1987, he attended the Rouen School of Fine Arts, and then continued his studies at the Institut Supérieur des Hautes Etudes in Paris, then directed by Pontus Hulten, where Daniel Buren was his supervisor. During these studies, he focussed on theory before "turning to practical things" at the Rijksakademie in Amsterdam (1994-1995). In 1994, he had a major show at the City of Paris Museum of Modern Art.

The ballet performed by his machines is like so many choreographies. Malachi Farrell's praxis involves a unique combination of bricolage, throwing things together, and the use of state-of-the-art technology. While his works do carry a theatrical dimension, they mainly deal with popular culture.

In 1996, Malachi Farrell was invited to the Maribor Triennial in Slovenia. He produced his piece *Nature Morte [Still Life]* (1996-2011) for this occasion. It included two electric chairs on which bay leaves were arranged. According to the artist, this was a reference to Julius and Ethel Rosenberg, who were sentenced to death by the US court for spying on the American production of the atomic bomb and sharing these secrets with the USSR. The leaves were arranged so as to replace the bodies, thus referencing Arte Povera. However, this work can also be interpreted in a completely different way. Indeed, it can also be seen as portraying the death of nature through the artist's play on the words "Nature" and "*morte*" (dead). "Nature morte" is French for "still life", a pictorial genre presenting various objects and marked by the absence of human figures.

The artist appropriated the expression "Nature morte" literally, thus confronting us with the spectacle of nature subjected to the death penalty. The resulting installation, which also included sound and light, was spectacular: once the curtain rose, electric discharges were sent through both electric chairs, shaking the laurel branches, which looked as though they were being executed. Harnessing technology as a tool of expression, Malachi Farrell builds a narrative of the end of plant life. In doing so, he raises public awareness of environmental crises. The destruction of nature

would lead to an “us without a world”; however, there are also manifestations of a “world without us”. We will endeavour to look more closely at both of these ideas.



Figure 73. Malachi Farrell, *Nature Morte*, 1996-2011

IV. The difference between “us without a world” and “a world without us”.

How can we define the possibilities of an “us without a world” and “a world without us”? Bruno Latour highlights two complementary mythical motifs: on one hand, “the disappearance of the world, absorbed by the Subject and transformed into its Object”, and on the other, the “disappearance of the subject, absorbed by the world and transformed into a thing among things”⁶⁸⁸. This echoes the distinction between a cosmological order and an anthropological order, between “a deep cosmological time” and a “human historical time”⁶⁸⁹. However, such a distinction becomes irrelevant once Nature and Culture merge. Let us start by examining the possibility of an “Us without a world”, and go on to study that of a “World without us”.

A. “Us without a world”

In Michel Serres’ words, “We have lost the world: we have turned things into fetishes and goods, and our philosophies are acosmist (without cosmos)”⁶⁹⁰. It is particularly difficult to imagine an “us without a world”. However, Native Americans already have access to this in being forced to live in a world which is not theirs: “The only Earthlings we could consider to be fully entitled to this New World are people without a world, shipwrecked, having taken refuge in lands to which they could no longer belong because the lands no longer belonged to them”⁶⁹¹. In addition, according to Native American cosmologies, the human being is the origin and material of the world itself. Ancient times thus appear as time-frames in which humankind is already there, without a world⁶⁹².

Eduardo Viveiros de Castro and Deborah Danowski hold Kant responsible for our “loss” of the world. Indeed, with Kant, “we have turned towards ourselves, in a movement which we might describe as a real psychotic crisis of our metaphysics”⁶⁹³. This is how we “lost the Earth”, in the words of David Abram, whose ideas we looked at in our third chapter. According to Timothy Morton, and as previously stated, we should let go of the concepts of “nature” and “world”.

⁶⁸⁸ VIVEIROS DE CASTRO Eduardo & DANOWSKI Deborah, *Ibid.*, p. 248. (my translation)

⁶⁸⁹ LATOUR Bruno, in: VIVEIROS DE CASTRO Eduardo & DANOWSKI Deborah, *Ibid.*, p. 248. (my translation)

⁶⁹⁰ SERRES MICHEL, *Ibid.*, (my translation)

⁶⁹¹ VIVEIROS DE CASTRO Eduardo & DANOWSKI Deborah, *Ibid.*, p. 320. (my translation)

⁶⁹² *Ibid.*, p. 277.

⁶⁹³ *Ibid.*, p. 243-244.

Conversely, it would also be necessary to “swear allegiance to and coexist with nonhumans without a world”⁶⁹⁴.

Representations of this “us without a world” are rare, but there are a few, such as films like *Mad Max* and *Matrix*. In his book *The Road*, Cormac McCarthy tells the story of a father and son wandering alone across a rotten world. In this story, the Earth is “dead” due to a planetary disaster, the cause of which is unknown to us. The thesis of Singularity, which we examined earlier, echoes the idea of humankind’s wordlessness insofar as it announces a world where “there will no longer be any environment outside humankind”⁶⁹⁵. Furthermore, in *Fragments d’Histoire Future* (1896)⁶⁹⁶, Gabriel Tarde also described a situation in which humankind is left without a world. His story involved the result of a cosmic incident resulting in the complete annihilation of all fauna and flora, leaving humans alone in a deserted environment. After a long wait, the characters witness a “happy disaster”⁶⁹⁷: the sun is extinguished, and the planet’s surface freezes over. The novel’s main character, Miltiade, proceeds to persuade human beings to bury themselves inside the Earth. These latter discover the space within, but unlike Noah, they cannot take other species since they are already dead. Eduardo Viveiros de Castro and Deborah Danowski describe Miltiade as an “anti-Platonic Wiseman” and Tarde’s narrative as an “inside-out allegory of the cave”⁶⁹⁸. Within this subterranean world, the characters meet a small Chinese tribe, which has chosen the same course of internalisation. However, these Chinese people have managed to bring a miniature version of nature with them: “...small vegetables... in little plots of soil, little pigs, and little dogs...”⁶⁹⁹. While the protagonists of Tarde’s narrative have literally lost their world, this Chinese tribe has managed to keep a miniature world.

