



**HAL**  
open science

# Narratives of the Anthropocene: How can the (performing) arts contribute towards the socio-ecological transition?

François Ribac

## ► To cite this version:

François Ribac. Narratives of the Anthropocene: How can the (performing) arts contribute towards the socio-ecological transition?. *Scene*, 2018, 6 (1), pp.51-62. 10.1386/scene.6.1.51\_1 . hal-02423856

**HAL Id: hal-02423856**

**<https://hal.science/hal-02423856>**

Submitted on 7 Jan 2020

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

## **Narratives of the Anthropocene. How can the (performing) arts contribute to the socio-ecological transition?<sup>1</sup>**

**Author:** François Ribac

Scene 6 (1) pp. 79–90 Intellect Limited 2018

### **Introduction: Narrating the Anthropocene**

When introducing the collective book *De l'univers clos au monde infini (From the Closed Universe to the Infinite World)*, Émilie Hache (2014) begins by telling the story of a group of cosmonauts who have been living for generations on a distant planet, and now return to Earth. As soon as they arrive, they understand that their colony is of no interest to the earthlings who no longer dream of conquering the universe: in fact, the modern paradigm has completely lost any appeal. It seems to me that, by drawing on *The Climbing Wave*, a science fiction short story by Marion Zimmer Bradley (1955), Hache opens up several paths for reflexion that are worth examining more closely.

The first one involves resorting to a metaphor to explicate the central question of the work that Émilie Hache has edited: how can we reclaim the Earth? How should we land in the Anthropocene, this era in which human activities have become a geological force and threaten both the Earth and humanity (Bonneuil and Fressoz 2013) ?

But this confrontation between “demodernised” earthlings and the conquerors of space, that is to say the description of two contradictory cosmogonies, also suggests a second path, namely that the Anthropocene necessarily calls up *divergent narratives*. Hache astutely reminds us that there are several ways to tell a story. And indeed, in their contribution to this same book, Christophe Bonneuil and Pierre de Jouvancourt (2014: 57-105) reject the scientist and immanent version of the Anthropocene, according to which the advent of this era is an almost mechanical consequence of the capacity of human beings to increasingly master nature and technologies. They explain that the transition to fossil fuels at the end of the 18<sup>th</sup> century was not part of a natural progression, but rather must be traced back to the development of capitalism in Europe, and to forms of domination and privatisation of resources, land and bodies (See Malm 2016) . In opposition to a “Western-centred” narrative of the Anthropocene, Danowski and Viveiros de Castro (2014: 221-338) remind us in the same book that the end of the world has come already for the Natives from North America, Incas or Aztecs, at the time when European colonists invaded the Americas and practically annihilated them.

Finally, Hache also makes use of a short story because

“taking a detour via the fantastical power of a science fiction narrative specifically seeks to multiply the points of contact with distinct sensations, emotions, forms as well as values and perceptions, which we are hoping we can make work for us.” (2014: 20).

In other words, Hache points towards the *heuristic potential* of fiction, which has the power to make us understand the world differently, to suggest specific directions and ways of seeing<sup>ii</sup>. And it is precisely this potential which we will now examine and discuss.

## **1 The Contribution of the Arts**

The idea that literature and more generally the arts can act as a kind of activator to understanding environmental questions has many acceptations and variations. Thus, the school of thought known as ecocriticism identifies and analyses, from an ecological perspective, the ways in which literature – for example, 19<sup>th</sup> century Romantics – has described nature and thus contributed to constructing it as a separate entity (For instance Garrard 2012; Clark 2015, and for music Ingram 2010). We might also remind readers that some ecological movements, such as *deep ecology* (Naess 1989) or ecofeminism (Hache 2016), not only develop their ideas in the form of manifestos and theoretical texts, but also through poems and mythological tales – in short, through fictions.

