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Time to Leave Uchronia: Queer Eco-Temporalities for a Livable World

Claire S. Brault
University of Massachusetts, Amherst

TIME TO LEAVE UCHRONIA

QUEER ECO-TEMPORALITIES FOR A LIVABLE WORLD

A Dissertation Presented

by

CLAIRE BRAULT

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Approved as to style and content by:

_____
Barbara R. Cruikshank, Chair

_____
Ivan A. Ascher, Member

_____
Angela R. Willey, Member

_____
Jane E. Fountain, Department Head
Political Science

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iv

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ABSTRACT

TIME TO LEAVE UCHRONIA:

QUEER ECO-TEMPORALITIES FOR A LIVABLE WORLD

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CLAIRE BRAULT, B.A. UNIVERSITE RENNES I HAUTE BRETAGNE

M.A. UNIVERSITE RENNES I HAUTE BRETAGNE

PHD UNIVERSITY OF MASSACHUSETTS, AMHERST

Directed by: Professor Barbara Cruikshank

My dissertation is a Feminist contribution to Environmental Political Theory focused on temporality. My research investigates the tension between the urgent need to act fast in a fast-changing world, and the necessity for time to pause and think through such radical and rapid changes. As it signals our nearing the planet's limits, the emergence of the "anthropocene" crisis challenges growth-driven "progress."

I begin this dissertation with a survey of Environmental Thought that helps situate my contribution to the ongoing debates in this field, underscoring that as ecosophers pose the question of the nonhuman, in so doing they also are confronted with problems related to temporality. Then, building on the concept of "utopia," I critique a temporality that assumes infinite growth on a planet with finite resources, while constantly postponing its promises of abundance to an impossible future. The concept I propose is "uchronia": growth-driven progress is a timeless (*ou-chronos*), dangerously idealized (*eu-chronos*) temporality, just like "utopia" refers to both a "nowhere" place and an "ideal" place (*ou-* and *eu-topos*). I draw from Nietzsche's concept of eternal return to problematize teleologies of progress: the eternal return prompts us to live our lives as though we were

prepared to re-live them eternally.

In contrast with uchronia, alternative, queer eco-temporalities – I call these "anti-uchronia," "heterochronia," and "synchrony" – build upon and radicalize sustainability. However, not all "eco-temporalities" – alternatives to the hegemonic, in-crisis temporalities – constitute themselves as non-linear or radical – *i.e* not all of them are queer: I have also coined the concept of "counter-uchronia" to describe certain understandings of "sustainable growth," justifications of geoengineering and carbon markets creation, as well as primitivist (often virilist) environmentalist discourses which respectively advocate the "return" to a golden past of harmony with (often feminized) "Nature," or technofixes and green capitalism to amend and resume growth-driven progress' uchronian course.

To advance this conceptual framework, I offer close readings of environmental science fiction stories, activist manifestos, graffiti art, performing arts including contemporary dance and circus, as well as the Intergovernmental Panel on Climate Change scientific reports.

TABLE OF CONTENTS

LIST OF FIGURES

INTRODUCTION

JUST A MATTER OF TIME

> A seer, a purposer, a creator, a future itself, and a
> bridge to the future – and alas! Also as it were a
> cripple on this bridge. (…) To redeem what is past,
> and to transform every "It was" into "Thus would I
> have it!" (…) "It was" : thus is the Will's teeth-
> gnashing and lonesomest tribulation called.
> Impotent toward what hath been done – it is a
> malicious spectator of all that is past. Not backward
> can the Will will; that it cannot break time and
> time's desire – that is the Will's lonesomest
> tribulation. (…) That time doth not run backward –
> that is its animosity; "That which was": so is the
> stone which it cannot roll called."
>   Nietzsche, Thus Spake Zarathustra, XLII

Urgent Matters, Time and Again

"It's Not Too Late!" was Greenpeace's slogan in one of its worldwide campaigns a

couple of years ago, in a formulation symptomatic of the *urgency* often omnipresent in

environmentalist discourse. Since 1992 when 12-year old Severn Suzuki spoke to the

United Nations Earth Summit in Rio, many environmentalist images and events have

relied upon children as the symbols of "*future generations*," to the point that this phrase

has practically become idiomatic in environmentalist talk. The *slow* movement's ranks

are growing, defending lifestyles that would break away from the fast *speeds* and *paces*

of late modern life. Degrowth and conviviality-oriented environmentalists take *clocking*,

the work *week*, the work *day* as well as *"free time"* as their targets to argue in favor of

"liberated time," in what they denounce as a *"speed society"* (Illich, 2013). This comes

with denunciation of consumerism and commodities' *planned obsolescence*, critiques

pointing out that the only good consumer is a never-satiated one, this state always

postponing satisfaction to an *abstract future* which won't and should not be reached, but

always desired. Activists often also involved in the slow movement create *"time banks"*

everywhere to turn away from the capitalist markets and to barter skills, activities, labor

with *hours* as the bartering unit rather than money.

Geologist Paul Crutzen has offered the idea to invent a new *"epoch"* in geology's

periodization of Earth history, to designate the current one as distinct in that human-

caused markings will come to predominate the lithosphere: thus, we are told, the

"anthropocene" may have begun, and a hypothetical *deep future* geologist would be able

to read Earth's history to see its anthropogenic scars – granted geology as a science

produced by humans is as unlikely to exist as humans are, in this *posthuman future*

(Colebrook, 2014). Thousands of researchers worldwide wonder and debate about when

exactly to situate the start of such epoch, while some wonder about the meaning of the

convergence of Gaia and the human *calendars* (Colebrook, 2014; Chakrabarty, 2010;

Hache, 2010; Gibson-Graham, 2011). Both to dramatize the destruction associated with

the "anthropocene," and as an attempt to make sense of Earth's *deep time* in relation to

humans,' geologists translate deep time by explaining that if the Earth's old age was

converted into an *annual scale*, humans would have made their appearance at the *last*

minute before midnight on New Year's Eve.

The world's largest and most cited panel of scientists and the only one ever to have won a Nobel Peace Prize, a.k.a the Intergovernmental Panel on Climate Change (IPCC), produces periodic reports synthesizing all climatological data available regarding *past millenia* of climate trends into *computer-modelized futures*, subsequently making recommendations for *present* world leaders. One of the most cited marking points for the origins of the contemporary environmental movements is 1962, the date of publication of Rachel Carson's now world-famous *Silent Spring*, in which, to denounce the omnipresence of toxic pollutants in daily life in the United States, the author opens her essay with the description of a *dystopian, imagined future* Spring where no more birds will be able to sing.

Slowing down, before it's too late, because it's urgent, to take care of future generations, to avoid apocalyptic futures, to imagine other futures, given the new epoch and new calendars on Earth's deep time, while humans have been Earth dwellers for a second, while capitalism took a split second to emerge, and while greenhouse gases destructive of the holocene atmosphere proliferated in about the same split second: these claims may all be coming from environmentalist voices, but they have something else in common as well. They are injunctions, invitations to rethink *temporality*, to conceptualize and experience *time* differently.

The other most cited date used to mark a starting point for contemporary environmentalist movements is 1972. Ten years after Carson imagined future Springs as gloomily silent, the now-famous *Limits to Growth* report used computer models designed

to imagine the future, a bit like the IPCC's modelizations: in this case, the data treated was focusing on the (impossible) relationship between exponential growth of economic production and linear growth of access to natural resources. On the basis of this scientific evidence and many other symptoms of resource depletion, possible scarcity, current pollution and ecological damage of all sorts, environmentalists everywhere mobilize to denounce risks and consequences involved in "going beyond limits," "passing critical tipping points," beyond "thresholds," sometimes accompanying their urgent warnings with dramatic end-times descriptions. Here acting in concert against climate change and ecological catastrophe takes the form of attempts at finding the right moment, again, before "it's too late," as long as "it's not."

In 1987, the United Nations' World Commission on Environment and Development published its now famous "Brundtland Report," which was titled *Our Common Future,* and which tied the already temporally-connoted term "sustainability" with the idea of "future generations" : "sustainable development" was defined here as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development, 1987). Environmentalist activists keep calling for taking into account the long term as well as the short term (many refer to capitalist markets as characterized by "short-termism"), accusing capitalist growth of being blind to the former, and defending de-growth. The climate crisis forces distinctions to be made between the weather (short term) and climate (long term). It invites deep time into fast-paced lives, as it becomes ever more threatening when visible not only in climate trends, but also in weather events. But though global warming has long seemed ever too fast and vast to act upon, it turns

out to be simultaneously (paradoxically) so slow, gradual, non-linear as to be the target of (heavily right-wing funded) "skepticism." Though Louisiana's territory is sinking at a rate described as "the equivalent of one football field every hour," and though dramatic weather events cause sudden accelerations in damage in specific locations, U.S politicians and international summits react ever so slowly, if at all. Just like the sixth extinction under way, the imperceptible, slow and erratic acceleration of climate change causes Gaia theory inventor James Lovelock to wish a sudden and catastrophic event would give it a sufficiently palpable, urgent nature, so as to provoke "blood, sweat and tears" emergency action. Urgency sometimes turns to despair, outcries and frustration, and the risk of a failure to think critically: in an album dedicated mostly to global warming, Radiohead singer Thom Yorke sings: "there is no time… to analyze… to think things through… to make sense." Thus the singer underscores the tension between needs for rapid changes in the face of a rapidly yet to an extent imperceptibly developing event, and the need to take the time to "think things through." On another end of the environmentalist spectrum, the Climate Reality Project, founded by Al Gore (who also offers "Earth Inc." and such green capitalist ideas, thus the distinct positioning compared to a more radical environmentalist like Thom Yorke), has initiated the "24 hours of reality" event organized around "24 reasons to hope" and "24 reasons to believe." Banners on the events' website claim: "now is our time!"

Post-apocalyptic movies proliferate, most with ecological catastrophe as their moment of dramatic shift. Some (perhaps not enough of "us") worry about how to signal to future generations of human and nonhuman beings that they should not dig up the nuclear waste that has been and still is being accumulated over the last half century,

designing impossibly universally decipherable monuments and atemporal or allegedly

deep temporal warning signs supposed to be understood by species and beings radically

unknown to us, separated from us by 10, 000 years. Along with its desperate attempts at

communication, this potential anthropogenic mass destruction into deep time inaugurates

a new kind of unknown and a new kind of unimaginable.

To highlight urgency, new forms of clocks are called upon and performatively tell

a new time (Bastian, 2012): the doomsday clock, created in 1947 by the Bulletin of the

Atomic Scientists (BAS) as a way to quantify the likelihood of "the end of time" (mass

destruction) approaching, has been coming closer to its symbolic midnight to incorporate

not only risks related to nuclear catastrophes – the most pressing possibility of ecological

destruction when this clock was initially invented, but also climate change and other

ecological disasters. The "One Hundred Months project" is a similar instance: in August

2008, the New Economics Foundation started its hundred-months' countdown to the

moment when action to prevent the Earth's average surface temperature from increasing

above the threshold of two centigrades would not be possible anymore. Granted, the

hundred months project's accuracy is already challenged as the calculations supporting

our passing 2 centigrades one hundred months from August 1st, 2008, was based upon the

estimate that the atmosphere's concentration in CO_2 would go beyond 400ppm (parts per

million) at the end of December 2016,[1] a threshold that was in fact passed in April 2014.[2]

Though the clock is still ticking on the campaign's website ("100 Months," 2015), before

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[1] See more detail on the calculations that initially informed the hundred months' project at
http://www.neweconomics.org/page/-/files/100_Months_Technical_Note.pdf; retrieved July 13, 2015.
[2] Though the carbon dioxide concentration has never been so high in human history, and only reached such
levels anywhere from 800,000 to 15 million years ago, this level remaining as high is subject to seasonal
fluctuation: 2015 is suspected to become the first time when the 400 ppm threshold will have been passed
on an annual average.

the 100 months countdown expired, the Hundred Months Project was already the obsolete marker of a beaten race against time.

Other resorts to time warning us about ecological disaster take a calendar rather than a clock form: each year, Earth Overshoot Day marks the approximate date when humanity's resource consumption for that year exceeds Earth's capacity to regenerate those resources that year (in 2014 this occurred on August 19th). Also designed by the New Economics Foundation and widely campaigned about by the Global Footprint Network, Earth Overshoot Day performatively simplifies and dramatizes the ecological debt to provide it with a temporal measurement, qua the following equation: the world biocapacity is divided by the world ecological footprint, and the result is multiplied by 365 days. The result is an estimation of when "humanity" (here performative time-telling flattens unequal contributions and effects of this situation across different humans and nonhumans) starts living off the Earth on a credit which future generations will allegedly have to refund one day. Time will tell when.

Some argue in favor of a "return" to a supposed past when humans allegedly lived in harmony with nature. Many denounce the paces and speeds of the digital age, the car culture, globalization and its fast flows. Progress, this arrow that – once upon a time – used to provide the direction of modernity, is everywhere questioned by planetary limits and what some refer to as "the eruption of Gaia" (Hache, 2010; Stengers, 2009) in a volcanic metaphor which rhetorically impresses the reader or interlocutor as signifying a sudden emergence, an event, a surprise, and again, urgency, a state of emergency. This is so to the point that philosophers now studying ecology and politics have resorted to provocations – demonstrations – formulated in the past perfect: "we have never been

modern" (Latour, 1991). Not only 'sustainability' but also 'renewability,' 'recycling,'

evoke ideals of perennity, of taking the long term, or at least, future generations into

account, making new from the old and from the present without damage to the future,

maintaining and supporting resources so as to promote their endurance, transforming

trash so that it can cycle back and again, repeating use and privileging the perennial and

the enduring rather than a consumerist and destructive ephemeral.

'Conservation,' 'preservation,' 'restoration' are terms often used by yet other strands of

environmentalisms, and which posit a pristine wilderness, a "nature before man" both in

the sense of chronological preceding and prioritization in terms of importance.

Conserving and preserving, a bit like sustainability, connote endurance, longevity, and

restoration emphasizes a return, a reconstruction of the alleged past health of a lost

wilderness. Times of ecological crises are times when time becomes an urgent matter.

This dissertation is titled *Time to Leave Uchronia*. "Uchronia" is a concept I have

coined[3] to synthesize a number of notions and arguments in ecosophy, and add to these

debates as I argue that capitalist temporalities rely upon a timeless time, one that

presumes, values and desires (and values the desire for) infinite growth on a finite planet,

and one which promises abundance for all who deserve, satiety in an impossible,

unattainable and untenable future that subjects the present. As I will further explain

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[3] Though I have indeed coined this concept, I am not the first to deploy this neologistic term. The word "uchronia" has sometimes been used to designate a micro-literature, a sub-genre within science fiction that imagines different past worlds based on a re-writing of history. My conceptual ruminations have lead me to build the term "uchronia" as a mirror to "utopia" stressing temporality instead of spatiality, without my initially being aware of this neologism's preexistence. The previous use is obviously very distinct than the meanings I ascribed to my own concept here.

below, while utopia is built on "*eu-topos*" (the "good place" in ancient Greek) and "*ou-topos*" (a place that is no-where), uchronia is the ideal(ized) time which has no time.

But uchronia, capitalism's ideal and idealized time, has recently encountered a new crisis. For the most part, capitalism's temporal horizon has been clouded with stormy clouds since inception, in spite and because of some blind and blinding discourses that imagined a sun that in fact never shone there. The promises and limitlessness carried have notoriously not been kept or upheld, as the poor, many women, many minorities, and capitalism's myriad "others" could easily see. Today, another dimension of this world bears witness to this reality, a dimension which some have named Gaia, Nature, the environment, the mesh, climate, the biosphere, the planet. This takes the form of lithospheric scars that will testify of an age some have called the anthropocene, all the way into a deep future very different from uchronia's bright and shiny growth future, though deep future could indeed be bright and shiny for quite a moment – again, quite differently so. With this event, I argue it is about *time to leave uchronia*, that we need to take the time to leave uchronia, and that this is the right time to leave uchronia. This requires the (ongoing) emergence or eruption of alternative temporalities, ones that would make human and nonhuman lives livable.

My argument is a Feminist intervention in Environmental Political Theory (thus the subtitle of this dissertation, *Queer Eco-Temporalities for a Livable World*). In the last couple of decades, Feminist and Queer theory have become animated by a number of debates directly pertinent to my reflection here. Firstly, over the last couple of decades, "New Materialist" Feminist theory has revisited central problems regarding matter, the body, the environment, nature, often in light of the ecological crises. Feminist theory has

long been engaged in challenging, contesting, rethinking both the human and nature as problematic categories that supported the contradictory and violent exclusion of certain "others," as well as violence, inequalities, etc: either these "others" were excluded because these were associated with nature as opposed to "fully human," in modern ontologies that held the one as strictly separate from the other, or on the contrary, some were judged "unnatural," a judgment that, paradoxically depending also on modern understandings of nature, implied abnormality, deviance, abjection, etc.