This subterranean rebirth of human life, however, involves living conditions that lack fundamental features. This situation echoes St. Mark’s aforementioned statement, “For what shall it profit a man if he shall save his soul and lose the world?”⁷⁰⁰. While representations of an “Us without a world” are rare in the context of art, Catalan artist Jaume Xifra’s work offers a relevant example, and the

⁶⁹⁴ MORTON Timothy, *Hyperobjects*, Ibid., p. 119.

⁶⁹⁵ VIVEIROS DE CASTRO Eduardo & DANOWSKI Deborah, Ibid., p. 260. (my translation)

⁶⁹⁶ TARDE Gabriel, *Fragment d’histoire future*, Biarritz, Séguier, 1998 (original 1896 edition), preface by René Schérer, postface by H.G. Wells. / *Underground (Fragments Of Future Histories)*, Les Presses Du Réel, 2004

⁶⁹⁷ VIVEIROS DE CASTRO Eduardo & DANOWSKI Deborah, Ibid., p. 268. (my translation)

⁶⁹⁸ Ibid., p. 269.

⁶⁹⁹ Ibid., p. 271.

⁷⁰⁰ LATOUR Bruno, *Face à Gaïa*, Ibid., p. 273. (my translation)

Chapman brothers, Jake and Dinos, seem to stage a transition between “Us without a world” and the “World without us” through their visual work.

Jaume Xifra

Jaume Xifra was born in Salt (in the Girona district of Catalonia, Spain) in 1934 and died in Paris in 2014. He was one of the major figures of Catalan conceptual art and settled in France in 1959, first in Marseille and then in Paris, where he worked as the assistant of sculptor Appel de Fenosa, and then of César. This led him to meet other exiled Catalan conceptual artists, and together they formed the group known as the Catalans of Paris, which included members Antoni Miralda, Antoni Muntadas, Benet Rosselli, and Joan Rabascall.

In the late 1960s, he moved to Chile, where he joined a very active avant-garde scene and started experimenting with spray paint. Upon his return to Europe, he focused on performances and rituals inspired by Fluxus, at the height of the counter-culture movement. His collaborators included Dorothée Selz and Antoni Miralda, with whom he produced *Fête en Blanc* and *Mémorial*, two monochrome performance dinners at Verderonne castle in the Oise, in northern France. He then turned to video art. Jaume Xifra taught at the Dijon School of Fine Arts. His multidisciplinary works feature in the collections of the Macba in Barcelona and the Reina Sofia Museum in Madrid.

In 1970, he produced *Reliquiae Terra*, a trivial trace of life on Earth. It comprises an image of the Earth, as seen from space, and two plastic pouches, one containing a little earth, the other a little water. This relic of the Earth seems to have been intended for aliens or future humans exiled on another planet. The work thus evokes the possibility of an “us without a world” and takes part in the mythology of the end of the world.