More generally, we know that many players, artistic collectives, institutions, academics, and activists believe that (what they define as being) art has the ability to warn and/or educate the general public about the ecological catastrophe that we are facing (Blanc 2010; Weintraub 2012; Blanc and Benish 2017; Kagan 2013; Miles 2014; Davis and Turpin 2015) . In this light, many approaches focus on highlighting the harmful consequences of using objects such as smartphones (non-recyclable chemical products, children employed in mines in Africa, technological rubbish dumps in Asia), or extreme climate events etc. We might also mention the performances that were recently organised by the *350.org* network in the Louvre in Paris to condemn the collaboration between the museum and the oil company Total<sup>iii</sup>. The contemporary art world regularly takes on this role of watchman and explores these issues in the form of event-based works and/or exhibitions, or sometimes even *in situ* installations, most often in spaces that are specifically dedicated to contemporary art: museums, galleries, fairs and biennials etc. We might for example mention the French collective of artists and researchers known as *Coal*<sup>iv</sup>, or the Berlin-based collective of contemporary artists called *Global 3000*<sup>v</sup>. While all these approaches and actions are extremely varied, we should note that many of them use technologies such as video, IT and the internet – a point I will return to later.

The performing arts are also not to be outdone, and offer a wide range of ways of approaching these topics: shows aimed at teaching younger generations to be respectful of the environment, projects that explicitly attempt to describe the ecological crisis, transposition to the stage of theoretical texts (such as, for example, the *Global Gaïa Circus* which brings Bruno Latour's works on the Anthropocene to the theatre<sup>vi</sup>), traditional plays and operas that are reread in the light of global warming, specific festivals and events etc.

We should also note that, both in contemporary art and in the performing arts (in particular in rock festivals), an increased awareness of the ecological cost of artistic activities is pushing many organisers, artists and institutions to take action: recycling and sorting of the materials and waste generated by the events, sharing stage designs, organising car sharing systems for festivals, local food networks, a preference for organic products, measuring and limiting energy consumption, etc. (Fuller 2005; Whiteley 2011; Pedelty 2012; Allen and Dawe 2017). This development is also supported by the introduction of building standards that are implemented when new performance or exhibition spaces are built. In short, the material dimension of the arts is now a preoccupation to some of its players, albeit to different degrees. I would now like to examine two projects that implement these various approaches in particular ways.

## **2 *The Great Animal Orchestra* by Bernie Krause**

From July 2016 to January 2017, the Fondation Cartier, in Paris, hosted an exhibition/concert devoted to the works of Bernie Krause and to his main thesis, namely that music has come to us from animals (Krause and Chandès 2016)<sup>vii</sup>. While Krause first made a name for himself as a pioneer of synthesisers at the end of the sixties, he is also a theoretician and practitioner of *soundscapes*. For example, he coined the terms *antrophony* and *biophony* to describe, respectively, the human and natural parts of these environments, and he has been recording animal fauna and wild life in all four corners of the world for the past forty years. The exhibition included two floors: on the building's ground floor, works that were mainly pictorial (videos, paintings, photographs) attempted to demonstrate the existence of animal societies and the central place occupied by music in these forms of sociability. The basement was mainly reserved for sounds, and for listening to Krause's recordings. We will here mainly examine the basement room, where one could hear and listen to his *soundscapes*.

### **a) Performing the Sound of the Anthropocene**

After having walked through an airlock, the visitor finds themselves in a vast room where everyone can take whatever position they wish: standing up against a wall, lying down on the carpet, sitting

on benches, walking around. In semi-darkness, Krause's sound atmospheres ring out and flow one after the other, every twelve minutes to be more precise. Thanks to a multi channel PA system, the sound wraps round the whole room and everyone inside it. The United Visual Artists (UVA) collective has designed a system that turns Krause's *soundscapes* into light flows and makes them dance over three of the room's walls. On the first wall, light signals react to the dynamics of the music, a little like a recording level gauge. On the two other walls, light waves resembling audio signals move from left to right to the rhythm of the music, with each specific animal song being announced by a text inserted into the light flow. Every new sequence is announced by a video projection describing in which country, which place, under which meteorological conditions, at which season and on which date the recording was made. We never stop changing continent, going from a lake to the middle of the ocean, from the Tundra to America, from whales to elephants, from birds to mammals, from the sky to the earth. The texture of each sequence usually consists of a general soundscape (for example the intertwined sounds of the wind, the sound of the sea's backwash and the cries of seabirds), in which specific (groups of) animals make a punctual appearance, like soloists, before handing over to others. This set-up allows us to literally visualise the sounds and to make out in the background the different (groups of) animals that are present in each place. Through this succession of sound biotopes, Krause allows us to hear the sound(s) of the Earth. Whether you close your eyes in order to melt into the soundscape or watch the light flow on the walls, the sensorial experience is intense. All the people I spoke to who had been to the exhibition agree on this point, and on the beauty of these sound cartographies. And indeed, the secret, psychedelic and hybrid world of the animal-musicians on the ground floor unfolds in our ears and on the screens in the basement, the diversity of species is revealed by the variety of calls, songs, dynamics, by choral pieces, solos, concertante dialogues that are constantly being renewed. While, on the ground floor, the continuity between animals and human beings was suggested by visual representations, it is through their immersion in the soundscapes and into listening that the visitors penetrate into the heart of these ecosystems and perceive their various components and the interactions between them, as though they themselves were a part of them<sup>viii</sup>... There is no doubt that, as was the case with me, most visitors also realise that many of these soundscapes are now the only remaining traces of worlds that have been annihilated by the urbanisation of our planet and global warming. Krause's soundscapes create a soundtrack for the Anthropocene, they allow us to hear what has already disappeared, what will disappear whatever we do, and what we must save.