But if these challenges to what and who counts as human and what and who counts as natural have long been central to feminist and queer theory, new materialist feminisms and queer ecologies have posed these problems anew. As Stacy Alaimo (2008) has pointed out, in order to offer critiques of these human/nature exclusions and separations (Plumwood, 1993) insofar as they acted as the foundation for gender inequalities, feminists often would abandon nature altogether, casting it as an unredeemably normative concept and endeavoring to critique and rethink the human instead. With the ecological crises, the digital and technological age and its proliferation of cyborgs (Haraway, 1989; 1991), and late modernity at large, questions related to biology, nature, the environment, humans' intimate relationships to nonhumans, and what French science philosopher Isabelle Stengers has called "the eruption of Gaia" have caused new materialist feminist and queer theory to engage in queering nature (Hird, 2004), queering ecologies.

Meanwhile, and with little overlap so far between these debates, queer theory has engaged in debates over questions of temporality which will be helpful to think with in what follows. Straight time, linear time, progress, the relationship between normativity

and time, utopia v. the present, are all concepts and questions that have attracted the attention of queer theory. Finally, I turn to Queer and Feminist theory for support in my intervention in Environmental Political Thought because the latter has important shortcomings in terms of its thinking about and deploying temporalities in relation to the nonhuman. This relation manifests itself in often gendered forms, as I will demonstrate in the first chapter below. Indeed, while the new materialist turn in Feminist Theory has sometimes been rightly cast as a need for internal critique on feminism's part (Alaimo, 2008), it is also the case that feminist critique is highly necessary as an intervention in ecosophy.

The Eternal Return of Temporality and
the Temporality of the Eternal Return

One thread running through this dissertation is the Nietzschean notion of eternal return, according to which time has no origin or end, and of all the infinite pasts and infinite futures are with us at each moment. This notion rejects any possible reading of time as linear, progressive or teleological. I am not the first to turn to Nietzsche for purposes of queering temporality: queer theorists McCallum and Tuhkanen have already done so in their "Becoming Unbecoming: Untimely Meditations," opening a co-edited volume on queer temporalities. Neither am I first to draw from Nietzsche within ecosophy, especially with respect to temporality and becoming, as William Connolly's last couple of books attest (2011; 2013). However, what distinguishes the argument I present here from these examples is that I draw more specifically from Nietzsche's concept of eternal return, which, I suggest, resonates particularly strongly with our current context of ecological crisis.

The Eruption of Gaia: Intensity and Possibilities for Improbable Joy

As we have seen, thinking at a planetary scale and in deep time is forced upon us in a context named the Anthropocene, the sixth extinction, the climate crisis. The markings referred to by the concept of Anthropocene, which allegedly engrave "human" presence in the lithosphere all the way to a hardly imaginable future lacking a human geologist to decipher them, remind us of how short the Holocene has been (Colebrook, 2014). It was but an ephemeral period of hospitality on the part of an Earth now damaged by some of its self-extinguishing guests. Meanwhile, in the midst of these ecological crises, desires to alternately slow down or rapidly make changes with respect to even quotidian and larger scales temporalities so as to match our world of becoming, along with challenges to historical time as progress or decay or neither, all emerge as increasingly salient and intense because of the eruption of Gaia, and her deep time. In the end of the nineteenth century, a few years before a 1908 earthquake devastated the area and as the famous volcano Etna was erupting as usual, threatening erasure of fragile lives and things, Nietzsche wrote a series of Idylls while in Messina, Sicily, which would subsequently serve as an appendix to his *Gay Science*. He proposed them to the *Internationale Monatschrift* claiming that "even the most serious publication need something cheerful." In the Idylls, Nietzsche indeed entertained a conversation with a woodpecker, who made him laugh by calling him a poet, and admired an albatross who "felt sorry for envy." How could such joyful thoughts and affects emerge under volcanic and seismic threats? Could it be that we similarly may laugh and encounter joy, in our anthropocene and sixth extinction context? I will argue, throughout the pages that follow, that it is in fact due to this very context that we may experience a vast array of affects with a special intensity,

and that this intensity is further heightened also, by the notion of eternal return – which is linked, as we will see, to extinction and necessary to a philosophy of becoming. If every moment passes, everything becomes, every time difference returns, then how do we face and perhaps embrace this becoming, especially in moments when the ephemeral and the long term are simultaneously so salient, and when tensions arise between needs for rapid change in a fast-changing world and for pauses allowing philosophical ruminations to think such change. Could our "sixth extinction" or "Anthropocene" (or "Capitalocene" – Haraway, 2015) be or become ripe with an intensity that may highlight life in all its thick layers and striating scars, while we are pushed to envision, down to best-sellers, "the world without us" (Weisman, 2008)? Could joy also be part of these moments where the short and long term, deep time and the speed society, needs for slowness and quick change, tear our temporalities apart? The eruption of Gaia threatens to sweep the world as we know it… now shall we join Zarathustra's dance?

Eternal Return: a Critique, an Ontology, an Ethics

The Nietzschean concept of eternal return is a very complex one that suffers or perhaps enjoys multiple interpretations. If I were to simplify it to the point of risking doing violence to it, I would say that for Nietzsche (or at least for a Deleuzean Nietzsche) the idea is to denounce any teleological understanding of time according to which the origin of time absurdly already containing its ends, to instead see the universe as made up of finite forces which constantly re-organize from one instant to the next. This has a number of ontological and ethical consequences which I find highly pertinent to a context of extinction, as the eternal return intensifies each instant, prompting a transvaluation of all values (in other words it requires to question the value of values). The eternal return

entails that the entire infinity of the past as well as the infinity of the future, are present in each present moment, such that the oft-cited notion of "interconnectedness of all things," often stressed in a spatial sense in environmentalist discourses, takes on a temporal dimension as well. This last aspect will feed into my concept of synchrony, in contrast with the atemporal time of uchronia.

One of the eternal return's recurring characteristics as a concept has to do with the fact that it was repeatedly dismissed as the incoherent thought of a soon-to-become mad man. Milan Kundera dismissively referred to it as "Nietzsche's half-mad idea."[4] Yet, Nietzsche's notion offers a critique of linear, teleological visions of time (thus Zarathustra exclaims: "I have liberated them of goals!"), allows to celebrate chance and the unpredictable, unexpected, random (thus Zarathustra's reign is called "the reign of great randomness"). Such a critique is vital, as we will see, to efforts to carve queer eco-temporalities against straight time, to challenge growth-driven progress. The eternal return also provides a philosophy of becoming, helping to think how all pasts can flow into all futures through present moments. Finally, it entails a radical, ethical challenge: if we were to weigh each of our actions against the possibility (or quasi-certainty) that the moment in which they arise would repeat itself forever, would we drive an SUV up to mount Etna for a "once-in-a-lifetime" tourist experience, without feeling the presence of future generations on the passengers' seat along with Nietzsche's poetry writing moments in nearby Messina? We may still opt for the SUV, yet the intensity of each moment,

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[4] Though he extensively draws from Nietzsche throughout his inspiring work on temporality and becoming, in the *Fragility of Things* (2013), William Connolly dismisses this notion, read in one specific way, as "incompatible with a philosophy of becoming" (p. 217). Throughout this dissertation, one of the implications of my main argument will be about advancing a different reading: to me the eternal return is not only highly pertinent to our contemporary ecological context, it is the very condition for a philosophy of becoming. See especially chapter 6 (see for instance *ibid.,* p. 349), for more engagement with Connolly's dismissal and a more detailed my (partial) disagreement with this reading.

including all joyful, or mediocre, or terrible ones, would have to be confronted

differently, inviting indeed, a trans-valuation of all values.

Uchronia, Anti-Uchronia, Counter-Uchronia, Heterochronia

My effort to queer temporalities in times of ecological crisis will thus draw from

Nietzsche's concept of eternal return and, as we will soon see, strive to argue against

visions of ecological thought as utopian. As I will further explain (chapter 2), one of my

goals is to turn the tables, to shift the burden of proof, to turn accusations around, against

common suspicions: radical queer ecological thought and praxis are by no means utopian.

In fact, it may offer pragmatic antidotes to decenter capitalocentric temporalities. By

contrast, the latter temporalities, as they forever postpone the satisfaction of capitalist

promises to an ever-receding impossible horizon of consumerist and productivist

abundance, purporting to offer limitless growth on a limited planet, are what I call

"uchronian."

Time and Ecosophy

In the first chapter, I will show that temporality is a central theme threading

Environmental Political Thought and interlaced with the central ecosophical question of

the human/nonhuman relationship emerging in varied gendered forms. This will enable

me to further situate my argument as an intervention in EPT from a Feminist and Queer

Theory perspective. In the chapters that follow, I will develop four concepts that together

provide tools for queering capitalocentric temporalities. Their goal is to detect the

possibility for other temporalities to emerge, and ways to distinguish between various

alternative temporalities that are already emerging in environmentalist discourses.

Uchronia

In chapter 2, I overview some key concepts in environmentalist discourses and ecosophy,

again bringing out the temporal thread which runs across these, to advance my own

concept of "*uchronia*," and elaborate upon the critical lens it offers. "Uchronia" aims to

underscore how capitalocentric temporality teleologically postpones promises of inifinite

economic growth to an abstract and impossible future (*ou-chronos*, no-time) of also

infinite accumulation, where all those who "deserve" ("worked hard for") it, would

allegedly revel in consumerist and productivist abundance (*eu-chronos*, good time). This

future is impossible as it assumes infinite growth on a finite planet (*ou-chronos*). The

environmentalist concept of *limits to growth* underlines the impossibility of infinite,

exponential growth in a world with finite resources. Thus the idea of limits to growth

makes it possible to see capitalocentric temporality for what it is: uchronian. I open the

chapter with the environmentalist theme of *urgency*, specifically with a close-text reading

of some slogans and videos Greenpeace released a couple of years ago, in the context of

its "It's Not Too Late!" campaign. I also start drawing from the Nietzschean concept of

the *eternal return*'s critical dimension, to question the teleological character of

capitalocentric temporality, or "uchronia." Through this lens, I explore what exactly is so

new and unprecedented in making *future generations* and nonhumans a matter of

concern: I distinguish this concern from the self-proclaimed future-oriented (or "futurist")

character of modern, capitalocentric progress. As Bruno Latour has claimed, moderns

have always "run to the future… with their backs turned." In my formulation, the

fundamental distinction between uchronian futurism and the futurity at stake in the

concept of responsibility toward future generations, is revealed by my concept of

uchronia: uchronia is inherently reliant upon the abstraction of consumerist and productivist horizons (the point is to accumulate and grow, with more or less regard and fetishization for the objects of such growth). In contrast, future generations offer concrete and vitalist, material matters of concern (the point is to affirm life and/or the livability of life). Finally, I discuss "*end-times*" themes in some environmental discourses, *i.e* to underscore *the limits of limits'* discourse. For instance, I challenge a certain kind of – capitalocentric – Marxist despair-ridden sigh which has been resonating too often in the last decade (*e.g.*, Zizek's or Harvey's work), according to which with the current ecological crises, "we" (late modern humans) have less difficulty imagining the end of times than the end of capitalism, or the radical (non-capitalist) means by which we would avoid end-times. I argue that this type of colonization of the imaginary (Castoriadis) by capitalocentric temporalities is one of the powerful and problematic effects of uchronia.

Anti-Uchronia

In chapter 3, I advance a second moment in my reflection on uchronia, one that asks: how can we cultivate an ability to see uchronia differently, how can we develop *a perspective from which to start seeing that there may be other possibilities*, i.e to see uchronia as a contingent, fragile and not so self-evident temporality which cannot but imagine the future as capitalist (and it is indeed in this sense that it is a "capitalocentric" temporality), and which (inaccurately) presents itself as the only possible and desirable reality.

"Anti-uchronia" is not a symmetrically oppositional perspective, supposed to confront uchronia, as anti-capitalism may be for "Capitalism." It is, however, a moment of my argument which may be described as "critical" (crucial and critically-minded). I conceptualize anti-uchronia as a pause to take the time to think, in creative tension with

fast-paced, rapidly changing worlds and with urgent needs for radical change. Though anti-uchronia is not yet an alternative temporality, it is a breech opened in the self-naturalizing character of uchronia, into and against the capitalist pretension to the colonization of the temporal imaginary: anti-uchronia "makes other possible (temporal) order of things glitter," to use Foucault's formula regarding what he calls, in the *Order of Things* (2014), heterotopias (although the "temporal" in parentheses is my addition here). Anti-uchronia thus refers to the opening up of the possibility for other temporal possibilities.

Anti-uchronian art, science, thought, events, would be those which allow to see the essential contingency in a temporal order that attempts to naturalize itself, in spite of all odds – as it is, in fact, timeless, disconnected, absurdly teleological, unsustainable and unbearable, as it always already postpones the promise it carries, running after sand castles in clouds so destructive to our Earth presents. Anti-uchronian moments are moments of "idiocy" in the Deleuzian and Stengersian sense, where we allow ourselves to ask interruptive, disruptive questions that "slow others down": "wait! Why do we/I need/desire capitalist growth again? But… *do we* indeed need it?" They are moments of suspension of a rushed, supposed common sense (a frenetic race to a capitalocentric temporal horizon), moments when we are invited to look at temporalities differently.

In this third chapter I draw from world-renowned graffiti artist Blu's works, arguing that some of his frescos can be interpreted as "anti-uchronian." I juxtapose these with the Intergovernmental Panel on Climate Change reports, suggesting that the famous panel of climatologists provides evidence that capitalocentric temporalities "lead us into a wall" (Stengers, 2009). I also offer a close reading of a science fiction short story where

artificially intelligent self-renewable houses become cannibal, and of a contemporary circus piece and its work on suspension, a choreographic movement I associate with anti-uchronia. Through the examination of these various forms, genres and discourses which I read as anti-uchronian, I discuss the need for a conceptualization of interruptive time that would include *kairos* (time in the sense of the moment, the event, the right or wrong time, etc) and *chronos* (series and duration, successions, etc). I also weave the anti-teleological moment of the Nietzschean concept of eternal return into my interpretation of these various examples.

Counter-Uchronia and Hyper-Uchronia: Regression and Progression

The fourth chapter starts to develop a third concept to think with in times of ecological crises, when uchronia comes apart as such. "Counter-uchronia" refers to alternative temporalities emerging in this context, but which still take on the form of a capitalocentric temporality, either because they merely modify or amend growth-driven progress (sustainable growth, and most mainstream understandings of the concept of sustainability), or because they attempt to diametrically oppose this temporality by way of a primitivist narrative of "return," often reifying pre-modern, pre-industrial, pre-capitalist economies as well as non-Western ones. The attempt, in both of these cases, is to propose a "counter-uchronia," (i.e uchronia under a slightly different guise), a reactive, symmetrically oppositional temporality created so as to counter uchronia. I underscore that this is insufficient, as counter-uchronias remain caught in a temporal capitalocentrism (it fails to challenge, go beyond, circumvent or de-center uchronia, remaining caught up in capitalist times).

<u>Regression</u>

Anarcho-primitivist works, a de-growth manifesto, Viennese environmentalist artist Hundertwasser's "five skins" and "tree tenant" theory serve as some of the examples with which to think the extent to which different environmentalist discourse may be called "counter-uchronian," when they rely upon a "return" to a supposed golden age when humans and nonhumans lived happily-ever-before, when harmony between "Man" and "Nature" allegedly prevailed. If Bruno Latour has described moderns as running to the future with their backs turned to it, "primitivist" moments in environmental discourse and thought would have us run to the past in the same uchronian manner. Chances of falling are just as high. Often, the "return" proposed is also one that reifies diverse (often indigenous) economies and worlds that are in fact coeval (Fabian, 2014) with capitalist economies, thus taking on a colonizing form.

Furthermore, with chapter 4's focus on regressive counter-uchronias, we will see that the problem with nature does not reside in the nature of nature, as much as it does in its temporalities: if "Nature" is imagined as mere background, stable, static, or moved by eternal cycles (in contrast with the eternal return of becoming), then it becomes an object of reification and a counter-uchronian, teleological end or goal. However, the examples I use can be read for difference, i.e as not counter-uchronian all the way. Indeed, after problematizing their counter-uchronian aspects, in chapter 6 I will also offer to read some of the same art works as also stressing hybridity and becoming.