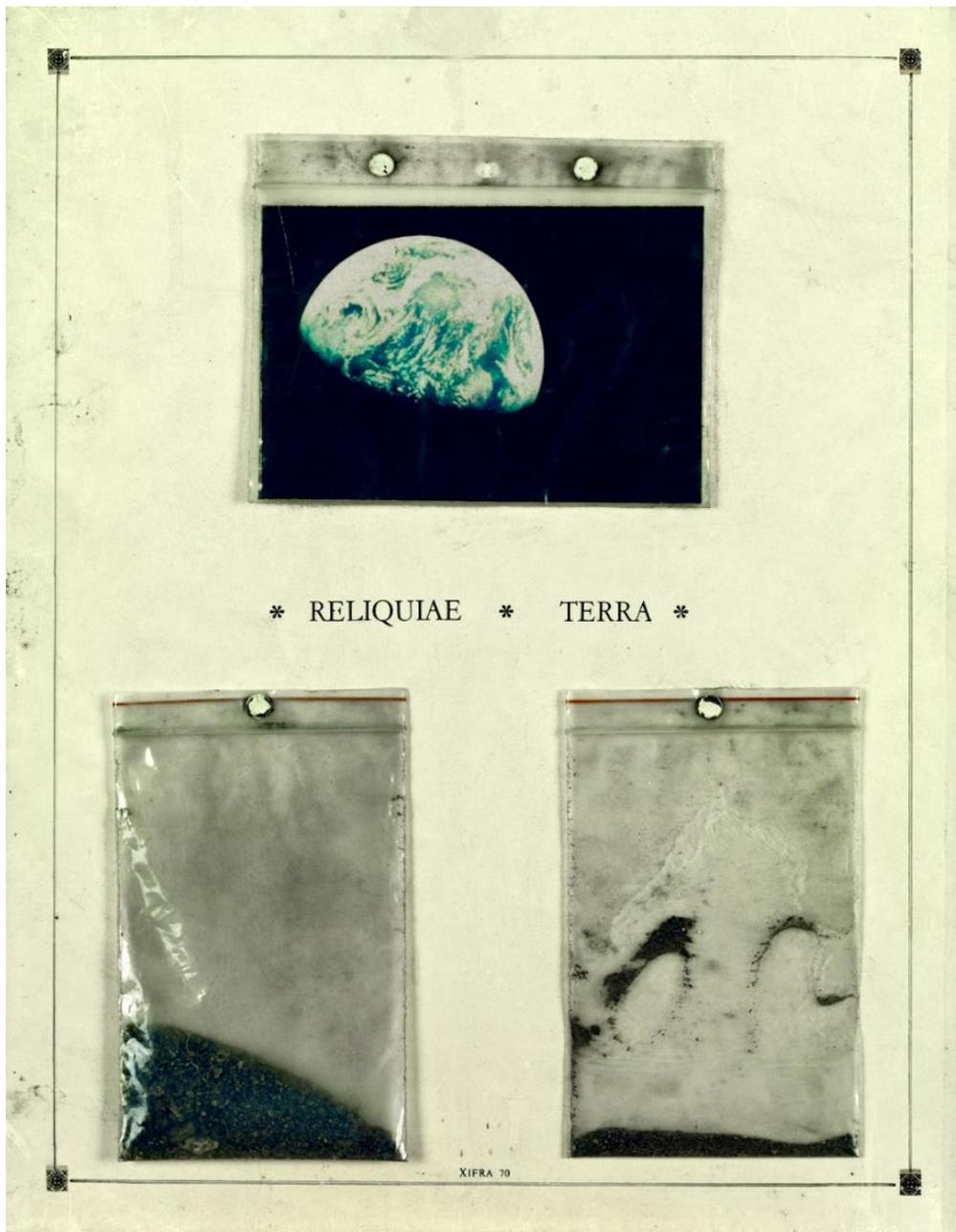


Figure 74. Jaume Xifra, *Reliquiae Terra*, 1970

Jake and Dinos Chapman

The Chapman brothers, Jake and Dinos (British, respectively born on the 3rd of November 1996, in London, and the 19th of January 1962 in Cheltenham), collaborate on sculptures, engravings, and installations. They both live in London. After graduating from London's Royal College of Art in 1990, they developed a practice full of cynicism, mixing wit and horror, building a deliberately macabre aesthetic. Inspired by Goya, they exhibited works conveying the *Disasters of War*, and *Hell*, as depicted by Hieronymous Bosch (*Hell*— in the triptych *The Garden of Earthly Delights*, circa 1450).

The two artists describe their own practice as “trashy” or “gory”. Indeed, they exhibit works marked by extreme violence and an undeniably apocalyptic dimension. *Hell* (2000) is one of their best-known works: it consists in a scale model⁷⁰¹ comprising over 30,000 figures of Nazi soldiers and skeletons subjected to terrifying acts of violence. Despite the horror it conveys, the work is imbued with irony and self-deprecation. *Hell* is depicted as a collection of people without a world, condemned to everlasting suffering.

Migraine (2004), another work by the Chapman brothers, seems to represent an opposite principle of *Hell*. It involves a human skull, riddled with worms and insects, in an advanced state of putrefaction. Through it, the duo pair a classic genre of art history, the *vanitas*, with an ironic title pointing to a mere headache. *Vanitas* became a fully-fledged genre in Holland around 1620 before spreading across Europe. They aim to portray the ephemeral nature of life and to remind us of the inevitable triumph of death and of the passage of time. The Chapman brothers' oeuvre alludes to a bitter form of apocalypse. It evokes a world in which all that remains are human corpses, and nature reclaims its rights, in other words, a “world without us”. The *vanitas* motif features in the works of contemporary artists such as Damien Hirst and Philippe Pasqua. They carry the message of “memento mori”, “remember that you are going to die”, while this same maxim continues to be ignored by those caught in the headlong rush of the “religion” of economic growth. Jake and Dinos Chapman contrast a “theology of salvation” with a “theology of hell”: presenting the afterlife as a dark and macabre end-time.

⁷⁰¹ This was the first of a set of four scale models.