## **b) A Politics of Sound**

To be precise, the specificity of Krause's work and of the installation that was designed for this exhibition is to allow us to see and hear the transformations that are part and parcel of the Anthropocene by highlighting a sensorial experience. But rather than showing us devastated valleys, rather than making us listen to the silence of polluted wastelands, rather than delivering a prophetic speech (announcing the catastrophe in order to better avert it), Krause immerses us in the soundscapes that he has been collecting for decades in order to capture their diversity and formal beauty (Regarding prophetic discourse see Afeisaa 2014). Krause's *Sublime* (Brady 2013; Guenin 2016) is thus far from being the spectacle of unchained elements that was so admired by the Romantics: it is, instead, the aural ecstasy of the wilderness. Reasoning is here associated with resonance, and Krause thus reminds us that hearing, sound and music are also powerful tools of analysis. And in order to make us understand that a large part of these worlds has disappeared, Krause broadcasts *the recordings of his mixing sessions*. This is a process which, from the start to the end of the production chain (in situ recordings, mixing and editing, broadcast), brings into play the tools of sound production, i.e. one of the technologies that is most characteristic of modernity. We should also note the hybridity of a process that borrows equally from the act of recording and the worlds of concerts, performances and exhibitions. We are thus in the presence of a confidently original ecological aesthetic, and of a real politics of sound: for everything here is perfectly accessible, whatever your age, language or country, there is no need of a user manual to access these works, nor of a mediator to understand the artist's message, nor of a lesson in civic-mindedness either.

### **c) Is nature alone on Earth?**

The other remarkable point of *The Great Animal Orchestra* is connected to the fundamentally ambivalent status of "nature". Even if many of the works on the ground floor more or less explicitly suggest that fauna, flora and the animal world live and coexist at a remove from human beings (Krause 2002), Krause's *soundscapes* are, in practice, based on the interpenetration between human beings, animals and the elements. The immersion into soundscapes to a certain extent makes animals of us, or at least it *mixes* us with them. Surrounded by sounds, we are not so much in the position of an observer or sound recordist as at the very heart of the sound ecosystem, tossed about by the waves, carried by the wind like birds, listening to the Earth from the perspective of an insect. It is an experience that strengthens the implicit animism of numerous works and installations on the ground floor: the idea of there being a continuity between "us" and the animals, and that human beings are just as much animals as they are their opposite. We know that Timothy Morton (2007) has been calling for an *ecology without nature* in which we would stop viewing nature as a separate

entity, since it is precisely the fact that we consider and use the environment as an unlimited resource that explains ecological disorders and the advent of the Anthropocene. Krause's work *practically* realises Morton's programme, and he does so using a system that does not so much reproduce nature and the wilderness as produce them. On which note, the second project we will now discuss examines such intricacies.