Progression

The second form of counter-uchronia, which I call "progressive" counter-uchronia, is the focus of chapter 5. In this chapter I turn again to the Intergovernmental Panel on Climate Change reports, this time to underscore their counter-uchronian rather than anti-uchronian character. While in chapter 3, I underscored that the IPCC made it possible for welcome and needed "idiotic" questions to be asked (such as, "but is endless growth even possible in a finite world?)," in this chapter I stress that these reports do not sufficiently part ways from capitalocentric temporalities and remain (counter) uchronian in their proposal of creating carbon markets, their relative blindness to gender, class, race and other inequalities in climate change impacts (supposedly affecting all of "humanity"), their understanding of sustainability's object as… capitalist economies. Indeed, these reports are the perfect examples of a *counter-uchronian understanding of sustainability*, as needing to sustain capitalist growth. Yet, for sustainability to become synchronic rather than counter-uchronian, its object should shift from capitalist economies to a form of nonhuman/human (hybrid) ethics. Sustaining capitalist futurism with windmills and other technofixes as well as carbon markets thus differs from sustaining an ethical perspective taking present and future generations of human, nonhuman and hybrid lives into account: the former sustainability is counter-uchronian, the latter would be synchronic.

I then ask "idiotic" or anti-uchronian questions (ones that intend to create pause). The IPCC's counter-uchronian perspective deploys what Isabelle Stengers would call "*stupidity*," i.e it places demands on a situation which demands completely otherwise, aggravating it rather than taking into account the current demands (made by the

ecological crises, by the situation). Thus the IPCC indeed proposes to address a crisis it has demonstrated was caused by capitalist economies… with more "Capitalism." In doing so, and in spite of its own anti-uchronian moment, the IPCC is traversed by what may be called stupidity. The world-renowned panel compares millenia of climate data with data over a period of high levels of carbon dioxide causing unprecedented global heating: that of 1750 and on. The IPCC reports then proceed to argue that global warming is "anthropogenic." Problematizing the undifferentiated "anthropos" once again, I ask the following idiotic questions: have "we" become "human" only in 1750? Should climate change be called "capitalogenic" instead of "anthropogenic" (Donna Haraway has recently proposed to the term "capitalocene" to describe what some have been calling the "anthropocene" – 2015)? What does this correspondence tell (or confirm to) us about the emergence of humanism and the concept of the universal "human" in relation to carbon-emitting capitalist economies?

I conclude chapter 5 with examples of the potentially hubristic consequences of anthropocentrism in a context of climate crisis, advancing a critique of geoengineering measures that have been defended by the IPCC, Gaia theorist James Lovelock, and millionaire Russ George.

Heterochronia and Synchrony

Chapter 6 closes the argument with a couple of additional concepts to think with, in the hope of better seeing and creating alternative temporalities. It asks, how do we go from an anti-uchronian moment, taking pause to consider the possibility for other possible temporalities, to experimenting with alternative temporalities that may decenter uchronia, without finding ourselves trapped by a counter-uchronian logics?

One term I propose is "*heterochronia*," to refer to other times, other temporalities: to Foucault, heterotopias were spaces which juxtaposed otherwise incompatible spaces (2009), just like in medical language, heterotopia referred to the growth of an organ in an anomalous place on the body. In Foucault's view, heterotopias made it possible for "another order of things to glitter" (2002, p. vii). "Heterochronia," in my conceptualization,[5] refers to moments of surprise when otherwise distinct and separate temporalities coexist simultaneously, when they converge in a *synchronic* moment. One way of nurturing heterochronia would be to ask 'what is being done?,' as Gibson-Graham invites us to do (2010). Here for instance, I offer an alternative reading of Hundertwasser's five skins and tree-tenants theories, which I had read as partly counter-uchronian in chapter 4. I argue that this artwork also offers a heterochronian dimension, if one reads Hundertwasser's art in the form of three dimensional spirals. Imagining and creating a different oikos enables decolonizing the imaginary, and while this could be called a utopia, I argue that we can also read it as offering ecochronian antidotes resisting the pull of uchronia.

In discussing synchrony, I bring in Nietzsche's concept of the eternal return again. According to this latter idea, all the infinity of the past (pasts) and all of the infinity of the future (futures) are contained in each passing moment, and the universe is but a constant re-distribution of forces which do not know any maximal or optimal point, do not suffer any diminution or increase, as teleological time is an impossibility. For moments to pass, for time and for being to exist, all must be becoming. If this is the case, Nietzsche invites us to an ethical attitude resulting from this ontological condition: were we to relive our

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[5] Foucault had proposed the term as well, but only mentioning it in passing as the temporal dimension of heterotopia (see Foucault, 2009).

lives eternally, would we cry enthusiastically, joyfully, "*da capo*"? Temporalities that have been cultivated in the performing arts, certain community economies, science fiction, etc foster a sense that many times, paces, rhythms and speeds, many temporal orders, can be experienced *at once*: this is what I call synchrony. I discuss this concept of synchrony in relation to a couple of contemporary dance choreographer Pina Bausch's pieces as well as a choreographic moment in a recent "Flood Wall Street!" protest, to illustrate this concept and demonstrate the embodied nature of such an ethics.

CHAPTER I

WHAT NOW? TIME AND ECOSOPHY

<u>Morning Glory</u>

The deployment of time and temporality within what has come to be called

Environmental Political Thought and ecosophy is both new and old, central and often

insufficiently foregrounded. Early in the XIXth century, Henry David Thoreau, who is

often read as a precursor of environmental thought,[6] already pointed to the acceleration of

paces and speeds in the quotidian as one of the symptoms for the lack of simplicity

characteristic of his industrializing times. In *Walden*, he poetically describes the rhythms

and cycles of "nature" and opposes them with the acceleration produced by the railway

system then in the making:

> the soul of man, or its organs rather, are *reinvigorated each day…* All memorable
>
> events, I should say, transpire in *morning time* and in a morning atmosphere… To
>
> him whose elastic and vigorous thought *keeps pace* with the sun, the day is a
>
> *perpetual* morning. It matters *not what the clocks say* or the attitudes and labors of
>
> men. *Morning is when I am awake and there is a dawn in me…* In any weather, at
>
> *any hour of the day or night*, I have been anxious to improve the *nick of time*, and
>
> notch it on my stick too; to stand on the meeting of *two eternities*, the *past* and
>
> *future*, which is precisely the present moment; to toe that line (2008).

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[6] See for instance Bennett, J. (2002).

The valuation of the present moment and of the moment of morning, of awakening, are associated with the regularity of nature's cycles. "Nature," understood as granting access to transcendence, is seen as self-coherent, predictable, and immutable in its cyclical character. It is associated with a double eternity, into both the past and the future. It is also situated beyond, outside, apart from conventions and the socius: clock time does not affect the morning state Thoreau claims to be capable of whatever the hour. But morning, like Nature as granting access to transcendence, is a state of mind disconnected from the concrete moment (be it "social" or "natural"), and thus it is not only abstracted from social conventional time, but also from day and night. This abstract understanding of nature as made of immutable cycles is now becoming ever more clearly problematic – many environmentalists altogether reject the concept of Nature, contrary to the cliché portraying them as Nature-lovers. Thus Tim Morton denounces "Nature" as a form of "crystallized history." As Dipesh Chrakrabarty has claimed, the emerging geological concept of anthropocene prompts the human and the Earth calendar to converge – I would rather say they may be – problematically – read together, as whatever is referred to as "the human" was always indeed a period of so-called "natural" history and as our months, seasons and years, like other calendars in various cultures, attempt to pace themselves imperfectly along the Earth's rotation in relation to the sun and the moon's in relation to the Earth. The anthropocene event incites zooming out in "deep time" and understanding the ryhthms and cycles Thoreau took to be the key to some eternal transcendence as ever more fragile, as passing, with all other moments. The (Western and relatively temperate,[7] cyclical) milieu described in *Walden*, the Holocene "man" – now

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[7] Note that the term temperate has time for its root, just like Thoreau's Nature relies upon a certain, relatively static vision of time. I will return to this temporal dimension of the conceptualization of nature,

allegedly transformed into an "anthropocene" one – was but the product of a fleeting

exception of hospitality on the part of an Earth that would have been and will most likely

go back to being inhabitable for human forms. This vision was as ethnocentric as it was

anthropocentric. Thoreau's time and Thoreau's Nature are problematic, even while and

perhaps precisely because it opposes "human" fast-paced "modernity" to a supposed

stillness or predictability found in "Nature." Thoreau's temporal dualism is ultimately

quite similar to that which has founded the possibility of understanding a "Nature"

passively awaiting humans so as to be mystified, reified, festishized, conserved, and, also,

colonized, "mastered," destroyed (Grosz, 2004; Bennett, 2002). Thoreau invoked what I

read as a triple return: at the scale of a life, he praised infancy associated with purity and

innocence (2008, p. 63). At the smaller scale of the day, we have seen that mornings and

awakenings were to be returned to so as to constantly begin again (p. 64). Finally, at the

scale of history, Thoreau associated cardinal points, and his fetishized visions of both

"the Orient" and "the West," with an allegedly different kind of progress, a westward

movement following both the direction of the sun each day and manifest destiny,

celebrating a wilderness whose human inhabitants he erased (at most Thoreau would

abstractly praise Native Americans as "savages," while most of the time he would refer to

Native American land as empty – p. 268), and which Americans were inevitably drawn to

(p. 269). The reactionary and colonial dimension of this thought was accompanied by the

projection of purity and transcendance into an abstract, constant and cyclical Nature

which ultimately was the precursor of ways in which what is now called biocentrism

meets anthropocentrism: "[Thoreau] took a walk in the woods and came back taller than

this teleological nature, in chapter 4.

the trees" (2008, p. 265). Today's deep ecologists and conservationists have continued on this particular trend of thought, as we will see below.

I will also come back to the problematic utopian nature of Thoreau's transcendent Nature below, but for now I want to stress that these glimpses into Thoreau's works show the important place of temporality in relation to the Man/Nature relationship here, an importance that carries on beyond Thoreau. The disobedient transcendentalist's insistence that Americans "live too fast," that the division of labor and productivism, the construction of railtracks, the exclusions and destructions associated to the fast and speeding-up rise of industry ("if some have the pleasure of riding on a rail, others have the misfortune of being ridden on" – 2008, p. 66), which he opposed to the eternal cycles of Nature, indicate the importance of temporality for environmental thought all the way down to its precursors. Thoreau makes it possible to begin my reading of this barely visible yet central thread, this importance of temporality (whether explicit or not) which I see as one of the few commonalities between otherwise disparate visions, throughout Environmental Thought.

Humans/Nonhumans, Temporality, Gender

> Beyond a critical speed, no one can save time without forcing another to lose it.
> Ivan Illich

Environmental Political Thought (EPT), or "ecosophy" as it is often called (more often by European thinkers), is now an increasingly established field in political theory, philosophy and ethics, though of relatively recent emergence. Right before the twenty first century, J. Baird Callicott pointed out that "during the decade that has elapsed since the publication of [his book] *In Defense of the Land Ethic*, environmental philosophy has

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developed explosively." However, this conservationist ethicist, who strove to continue

the works of Aldo Leopold's "land ethics," claims that: "nevertheless, environmental

philosophy remains something of a pariah in the mainstream academic philosophical

community" (1999, p. 2). What in 1999 Callicott considered a marginal place held by

EPT within philosophy has for sure changed significantly since, to the point that even

beyond the confines of this field, many authors who previously did not address ecological

issues now feel compelled to do so.[8] However the canon of Environmental Political

Theory remains contested, as well as the exact boundaries that could help define what

may count as "ecosophy." Thus environmental theorist Matthew Humphrey claims: "we

lack an all-encompassing concept for green/environmental, political thought" (2010, p.

182). Searching for the lowest denominator that may bring together sometimes disparate

traditions of environmental thought, Green theorist and politician Andrew Dobson quotes

Andrew Vincent who claims that

> most [political ecologists] assert the systematic interdependence of species and the
>
> environment … and there is a tendency to be minimally skeptical about the
>
> supreme position of human beings on the planet. Furthermore there is a general
>
> anxiety about what industrial civilization is actually doing to the planet (2007, p.14)

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[8] Examples could include Latour, whose work Actor Network Theory going from the French *Conseil d'Etat* to the production of scientific knowledge and truth contributing to shape Science and Technology Studies, has taken a resolutely clearer focus on political questions regarding the Earth, the ecological crisis, the concept of humans, hybridity, and nonhumans etc over the last decade or so (*e.g. The Politics of Nature,* 2004). J.K. Gibson-Graham and community economies scholars are also increasingly focusing on ecological dimensions, hybridity and nonhumans in their work. Many among the Left(s) especially have dedicated at least significant portions of their latest works on ecology when critiquing capitalist economies. Writers beyond academia also exemplify this change. Naomi Klein's latest book's title is quite telling: *This Changes Everything* marks her shift from her latest study on the "shock doctrine" where she appeared much more as a keynesian, to more radical critiques of capitalism provoked by her investigation of the climate crisis (Klein, 2014).

Environmental thought is eclectic, disparate, and many schools of thought, many visions and positions are incompatible with one another within this vast movement or these movements. One common denominator nonetheless stands out and ultimately brings these together, sketching the contested contours of the field so that it may indeed be considered one, so that it may be called ecosophy or environmental thought. Namely, environmental thought engages with the human/nature dualism, also known as human/nonhumans, modernity/Nature, Man/Nature, humans/more-than-humans, humans/environment, human/Earth. Various traditions within environmental thought indeed conceptualize this problem or relationship using slightly different terms, and the relationship itself may be called or critiqued as a dualism, a binary, a separation, a divide, a dichotomy, depending on the tradition. Various schools of thought and authors also offer differing responses or insight with respect to this question, thus resulting in differences and disagreements between not only the formulation of the problem, but also what should be done or thought through to address it: as we will see some may wish to reverse the hierarchy binding the two terms, celebrating "Nature" and denouncing its modern subjection to "the human." This biocentrism denouncing anthropocentrism is found in deep ecology and conservation, as well as some social ecologists. It is probably the most known image of environmentalism, though not by any means unambiguously majoritarian. In contrast, some environmentalists (e.g. political ecologists, critical ecologists, post-structuralist and new materialist ecological perspectives) sometimes call for our abandoning the very concept of nature and altogether challenging the concept of human, to emphasize the blurriness of lines separating the human and its environment as well as the role of the very separation in creating conditions of ecological crisis. In other

words, reversing the hierarchy in the human/nonhuman binary may not be enough, and the ecological crises call for carefully examining both terms critically, potentially even to subsequently reject either or both of them. In this chapter, as one point of entry to situate my own contribution to the field of environmental thought, I discuss some of the most important schools of thought and authors involved in this work, showing that, to each respective understanding and critique of the human/nonhuman relationship, corresponds a specific understanding and mobilization of temporality.

We have just seen that Thoreau's rendering of the human/nonhuman dualism was one whereby he praised the regular (supposedly "eternal") rhythms, patterns and cycles of "Nature" (daily, seasonal…), contrasting those with the paces and speeds of the fast-industrializing America of his times. The former have an ability to invigorate the self against conventional time (mornings as awakening, despite "what the clocks say"), while the latter function as a means of exclusion (some ride on trains and others are "ridden on"). Now if we leap in time from this nineteenth century transcendentalist (alleged)[9]

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[9] Henry David Thoreau's status as a precursor of EPT or ecosophy is open to debate, though I lack the space and time to discuss it and take a more substantiated position on the subject here. First, Thoreau is far from being the only candidate for early modern thinkers that have inspired the environmentalist movement as we know it today. Darwin could of course be cited, as well as Thoreau's friend Emerson, but also the romantics, and the precursor of romanticism Rousseau. We could also consider the Lockean imperative to save only what one can consume to be a premise which some environmental thought is based on, and this one has obvious roots in a long tradition within Christian thought. The eternal regression to many philosophers throughout the Western canon can go on to any thinker having thought (with) the concept of Nature… *i.e* virtually all (virtually all of the canon has reflected upon "nature," as a central concept even – Thoreau's innovation may be said to be about the opposition between industrialization and this concept, announcing the ecological crises to come more than he founded a current of thought including "ecosophy" in general). This regression also tends to obscure female or feminist, and nonwestern nature writers to foreground white, male, upper middle class Westerners. In my view, Thoreau is just such a nature writer primarily, and rather than a precursor anticipating the themes developed by contemporary ecosophy, he has inspired some (very specific) authors within Environmental Political Theory. I am using this latter phrase, distinguishing here between ecosophy and EPT in the sense that the former is more often used as the term to describe this field in North American literature, while the latter is more often used in European philosophy. Indeed, Thoreau is more often cited as a precursor of environmental thought on the former side of the Atlantic. He also is claimed as legacy by specific currents of the broad field of environmental thought. Namely, (self-proclaimed) "deep" ecologists and conservationists rarely hesitate to consider him as a founding father (gendered phrase intended), and as we will see, they indeed often inherit some of the

precursor of environmental thought to the beginnings of the contemporary movement, a couple of important founding figures stand out (e.g Ivan Illich, Hans Jonas, Aldo Leopold[10]), and a number of different schools of thought subsequently developed (deep ecology, social ecology, political ecology, ecofeminism, critical ecology, post-structuralist and new materialist ecology). Qua a few (inevitably non-exhaustive) examples from these various currents, I will argue that while each propose their specific formulation of the human/nonhuman problem, these formulations respectively have idiosyncratic consequences for their mobilization of temporality. The goal of this overview is two-fold: it will underscore a less obvious thread within Environmental Theory, and its importance, i.e temporality. It will also allow me to further to situate my own contribution concerning the new temporalities emerging in a context of sixth extinction, anthropocene, climate change, in short, in times of ecological crises. Thirdly, as we meander through a number of ecosophers' works, my examination of the connection between temporality on the one hand, and the human/nonhuman on the other, as threads of ecosophy, will prove to be more or less explicitly gendered in each instance, for better or worse.