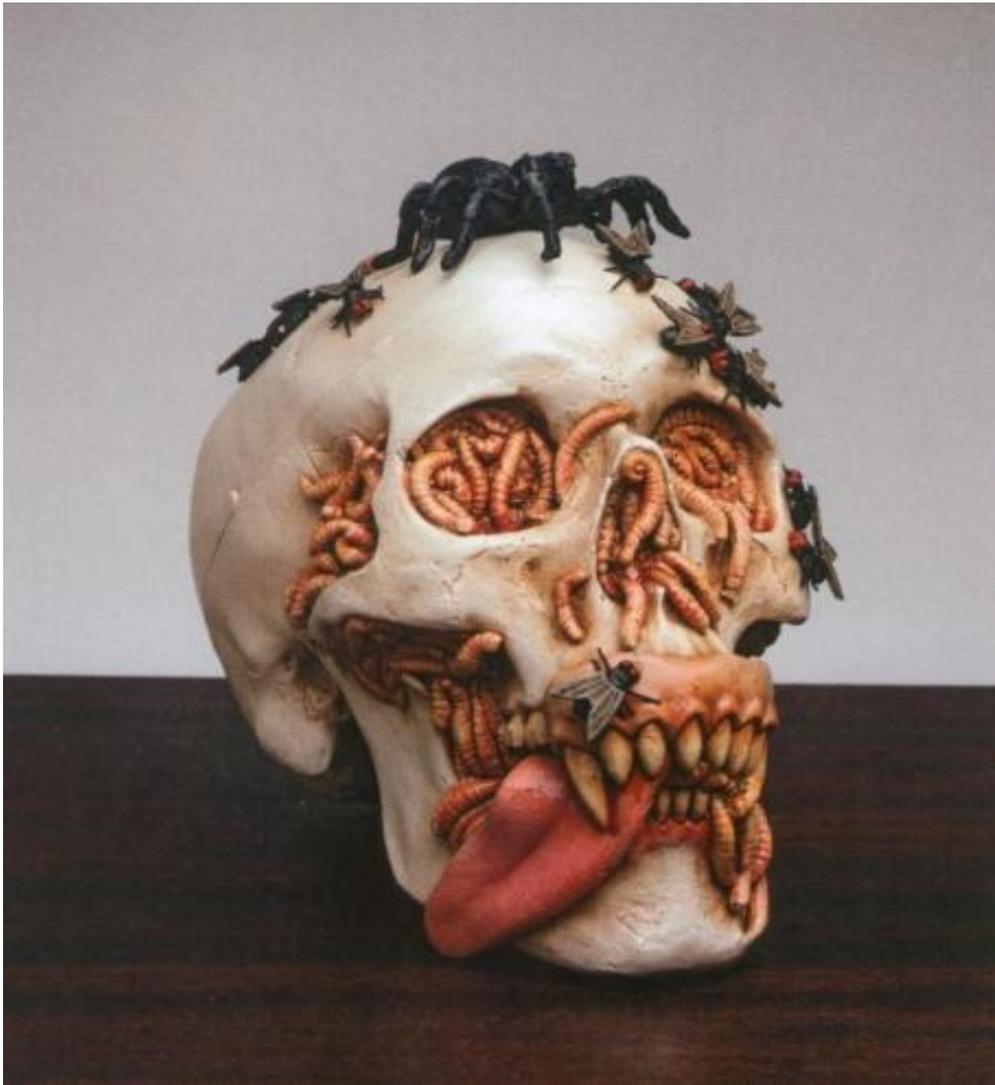


Figure 75. Jake and Dinos Chapman, Migraine, 2004

B. A “World without us”

How can we apprehend a “world without us”? The thought of the end of the world inevitably brings up the associated issue of the end of thought, that is to say, the end of the relationship between thinking and the world (Vivieros de Castro). With Quentin Meillassoux (*Après la Finitude / After finitude*), it is possible to imagine the absolute pre-eminence of a world without people. Through his use of the term “Correlationism”, Quentin Meillassoux established that our understanding of the world is invariably the result of a correlation between a subject and an object. He raises the following question: How can we bring ourselves to apprehend a state of the world that predates any form of human relationship to the world? Meillassoux⁷⁰² then introduces the archifossil notion, a reality that predates the presence of the observer. Philosophy thus connects to a form of absolute, seen as purely contingent.

Our time, in which environmental crises appear as a vitally urgent threat, coincides with the emergence of a new school of thought known as “Speculative Realism”, a holistic line of thinking whereby “human beings and animals, plants and objects, must be treated equally”⁷⁰³. While Bruno Latour refers to a “parliament of things”, Levi Bryant speaks of a “democracy of objects”. Through his “object-oriented philosophy”, Graham Harman ascribes a metaphysical autonomy to objects. Relationships between things and relationships between people must be put on an equal footing. In *The Democracy of Objects*, Levi Bryant established that it is essential to consider each object as a thing in itself, detached both from the gaze of a subject and from all forms of representation and discourse. Thus, no object can be another’s construction, and no object can be another’s pedestal⁷⁰⁴.

Alongside Speculative Realism, Ray Brassier is an advocate of nihilism, the idea of a great levelling, whereby existence has no value in itself. He believes that we should imagine a “reality without us”, a “reality free from the mind”⁷⁰⁵. Ray Brassier develops a hyper-nihilistic argument, announcing the “inexorable annihilation of humankind, of life in general, of the Earth, and of the Universe”⁷⁰⁶. However, Eduardo Viveiros de Castro and Deborah Danowski explain that human exceptionalism

⁷⁰² MEILLASSOUX Quentin, *Après la finitude. Essai sur la nécessité de la contingence*, Editions du Seuil, L’Ordre philosophique, 2012, p. 26. / *After Finitude: An Essay on the Necessity of Contingency*, Continuum International Publishing Group Ltd, 2008

⁷⁰³ BOURRIAUD Nicolas, *Coactivities - Notes for The Great Acceleration*, Taipei Biennial, 2014

⁷⁰⁴ Ibid.

⁷⁰⁵ VIVEIROS DE CASTRO Eduardo & DANOWSKI Deborah, Ibid., p. 250. (my translation)

⁷⁰⁶ Ibid., p. 246.

is inevitably bound to re-appear, despite all our attempts to get rid of it. In both Meillassoux and Brassier, the “World without us” is irrevocably seen from a human point of view. Both authors refer to a “negative anthropocentrism”⁷⁰⁷, which is indeed still a form of anthropocentrism.

For Hicham-Stéphane Afeissa, the impetus is on “intrinsic value”. Indeed, according to George E. Moore, the world is imbued with intrinsic value⁷⁰⁸; in other words, it has unique characteristics, individually from any gaze at them. Within an end of the world narrative, the last survivor might thus be prompted to declare that, even after his death, “the existence of a beautiful world is still preferable to that of a hideous world”⁷⁰⁹. The world’s lack of viewpoint does not destroy its intrinsic value.

There are many representations and myths of the “World without us”, we will mention just a few. Eduardo Viveiros de Castro and Deborah Danowski evoke Eden, namely, the world as it existed until the sixth day of Creation, which they see as “a world for humans without humans”. In John Milton’s *Paradise Lost*, the Garden of Eden is surrounded by wilderness, which protects it from the outside world: this is the new reality that the first humans experienced, once “separated from the world”. In 2007, Alan Weisman published *Homo Disparitus*, a bestselling novel that inspired a TV series with the same title. In a deserted world, in the wake of a sweeping epidemic, one of the rare survivors witnesses the evolution of life on Earth after the extinction of humankind. After a transition period, he observes the rebirth of plants and animals, which populate the Earth, turning it into an immense wilderness⁷¹⁰. Given the multiplicity of narratives and visual representations of a “world without us”, it is possible to assert that a mythological tale of the end of the world is deeply rooted in our collective imagination. With this in mind we will now examine works by Loris Gréaud, Chris Morin-Eitner, and Chen Zhen.

Loris Gréaud

In 2008, at the Palais de Tokyo in Paris, Loris Gréaud’s work was the subject of an exhibition called *Cellar Door*. This title refers to an underground, mysterious, and disquieting world. The entire show was structured as a gigantic organism, plunged in semi-darkness. This organism underwent constant fluctuations and was controlled by a ubiquitous conductor, the artist himself. The

⁷⁰⁷ Ibid., p. 247.

⁷⁰⁸ AFEISSA Hicham-Stéphane, Ibid., p. 232.

⁷⁰⁹ Ibid., p. 238. (my translation)

⁷¹⁰ VIVEIROS DE CASTRO Eduardo & DANOWSKI Deborah, Ibid., p. 239.

exhibition created a collision of time frames through an announcement placed at its entrance: “There was a door where the future was first to enter”. The artist set up different “bubbles”, each of which offered a different sensory experience and a range of “stages” throughout the show.