## **2 Beatriz da Costa's *Pigeon Blog***

In a recent work, Donna Haraway (2016) describes an experience initiated by the "artist" Beatriz da Costa (1974-2012)<sup>ix</sup> and carried out in Southern California by a coalition of environmental activists, hackers (in the sense of people who fiddle with electronic objects and online activists) and pigeon fanciers (See also Barry and Born 2013). Homing pigeons were equipped with sensors measuring atmospheric pollution, and the measurements they gathered were put up online on a blog. Thanks to the birds and to their ability to fly over various areas, at different times and variable altitudes, it was thus possible to measure pollution in real time, and in a different way to that of sensors that are placed at fixed points and at identical heights. The coordination and communication of all of these measurements then made it possible to *represent* the pollution in a dynamic way, and led to local inhabitants eventually taking an interest in the issue and asking the town council to take action... This approach is reminiscent in more ways than one of the *Transitions Towns* movement (Hopkins 2011). For around ten years, in all four corners of the world, communities are getting involved here and now in supporting the ecological transition through numerous local actions. These might take the form of planting communal orchards, equipping a district with solar panels or drinking water, whatever the case may be. What matters is taking action, and doing so together, on the assumption that public institutions and other individuals will then follow suit. Based on the empowerment of local collectives of users, these actions aim to seize the opportunities currently available in a given area to answer the needs of those people who work and live there (Biewener and Baqué 2013). The aim is thus to constitute communities of action *by doing*<sup>x</sup>.

For Haraway, the point of *Pigeon Blog* is not just its social dynamics, but also the fact that it is based on a collaboration between different types of species (human beings and pigeons), and that it hybridises different forms of knowledge and technology such as pigeon fancying, hacking, environmental activism, measuring pollution, art, GPS and the internet... In her view, this intertwining provides the basis for a future response to disorders connected to the Anthropocene, pathways in which *existing* forms of knowledge, species and genealogies could be combined, redeployed, crossed over. For, in Haraway's view, reconstructing our world cannot involve starting from scratch: we must manage with what we have and know, "staying with the trouble" as she puts

it<sup>xi</sup>. It is in thus weaving new materials of this type that new narratives and new myths may take form, and Haraway in fact regularly features such fantasies in his works.

What lessons can be drawn from these two experiences? I would here like to highlight two aspects – though there are many others one could look at – that seem crucial to me.

### **3 A Few Thoughts**

#### **a) No Cult of the Art(ist)**

Firstly, it is clear that neither *The Great Animal Orchestra* nor the *Pigeon Blog* arise out of a fetishism of artistic works or artists; art is not presented as intrinsically redemptive as is often the case elsewhere. In the *Pigeon Blog*, what we might call the work is a collaborative process that aims to disseminate knowledge, to equip inhabitants and to imagine a local area in a different way. Rather like DJs at the very first rave parties, the *Pigeon Blog* artist facilitates the project more than being its main attraction or, to put it differently, its concept and realisation are more starting points than ultimate aims. Likewise, while Bernie Krause puts his name to the set-up, the broadcast of his soundscapes and of numerous other works in the exhibition were conceived and realised by and with other collectives, artists and a curator. In fact, the performers are just as much human beings (who collect, mix and broadcast) as machines, animals and landscapes. Furthermore, if we compare *The Great Animal Orchestra* with other exhibitions devoted to the Anthropocene<sup>xii</sup>, we notice how completely void it is of didacticism and scientific popularisation; the gamble here is that *the aesthetic experience* will be an excellent mediator, that it will inform visitors as much as it delights them (See also Perriquet 2016). Just like in the *Pigeon Blog*, the registers of science, art, performance, museums and activist interpenetrate each other without stifling each other and it is up to the users to draw lessons from this.

#### **b) Making Do with the Modern Paradox**

The *Pigeon Blog* and *The Great Animal Orchestra* also have another thing in common: their deliberate use of recording technologies, of electronics, of IT, of the internet. In the first case, pigeons are equipped with sensors and the data is then collected and analysed. After which, the Web (2.0) is used to disseminate this information and possibly to structure communities of users. The project's memory is stored and available online. All of this requires transistors and electronic circuits, smart cards, computers, smartphones, but also communications networks, satellites, connecting cables, electricity, data centres etc. In the other case, sounds are recorded using microphones and recorders, they are digitally coded, and then this data is mixed and polished in recording studios thanks to various pieces of software. Then, another piece of software allows us to



manage the sounds and images that are broadcast in the basement of the exhibition, not to mention the sound system and projectors. In other words, Krause is not broadcasting recordings of “nature”, but rather constructing it in his studio. These two projects therefore bring into play materials, equipment, transformation processes, transportation systems and considerable quantities of energy that are partly responsible for our current problems (Gabrys 2011; Flippo, Dobré and Michot 2013; Cubitt 2017). But should we not be getting rid of these objects and networks as quickly as possible, returning to “pure” forms of art? What answer can we give to this objection?