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problematic understanding of "Nature" he mobilized, his response to the problem of the Man/Nature relationship in the form of a reversal of the dualism's hierarchy in favor or "Nature" or the wilderness, and the gendered characters of these two ontologico-ethical positions: Nature is often a "she," either calm and motherly (as for instance in his essay "Walking") or erratic and hysterical (in many instance both in "Walking" and *Walden*), and part of the true ecologist's attitude has to do with facing, embracing it in ways quite… masculine or virile (famously killing animals with one's own hands is described in such terms in *Walden* – a reminder to the reader than meanwhile Thoreau was regularly taking cookie-collecting trips at his mother's would perhaps excessively specifying the kind of masculinity – boyhood? – indeed at play here.

[10] I will be discussing Illich, Jonas and Leopold here so as to provide a couple of major examples of inspirations for contemporary ecosophical work. However, by no means do these offer an exhaustive genealogy situating environmental thought: the survey of EPT literature I offer here is selective: the goal of this selection is to highlight, through enough important figures and schools of thought within the movement, the relation I wish to underscore here, between EPT's common thread, i.e its reflection on human/nonhuman relations, and temporality.

Anti-Elitist Feminist Conviviality

Ivan Illich's considerations on the energy crisis strikingly resonate with Thoreau's

denunciation of the speed of railtracks, though Illich was no transcendentalist. In a 1973

essay first published in *Le Monde* (2013), the late 20th century philosopher who inspired

the de-growth and political ecology movements (conversely, Thoreau inspired more

thinkers and groups among the deep ecology and conservation movements) laments the

"speed-stunned imagination" of cultures dominated by motorcars, where the "habitual

passenger" of such vehicles suffers from "inherited perceptions of space and time and of

personal pace" which "have been industrially deformed." The concept of "net transfer of

lifetime" (2013, p. 83) is crucial to his critique of the energy crisis: Illich points out that

with motor vehicles and high speed transportation in general, "the exchange-value of

time becomes dominant, and this is reflected in language: time is spent, saved, invested,

wasted, and employed" (2013, p. 84). By "net transfer of time," Ivan Illich simply means

that once transportation's acceleration reaches a critical threshold, equity and the quality

of social relations cannot but be greatly damaged:

> Beyond a critical speed, no one can save time without forcing another to lose it.
>
> The man who claims a seat in a faster vehicle insists that his time is worth more
>
> than that of the passenger in a slower one. Beyond a certain velocity, passengers
>
> become consumers of other people's time, and accelerating vehicles become the
>
> means for effecting a net transfer of life-time (2013, p. 85).

Illich goes so far as to insist that neither the specific technological make-up of a

particular technology nor the specific persons owning these technologies of transportation

(and this extends to other examples than transportation) are as important as the

technologies' speed. The speed society is damaging of sociability, damaging of the "conviviality" (1973) which Illich stressed and advocated (very simply put, Illich understood the concept of conviviality as corresponding to societal arrangements where tools allow people to express themselves, as opposed to machines subjecting their users). Speed matters in matters of motion, more than the matter moving. Temporality here is foregrounded, as central to conviviality and the socius:

> The effect of speed on the autonomy of people is only marginally affected by the technological characteristics of the motorized vehicles employed or by the persons or entities who hold the legal titles to airlines, buses, railroads, or cars. High speed is the critical factor which makes transportation socially destructive. A true choice among practical policies and of desirable social relations is possible only where speed is restrained. (2013, p. 55)

Illich, a bit like Thoreau in his denunciation of speeds and paces of modernity as opposed to rhythms and cycles of nature, underscores the ways in which beyond a certain threshold, the speed and acceleration certain technologies bring about becomes poisonous, insofar as they participate crucially not only in production, but also in the production of new inequalities and exclusions as well as their reproduction. He thus calls for a slowing down, a restraint on speed and a re-valuation of slow, more "natural" modes of transport, insisting upon embodied practices not involving high-speed machines: motion by way of walking on one's feet procures more autonomy. Speed has become a nuisance to both autonomy (in an almost Castoriadian[11] sense) and conviviality, and empoverishes those whose quotidian lives it purports to make more

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[11] In fact the impact of Cornelius Castoriadis on French political ecology could also be noted.

efficient. Of note here is the emphasis on sociability, autonomy, equality, conviviality. Surely Illich also discussed thresholds and technological innovation in relation to natural resources. Yet, inaugurating the political ecology tradition (and to an extent offering some inspiration to social ecology as well), Illich is not focused on "Nature," but rather on the livability of (human) life. In fact, deep ecology's "biocentrism" clashes quite explicitly with Illich, Gorz, Bookchin, in other words with political and social ecology's relative "anthropocentrism." Furthermore, Illich's stance contrasts with Thoreau, deep ecology, and conservationism's, also in the sense that then the time in question and under scrutiny is about a concrete, social temporality, rather than an abstract mental state whereby one would always be invigorated by an eternal morning, away from social time.

Illich's critique of the speed society also importantly integrates temporality, gender/sex, and his critique of industrialism/growth. In his book *Gender*, Illich contrasts preindustrial societies' "reign of vernacular gender" to industrialism's "regime of economic sex." Insisting on "lost time," which disappearance he bemoans, he carves the concept of "ghost work." In the "apparent economy," i.e that characterized by salaried work, sexual discrimination is made clear by wage disparities which Illich sees as inherently present in the growth society. Thus he reads the (sexually) "neutral" (growth-oriented) economy as a liberal feminist illusory promise of emancipation in fact further alienating women and other minoritized groups. Illich emphasizes that, in industrial societies that abolish "vernacular gender" (i.e, the differentiated quotidian roles shared by women on the one hand, and men on the other), "sexism" becomes prevalent not only due to wage discrimination in the apparent economy but also because of the unpaid time spent by women to transform commodities into useable products. Only the time spent

performing salaried work is considered to have any sort of value: Illich mentions car rides to and from vast grocery stores, use of laundry machines abolishing possible moments of social gatherings of women when they previously all washed clothes together, etc. Thus he defines "ghost work" as follows:

> any labor by which the consumer transforms the purchased commodity in a usable good, … *the time, toil and effort spent* which must be expended in order to add to any purchased commodity value without which it is unfit for us… The transformation of household labors is by no means superficial, but indeed very profound. The increase of standard of living makes these labors ever more dependent upon capital by having multiples machines and gadgets penetrate households… New domestic chores have also become more solitary, monotonous, impersonal, and considerably more polluting. Among other palliatives to this silent stress, we note the consumption of Valium and mind-numbing in front of a TV screen … *If economic growth is intrinsically and irreparably … sexist, then sexism will not decrease unless it does at the 'price' of contraction of the economy.* (1983, p. 47)

One of the most important aspects of such subordination in a society that inaugurates vernacular genderlessness yet so profoundly relies upon sex-based discrimination has to do with both the quality and the quantity of quotidian time spent by women accomplishing tasks which used to take place in common with other women and which collective dimension is now supplanted by machinic alienation. This critique should not be confused with an advocacy in favor of a return to medieval times and the "reign of vernacular gender." Liberal feminist Elizabeth Badinter's caricatural and sweeping

denunciations (2010) of all environmentalists as necessarily anti-feminist, or even sexist,

because they dare critique the allegedly wonderful progress laundry machines have

represented for women, would be quite inapt at accounting for what Illich is pointing to

here. Rather than advocating a return to different and allegedly purer forms of subjection,

Illich uses past arrangements to contrast them with the "modern" "West," showing that

the latter's is a story of "progress" understood as the proliferation of new, machinic form

of sexist subordination eating up autonomous moments and "liberated" time. He refrains

from speculating on the future, but calls for "contraction," in the de-growth sense I will

clarify a bit below. In sum, Illich brings together environmental degradation with an

astute attention to quotidian temporalities, showing the gendered and sexed dimensions of

both.

Patriarchs and Technocrats

While Illich's reflection on technology and modernity's speeding up paces focuses on

temporality as it is transformed at the (sexed) quotidian scale, Hans Jonas, another major

influence who inspired contemporary ecosophy, offered a multi-dimentional and multi-

pace, complex deployment of temporality in relation to his critical reflection on

ecological crises. Jonas' work indeed engages not only the paces at which we live on a

daily basis, but also, at a larger scale, the ways in which our "technological age" forces a

rethinking of ethics to incorporate nature and future generations as objects and subjects of

present generations' ethical obligations. Here the scale is thus not the quotidian, but a

larger temporal scale, a historical perspective, inclusive of future generations' capacity to

exist, to live. Jonas' ethics is also "multi-pace," in the sense that he called for the

deceleration of technological developments accompanied by the acceleration of a science

of prediction, which he called "futurology," to inform what he called an "ethics of the future."

As a student of Heidegger, Hans Jonas read the current "technological age" as one where technology had radically altered the scope of ethics. Namely, to him responsibility was commensurate to powers, to what a thing can do: granted that the technological age had provided humanity with unprecedented powers for self- and nature's destruction, human responsibility knew totally new scales which forced taking into account nonhuman nature and a duty toward future generations' non-extinction. In short, progress had turned into threat with the advent of the technological age. Writing in 1979, as nuclear threats were highly tangible and global warming and such planetary ecological crises were barely starting to emerge in ecological knowledge, Jonas wrote:

> Modern technology, informed by an ever-deeper *penetration* of nature and *propelled* by the forces of the market and politics, has enhanced human power beyond anything known or even dreamed of before. It is a power over matter, over life on earth, and over man himself; and it keeps growing at an *ever accelerating pace*. … But lately, the other side of the triumphal advance has begun to show its face, disturbing the euphoria of success with *threats* that are as novel as its welcomed fruits. Not counting the insanity of a *sudden*, suicidal atomic holocaust, which sane fear can avoid with relative ease, it is the *slow, long-term, cumulative* – the peaceful and constructive use of worldwide technological power, a production, consumption, sheer population growth – that poses threats much harder to counter. The net total of these threats is the *overtaxing of nature, environmental and (perhaps) human as well. Thresholds*

may be reached in one direction or another, *points of no return*, where processes initiated by us will *run away* from us on their own momentum – and toward disaster. (1985, p. ix)

According to Jonas, before the technological age, the human polis was comparatively separate from nature, in the sense that human powers could only impact nature in restricted ways: in his view the polis coexisted with nature with little effect on the latter, thus nature was primarily moved by "immutable" laws, untouched by human artefact. This separation of nature and the human sphere of action (and therefore of responsibility) collapsed with modern technology's new powers: "the raping of nature and the civilizing man go hand in hand" (1985, p. 2). Or, as he puts it in the quote above, "modern technology [is] informed by an ever-deeper penetration of nature." Formulated in yet another way, Jonas claimed that "the nature of human action has de facto changed, and an object of an entirely new order – no less than the world biosphere of the planet – has been added to what we must be responsible for because of our power over it" (1985, p.7). The threatening acceleration of technological development is thus directly linked, in Jonas' rendition, to the collapse of an allegedly previously separate and intact sphere of "Nature:"

> The boundary between 'city' [here Jonas is referring to the polis] and nature has
> been obliterated: the city of men, once an enclave in the nonhuman world, spreads
> over the whole terrestrial nature and usurps its place. The difference between the
> artificial and the natural has vanished, the natural is swallowed up in the sphere of
> the artificial, and at the same time the total artifact generates a nature of its own.
> (1985, p. 10)

With this comes an unprecedented need to rethink ethics. The new "ethics for the future" takes on various radical, temporal changes: for Jonas, a new science of predictability is necessary: this is what he called a "futurology." Differentiated changes of pace follow in various domains: futurology's development must be accelerated, and meanwhile, technology's development must be slowed down, as there is a "gap between the ability to foretell and the power to act," a gap which has created this novel ethical problem. Armed with the lessons drawn by futurology, the decision-maker or statesman must espouse "an ethics for the future" taking on a form which Jonas compares to the patriarch's protective attitude toward his family (!): futurological experts will examine the future, in terms of risks, probabilities, predictions and uncertainties, and on this basis, with nature and future generations in mind, statesmen may make sound, protective decisions (for now fragile Nature and for children – including those who do not yet exist). Jonas places nature and future generations on the same footing, in that neither have the ability to represent themselves – this is also part of the novelty of the technological age's human condition. One major imperative falls on the statesman's shoulders, that of preserving the capacity for future generations to exist, which is also what links them to nature, as nature is a condition for the livability of future human life.

With the case of this major precursor of contemporary ecosophy, we see quite clearly how there is a striking connection between needs for paces of scientific, technological and ethical developments to be radically altered in a differentiated manner, on the one hand, and the eruption of Gaia, on the other. According to Jonas science and ethics must take on a future-oriented form – "futurology" and the "ethics of the future" ; futurology's pace must accelerate ; technology must slow down ; politics must start

40

incorporating the ethics for the future. And all these modifications of temporality must take place due to the greater and greater dissolution of separation between nature and the human, as well as the eruption of awareness that future generations' living conditions are highly altered by the technological present. Temporality and the relationship between the human and the nonhuman are at the center of Jonas' philosophy.

However compelling and helpful the case of Jonas may be so as to see the human/nature dualism in relation to temporality, his diagnosis, prognosis and program are highly problematic in a number of respects. For one, his claim that nature and the polis used to be relatively separate, that nature was "immutable," is dubious at best. We know that with the very beginnings of human history and the settling of human societies throughout the planet, whole species have constantly disappeared, and that this took place much before what Jonas calls the "technological age." Of course his association of human modernity with natural devastation has some truth to it, as the rate of these extinctions has notoriously accelerated with the industrial revolution and on, such that we currently are confronted with what scientists call the sixth great extinction. Nonetheless, the portrayal of pre-modern nature as animated by "immutable" laws in contrast to a period where "the natural is swallowed up in the sphere of the artificial" is rather unconvincing: environmental historians like Mike Davis (2002) have demonstrated how an ahistorical reading of nature as changing ever so slowly, or moved stably by cycles, is mostly the result of ethnocentric perceptions of "Nature" in relatively (and relatively recently) temperate climates. And as mentioned above, the eruption of the concept of "anthropocene" reminds us of how short the hospitable Holocene has been relative to Earth history.

Another problematic dimension of Jonas' critique and program has to do with the specific gendered terms of both: Jonas depicts human civilization as "raping" and "penetrating" nature ever more deeply, in a move that many ecofeminists have denounced where nature is feminized, women are "reduced" to biology and nature, and both are depicted as passive, or in this case as victims of penetration. Conversely, the human is more or less implicitly equated with a certain masculinity, risking women's exclusion from a category that is (problematically) traditionally centered and privileged. Further, Jonas' recommendation that decision-makers espouse the "patriarch's" ethical attitude may raise more than one queer and/or feminist eyebrow. The technocratic, potentially anti-democratic dimension of Jonas' programmatic moment is quite clear: Jonas encourages us to rethink the role of technology in late modernity, only to affirm the celebration of the scientific expert and his capacity to inform (and arrest) debate, to curtail civil society's potential interference – the latter is not even mentioned in Jonas' *Imperative of Responsibility*, besides as a passive feminized force in need of patriarchal protection. As Latour would say, scientists come in and out of the cave, exercising a monopoly over the kind of truth capable of eliminating any participatory democracy dear to others in the political ecology tradition (above-discussed Illich's anti-elitism contrasts with these views, for instance).

Yet Jonas' insight into the technological age, the centrality of both temporality and the human-nonhuman relationship to his thought, and the gendered terms of such insight, are helpful insofar as they further confirm my claim that while ecosophy has proposed, in varying, specifically gendered terms, to focus on the human-nonhuman

question, it has done so in ways that foreground the temporal, or at least considerably affect temporality – being especially critical of temporalities of progress.