Among them, *La Bulle Forêt de Poudre de Canon* (2008) looked like a forest of scorched trees lit by a globe hanging from the ceiling, with transparent tubes stuck to a wall. Visitors walked through this strange crepuscular forest without knowing where it led. The gunpowder covering the trees evoked a state of war not unlike the conflict Bruno Latour describes, between Earthlings of the Anthropocene and Humans of the Holocene. These charred, leafless trees seemed to be drawn from an apocalyptic imagination. While the room produced a confused sense of the end of time, the suspended globe evoked a sublunar world. This world was that of the Earthlings, having already deserted the forest, announcing a “world without us”.



Figure 76. Loris Gréaud, La Bulle Forêt de poudre de canon, 2008

Chris Morin-Eitner

Born in 1968, Chris Morin-Eitner is a photographer and filmmaker (short films). He has a degree in architecture and lives in Paris. In 2016, at the Galerie W. Landau, he held an exhibition titled *Il Était une Fois Demain / Once Upon a Time Tomorrow*. It featured composite images assembled through Photoshop. These works, which create an apocalyptic atmosphere, feature urban landmarks devoid of all human presence and surrounded by luxuriant nature. Through them, the artist imagines metropolises transformed by the effects of global warming. Only the most significant monuments of each city remain visible; the rest is covered in abundant vegetation and filled with animals. In the exhibition, loudspeakers broadcasted the soundscapes of the various ecosystems presented by the artist, the voices of nature, having regained its rightful power over the world — in Paris, London, New York, Hong Kong, Beijing, Dubai, and Moscow.

In Paris, one can see zebras in the forecourts of the Louvre and the Trocadéro and catch a glimpse of a lion by the Arc de Triomphe. The Moulin Rouge has been taken over by monkeys, with hummingbirds perched on electric wires. The project *Il Était une Fois Demain* began in 2007 when Chris Morin-Eitner travelled to Cambodia, where he discovered the temples of Angkor. These temples were built in the 9th century and had, since then, been abandoned and invaded by plant life for hundreds of years⁷¹¹. Chris Morin-Eitner then travelled to Dubai, which offered a stark contrast. Dubai is a mushroom city, less than 40 years old, and marked by its extreme modernity. These two sites led the artist to question how time affects places and to reflect on their shared future in a time of ecological crises. He travelled across the world, gathering photographs of monuments, various buildings, trees and roads, and wild animals. He eventually went on a safari in a nature reserve in Tanzania.

The challenge of Chris Morin-Eitner's practice lies in combining images of abundant nature with cityscapes. He endeavours to “grasp” each city, which then acts as his “palette”. A hundred or so photos are required to create each image, and it took him about five years to complete the project. He describes his process as “digital painting” or “collage”⁷¹². Far from the dark and frightening apocalyptic landscapes found in other artists' works, Chris Morin-Eitner's landscapes are more like theme parks. His works are imbued with otherworldly and surreal visions; besides they are marked by an imaginary issuing from the fantastic and the wonderful. Through collage, nature appears

⁷¹¹ The temples of Angkor were rediscovered in the late 18th century.

⁷¹² Interview with the artist by Valentine Puaux, *Chris Morin-Eitner, activiste poétique*, ArtHebdoMedias, 23 May 2016.

more artificial than human constructions (monuments, roads, etc). This lends Chris Morin-Eitner's images a fictional and playful dimension; they invite us to dream and wonder, provoking a kind of fascination. They build a fairytale version of a "world without us"; with Chris Morin-Eitner using magic imaginary to announce the tragic prophesy of the end of humankind.



Figure 77. Chris Morin-Eitner, *Il était une fois demain*, 2016

Chen Zhen

Born in 1955 in Shanghai, Chen Zhen grew up during the Cultural Revolution. At that time, he lived in the old French concession with a family of French-speaking doctors. He became interested in the differences between traditional Chinese philosophy and Western culture at a very young age. He studied at the Shanghai School of Fine Arts and then learnt the art of stage design at the Theatre Institute.

When he was 25, Chen Zhen started suffering from haemolytic anaemia, an incurable disease he died from in 2000, when he was 45. He, therefore, lived with an acute awareness of death and a deep-seated understanding of the fleeting nature of time. In 1986, he settled in France, where he continued his art studies. During those years, he experienced a powerful culture clash, which became a significant source of inspiration in his art practice. From then on, he gave up on painting and began to produce installations. He developed a cross-cultural way of thinking, based on a notion he called “Transexperience”. This involved understanding the relationships between humans, nature and consumer society, associating Chinese tradition with the Western world.

Two years before his death, he started learning about traditional Chinese medicine. This knowledge greatly influenced his later works, which he produced while learning about the dialogue between body and mind, Humankind and the Universe. In 1993, he produced *Lands-Objectscape n° 3*: a metal box containing three shelves covered in remains of human life. This installation was a kind of glass coffin containing everyday objects, waste and earth. This work, shrouded in mystery, was like a kind of relic of human life on Earth. It conjured up a form of humankind without a world. In 2000, the year of his death, he produced a major installation called *Purification Room*. This piece was a space filled with everyday objects (shoes, furniture, clothes, containers, a ladder) meticulously covered in clayey mud. According to Chinese tradition, the Earth performs a ritual of transition and purification. Objects are purified, forming a frozen and timeless environment. The work fits into the context of Western culture, that of consumer society, and the religion of progress which blinds us to environmental issues. It is like a monochrome tomb of modernity and an overwhelming allegory of the Western world’s fate. Chen Zhen’s oeuvre plunges us into the “end-time” and evokes a “world without us”. The clayey mud both freezes and purifies the objects. Thus, while Western humanity disappears, Chen Zhen’s world remains purified and frozen for eternity.



Figure 78. *Chen Zhen, Purification Room, 2000*

Conclusion

To conclude this sixth chapter, let us look at Isabelle Andriessen's practice. She attempts to call the distinctions between humans and non-humans and the living and the inert into question. In her own words, she creates "Zombie Materials", beings that situate themselves between life and death. She mainly works with minerals and chemical stimulation. Her works thus appear as materials infected by an unknown virus. These mutant objects, which seem to hail from a hypothetical future, evolve and transform throughout the exhibition. The artist works with a chemist to find ways to infect these materials and bring them to life. Through her sculptures, Isabelle Andriessen imagines a future in which humans have disappeared, while materials such as plastic, aluminium, rubber, and other non-biodegradable chemical products still exist. Through her exhibitions, she offers an alternative narrative of the end of human time, in which only animated elements from the earthling time subsist.