The first answer is as simple as can be: these are the very tools that allow us, at least in part, to observe and measure the ecological catastrophe. It is thanks to satellites, software and electronic tools of measurement that we observe global warming and its numerous consequences. In fact, these tools are at the heart of our knowledge and of many of our actions. In other words, the instruments of our downfall inform us about it – this is the modern paradox. The same applies to the two projects we are examining here.

Secondly and as a result, if collectives like the *Transition Towns*, the anti-fossil fuel activists of *350.org* or the two experiences mentioned here use all of these tools – and the material networks that support them – to contest, construct and imagine, this probably means that even the most radical degrowth will need these forms of knowledge and sharing.

Finally, the involvement of hackers in the *Pigeon Blog* reminds us that it is possible to recycle and tinker with digital technologies and the many objects that go with them, and to use them for common causes. Various academic texts in fact show that the obsolescence of technical objects is not inevitable and that “modern technology” is not necessarily connected to fossil fuels (Edgerton 2011; Smith 2015).

Seen in this light, we understand that the intermingling of technologies, their uses and human beings is destined to endure in (a large part of) the arts. Some theoretician(s) of degrowth, whose work strongly inspires and influences the thought of yours truly, nevertheless seem to view these technologies that have appeared since the gramophone with a certain mistrust. Let us listen for example to the words of Philippe Bihouix (2014 : 2393) whose work on low technologies is, incidentally, fascinating:

“A ‘dictatorship of concentration’ transforms us into spectator persons rather than acting persons. (...) could we not absorb a little less content and produce a little more? Go to the cinema less and be involved in theatre more? Download less music videos and play more

videos, hold more concerts, in particular involving acoustic music based on 100% renewable energy?”

This approach is open to several objections.

First of all, Bihouix neglects the fact that even theatre (projectors steered by digital consoles, polluting materials used in sets, PA systems, incessant tours) is not much “cleaner” than cinema (Narine 2015). The idea of privileging acoustic instruments is just as abstract, since here too, the rare woods, glues, varnishes, various metals, transport, and energy used in the manufacture and drying of wood etc. are not really more sustainable than when electric instruments or pieces of software are being produced. Must we also point out that all of “acoustic” music is broadcast and recorded using microphones and computers, and therefore electricity? In terms of performances, music, and contemporary art, programmed obsolescence is apparent at least as much in the constant renewal of programmes and in the eternal race for novelty as in the infrastructure and objects related to them. And this applies to professional productions and cultural consumption as much as it does to amateur involvement.

Likewise, the idea that downloading music is synonymous with passivity is problematic. I know very well that this is a widespread idea, and that it drives public cultural policy, but this does not make it any more convincing (Rancière 2008; Duteil-Pessin and Ribac 2017). Opposing the practice of art to its consumption is, firstly, to forget that “art” appeared at the moment when it could generate profits on certain markets. People started talking about art when they started to sell it, and this is a well-documented point (Moulin 1995). Secondly, a work of art does not pre-exist before it is “technologized” or “mediatised”: a composition is born while the score is being written, the Beatles’ music was born in the recording studio (and not beforehand) (Frith 1992), and the love of and expertise in music are inseparable from the possibility of listening to it non-stop on one’s Walkman (or Ipod) or hi-fi (Hennion 1993; Maisonneuve 2009). It is more the fact of only listening once in your life to a Beethoven symphony, and on condition of having enough money to and of living in Vienna in 1800, that is close to throwaway consumerism. Recording and broadcasting equipment, be it amateur or professional, amateur blogs and mp3 players are just like what satellites are to the Earth: it is thanks to them that we appreciate concerts and music.

Thirdly, Bihouix would have to explain to us how enjoying a recorded work or a film is more passive than playing the guitar.

Rather than implicitly producing standards, the real question that arises here is therefore that of knowing what place these “modern” tools will have in degrowth, how we might negotiate their conversion, how we might turn them into low technologies, and who would decide all this?