Conserving Virility

The conservation movement, as yet another specific tradition within ecosophy, similarly deploys discussions of the "Nature"/human relationship in temporal and gendered terms. Environmental feminist Karen Warren has praised one of the founders of conservation ethics, Aldo Leopold, claiming that:

> Many feminist environmental philosophers adopt key aspects of Leopold's land ethic. For example, many defend a notion of the self as a relational, ecological being who is a member of the larger biotic (living, organic, ecological) community. (Warren, 2015)

Warren also goes on to quote Leopold's praise of both cultural diversity and biodiversity: "Leopold claimed that an ecological interpretation of history shows that 'the rich diversity of the world's cultures reflects a corresponding diversity in the wilds that gave them birth'" (Warren, 2015). Yet, if Aldo Leopold's famous land ethic does indeed resonate in part with some environmental feminist ideas regarding the diverse interconnectedness between humans and nonhumans, we may also remember that in 1925, Leopold wrote that "public wilderness areas are essentially a means for allowing the more *virile* and *primitive* forms of outdoor *recreation* to survive the receding economic fact of pioneering" (Leopold, 1992, p. 138). This sentence captures a number of dimensions of conservationist thought's complex and at least partly problematic positioning with respect to the correlated questions of temporality, human/nonhuman relations, and gender.

The adjectives "virile" and "primitive," along with the phrase "outdoor recreation" are symptomatic of some of the conceptual grounds that have conservation ethics is rooted in. Leopold saw "wilderness" as calling for "conservation" so as to preserve possibilities for certain manly men to fully experience their manhood by accessing land with no roads or "civilization" (also a commonly used term in Leopold's writings) as "playgrounds" (this word appears extremely often in Leopold's essays). Though the land ethic that Leopold crafted repeatedly asserts that "Nature" must be "protected" for its own sake, because of its intrinsic rather than instrumental value, underneath this distinction lays an opposition between Nature for leisure and Nature for labor. "Using" "Nature" as a playground for purposes of serving upper-middle class men's feeling of wild exploration of "primitive" ways is deemed of higher moral value than exploitation of Nature as a resource for one's livelihood. The term "primitive" signals a narrative imbued by a temporality of "return" that permeates conservation ethicists through and through, whereby certain nonwestern ways of life are symbolic of the past while the West stands for the present and future (themselves read in a declentionist perspective). Denying any coevalness to so-called "primitive" economic ways of life, these are subsequently exoticized for purpose of play. At the same time, and this is not by any means a contradiction but rather more proof of the erasure committed here, when Leopold contributes to imagining the national parks system in the United States, he rejoices: "any system of wilderness areas would have to be owned and held for public use by the Government. The fortunate thing is that the Government already owns enough of them" (Leopold, 1992, p. 125) Let's all clap at the completed U.S. occupation of the land all the way to the West coast.

Though it is true that Leopold inaugurated an ecological tradition of questioning economic logics as sole drivers of land policy, his was a project, not of contesting ideas of manifest destiny and economic growth, but of merely tempering, reforming or limiting it. Therefore, although he is often read as related to the deep ecology tradition and to what Dobson will call ecologism as opposed to environmentalism (see my next section below), his legacy must be complicated as also constituting a precursor of green capitalism, informed by certain colonial and patriarchal undertones. Leopold did critique industrialization's overtaking all American land, with some provocatively critical formulas such as "there is no God but Gasoline and Motor is its Prophet!" (Leopold, 1992, p. 127) Yet, the "father" of land ethic also repeatedly asserts that economic expansion is desirable, as long as it is limited in *pace*: thus he denounces "the tragic absurdity of trying to whip the March of Empire into a gallop." Though the image is again beautifully provocative, here it is the pace, the speed of Empire's march that is denounced, and not so much Empire per se. Let's note here that Leopold's critique of paces and speeds at which modernity travels, echoing Thoreau's, and his vision of the "primitive," his partly declentionist objections to progress, enable him to attack only part of the imperial logics he seems to denounce: rather than the logics themselves, it is their rapidity that is at stake. The emphasis is on "loss" of "the Unknown," on a "return" to pristine ("virgin") wilderness, i.e the deceleration of a process which in itself is not contested. Although Leopold may inspire more radical agendas, he also preached for what would now stand as "green consumerism": "would not many people pay an extra penny for a 'clean' newspaper?" (Leopold, 1992, p. 192) And although as Warren underscores, Leopold insists in the *Land Ethic* that humans are part of an interconnected

45

nonhuman world, he relies upon clear distinctions between "Man" and an – often

feminized – "wilderness" that should be preserved from mass tourism so that the upper-

middle class man may use it as his "playground."[12] "Man" is hubristically defined as "the

first creature in all the immensities of time and space whose evolution is self-directed,"

while wilderness is evoked in the following terms: "the most pleasing [road] is the one

that 'opens up' some last little vestige of *virgin* wilderness." (Leopold, 1992, p. 184).

Again, we see a narrative of loss, of return, to a "Mother Nature" that calls for protection

and for recreational exploration on the part of a privileged manly man. This agenda also

relies upon a strong nationalistic rhetoric: part of the justification Leopold provides for

his conservation advocacy taps into a supposed idiosyncratically American spirit, and the

stakes emphasized have to do with preserving a rugged individualism at the core of

"Americanness" : "there is little question that many of the attributes most distinctive of

America and Americans are the impress of the wilderness and the life that accompanied it

… its distinguishing marks are a certain vigorous individualism" (Leopold, 1992, p. 138).

Formulations of the human-nonhuman relationship and what exactly may be

problematic or helpful with them changes with almost each author, or at least each school

of thought within ecosophy. So do their implications for temporality, and in each case the

terms of these two facets of the ecosophical question are gendered in different ways. It

remains that ecosophy is marked by: an engagement with the human-nonhuman

relationship which is often the most obvious common denominator between

environmentalists; a subsequent or rather simultaneous engagement with temporality; we

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[12] In her *Primate Vision*s (1989), Donna Haraway has offered another striking example of the ways in which racialized, gendered and classed narratives about "adventurers" and "explorers" so fond of "wilderness" (like, for instance, Teddy Roosevelt's) indeed contributed to constitute the white, male, privileged subject qua figures of "other," non-white, "natural" beings.

should now add, an often gendered language to defend these two endeavors – whether authors advance feminist critiques or, as in Jonas' or Leopold's case, explicitly patriarchal positions. This has become apparent through four precursors of ecosophy (XIXth century transcendentalist Thoreau, conservation ethicist Leopold in the first half of the XXth century, Illich and Jonas in the second half). In the remainder of this section I will survey some of the more recent schools of thought which have emerged in Environmental Political Theory (from the 1980s and 1990s, on), underscoring how each of these both critique and understand the human-nonhuman relationship, and what consequences this has on the way they may mobilize temporality. I will first focus on what Andrew Dobson has called ecologism and distinguished from environmentalism. Yet contrary to his defense and amalgamation of ecologism as one singular "ideology in its own right," I read ecologist thought as importantly traversed by disagreements which matter tremendously, and this importance will be particularly apparent in discussing temporality in these respective currents. These include deep ecology, social ecology, political ecology (and de-growth), and finally (more recently) critical, post-structuralist and new materialist ecologists (note that many of these categories of course overlap, as we will see).

Ecologism as Ideology

> The green movement has spent years trying to get the environment on to the political agenda, and the major political parties have so artfully stitched a green stripe into their respective flags that there seems to be no need for a specifically green politics any longer." (Dobson, 2007, p. 193)

This apparent lack of need for a specifically ecologist agenda, for what he called

"ecologism," understood as "an ideology in its own right," is what Andrew Dobson tried

to refute in *Green Political Thought*, which presented a survey of debates within

Environmental Political Thought and a synthetic overview of ecologism still often cited

as a reference in the field, even twenty years after its first publication, and many new

editions. For this reason I will devote a substantial amount of attention to it: not that it

represents the field exhaustively by any means, but it is a great entry point to discern

some of the connections mobilized, sometimes in spite of the authors' intentions, between

temporality, human/nonhuman relations, and gender. Dobson's argument distinguishing

ecologism from environmentalism was indeed a needed one, and helps situate some of

the following reflection, as my own intention is to intervene in ecologist rather than

environmentalist debates. However, I contend that Dobson's battle being to defend

ecologism as "an ideology in its own right," his attention to the flags within the (British)

party system[13] and their stripes (see the above quote), sometimes prevent Dobson from

distinguishing with nuance the complex spirals intertwined, the intersections and parallel

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[13] The term "ecologism" is relatively absent of American Environmental Political Thought. The terms"ecosophy" or "ecophilosophy"are equally rare. This is not the place for me to specify these nuances, but a passing clarification may interest readers wishing to further refine their understanding of the field and the contexts in which it has been developing. While in the United States, "political ecology" often refers to an academic field of scientific scholarship (which should however be understood as having political implications and going beyond disciplinary boundaries, including between so-called "hard" and social sciences - citations), in France "l'écologie politique" is a false cognate referring to what could perhaps be loosely translated as a movement sharing many similarities with the American "Environmental Justice" movement (citations). Thus when Bruno Latour opens his *Politics of Nature* with a provocative "What is to be done with political ecology?," to which he answers: "more political ecology!," he is calling for a furthering of a movement that has grown out of associative (non-profit) life, left-libertarian greens, and the Green Party there, problematizing the human/nonhuman relationship in relation to social, economic, geographic, gender and racial inequalities and participatory democracy. When Dobson refers to ecologism, he is speaking within his British context, where he has run for elections within the British Green party (and he has held a position of advisor to the British government's Sustainable Development Commission, among other such institutional responsibilities). The two movements (British "ecologism" and "écologie politique") do not exactly overlap, as what Dobson describes does not stress social inequalities as much as his continental counterparts, and as the latter ones are influenced by Ivan Illich, Hans Jonas, Andre Gorz more than deep ecologists like Arne Naess, and overlaps with the mostly Franco-Italian de-growth movement, which I also discuss above and below.

lines within the fabric of ecologism, the nuances among dark greens (I will try to offer a

glimpse at some of these in the following sections on deep, social, political ecology).

Though Dobson insists upon the distinction between light or shallow, and dark or deep

greens, he is color-blind to some dimensions of the debates. I will start with the

nonetheless very helpful definition he provides of ecologism (dark or deep greens) as

opposed to environmentalism (light or shallow greens) to grasp this, and examine how it

is directly connected to his treatment of the nature/human dualism, in relation to

temporality and gender. Dobson explains, as do many in the field,[14] that ecologism refers

to a movement which advocates for fundamental societal and institutional change as

necessary to address the ecological crises, while environmentalism would include, for

instance, ecological modernization, technological fixes, so-called green capitalism,

sectorial reforms in the use of very specific sorts of pollutants and ecological damages,

etc.

More specifically substantiating his definition of ecologism, Dobson provides a

synthetic and clear formulation. In his view and others,' "it is the limits to growth thesis,

together with the ethical conclusions to be drawn from ecocentrism and hybridity … that

divides light-green from dark-green politics" (2007, p. 53). And Dobson also emphasizes

the human/nonhuman relationship more explicitly elsewhere, as a distinctive trait of

ecologism: "what sets ecologism apart from other political ideologies is its focus on the

relationship between human beings and the non-human natural world" (p. 28). These

quotes are indeed quite rich in terms of helping one grasp the meaning of ecologism. I

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[14] See for instance Humphrey's review article, "Green Political Thought" where he writes: "We will use 'green' political theory as a broad category encompassing all forms of political thought that have as a high priority the conservation or preservation of the natural environment. 'Ecological' will refer to those forms of green thought that seek the dissolution of contemporary political and economic institutions, and environmental is reserved for approaches that would specifically adapt existing institutions" (2010, p. 182).

would rephrase this analysis as follows: ecologism or dark green politics comprises a critique, an ontology, and an ethics. The ontological moment in Green Political Philosophy has to do with posing the problem of the relationship between the human and the nonhuman. The ethics unfolds from this moment, while the critical moment, which can either be read as an implication of the first two or as the premise engaging an ontologico-ethical proposal, attacks the idea of progress, its direction being set by growth – thus the attack also targets growth itself. In Dobson's depiction, what I read as his programmatic moment would consist of building the "sustainable society." As I will discuss (and critique) later on in this chapter, the British thinker characterizes the sustainable society as a "utopia" – under his pen an appraisive term.

Dobson's identification of the ontology and ethics, the limits to growth critique, and the sustainable society program, all constitute the distinguishing elements that allows ecologism to be "an ideology in its own right." Of note here is that this statement contains both the question of the human/nonhuman relationship, along with a critique and program which temporal dimension is fundamental, though the author does not underscore this. Throughout his works, Dobson (and in this he is quite representative of many green thinkers) discusses the limits to growth not only in terms of material resources being exhaustible, but also with the implication of a deadline, thresholds, temporal limits: the critique is, after all, that growth is unsustainable, i.e that it cannot go on forever, in a (temporally, substantially) unlimited manner. In fact, Dobson points out (synthesizing the views of many ecologists, as is the goal of his book here) that the limits to growth not only impose a deadline, a moment when growth will inevitably collapse on itself: he emphasizes that this moment is also likely to be sudden and catastrophic. "The

rapid rates of growth aimed for by industrialized and industrializing societies have an

exponential character, which means that dangers stored up over a relatively long period

of time can very suddenly have a catastrophic effect" (2007, p. 54). The emphasis on

sustainability is quite clearly a way in which temporality meets imperatives to care about

the nonhuman: the idea is to sustain conditions for present and future life to continue (or

begin again) to thrive, thus imagining a present and future of contraction rather than

expansion. Like a number of other Green thinkers, Dobson deploys a battery of temporal

concepts, yet does not thematize temporality or underscore that these concepts have more

in common than addressing the relationship between humans and nonhumans – and of

course, this means that the connection between this relationship and temporality is left

unexplored as well.

This characterization is very helpful on our journey to start seeing the link

between temporality and the question of the human/nonhuman dualism, and the gendered

ways in which these questions are formulated by various green theorists. Yet as I have

mentioned above Dobson is so focused on drawing the line separating ecologism from

environmentalism, that he amalgamates a number of currents within the former under a

single rallying umbrella many may have qualms with (myself included). Firstly, Dobson

grants deep ecology a virtual monopoly over what he calls the "philosophical"

foundations of ecologism (what I would instead call, more specifically, the ontologico-

ethical moment in this thought). Yet as we will see below, social and political ecology,

understood as distinct from deep ecology, have nothing to envy the latter current in terms

of ontological and ethical insight. Dobson sees de-growth as the pragmatic implication of

deep ecology, rather than as one strategy and program shared by many deep, social and

political ecologists but not by all (in any of these three currents). Deep ecology asserts that all natural things have an intrinsic value, and this justifies sustaining them beyond the instrumental fact that human society could not do without natural resources. This is indeed a helpful way to read ecologism to an extent, yet the kind of biocentrism defended by deep ecology is not shared across the whole movement: in fact, deep ecology's concept of "intrinsic value" has been critiqued by ecofeminists in particular, along with social and political ecologists, which disagreement Dobson somehow avoids even when discussing ecofeminism (as for new materialist feminist or queer theory, Dobson seems to ignore the very existence of this critical development in feminist thought). According to a number of social ecologists (*e.g.* Murray Bookchin, discussed below), political ecologists (e.g. Bruno Latour, who as we will see proposes to further deploy political ecology beyond itself), ecological feminist theorist Val Plumwood (1993), Tim Morton's (2010) "dark ecology," as well as queer ecology, the response proposed by deep ecology to the problem of the human/nonhuman relationship merely consists of re-valuing the de- or under-valued term in this dualism. Simply reversing the hierarchy that organizes this dualism insufficiently problematizes both terms: it fails to deconstruct the binary under scrutiny – in other words, what is needed is rather to dehumanize and denaturalize ecology.

This is directly linked to the temporal dimension of Dobson's version of ecologism: he thus claims that, to the question aiming at specifying the object of sustainability, "what is to be sustained?," ecologists answer: "natural value." Yet instead of flipping values around, instead of mere reversal, I argue that strands of ecologism could potentially propose a "transvaluation of all values," to borrow a Nietzschean phrase

(I will further discuss this idea below and to some extent throughout this dissertation).