Figure 79. Isabelle Andriessen, Terminal Beach, 2019

“The geologist of the Anthropocene is even more frightening than Walter Benjamin’s *Angel of History*, who, where we once saw progress, only saw catastrophe and disaster”⁷¹³. If we are in this new geological era, it means the disaster has already happened, and it seems irreversible. In this sixth chapter, we set out to analyse various forms of performative prophecies of the end of the world. After putting collapsology aside, we examined the tradition of the apocalyptic theme in its religious, nuclear, and environmental form. This led us to explore how new narratives about the end of the world can be transformed into myths and thus “re-populate our imaginations”⁷¹⁴. We then established a distinction between the “end-time” and “the end of time”. Bruno Latour expresses an interest in anyone who places themselves in the “end-time”: “because then you know that you will not escape the passage of time. Staying in the end-time”⁷¹⁵, that says it all”⁷¹⁶. As for the “end of time”, it embodies the ultimate impact, the end of the end, the realm of “Nothing has existed”⁷¹⁷, as emphasised by Michel Serres. In the fourth section, we attempted to make a distinction between “us without a world” and a “world without us”, acknowledging the challenge of envisioning an “us without a world”. Michel Serres demonstrates that “we have lost the world”, while Eduardo Viveiros de Castro and Deborah Danowski explain how Native Americans had already lost theirs. The “world without us” includes a whole host of narratives and representations while also echoing speculative realism.

Humans and the Earth have never been as close as they are now, while geopolitics embarks on a novel relation with geophysics. The distinction between cosmology and anthropology is also on the verge of collapse. Traditional boundaries are falling and fading. Cosmic transcendence is unravelling, and we are faced with a closed, immanent world, a local and non-unified Earth. In parallel, as a celestial body, the Earth is separate from Gaia, the latter being nothing other than “the name of the final sum of those figures of the end”⁷¹⁸. Some speculative realists highlight the validity of cosmocentrism, one of the variants of which is “Big Science”. Others, such as Bruno Latour and Isabelle Stengers, focus on geocentrism, meaning the “closed world”. While Latour is interested in the “small sciences”, Isabelle Stengers explores the notion of “slow science”. Faced with the “coming barbarism”, it is important to speed up “the process of slowing down the sciences”⁷¹⁹.

⁷¹³ FRESSOZ Jean-Baptiste, *L’Anthropocène et l’esthétique du sublime*, in: GUENIN Hélène, *Ibid.*, (my translation)

⁷¹⁴ STENGERS Isabelle, *Penser à partir du ravage écologique*, in: HACHE Émilie, *Ibid.*, p.167. (my translation)

⁷¹⁵ The “end-time” is an end that stretches through time, of which we are the protagonists.

⁷¹⁶ LATOUR Bruno, *Ibid.*, p. 281. (my translation)

⁷¹⁷ ANDERS Günther, in: AFEISSA Hicham-Stéphane, *Ibid.*, p. 129. (my translation)

⁷¹⁸ VIVEIROS DE CASTRO Eduardo & DANOWSKI Deborah, *Ibid.*, p. 320. (my translation)

⁷¹⁹ *Ibid.*, p.320.

According to Eduardo Viveiros de Castro and Deborah Danowski, we should mourn what is already dead. However, we are often incapable of doing so. We nevertheless witness the transformation of the world, the destruction of which is unfolding before our very eyes: “Every day, the impression that we are already living in, and that we shall, increasingly, continue to live in a radically diminished world is confirmed”⁷²⁰. According to Donna Haraway, the cyborg represents the time of the apocalypse and invalidates all the modern procedures of domination, as well as all the dualisms that underpin them. Haraway turns to socialist-feminist politics, which she believes are crucial to renewing “the systems of myth and meanings structuring our imagination”⁷²¹. She believes we should build and employ original narratives that go hand-in-hand with the end-time. She sees these original narratives as ways of subverting the fundamental myths of Western culture. Lastly, according to Michel Serres, “we must understand our finite nature and reach for the limits of our non-infinite being”⁷²². Eduardo Viveiros de Castro and Deborah Danowski quote Lévi-Strauss: We know that “the world began without humans and will end without them”⁷²³. Despite our awareness of this truth, we continue to declare the end of the world, to shield ourselves from it.

⁷²⁰ Ibid., p. 336.

⁷²¹ HARAWAY Donna, *A Cyborg Manifesto*, 1985, in: *Artificial Life: Critical Context*, 1991, p. 465.

⁷²² SERRES MICHEL, *Le contrat naturel*, 1990, Flammarion, 1992, p. 148. (my translation)

⁷²³ VIVEIROS DE CASTRO Eduardo & DANOWSKI Deborah, Ibid., p. 230. (my translation)

General conclusion

In April 1970, Robert Smithson started to develop his famous *Spiral Jetty* in the Great Salt Lake of Utah. This spiral-shaped jetty, which is about five hundred meters in size, can be seen as a conceptual gesture drawn from a direct experience of the environment. While nature lends itself to art, its submission to humankind can only be temporary. The notion of entropy, which is important to the artist, cements the hybrid status of this artistic situation, which oscillates between the perpetual movement of physis and the durability of artifice. Filmed from above, with a helicopter, the *Spiral Jetty* is completed by the involvement of the artist's body, running along the pier. Through its entropic dimension and significant proportion, the work prompts ecological thought. Indeed, its artistic context pushes us to reflect on our relationship with the "World of the living". Smithson's *Spiral Jetty* shapes the conclusion of this study through its ability to crystallise the diversity of entanglements between art, ecological philosophy, and the environment itself.