The naturalist approach consists in a way in turning the injunction of modernity on its head while preserving the assumptions of art for art’s sake, which are, in many respects, the cover for its commodification. It induces an abstract, static concept of culture, which is reduced to “values” and to forms that precede the gramophone, even though a culture is nothing without the media – languages, objects, technologies, spaces – that give it its intelligibility and allow it to be appropriated. In reality, it is indeed the division between culture and nature, which is rendered obsolete by the Anthropocene, that underlies naturalist ideas of what art is. While it is probably clear that the internet and the sound recorder have a far greater carbon footprint than a carnival mask, and that it will be necessary to radically decrease these footprints, changing the world cannot be equivalent to establishing a morality that would know better than us what is authentic and what is not.

*The Pigeon Blog* and *The Great Animal Orchestra* show precisely that an artistic production is the *result* of a process – in which technical objects and networks have a part to play – and not a prior state. Likewise, cyberpunk films, video games, and online exchanges are indeed places and practices which have as much of a claim as literature does to potentially feed into/inspire our understanding of the past, to positively or negatively foreshadow the future and to attempt to imagine or even model the transition.

## **Conclusion**

Works of fiction are useful tools for thinking about the origin, the narrative, the future and perhaps above all the imaginary world of the Anthropocene – not just thanks to the potential force for opening up the debate that narratives have, but also because artistic vocabularies (sometimes) allow us to see things differently. The two examples mentioned here show that this dynamic also occurs in artistic forms other than literature, and in very varied spaces. *Pigeon Blog* and *Great Animal Orchestra* also suggest that we should involve other species than humans in our narratives and experiments, and they put forward uses and relationships with the technical objects created by modernity that are neither technophile nor technophobe. The specificity of the *Pigeon Blog* is that it involves human beings and non-humans in a common story *through doing*. For its part, *The Great Animal Orchestra* calls upon sound and listening, which are often neglected by various disciplines and arts that tend to emphasise literary and visual aspects or to reduce performing arts to theatre and

dance (Sterne 2003). More generally, these two projects differ from the numerous artistic productions that claim to educate the general public about ecology and art. In contrast to these, they allow everyone to engage in varied forms of reclaim, implication, mobilisation, both on the sensory and on the political level. Art is not viewed here as being able to be a factor of sustainability as such, let alone of “sustainable development”, it is neither fetishized nor instrumentalised, even if the aesthetic dimension is nevertheless very present (Ballereau, Pirolli, Reboud, Ribac and Sinapi 2018) Finally, we should note the local rootedness of these two projects, which refer, or even imply, specific places and all those that people and give life to it.

For all that, are these projects models – should their ways of doing things replace other ways of talking and thinking about the Anthropocene and ecology using artistic means? Of course not: such a normative approach would involve forgetting that, whatever the medium and the type of narration, every one of us tells themselves a particular story, whether we are watching a show, reading a book or listening to a record. In the same way as the (secular) mysticism of art is abstract, there is no reason to prescribe any particular way of producing or consuming art. In his writings, Rob Hopkins, the theoretician of transition towns, stresses the importance of constituting local experiences into narratives, so that tales of the transition to a different world can be strengthened in our common imagination. In a way, the two projects presented here bring a “cultural” answer to this scheme: thinking about the Anthropocene, writing its plural and localised history with collectives and drawing its imaginary contours.

## References

Afeissa, Hicham-Stéphane. 2014. *La fin du monde et de l'humanité: Essai de généalogie du discours écologique*. Paris: PUF.

Allen, Aaron S., et Kevin Dawe, éd. 2017. *Current Directions in Ecomusicology: Music, Culture, Nature*. New York: Routledge.

Ballereau, Valérie, Pirolli Fabrice, Sophie Reboud, François Ribac, and Christine Sinapi. 2018. « Pour une géologie des instruments de musique ». In *Les arts du spectacle au prisme du développement durable*, Daniel Urrutiaguer ed. Paris: Presses de la Sorbonne Nouvelle.

Biewener, Caroline, and Marie-Hélène Baqué. 2013. *L'empowerment, une pratique émancipatrice ?* Paris: La Découverte.

Bihouix, Philippe. 2014. *L'âge des low tech: Vers une civilisation techniquement soutenable*. Paris: Seuil.