Thus it is not so self-evident to all ecologists that "natural value" is to be sustained, and in fact many (myself included) would argue that this mere reversal is likely to result in a further fetishization, reification and mystification of nature, thus perpetuating and reinforcing the human/nature separation, however much deep ecologists claim that humans are also part of nature, however much they stress the interconnectedness of all things. Yet, of interest here is the fact that Dobson is quite symptomatic of an interesting assumption that all ecological thought has to be about "nature" : put differently, while the most mainstream and least "deep" – in spite of their self-proclamations – critiques that have erupted from the ecological movement[15] regarding the relationships between "nature" and "the humans" fail to de-naturalize and de-humanize politics, in doing so they further strengthen the very dualism that produced the current ecological crisis, solely striving to either reverse or flatten its hierarchy by way of a simplistic "mise en equivalence" (Stengers, 2009) or altogether a praise of "pure" "wilderness." As we will start seeing below in discussing Dobson's treatment of utopia and in chapter 4, this results in a highly problematic envisioning of the future in ways that reproduce patterns having created the "anthropocene"'s sixth extinction. For the time being, let's just point out that Dobson sometimes reduces green envisionings of the future and warnings in the present, to terms of pessimism/optimism. This is motivated principally by a desire, as the ideologue, to fend off accusations made against greens of pessimism. Doom and gloom

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[15] Note that here I am calling Dobson's ecologism "mainstream" in the double sense that it seeks to amalgamate disparate and complexly distinct movements within ecologism, and in that it thus leans toward what I see as the least profound and radical questioning of the human/nature dualism, in relation to temporality and gender. I do not mean to refer to environmentalism by way of the adjective "mainstream," as I agree with Dobson regarding his distinction between environmentalism and ecologism (up until he claims that adherence to deep ecology's ontological and ethical vision is one of the distinguishing element between the two).

warnings used as mobilizing tools, fear as anticipation of dire times are indeed central, as we have seen above, to a precursor of ecosophy like Hans Jonas: this has earned ecologism a reputation for party-poopers Dobson wants to counter with a life-of-the-party identity. Dobson thus "defends" ecologism as follows : "greens are generally unerringly optimistic with respect to our chances of dealing with the crisis" (2007, p. 20). I would not only disagree with such a statement (as we will see, many ecosophers fully expect and reflect upon mass extinction, not a particularly or necessarily optimistic vision), but I would also argue that the pessimism/optimism dyad is at best unhelpful, at most detrimental to both thought and praxis. In fact, overcoming, side-tracking, marginalizing such incentives to self-description as either optimistic or pessimistic – and, similarly, self-proclaimed utopianism relying upon threats of dystopia – is part of the point of the conceptual apparatus I propose, so as to think and experience temporality differently in times of ecological disaster. Hopefully the project of circumventing utopia/dystopia, optimism/pessimism, human/nonhuman visions will become more and more clear throughout, as well as the connection between needs to denaturalize and dehumanize ecologism, on the one hand, and needs to create new temporalities on the other.

Dobson's ecologism is also resolutely universalist, and in this respect very much part of a liberal kind of ecologism, in spite of its claims to radicality (or, as he, Naess and the likes enjoy calling it, "depth"). To underline the unique nature of ecologism, Dobson writes that it is a "function of the green movement's argument that environmental degradation and the social dislocation that goes with it are everybody's problem therefore ought to be everybody's concern" (2007, p. 21). Yet even the most moderate and liberal institutions are well aware of the uneven impacts and responsibilities related to various

environmental crises. Demonstrating that gender, class, race, ability, geographic location

inequalities are not only reflected but also exacerbated by, say, the climate crisis is

beyond the scope of this dissertation. However one could quote, for instance, this report

published by UN WomenWatch, to underscore the gendered character of the crisis:

"women are more vulnerable to the effects of climate change than men—primarily as

they constitute the majority of the world's poor and are more dependent for their

livelihood on natural resources that are threatened by climate change." The report goes on

to emphasize that

> women are not only vulnerable to climate change but they are also effective actors
> or agents of change in relation to both mitigation and adaptation. Women often
> have a strong body of knowledge and expertise that can be used in climate change
> mitigation, disaster reduction and adaptation strategies. Furthermore, women's
> responsibilities in households and communities, as stewards of natural and
> household resources, positions them well to contribute to livelihood strategies
> adapted to changing environmental realities. ("Women, Gender Equality and
> Climate Change," 2015)[16]

Reciprocally, uneven contributors to climate change challenge the idea that it is

simplistically "everyone's concern and everyone's problem," as Dobson calls it without

much further qualification (the average carbon footprint of an American is about 10 times

that of a Brazilian, more than 13 times that of an Indian, and 40 times that of a

Senegalese, and one could also observe similar gaps within each of these countries, along

with gaps in impacts of climate change unevenly distributed across class, race, gender,

ability lines). Thus we may remind gender, class, race-neutral advocates of carbon-

neutral politics that, for instance, three times as many women as men died in each of the

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[16] Note the language of "vulnerability" deployed here, as is the case also with the Intergovernmental Panel
on Climate Change reports: this language poses a number of problems as it risks reifying certain
populations to a relatively passive role, while also obscuring the interdependencies, power dynamics and
inequalities which produce the so-called "vulnerability." I will return to this point in my critique of the
IPCC reports in chapter 4.

last Asian tsunamis in the 2000s, and that age and income level also contributed to this disparity. This is never evoked by Dobson even when he discusses women's alleged "greater proximity to nature," which he makes the only, vague and essentialist reason to acknowledge ecofeminism in the last couple of pages of his book. Dobson then recognizes that ecofeminism, contrary to other "ideologies" he distinguishes (socialism, liberalism, conservatism) from ecologism, is quite close to the latter and apt at providing robust concepts with which to think ecologist themes and advocate an ecologist program. Though he does approvingly discuss Val Plumwood's deconstructive efforts (Dobson, 2007, pp. 176 – 188) with respect to human/Nature and the man/woman, male/female, master/slave dualisms, Dobson fails to truly integrate any of these anti-essentialist environmental feminist insights in his own writings. When he refers to feminists' anti-essentialist skepticism with regards to "Nature" being read as having a "feminine character" (allegedly inspiring "care" and nurturing qualities), Dobson describes such skepticism as "balking." He not only fails to fully recognize the essentialism in this feminization of nature, but also proceeds to espouse such "nature as female" as a "normative model," claiming that "ecologists" at large do so.

Getting Deep

Up until the third edition of Dobson's *Green Political Thought,* the British advocate of "ecologism" indeed offered "principal features of the natural world" which were supposed to act as a normative model: each of these ontological features "translated" in programmatic principles for ecologist politics. Though he has retired this passage with the latest edition of the volume without further ado, these normative "lessons from nature" are indicative of a certain kind of deep ecology-informed ecologism born in the

1980s under the pen, for instance, of ecosopher Arne Naess. Dobson then characterized "Nature" as coterminous with "diversity," "interdependence," "longevity," and, last but not least, "nature as 'female.'" These characteristics respectively translated into the (thus separated) political world as "toleration, stability and democracy," "equality," "tradition," and finally "a particular conception of feminism." I must note here the interlaced features of ecologist thought I have been underscoring throughout: longevity, stability and tradition again signal an at least implicit importance of the temporal – in this case a specific temporality imbued here with an account of "Nature" and femininity as constant if not altogether static, unchanging, perennial, an account which we could already make out in both Jonas and Thoreau's depictions including transcendence, cycles, reproduction and even eternity. We may also note that within these lineages of environmental thought, feminized Nature and naturalized femininity have also been alternately associated with portrayals as "temperamental" – both the angelic, pristine, pure and eternal Virgin and the hysterical, unpredictable woman have been invoked.

From a deep ecology perspective, the human/nonhuman dualism has been addressed as a problem which solution resided in the re-valuation of Nature. Arne Naess, who originally coined the term "deep ecology," distinguished this current from what he called "shallow ecology" by stressing that all natural things had "intrinsic value." This included individual animals and plants, but also ecosystems, the Earth, etc. Thus Arne Naess and others (e.g. Naess, Drengson, Devall, 2008; Devall & Sessions, 1985) denounced anthropocentrism and advocated for biocentrism, advancing various fundamental principles to ground this biocentric worldview. In his essay on "the Basics of the Deep Ecology Movement," Naess synthesized these principles as a "common

platform" comprising eight essential points (Naess, 2008, pp. 105-120). The very first

point declared that "the flourishing of human and nonhuman life on earth has inherent

value. The value of nonhuman life-forms is independent of the usefulness of the

nonhuman world for human purposes" (p. 111). By "inherent" or "intrinsic" value, deep

ecologists meant to refer to a value beyond any instrumental use found in natural things.

Nature is not only to be "preserved," "conserved," or "protected" (note the past-oriented,

paternalistic language often used by deep ecologists and conservationists) as a resource

upon which humans depend, but also for its own sake. The "inherent" value is part of

why Naess claimed deep ecology went "deeper" into the problem of the relationship

between humans and "Nature" than did "shallow" ecologists and their anthropocentric,

instrumental views. Point 5 of Naess' platform echoed this proposition, and also gave

away the extent to which this valuation of nature came with a reproduction of the

separation between humans and nonhumans: "present human interference with the

nonhuman world is excessive, and the situation is rapidly worsening" (p. 111). Note the

stress on the urgency, the pace of the crisis included in this point. Arne Naess called for a

"more joyful experience of the connectedness of all things," yet his deep ecology

urgently demanded that humans cease to "interfere" with the nonhuman world so much –

having declared, at the same time, that humans were indeed part of nature. Point 1 of

Naess' deep ecology platform proposed the ontologico-ethical claim that all human and

nonhuman life had inherent value, while point 5 advanced a critical moment in deep

ecologist thinking, whereby human "interference" must become more limited. Though

deep ecology did celebrate a re-valuation of nature, it not only failed to challenge the

human/nonhuman dualism per se but also would *deepen…* the separation of the human

from the nonhuman, as it called for a retreat of humans *from* the nonhuman world. "Deep" ecology's biocentrism is trapped in contradictions that ultimately tend to have it fall back onto anthropocentrism.[17]

Naess' deep ecology also advanced a slightly different version of the concept of sustainability than that outlined by the Brundtland report, though this institutional source provided the model to amend: to Arne Naess, "there is sustainable development if, and only if, it meets the *vital* needs of the present-day human population without compromising the ability of future generations to meet their own *vital* needs" (p. 194). Here the amendment of mainstream "sustainability" concerned the idea of "vital" needs: Naess claimed that deep ecology went deeper than environmentalists among the United Nations World Commission on Environment and Development (WCED)'s injunction to make present needs' satisfaction compatible with future ones, as contrary to the Brundtland report, he stressed that the needs to be satisfied must be restricted to those which are deemed "vital." According to Naess' own admission, the term is "ambiguous, [yet it] is a good starting point for a critical approach to the term 'need' in its relation to demand in the marketplace of the world's rich countries" (p. 194). However, deep ecology has been critiqued by many social and political ecology advocates as well as de-growth and environmental justice ones, for failing to altogether reject the notion of development as it is, in their views, too *deeply* entangled with colonial legacies and universalizing, linear visions of progress – a sort of *depth* to which deep ecology did not

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[17] On this point and for a more extensive critique of deep ecology's ultimately anthropocentric biocentrism, see Andrew Biro, 2005.

seem as sensitive. Further, deep ecology has also been denounced for the often reactionary priorities set by its idiosyncratic defense of biocentrism.[18]

On this point we may turn to the strategic and programmatic moment of Naess' deep ecology. As he discussed some of the programmatic claims defended by deep ecology, Arne Naess declared: "people in the materially richest countries cannot be expected to reduce their excessive interference with the nonhuman world to a moderate level overnight" (p. 283). This concession to an expectation of incremental change in the Global North contrasts with Naess' recommendations with regards to "global actions … across every border:" "local communities or areas with scattered population are uncritically in favor of so-called development and must be forced to a more ecologically responsible policy by central authorities" (p. 113). This is an interesting limit to Naess' call for decentralization and participatory democracy. In other words, Naess' deep ecology was open to concessions and negotiation with regards to changes of lifestyles for Global North inhabitants, allowing these to transition smoothly to "less interference." Meanwhile, Naess claimed that people in "developing" countries may be coerced into a deep ecologist orientation to their politics. On the one hand, changes must "realistically" be incremental and transitions relatively slow (rich people "cannot be expected to" "change overnight"), and on the other, urgency allegedly justifies coercion (poorer areas shall "be forced" into ecological responsibility "by central authorities").Though Naess' occasionally critical view of the concept of development had sensible reasons and in fact could afford to be significantly more radical (without requiring coercion), Naess did not provide much explanation as to why exceptions to democratic, decentralizing imperatives

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[18] See for instance, for a critique of deep ecology from the perspective of social ecology, Bookchin, 2007 and for a feminist critique of deep ecology, Plumwood, 2002.

usually defended by radical environmentalists should be made when it comes to the Global South or "developing" countries.

This is just one among many examples of Naess' envisioning transitions and futures, or conceptualizing "sustainability," in such a way as to barely take global, class or gender inequalities into account, even potentially aggravating these. When examining his deep ecology's strategic moment, we similarly find an apology of tree-spiking direct action tactics in spite of the fact that this means of protest has notoriously killed more logging workers than it has dissuaded logging companies to curtail or stop their deforestation efforts (p. 105). Naess also praised the displacement of indigenous populations in Australia so as to extend the boundaries of conservation land (p. 279). These are justified by Naess with a rhetoric of "return" to an allegedly pristine natural state ecosystems enjoyed "before" human "interference," as well as urgency, along with a selective understanding of present and future "vital needs." Thus the specific ways in which deep ecology critiques the human/nonhuman dualism, in a specific gendered and ethnocentric form, informed by certain temporal assumptions including themes of return, urgency and sustainability, together result in a mere reversal of the human/nonhuman dualism's hierarchy, while tending to exclude already minoritized humans.

Some deep ecology advocates have also been problematically selective regarding the question of what sacrifices shall be made by whom among humans, so as to ensure "less interference" into "Nature": thus in 1988, the journal *Earth First!* infamously published a deep ecology-inspired piece where the author (who signed as "Ann Throphy") suggested violently homophobic means for addressing overpopulation: "if radical environmentalists were to invent a disease to bring human population to sanity, it

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would probably be something like AIDS, [which] has the potential to end industrialism"

(cited by Dobson, p. 52). Co-founder of Earth First! Dave Foreman also has been known

to make xenophobic claims regarding restrictions on Mexican immigration in the U.S as

somehow enabling better land conservation. When some self-proclaimed "deep"

ecologists may rejoice at the mass deaths of queers and AIDS-infected people, fantasize

about the coercion of developing countries, imagine "Nature" as "female," or not shy

away from displacing indigenous populations so as to "conserve" "wilderness," the

"depth" of these advocates of "biocentrism" is seriously questioned, in spite of its still

popular perception among the ranks of some in the environmentalist movement.

One, Two, Nature!

Bookchin's social ecology stands in stark contrast with many of the theories' discussed

above, and though it shares the same central threads (temporality and the

human/nonhuman relation) I have been emphasizing and drawing out in the above survey

of the field so far. His theories conflict with the lineage described above from Thoreau,

Leopold, deep ecology and conservation, within environmental thought, while they find

more affinities with (and are nonetheless distinct from) political ecology (discussed in the

next section) and its precursors (e.g Ivan Illich, Hans Jonas to an extent, and Jacques

Ellul). For instance, Bookchin opened an essay titled "What Is Ecology?" with a

statement in clear disagreement with deep ecology's biocentric perspectives: "ecological

problems originate in deep-seated social problems" (Bookchin, 2007, p. 19). Indeed,

when he wrote this Bookchin was quite aware of the incompatibility of this assertion with

deep ecologists and conservationists' views, whom he refered to negatively, in the

following terms: "those environmentalists who identify the primary ecological problem

as being the preservation of the wildlife and wilderness, or more broadly as attending to 'Gaia' to achieve planetary 'oneness.'"

Bookchin opposed this characterization to his own "dialectical materialism," which has the merit of explicitly stressing the processual nature of "Nature," rather than portraying it, as we have seen in some of the above cases, as static or at best constant in its allegedly regular cycles, and calling for a 'return,' a 'conservation,' or any such past-privileging accounts. In contrast, Bookchin critiques

> the beautiful vistas we see from a mountaintop or images fixed on the backs of picture postcards. Such vistas and images of nonhuman nature are basically static and immobile. …Such static images deceive us into believing in the 'eternality' of single moments in nature. (Bookchin, 2007, p. 23)

In Bookchin's ecology, the processual nature of "Nature" emphasizes that both the nonhuman and the human world profoundly change over time: they are granted a History rather than transcendance. Yet Bookchin does see order in "Nature:" he describes nature as a teleological process. To him nonhuman nature is a "developmental" and "enduring" process which, qua a simplified reading of Darwin, goes from less adaptable, flexible organisms with lesser intelligence, and capacities for subjectivity and self-reflectivity, to… humans, who are more of all these things than any other species, creatures or organisms. What sets "first nature," i.e nonhuman nature, apart from "second nature," i.e human, or social nature, is indeed the "fact" that "humans are highly intelligent, … very self-conscious primates" who can alter their environment. Thus "human beings belong to a natural continuum," they emerge from nature and are natural creatures, yet contrary to other nonhuman beings, they are capable of affecting their surroundings. However,

Bookchin does concede, throughout a pseudo-Rousseauist narrative of progress mixed with degeneration (toward more dominance, more hierarchy, more inequalities), that humans are not alone in being able to alter their environs.