Figure 80. Robert Smithson, Spiral Jetty, 1970

A retrospective view

Within the scope of this thesis, we have addressed the philosophical question of ecology in art from the 1960s to the present day. At the end of this study, we can confidently assert that there is an “art of environmental crises”, not, strictly speaking, an artistic movement, but a form of art connected to life, rooted in the context of fundamental geological change and climate change. This kind of art, which connects us to life, in the broader sense, should be able to support all initiatives of resistance to the intrusion of Gaïa; it should be able to “exorcise” us from the religion of progress and allow us to consider building a new alliance with the other-than-human world. Some artworks, produced between the 1960s and the present day, can actively participate in our investigation into ecological issues in areas where words fail. In doing so, they echo various strands of philosophical thought. Therefore, we looked into the writings of a range of contemporary philosophers with ecological focuses⁷²⁴ to merge the sensitive and the intelligible. Combining philosophical discourse with certain artistic practices allows us to build a new alliance between logos and icon, capable of generating a new form of awareness.

Our first chapter was dedicated to the notion of the sublime, emerging in response to the Anthropocene or Gaïa. However, this aesthetic of the sublime should not be approached through Kant’s external viewpoint. Instead, it involves a spectacle we are part of. We established a critical analysis of the notion of Anthropocene, challenging its undifferentiated approach to humankind and disregard for local situations. We discussed the ways in which artists responded to the paralysing terror we experience when faced with our new geological reality. We studied artworks that resonate with notions of Gaïa and the Anthropocene through this particular aesthetics of the sublime. We came to see this aesthetics as a symptom of the feeling of stupor we experience when we approach the environmental issue.

Environmental crises develop through a slow and progressive process, not in the brutal manner of an immediate catastrophe. The title of our second chapter, « Locally situated anthropo-histories »⁷²⁵ echoes the writings of Christophe Bonneuil and Pierre de Jouvancourt, according to whom it is necessary to adopt a local and situated mode of perception in order to apprehend environmental crises. Based on these founding principles, this chapter examined the production of knowledge of

⁷²⁴ Bruno Latour, Isabelle Stengers, Eduardo Viveiros de Castro, Donna Haraway, David Abram, Emanuele Coccia, Anna Tsing, Timothy Morton, Hicham-Stéphane Afeissa...

⁷²⁵ BONNEUIL Christophe, JOUVANCOURT de Pierre, *Ibid.*, p. 61.

environmental crises, which involves both slowing down and seeking situated forms of knowledge. This leads Bruno Latour to invite us to mourn for the image of the globe. Finally, in order to think through these crises, we must orchestrate a reversal between “actor” and “d cor”. While, in the past, nature has primarily been placed in the background, it must now become a protagonist. This leads us to understand the necessity of calling “great narratives”, such as the Anthropocene, into question. Indeed, in approaching humankind as an undifferentiated species, the Anthropocene prevents us from accounting for a diverse range of local human situations.

Our third chapter focussed on the co-dependent relationship between beings. The notion of “co-dependence” echoes Gaia Theory, as introduced by Lovelock in his book *Gaia – A New Look at Life on Earth* (1979). Indeed, according to Lovelock and as previously stated, each organism manipulates that which surrounds it “to serve its own interest”⁷²⁶. In order to tackle this notion, we looked at Bruno Latour’s book *O  Atterrir?*⁷²⁷, as well as works by Anna Tsing (*The Mushroom at the End of the World*)⁷²⁸, David Abram (*The Spell of the Sensuous*)⁷²⁹ and Emanuele Coccia (*La Vie des Plantes / The Life of Plants*). Each of these thinkers invites us to reconnect with other forms of life in their own way. Latour invites us to define our “Terrain of life”, that is to say, the set of elements we need to survive. Anna Tsing shows that it is possible to live in the ruins of capitalism. David Abram suggests that we experience the “life-world”. Finally, Emanuele Coccia urges us to rethink our relationship with plant life. Accepting this state of co-dependence is a necessary step towards effective ecological action.

This thesis’ fourth chapter explored different reactions to environmental crises. As part of our assessment of the current situation, we developed a critical analysis of the symptoms of environmental crises, namely, the theories of Singularity and Accelerationism. Following this, we attempted to respond to the question: “Why aren’t we doing anything?” evoking the idea of a religion of growth needing to be subverted. We then established a non-exhaustive inventory of the conditions of action that would allow us to consider ecological alternatives and their implementations in various art practices. Finally, following Isabelle Stengers, we looked at the urgent necessity of responding to Gaia’s call, that is to say, resisting the Anthropocene and living

⁷²⁶ LATOUR Bruno, *Face   Gaia*, Ibid., p.131.

⁷²⁷ LATOUR Bruno, *Down to Earth: Politics in the New Climatic Regime*, Polity Press, 2018

⁷²⁸ LOWENHAUPT TSING Anna, *The Mushroom at the End of the World – On the Possibility of Life in Capitalist Ruins*, Princeton University Press, 2015

⁷²⁹ ABRAM David, *The Spell of the Sensuous: Perception and Language in a More-Than-Human World*, Pantheon Books, 1996

“against ourselves”. Furthermore, we studied the ways in which numerous artistic practices illustrate this desire for resistance through subversive interventions.

Reacting to the prospect of ecological catastrophe implies building a “common world”. Our fifth chapter analysed the ways in which it is possible to live together at this time of environmental crises. We began by highlighting the fact that we live in a world of waste. We then attempted to challenge our current political system in order to question its ability to implement a form of resistance in response to environmental crises. We looked at Donna Haraway’s⁷³⁰ approach to the notion of the Cyborg, which involves human and non-human emancipation from Nature. Additionally, we outlined the “Demos” of Gaïa, which involves recognising each other as “Earthlings”⁷³¹. Subsequently, we highlighted the necessity of embracing symmetrical anthropology, that is to say, a thought that does not distinguish between humans and non-humans, Culture and Nature. Finally, we endeavoured to show the ways in which Native Americans can be seen as “portraying the future”⁷³². We argued that, following Joseph Beuys’ *I Like America and America Likes Me* (1974), we should seek to develop a new way of life, including both humans and non-humans, at a time of environmental crises.