- Blanc, Nathalie. 2012. « From Environmental Aesthetics to Narratives of Change ». *Contemporary aesthetics* 10. .
- Blanc, Nathalie, et Barbara L. Benish. 2017. *Form, Art and the Environment: Engaging in Sustainability*. New York: Routledge.
- Bonneuil, Christophe, et Jean-Baptiste Fressoz. 2013. *L'événement anthropocène*. Paris: Seuil.
- Bonneuil, Christophe and de Jouvancourt "En finir avec l'épopée. Récit, géopouvoir et sujets de l'anthropocène" in Hache Émilie (ed) *De l'univers clos au monde infini*. Paris: Éditions Dehors, pp. 57-105.
- Clark, Timothy. 2015. *Ecocriticism on the Edge. The Anthropocene as a threshold concept*. Bloomsbury Academic. London: Bloomsbury Academic.
- Brady, Emily. 2013. *The Sublime in Modern Philosophy*. Cambridge University Press. New York.
- Cubitt, Sean. 2017. *Finite Media: Environmental Implications of Digital Technologies*. Durham: Duke University Press.
- Danowski Deborah and Viveiros de Castro Edurado 2014. 'L'arrêt du monde', in Hache Émilie (ed) *De l'univers clos au monde infini*. Paris: Éditions Dehors, pp. 221-338.
- Davis, Heather, and Etienne Turpin, éd. 2015. *Art in the Anthropocene: Encounters Among Aesthetics, Politics, Environments and Epistemologies*. London: Open Humanities Press.
- Dutheil-Pessin Catherine and François Ribac. 2017. *La Fabrique de la programmation culturelle*. Paris: La Dispute.
- Edgerton, David. 2011. *Shock Of The Old: Technology and Global History since 1900*. London: Profile Books.
- Flippo, Fabrice, Michèle Dobré, et Marion Michot. 2013. *La face cachée du numérique*. Montreuil: L'échappée.
- Fuller, Matthew. 2005. *Media Ecologies: Materialist Energies in Art and Technoculture*. Cambridge: Leonardo Books.
- Frith, Simon. 1992. « The Industrialization of Popular Music ». In *Popular Music and Communication*, édité par James Lull, 49-74. London: Sage.
- Gabrys, Jennifer. 2011. *Digital Rubbish: A Natural History of Electronics*. San Francisco: The University of Michigan Press.

- Garrard, Greg. 2012. *Ecocriticism*. New York: Routledge.
- Guenin, H  l  ne. 2016. *Sublime. Les tremblements du monde (Catalogue de l'Exposition)*. Centre Pompidou Metz.
- Hache, Emilie. 2011. *Ce    quoi nous tenons*. Paris: La D  couverte.
- Hache   milie,   d. 2014. *De l'univers clos au monde infini*. Paris:   ditions Dehors.
- Hache   milie,   d. 2016. *Reclaim. Recueil de textes   cof  ministes*. Paris: Cambourakis.
- Haraway, Donna. 2016. *Staying with the Trouble: Making Kin in the Chthulucene*. London: Duke University Press.
- Hayles, N. Katherine. 1999. *How we became post human. Virtual bodies in Cybernetics, litt  rature and informatics*. University Chicago Press. Chicago.
- Hennion, Antoine. 1993. *La Passion Musicale, une sociologie de la m  diation*. Paris: M  tail  .
- Hopkins, Rob. 2011. *The transition companion. Making your community more resilient in uncertain times*. White River Junction: Chelsea Green Publishing.
- Ingram, David. 2010. *Jukebox in the Garden. Ecocriticism and American Popular Music Since 1960*. Amsterdam: Rodopi.
- Kagan, Sacha. 2013. *Art and Sustainability. Connecting Patterns for a Culture of Complexity*. Bielefeld: Transcript.
- Krause, Bernie. 2002. *Wild Soundscapes: Discovering the Voice of the Natural World*. London: Yale University Press.
- Krause, Bernie, et Herv   Chand  s,   d. 2016. *Le Grand Orchestre des Animaux (Catalogue de l'Exposition)*. Paris: Fondation Cartier pour l'Art Contemporain.
- Maisonneuve, Sophie. 2009. *L'invention du disque 1877/1949. Gen  se de l'usage des m  dias musicaux contemporains*. Paris:   ditions des archives contemporaines.
- M  llers, Nina, Christian Schw  gerl, et Helmuth Trischler,   d. 2016. *Welcome to the anthropocene. The Earth in Our Hands (Catalogue de l'Exposition)*. Munchen: Deutsches Museum/Rachel Carson Center.
- Malm, Andreas. 2016. *Fossil Capital*. London: Verso.
- Miles, Malcolm. 2014. *Eco-Aesthetics: Art, Literature and Architecture in a Period of Climate Change (Radical Aesthetics-Radical Art)*. London: Bloomsbury Publishing.