Yet when he is forced to such a concession he quickly escapes from further investigating the rather arbitrary and contestable criteria distinguishing first and second nature, by claiming that what he is describing is a spectrum, a continuum, and therefore if nonhumans also may affect their surroundings and/or exercise intelligence or demonstrate some degrees of consciousness, they are not equipped with these capacities "to the same extent" as humans. Difference between first and second nature becomes a mere matter of degree. What he first establishes as qualitative criteria for distinction becomes quantitative, with the quantities measured being identifiable on "developmental," "evolutionary," "organic" teleological line. This continuum emphasizes a human "superior" intelligence. Besides the fact that the meaning of the concept "intelligence" is (inaccurately) assumed to be sufficiently agreed upon to remain unqualified, this emphasis on human superiority is interesting for a "dialectical naturalism" that also relies upon a "libertarian municipalism" rejecting hierarchization. There remains (unexamined) tension between the Hegelian ontology advanced, and the anti-hierarchy anarchist project defended. Though Bookchin's emphasis on human self-reflexivity, consciousness and capacity to alter one's environment allows him to ground an argument according to which humans would have all the more responsibility toward nonhuman nature, as a "supportive" rather than "dominant" species, and qua an "ethics of complementarity" that social ecology aims to develop, the reasons for human nature to have degenerated into hierarchization, dominance, inequality, as well as ecological damage (the narrative

offered is a mix of progressivism and declentionism) are left to the wonders and

mysteries of dialectics. The progress of this teleological nature is also described thusly:

> Nature is the history of nature. … [This] require[s] a way of thinking that
>
> recognizes that 'what is,' as it seems to lie before our eyes, is always developing
>
> into 'what is not,' that it is engaged in a continual self-organizing process in
>
> which past and present, along a richly differentiated but shared continuum, give
>
> rise to a new potentiality for an ever-richer degree of wholeness. (p. 28)

Yet if the teleological movement guiding natural evolution is one that makes for more

"wholeness," and if the development of human capacities for reflexivity etc is praised as

coterminous with such progress, Bookchin also claims that second nature is not currently

fulfilling human potentialities (among others, as a "supportive" species). Thus the

founder of social ecology describes the negative moment of his "dialectical naturalism"

as follows:

> Second nature as it exists today, far from marking the fulfillment of human
>
> potentialities, is riddled by contradictions, antagonisms, and conflicting interests
>
> that have distorted humanity's unique capacities for development. Its future
>
> prospects encompass … the danger of tearing down the biosphere. (p. 31)

Bookchin thus sees social nature as having failed the achievement of its teleological ends,

and as currently taking a "distorted" and destructive form whereby a teleology of

progress turns into a declentionist one. Extracting both humans and nonhumans from this

path is possible if a "true" second nature, one that actually fulfills human "potentialities"

is restored, qua "libertarian municipalism," or the ecological society: small communes

with restricted needs would be self-managed in direct democratic manners, and federate

in broader bioregional sets. To Bookchin, capitalist societies distort second nature, organizing structurally around an imperative to growth that intrinsically is incompatible with ecological well-being, and instead promotes devastation. The regeneration that would occur in the ecological society would not reject technology per se, but would be capable of creating different technology. In a quasi-Illichean way, Bookchin claims that technology in a capitalist society is necessarily thought through the prism of the growth imperative, but that technique is not in and of itself noxious. I will return to the programmatic moment of Bookchin's social ecology in the section below on utopia and ecosophy. For the time being, we may underscore that for Bookchin, temporality and the human/nonhuman dualism are inseparable, insofar the processual, historicizable and developmental character of nature makes the two terms parts of a single continuum rather than completely separate spheres. However, Bookchin does not try to part ways with the dualistic nature of this process, and instead he further reinforces a normative ordering privileging the human. He does so qua a reading of the process as a teleological one – as we will see, this teleology will clash with the temporality of becoming that I will defend here.

What Is To Be Done With Political Ecology?

"What is to be done with political ecology? Nothing. What is to be done? Political ecology!" (Latour, 2004, p. 1) This provocative and enthusiastic exclamation is Bruno Latour's, and it opens his book *Politics of Nature*. Though in the United States, it is sometimes misread as referring strictly to the field of scholarship called "political ecology" and calling for further politicization of this academic field, in the French context where Latour's book was first published it is rather the social and political

movement of this name that the first chapter of the text stresses (though the STS scholar also includes ecology as a scientific subfield).[19] I will suggest below that Latour, along with an eclectic crowd made of science studies, philosophy of science, environmental and feminist theorists that could very loosely and imperfectly be described as "post-structuralist" for some, "new materialist" for others, "object-oriented ontologists" for many (these three currents also overlap and clash, to various extents) have together radicalized and complicated some of the insight that proliferated in part out of the political ecology tradition.[20] We will see that this double elan of complication and radicalization is particularly visible if we read these various texts and currents from the perspective of temporality in relation to the nonhuman. For now, and to clarify some of what Latour is inviting to "be done," I turn to one of the founding thinkers who influenced "l'écologie politique," understood as a political movement and a current of ecosophy.[21]

Andre Gorz, a prominent figure of the New Left in the 1960s and 1970s, focused on and developed what he and many in continental Europe called "political ecology" starting in the aftermath of May 68. Influenced by the Frankfurt school (he was a friend of Marcuse's) and also by Ivan Illich, Gorz advocated for an "ecological, social and cultural revolution which would abolish the constraints of Capitalism" (1980, p. 40). In his *Ecology as Politics*, Gorz denounced both "monopolistic capitalism" and

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[19] See my and Elizabeth Barron's upcoming paper: "Political Ecology, Ecologie Politique: Interdisciplinary Losses in Translation."

[20] See the introduction to this dissertation for more on queer and feminist ecologies.

[21] Granted that, as I have mentioned above in other authors' cases, a number of other important figures could have provided a general idea of where political ecology originated, and the survey in this chapter is by no means exhaustive. It rather offers prominent examples, for each current examined, of authors' insight regarding the human/nonhuman dualism in relation to temporality. In the case of political ecology, I could have turned for instance to Michel Serres (1995), or co-founder of Generation Ecologie, activist and anthropologist Serge Moscovici (2002).

"bureaucratic socialism" as the two facets of an industrialism incompatible with the limited resources of this planet. He thus participated in inaugurating the tradition now lead by thinkers like Serge Latouche and called "de-growth," formulating its ideals of economic contraction by claiming that the only way compatible with limited planetary resources would require to "produce less, to consume less, to work less, to live differently." Gorz proposed a polemical reading of productivism and consumerism that resolutely aimed at thinking social and economic inequalities alongside ecological devastation, bringing class-oriented left themes together with environmental justice. He insisted that "nature is not a garden planted for our benefit," while also repeatedly asserting that nature was not sacred either. In this perspective, the relationship between the human and the nonhuman cannot be animated by a deep ecologist reversal of the dualism's hierarchy celebrating "Nature" now placed on a pedestal. Neither did Gorz part ways from humanism. A generous reading of his works could conclude that he pushes aside both biocentrism and anthropocentrism, yet Gorz did remain focused on a relatively unapologetic anthropocentric viewpoint which argued for economic contraction mainly because natural resources' depletion and exhaustion create increased inequalities among humans and risk serving as justifications for anti-democratic measures in the emergent event of ecological catastrophe. Three axes could thus be identified in Gorz' works: social and economic inequalities, democratic participation, and ecological damage were his principal inter-related concerns. Though visibly close to Bookchin's social ecology, with regards to temporality (at the historical level) Gorz's political ecology contrasted with Bookchin's critique, in that it did not propose a reading of natural or social evolution in (potentially rigid) teleological terms, and neither was it moved by a declentionist nor

progressive vision. Instead, Gorz proposed an astute critique of productivism and consumerism grounded in a largely revised Marxist analysis, along with a resolute conviction that lifestyles could indeed be re-invented to adjust to natural limits and radical democratic imperatives, slowing down the relentlessly sped-up paces of late modernity (thus Gorz follows his friend Illich at the level of quotidian temporalities). He offered such a horizon of change away from capitalist growth as one possibility which may or may not prevail, depending on collective mobilization, just as he tended to explain the current ecological crisis in ways suggestive of over-determined contingency rather than progress or decay. Yet I will suggest that the role of temporality in Gorz's works remained problematic, when I discuss his description of "a possible utopia" in the section below (II).

More Political Ecology: OOO Subjectivity, and Matter Matters

But for the time being, let's return to Bruno Latour's invitation: as I mentioned, in his *Politics of Nature*, he asks provocatively "what is to be done with political ecology?," answering this provocation with a simple "nothing," itself followed immediately by a second question: "what is to be done?" The answer offered then: "political ecology!" Latour's invitation to "do" political ecology is interestingly quite inseparable from an insistence both on temporality, and on human/nonhuman subjectivities. However in his case, the agency at works is one lacking agents, and including instead actants, hybrids, involved in a "parliament of things," nonhumans being allotted "spokespersons" found in part in the sciences, and a new constitution bringing together or assembling "Nature" and culture, the sciences and politics, running counter to modernity's efforts of separation and translation between these two poles. This would perhaps position Latour as – at least

partly – an environmental philosopher, though more significantly his works are the result of a general trend in some segments of (overlapping) Science and Technology Studies, (so-called) post-structuralist theory, philosophy of science and what has now been named "new materialisms."[22] These have recently turned to new "matters of concern" due to the "eruption of Gaia" (2009). The events and changes mentioned at the beginning of this chapter, including various sorts of ecological crises and urgencies, have indeed prompted many to address themes that so far had mostly interested Environmental Political Theory or ecosophy per se. So rather than reading Latour as such an ecosopher, which would risk being reductive (though not entirely inaccurate anymore), it is interesting to note that he and others, though not originally or exclusively environmental theorists, have felt compelled to focus their attention to ecology in this context. In the case of Latour, temporality also seemed an inevitable problem related to the nonhuman turn. I would contend that this is not only caused by the importance granted to time and temporality in Latour's previous works, though it helped: if a meeting took place between on the one hand, a Latour who had previously asserted that "we have never been modern," critiquing the unidirectionality and unidimentionality of time in modern discourse, and on the other, the nonhuman turn, it was because this problematic linearity of modern time is also problematic when nonhumans invite us to rethink the world and the separations "moderns" have attempted (ultimately with limited results) to create. To Latour, hybridity proliferates particularly in our contemporary context, a hybridity that requires to rethink democracy as well as the passing of time. In fact, the futurism at work in modernity

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[22] Exhaustive discussion of the work done over the last couple of decades in this booming field is beyond the scope of my argument, but just as an indication of this development, we may cite a couple of anthologies, which to an extent are the start of a good indicator for how prolific this area has been lately: Grusin et al., 2015; Van der Tuin & Dolphijn, 2012; Braun, Whatmore, Stengers et al., 2010; Afeissa, 2009; Bennett, Cheah, Orlie, Grosz, Coole, et al., 2010.

(which I will further discuss in much of this dissertation), is described by Latour in the following terms: moderns have always been running toward the future, only their backs were turning backwards the whole time. This metaphor will come back a number of times in what follows, but already we may point out that, simply put (for now), the uni-directionality and uni-dimentionality of modern progress poses serious threats to both human and nonhuman life. Understandably, while hybridity (between humans and nonhumans and technological things and creatures) becomes ever so salient when hitting planetary limits, challenging a "modern constitution" that desperately attempted to separate for a more efficient reign, so does the need for critique of modern temporality become inevitable. In times of ecological crisis, times of progress are especially put in doubt.

Similarly and before Latour (already in 1989), Felix Guattari had reflected on what Stengers has called "the eruption of Gaia": he opened a short essay titled *Les trois écologies* with an expression of urgency and threat:

> Planet Earth is going through a period of intense technico-scientific transformations and phenomena of ecological unbalances are being engendered as a result, which threaten, in the long run and if they are not remedied, the implantation of life on Earth's surface. (1989, p. 11)[23]

In this essay Guattari called for an ecosophy operating in three registers or ecologies, namely that of the environment, that of social relations, and last but not least, the domain of human subjectivity. He argues that "there will only be a truthful response to the ecological crisis at the planetary scale if an authentic political, social and cultural revolution occurs, that would reorient the goals of the production of material and

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[23] NB: all the following quotes are my translations.

immaterial goods" (p. 14). If Guattari's call, which he further explored in the concluding chapter of his later book *Chaosmose* (1995), was strikingly urgent and related to the livability of human and nonhuman life, he mentioned that the necessary re-invention of subjectivity needed to match these circumstances would have to also "re-invent … the relationship of the subject to the body, fantasy, time that passes, and the 'mysteries' of life and death" (1989, p. 19). Guattari adds that "what is now in order is the release of fields of 'futurist' … virtualities," as "the unconscious only remains attached to archaic fixations only insofar as no engagement has it reach out to the future. This existential tension will operate qua human and nonhuman temporalities" (p. 28).

We are again invited to think the human and the nonhuman in relation to temporality, and though these are dispersed and omnipresent yet passing mentions, spread throughout Guattari's text, the importance of temporality to a number of authors who turned to the nonhuman from post-structuralism has become increasingly even clearer since. Perhaps this is also in part due to the proliferation of "new materialist" and "object-oriented ontology" literatures that occurred since the beginning of the 21st century, with some among these publications addressing temporality: in so many texts, it seems relatively sensible that temporality would erupt from time to time. Yet something more fundamental seems at play, perhaps more fundamental even than some passing references to temporality might seem to indicate in some of these works: if authors in these emerging fields do not all substantially develop new conceptualizations of temporality, it is omnipresent at least as a frequently recurring mention, almost taken for granted as important, so self-evidently crucial that it sometimes acts as a background,

undeveloped given. This may require that the question of time be foregrounded and accorded the time and attention it needs.

Though not alone (we have already started to see how feminist and queer theory has contributed here), William Connolly's works have advanced such a project to great extents. Connolly situates his own work on the fragility of things and thinking a new philosophy of becoming for this age thusly:

> The 'new materialism' is the most common name given to a series of movements in several fields that criticize anthropocentrism, rethink subjectivity by playing up the role of inhuman forces within the human, emphasize the self-organizing powers of several nonhuman processes, explore dissonant relations between those processes and cultural practice, rethink the sources of ethics, and commend the need to fold a planetary dimension more actively and regularly into studies of global, interstate and state politics. (2013, p. 399)

Connolly situates this new materialism in a different manner than I am here, as he sees it (rightly) as a number of convergent movements coming from philosophy, biology and the humanities. This further confirms what I was starting to suggest above: the eruption of Gaia is forcing a rethinking of subjectivities and matter, nature and culture, the human and the nonhuman, such that the latter two relationships are not taken on just by scholars exclusively or originally engaged in ecosophy or EPT.

In continuation of Deleuze's Nietzschean exhortation to take the difficult task of making chance an object of affirmation, Connolly affirms becoming as he re-thinks the world and the human condition, as well as humans' relationship to the world. He describes temporality in a world of becoming as "action-orientated perception and the

slower experience of the past flowing into the present and both flowing toward the future" (p. 305). Underscoring the limits both of linear causality and providential design, he points to the "bumpiness," randomness, surprise and contingency of time, marking the movement of the past into the future. A recognition of the limits of human powers, a world of becoming is made up of force fields always already engaged in motion and transformation, which would not be possible without the passing of time (and reciprocally, time could not possibly pass if it weren't for such force fields in motion). Thus once we know that matter indeed matters, that the nonhuman and the human are always already entangled, we cannot but also think the world in terms of motion, speeds, bumps, shifts, constant re-distributions. Temporality needs to be radically re-conceptualized as characterized by contingency and becoming.

Drawing not only from Deleuze but also from complexity theory and with an open sense of accommodation for a plurality of creeds, Connolly's philosophy of becoming could result in a groundlessness that may be frightening to some. Yet it is above all an occasion to affirm agency without subjects, a needed project in a context where the nonhuman emerges as omnipresent and entangled with the human. In conjunction to this philosophy of becoming, Connolly offers possible antidotes, ways to live that may creatively address some of the forces that have either fueled the climate and other ecological crises, or denied it to defend instead a specific – and volatile – version of capitalism. One way is to affirm a tragic temporality (2008), which instead of relying upon vengeance, resentment and eschatological visions, would turn to awareness and affirmation of conflict and of finitude – here William Connolly is clearly re-asserting his works in the agonistic tradition. Others have to do with positive visions of alternative

futures, which I will discuss below as a point of contrast to utopian ecologisms (see II below).