In our sixth chapter, we undertook a study of various forms of performative prophecies of the end of the world. After putting collapsology aside, we sought to examine the relationships between the religious, nuclear and environmental forms of Apocalypse. In doing so, we discussed the potential ways in which narratives of the end of the world could become myths and “repopulate our imagination”⁷³³. We then established a distinction between the notions of “end-time” and the “end of time”. Our fourth section looked at the differences between ideas of “us without the world” and the “world without us”. We stressed the performative dimension of these narratives, in line with Günther Anders’ assertion “we are apocalypticians only to be wrong”⁷³⁴. We have strived to grasp a visual form of Gaïa through visual art and feel confident in asserting that we have managed to draft an outline of it.

The End

⁷³⁰ HARAWAY Donna, *A Cyborg Manifesto*, Ibid.

⁷³¹ LATOUR Bruno, in : VIVEIROS DE CASTRO Eduardo & DANOWSKI Deborah, *L’Arrêt de monde*, Ibid.

⁷³² VIVEIROS DE CASTRO Eduardo & DANOWSKI Deborah, *L’Arrêt de monde*, Ibid.

⁷³³ STENGERS Isabelle, *Penser à partir du ravage écologique*, Ibid., p.167.

⁷³⁴ LATOUR Bruno, *Face à Gaïa, Huit conférences sur le nouveau régime climatique*, 6^{ème} conférence : Comment (ne pas) en finir avec la fin des temps ?, La Découverte, Paris, 2015, p.282.

I came into the world on 31 March 1984 — my birth occurred at precisely 8.30 pm, in a room of the Antoine-Béclère hospital in Clamart, a southwestern suburb of Paris. My conception occurred around the first fortnight of September 1983, and I dragged myself from my mother’s womb 32 weeks later, amid much haste and general panic.⁷³⁵ I weighed 1.48 kilos (3 lbs. 4 oz.), I was intravenously drip-fed in a glass box, and I remained under medical surveillance for seven weeks. From that very first moment, as an infant, I was faced with the threat of imminent death, which eventually eased during the fifth week of my postpartum life. I cannot think about the end of my existence without taking this beginning, which established the finite nature of my life, into account.

When Albert Camus published *The Myth of Sisyphus* in 1942, he defined the “absurd man” as one who is aware of the finiteness of his being, is simultaneously disillusioned with the world, and creates a new form of energy: that of *Revolt*. Since the purpose of life and Earth is unfathomable, only *means* — that is to say, human actions — can justify this *end*, which escapes our understanding. Camus, therefore, urges “the modern man” to become an “absurd man” by pursuing political and artistic involvement. While our contemporaries insist on applying a Modern attitude to the sciences — an attitude that we believed we had shed long ago —, scientists argue amongst themselves and with politicians and thinkers about the future and the *end* of human existence.

The fact is that neither priests nor researchers have the ability to reveal the end purpose of existence. This *world* that we think we know is already over: “It has already taken place”⁷³⁶. We live on a planet that “grips us tightly” and “comes to us”⁷³⁷. It is just as threatening as we have been to it, through our relentless thirst for power. Our current *ecology*, filled with despair and pessimism, collides with the announcement of the “end of the world”. The *End* is close, in an age when crises and ecological controversies are legion. The finite nature of my own existence is thus amplified by that of the world in which I was conceived and that I am part of. How can I approach the end of my life with the energy of *Revolt*, when the very Earth on which I am living is on the brink of an irreversible eclipse? Through a boundless conversion of *nature* into *culture*, the Moderns have lost their world — and, through it, their own bodies —, causing the rise of an overwhelming *apocalyptic tension*⁷³⁸. After being socially constructed by humans, this Earth in which we live now seeks revenge, and none of us can agree on how to appease it. It is through my own mortality —

⁷³⁵ I.e. eight weeks premature.

⁷³⁶ Eduardo Viveiros de Castro, in a lecture given at SPEAP on 17 January 2013.

⁷³⁷ Bruno Latour, *Enquête sur les modes d'existence*, Éditions La Découverte, 2012.

⁷³⁸ Eduardo Viveiros de Castro, *ibid.*

this *End* announced on the day of my birth — that I now find myself to be part of this new, contemporary *climate*.

An obviousness that would be obscure

Art history suffers from two ailments: the tyranny of the visible and the tyranny of the idea. These ailments prevent us from understanding the “visual effectiveness of images”⁷³⁹. This has brought us to seek an alternative path by staging an encounter between art and theory in the hope of finding a balance between these entities and building a fruitful and reciprocal relationship between them.

As we have intended to demonstrate throughout this study, art can teach us about the environment and contribute to establishing the narratives we need to repopulate our imaginations. However, artworks remain ambivalent, in Georges Didi-Huberman’s words: “Often, when we cast our eye on an artwork, we experience an undeniable paradox. What grasps us immediately and without any detour, is marked by the distress, like an evidence that would be obscure”⁷⁴⁰. According to Didi-Huberman, we might “feel alternatively captive and freed in this braid of knowing and not knowing”⁷⁴¹. Furthermore, beyond knowledge itself, we should “engage in the paradoxical ordeal of not knowing”⁷⁴². Far beyond philosophical thought, artworks offer us new ways of experiencing the finiteness of our existence, its inherent precariousness, and the coming catastrophe. While artworks generate a kind of fascination and imaginative profusion, they often surpass thought and bring us further than concepts could. By resisting art history’s “rhetoric of certainty”⁷⁴³, we have sought to emancipate the visible from the legible in order to orchestrate a reciprocal encounter between artworks and the philosophical question of ecology.

⁷³⁹ DIDI-HUBERMAN Georges, *Devant l’image*, 1990, Les Éditions de Minuit, Collection Critique, 2016, p. 25.

⁷⁴⁰ *Ibid.*, p. 9. (my translation).

⁷⁴¹ *Ibid.*

⁷⁴² *Ibid.*, p. 15.

⁷⁴³ *Ibid.*, p. 11.

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