- Morton, Timothy. 2007. *Ecology Without Nature: Rethinking Environmental Aesthetics*. Cambridge: Harvard University Press.
- Moulin, Raymonde. 1995. *De la valeur de l'art*. Paris: Flammarion.
- Naess, Arne. 1989. *Ecology, Community and Lifestyle Outline of an Ecosophy*. New York: Cambridge University Press.
- Narine, Anil. 2015. *Eco-Trauma Cinema*. Abington-On-Thames: Routledge.
- Pedelty, Mark. 2012. *Ecomusicology: Rock, Folk, and the Environment*. Philadelphia: Temple University Press.
- Perriquet Olivier. *Le Grand Orchestre des Animaux*. <http://perriquet.net/docs/lna74p24.pdf> Accessed 10 January 2018
- Rancière, Jacques. 2008. *Le spectateur émancipé*. Paris: La Fabrique.
- Ribac, François. 2004. *L'avaleur de rock*. Paris: La Dispute.
- Smith, Jacob. 2015. *Eco-Sonic Media*. Berkeley: University of California Press.
- Stengers, Isabelle. 2013. *Au temps des catastrophes. Résister à la barbarie qui vient*. Paris: La Découverte.
- Sterne, Jonathan. 2003. *The audible past. Cultural origins of sound reproduction*. Durham: Duke University Press.
- Weintraub, Linda. 2012. *To Life!: Eco Art in Pursuit of a Sustainable Planet*. Berkeley: University of California Press.
- Whiteley, Gillian. 2011. *Junk art and the politics of Trash*. New York: I.B.Tauris.
- Zimmer Bradley Marion. 1995. *The Climbing Wave*. Marion Zimmer Bradley Literary Works Trust.

---

i Many thanks to Kate Macnaughton for her translation

ii We know that many academics draw on artistic productions to better understand social metamorphoses. One might mention, for example Hayles 1999, who has drawn parallels between works of science fiction (in particular Philip K. Dick) and cybernetics to analyse the progressive “naturalisation”/humanisation of machines. One of the main characteristics of cultural studies is also to take into account/take an interest in the performativity of the cultural sphere (and therefore of the fictions it produces).

iii <https://350.org/press-release/350-org-lance-une-campagne-demandant-au-musee-du-louvre-de-mettre-un-terme-a-son-partenariat-avec-total/> Accessed 10 January 2018

iv <http://www.projetcoal.org/coal/en/coal-art-developpement-durable/> Accessed 10 January 2018

- 
- v <https://groupglobal3000.de/en/> Accessed 10 January 2018
- vi Conceived by Bruno Latour, Frédérique Aït-Touati and Chloé Latour. Written by Pierre Daubigny. Directed by Frédérique Aït-Touati. First performed in 2013.
- vii Interactive website of the exhibition: <http://www.legrandorchestredesanimaux.com/en> Accessed 10 January 2018
- viii It would doubtless be worth looking into the concordance between the progression of ecological awareness and those of technologies that immerse users in functional universes; rock fans listening to music through headphones, virtual reality glasses, *Avatar*-style 3D cinema etc.
- ix <http://nideffer.net/shaniweb/pigeonblog.php> Accessed 10 January 2018
- x This agenda is comparable to that of the *Alternatiba* movement in France. <https://alternatiba.eu/> Accessed 10 January 2018
- xi To which Stengers (2013) and Hache (2013) add that our response to the ecological catastrophe should also be based on a profound renewal of modes of decision-making and debating, in order to give a real place to non-specialists – that is to say, a substantial deepening of democracy.
- xii I am thinking in particular of the exhibition *Welcome to the Anthropocene. The Earth in Our Hands*, presented by the Deutsches Museum in Munich, which provides a narrative of an immanent progression of technologies and forms of knowledge. <http://www.environmentandsociety.org/exhibitions/anthropocene>