Queer Eco-Temporalities

With the above survey of the recent history of Ecosophy and Environmental Political Theory I have shown that, in posing the problem of the relationship between the nonhuman and the human in response to the current ecological crises, temporality has also become a central thread to key authors and schools of thought within this field. However we see from the readings I offer here that this connection between temporality and the question of the nonhuman has often taken on problematic gendered forms. For this reason I now turn to feminist and queer theory's dealings with both temporality and ecology. A number of pertinent debates within queer and feminist theory have erupted in the last few decades: firstly, feminist and queer theory have gone through what some have called a "new materialist" turn (Alaimo, 2008) that has discussed nature, ecology and the nonhuman in innovative ways. Related to this shift is the emergence of "queer ecologies" (Mortimer-Sandilands & Erickson, eds., 2010), i.e efforts to rethink nature as queer, confounding our cultural gendered categories rather than caught in essentialist, static sex binaries. Finally, queer theorists have engaged in rich debates over temporality, contesting "straight time" (Halberstam, 2005) and reflecting on what alternate temporalities queers inhabit. However, feminist and queer debates over queer ecologies, nature matters, and time, have not or very rarely crossed paths. Rather, they have been pursued as parallel realms of inquiry. In other words, while the former two (new materialist feminisms and queer ecologies) greatly overlap, queer times and queer natures have yet to meet and be entertained as interconnected problems. Posing the question of

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queer eco-temporalities would bring these debates in conversation with one another and enable a much needed feminist intervention into ecosophy.

In *Feminism and the Mastery of Nature*, Val Plumwood (2002) has offered feminist insight into what she reads as the human/nonhuman 'dualism' which organizes much of Western discourses, and which operates not only similarly to but also interdependently with other dualisms opposing Man/women, culture/nature, master/slave, mind/body, etc. Plumwood's deconstructive approach helpfully strives to distinguish these dualisms from simple binaries or dichotomy, arguing that they rely upon radical exclusion (or hyperseparation), backgrounding or denial (the supposed dominating term in each dualism is seen as independent from the dominated one, negating the essential work the "Other" does to sustain the "self"); incorporation (or relational definition: the subjugated term is defined in relation to the upperside, as a lack or negativity); instrumentalization (or objectification, e.g nature is man's garden); homogenization or stereotyping (the lower side of the dualism is caricatured, which implies that a simple reversal of the relation of power at stake with both terms unchanged is insufficient at best, dangerous at worst, as occurs when deep ecology celebrates the "intrinsic value" of nature and failing to sufficiently re-conceptualize it). Plumwood's deconstruction exposes this logic of colonization and re-conceptualize both terms for a new ethics. She thus has opened the possibility to see how valuable feminism may be to environmentalism, and vice versa. Further even, she has demonstrated that one cannot do without the other: the implication of demonstrating that various dualisms like human/nonhuman and male/female are interdependent is that the resistances against the orders organized by such logics are also interdependent.

The work of Donna Haraway has also enabled a feminist or queer ecology to come into existence. For instance, she read primatology (1989) as a discourse that constituted white, male, Western, upper class subjects and cast non-human, non-white, non-western and female subjectivities as "Others" against whom the norm may establish itself as such. Her famous cyborgs and companion species manifestoes (1987; 2003) have challenged readers to think of the hybridities that make up all situated subjects and situated knowledge, as discursively constituted – while reminding us that these discursive constitutions have a materiality also requiring problematization. As Stacy Alaimo has written, "Nature, as a philosophical concept, a potent ideological mode, and a cultural repository of norms and moralism, has long been waged against feminists, people of color, indigenous people, queers, and the lower class. Paradoxically, feminists, the working class, tribal peoples, and people of color have been denigrated because of their supposed 'proximity' to nature, even as queers have been castigated for being 'unnatural" (Alaimo, 2008, p. 239).

Environmental feminist theory has simultaneously engaged these interconnections, these complex and contradictory uses of "Nature" against women and "Others," while also pursuing an internal critique of feminist theories. The latter have indeed often been so intent on parting from essentialism to demonstrate the social construction of gender that they have sometimes paradoxically failed to properly address ontological and epistemological questions of matter, the material, "Nature," the environment, the biological body. In contrast, Alaimo's approach conceptualizes the fundamental hybridity of our makeup, by way of her notion of "transcorporeality," allowing for a queer feminist engagement of the nonhuman and questioning the porous

boundaries of human and nonhuman life, including at the skin's scale. Transcorporeality provides substance to re-imagine nature as queer, as processual, agentic rather than serving as passive background, fragmented, traversed by historical/herstorical change, having porous boundaries or hardly discernable ones, entangled with human bodies. The nonhuman is thus invested with feminist stakes, and reciprocally, feminist critique and struggles have nonhuman stakes.

Similarly, Myra Hird's work on animal biology (2008) shows that "we may no longer be certain that it is nature that remains static and culture that evinces limitless malleability." Indeed, she provides a profusion of examples from the so-called natural world which queer it to the point that heterosexism may seem, in this perspective, quite "unnatural." Supposedly female and male characteristics shift and change rapidly among animals and living beings, "the vast majority of cells in our bodies are intersex," etc. This re-reading of "Nature" and biology from a queer perspective suggests open possibilities that, instead of avoiding or casting aside biology and nature as threatening to feminist positioning, may indeed nourish the latter. Claire Colebrook advances yet another kind of queering, proposing an alternative reading of the genealogies of vitalism where certain vitalisms have historically served normatively dominant valuations of life, while a vitalism emphasizing the virtual rather than the actual (from Nietzsche and Bergson to Deleuze, etc), may be thought of as queer (2014, pp. 100 – 126). Queer Deleuzian Feminist Rosi Braidotti invites new materialist feminism to rethink subjectivities in terms of nomadic subjects, and emphasizes becoming-nomad and becoming-animal as ways to experience a groundless world of precarious becoming (2011; 2013). Object-Oriented Ontologist Timothy Morton (2010; 2013) also was one of the first authors to propose the

phrase "queer ecology," in his case to advocate for the abandoning of the concept of Nature, which he deems a crystallization of history, and asserting our constant partaking into a mesh or interdependent, complex beings simultaneously uncanny and familiar whom he calls "strange strangers." Strange strangers require us to "think big," and "hyperobjects" such as the planet, climate change, deep time do so as well. There have been significant tensions which I cannot elaborate on here, between object-oriented ontology and speculative realisms, on the one hand, and new materialist feminist theory on the other, yet they converge to an extent in calling for queer ecologies.[24]

This whole literature indeed stresses contingency, the unexpected, and becoming as central to the feminist intervention into matter and the nonhuman and to the new materialist turn within feminism. However, few spend as much time on time as Elizabeth Grosz does (1999; 2004; 2005). Re-reading Darwin, Bergson and Deleuze from a feminist perspective and stressing temporality, she affirms randomness, chance, surprise, unexpectedness in stories of evolution, in art, and in a context of ecological damage. Indeed, queering both the human and the nonhuman calls for queering temporalities and challenging straight time.

But parallel to these debates among new materialist feminists and regarding queer ecologies, queer theory has also sought to question visions and experiences of time, so as to "queer" it. This has taken place without necessarily or often being connected to the ecological debates, so that bringing the two literatures together may enrich a queer perspective on eco-temporalities. I will now turn to a couple of authors in this vast array of work (Halberstam, 2005; Freeman, 2010; McCallum & Tuhkanen, 2011), as the goal

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[24] For feminist responses to some OOO and speculative realist critiques that also sum up the stakes and issues debated, see Bennett (2015) and Sheldon (2015).

here is not to exhaustively review this literature, but rather to extract pertinent insights

which can feed into my own contribution. Specifically, I choose the central debate

between Edelman and Munoz, as it also staged a familiar character whom Munoz

introduces against Edelman's presentism and which I will discuss further in the pages to

come: utopia. Lee Edelman's *No Future: Queer Theory and the Death Drive* (2004)

played a crucial role in launching the debates within queer theory regarding temporalities.

In his book, Edelman argues that the reigning, heteronormative temporality rests upon

what he denounces as "reproductive futurism." In his view, heteronormativity powerfully

subjects the present to an always already postponed future qua the fetishized figure of the

Child. Because of a constant obsession with the Child as representing innocence and

calling for protection, queerness becomes the incarnation of the negation of futurity, the

embodiement of a dangerous death drive. All sexuality, when not redeemed by the

imperative to reproduce, is indeed dangerous, both in itself and with respect to the status

quo. Edelman calls for queerness' espousal of this dangerousness. He asks that queerness

embrace the refusal of the – futurist – social and political order. Queerness must, in

Edelman's account, further mobilize and deploy the negativity of which reproductive

futurism accuses it. Fuck the future! Fuck the Child! (p. 29) thus becomes a queer outcry

meant to contest and resist the heteronormative subjection to the future. To a great extent,

this critique of reproductive futurism could also be extended to ecological questions of

limits on growth: what I call uchronia is in part defined by a subjection of the present to a

future of always more. This ever-postponed tomorrow of impossible illimited abundance

in a limited planet purports to justify ecological damage and destruction today, just like

the abstract, fetishized figure of the Child enables the normalization of heteronormative

reproductive sex today. Thus Edelman's attack on reproductive futurism can be transposed to the questions pursued in queer ecologies and offer insight.

However, while the sort of anti-relational presentism Edelman then calls for, and the eloquence with which Edelman portrays it, can be highly seductive, his critique of reproductive futurism also contains – or so I wish to object – a potentially nihilistic hyper-individualism incompatible with the stance of an environmentalism that also would invite an uprise against futurism (understood as the subjection of the present to an abstract singular future), without abandoning futurity. Instead, queer eco-temporalities could endeavor to re-think the future with respect to virtualities and possibilities beyond heteronormativity, beyond capitalist growth. In the next chapter I will further discuss the figure of the Child, which Edelman rightly underscores as heteronormative and in need of challenging in its abstracted, fetishized form, versus children, queer kinships (Haraway, 2015) and "future generations" involved in eco-politics. Helped with Claire Colebrook's queer vitalism (2014), I defend futurity against futurism, a distinction which Edelman fails to make: rejecting the futurist ways in which an abstract future (in this case a heteronormative future where the figure of the Child dominates) subjects the present, Edelman rejects futurity in general. Edelman's critique is highly valuable, insofar as it gestures at destabilizing the subjection of concrete present and future realities under the yoke of abstract futurism. Yet the critique of "reproductive futurism" should focus more specifically to futurism, rather than rejecting all vitalism and interdependency in favor of a presentist nihilism. Presentism can indeed be a form of abstracted time, separated from both futures and pasts, thus equally problematic compared to remote utopias of growth. In fact, Edelman's presentism illustrates that attempting to resist against the submission

of the present to a singular normative future qua a merely reactive stress on the present is itself a form of utopianism. Such reaction simplistically re-locates the "good time" (eu-chronos, uchronia) in an isolating and hyper-individualist present instead of the future or futures.

Jose Munoz pointed out, in his *Cruising Utopia: the Then and There of Queer Futurity* (2009)*,* that Edelman's anti-relational account posed problems not only as it may indeed result in a solitude or hyper-individualism not all queers may enjoy, but also because the present may not be such a pleasurable or desirable place for queerness to occupy. Instead, qua Ernst Bloch's conceptualization of utopia, Munoz defends the "not yet here" character queerness affords. While I find that Munoz is right to critique Edelman's anti-sociality and his presentism, I also find the former author's turn to utopia highly problematic. Both authors take issue with 'straight time,' as Halberstam has put it (2005), and Edelman in particular underscores one of its fundamental problems, namely the subjection of the present to an abstract futurism. Yet Edelman falls into the rejection of the future and futurity which he fails to distinguish from abstract futurism, while Munoz, seeing the trap of Edelman's presentism, falls into another: he ultimately situates possibility and change in an ever-receding horizon line once again, armed with Bloch's concept of utopia. I argue that the needed queer eco-temporalities that the current eco-crises call for cannot afford to project desires, hopes and concrete actions for change on a time disconnected from time (uchronia), whether it be an anti-relational, hyper-individualist, presentism, or eco-queer utopia.

Utopia and Ecosophy:

Gazing Through Concrete Landscapes To an Ever-Receding Horizon Line?

> Without concluding that narratives which recount an elsewhere and an otherwise be solely a nuisance, I declare it brutally: utopia is death, as we would like to live it. … It congeals time, submitting existence to rituals that are often obsessive; it neutralizes space, situating its narratives in the improbable and the "placeless" … Yet, desirable, it does so while rendering this death attractive and pain-free. … [It evokes a] fascination for an immersion in an undistinguishable fetal and lethal state.
> J.M. Besnier

Utopian Voices v. the Voice of Reason

Utopia, a bit like temporality, is a recurring theme in ecosophy that is often obscured by the more obvious human/nonhuman thread, yet is directly connected to both the latter, and to temporality, in their various gendered manifestations. As this section aims to illustrate, a number of the authors discussed above either praise or reject utopia, or they may include a utopian moment in their reasoning. However, few actually explain what they may mean even when they use these terms, or what function this category serves in their thinking. In this section I will describe and analyze this, and though what follows is by no means an exhaustive portrayal of the ways in which ecosophical literature so often incorporates the theme of utopia, I will provide a couple of examples I find particularly pertinent so as to further situate my own position with respect to ecology, utopia and temporality, laying the ground for my own contribution. From these, the need for queering eco-temporalities will become increasingly apparent (see section III).

Utopia, a term famously coined by Thomas More's eponymous novel depicting the visit of a (Western) traveler into a Platonic ideal Republic in a remote location, is etymologically built on a double meaning: "*eu-topos*" refers to the good-place, while "*ou-topos*" means no-place or placeless place, the place that is no-where. More's dropping the vowels leaves an ambiguity, a tension and/or a conflation which the modern meanings of utopia often comprises. The good place is also the place outside of all actual places, the unattainable one, perhaps to strive for, or perhaps to melancholically regret as a desirable and desired impossibility. Consequently, characterizing a political project or strategy as utopian may be appraisive, as we will see in the instances of ecological thinkers who proudly assert their utopianism. It may also be discrediting, accusatory: what is utopian is deemed unrealistic, unrealizable, impossible and naïve, idealistic.

These appraisive and accusatory or discrediting meanings are also informed by the either internal or external perspective which the qualification comes from: some within a particular current of environmentalism may adamantly refuse to be called utopian, as they may see this mostly as a discredit shed upon proposals they intend as realistic as well as demands they deem to belong to non-negotiable necessities. A description of ecofeminists as "utopian" by some eco-modernization, non-feminist currents of environmentalism would, for instance, be greeted with uproar and counter-accusations that it is the latter perspectives which aren't as realistic as the ecofeminist ones, and that, for instance, the project of re-conceptualizing women and men's roles as well as humans' relationship to nature is not an idealist but a necessary one, one which ecofeminists have every intention to turn into reality. Perhaps a more specific and telling example could make this point even clearer. Leaving aside schools of thought or broader

movements like ecofeminism as such, let's think of one of the many women Vandana Shiva (among others) has written about as involved in leading the Chipko movement in India. Now let's imagine her reaction if told that this movement's efforts to protect Himalayan villagers' livelihoods, their access to water, land, and forest shall be described as "utopian." The violence committed by characterizations of certain radical environmentalist claims, projects and views as "utopian" is especially clear when ecological devastation becomes a more and more explicitly vital matter. Insisting to depict such vital matters in terms of utopianism is a claim to the probability of death: it would be so beautiful (eu-topos) if you could keep living livable lives, and at the same time this idea is outside of any realistic imaginings (ou-topos). We may also imagine the reactions of a person belonging to a generation a couple of decades into the future, whose life has been directly affected by runaway climate change (this is not to imply, far from it, that climate change only affects remote future generations). Knowing this change which has damaged her life (or perhaps rendered it impossible) has been caused to a great, crucial extent, by the globalized carbon-emitting economies of today, should we even bother asking this person whether the contraction and radical re-invention of such present economies is utopian or whether it is needed, worth a shot, whether it should be granted possibility no matter how probable? We may finally imagine a conversation with one of the hundreds of nonhuman species currently endangered by the anthropogenic sixth mass extinction under way: if we were able to hold such a conversation, would such a species agree that ideas of radical change formulated so as to contain further destruction are "utopian"? Of course these examples are hardly comparable beyond this thought experiment, and actually deeming a more profound commonality would risk doing

violence to the unique subject positions at stake. Nonetheless, this question of who and what can afford to concede a "utopian" character to certain radical ecological critiques, claims and agendas seems especially salient and concerning, given how widespread the use of this term is.[25] It has become quite commonplace, both for appraisive purposes within the ranks of – mostly Western, mostly white, mostly non-feminist – ecosophers and/or environmentalists, and, at the same time, to serve the discrediting and dismissive purposes of environmentalism's detractors (whose "voice of reason" may utter things like "come on, we know you're cute and utopian and idealist, but let's be realistic, remember growth and the market really dictate what reality demands: in fact your 'reality' is unreasonable and their reality is the only one that counts as such"). As will start to become apparent by the end of this section, I wish to debunk both uses (appraisive and dismissive: their effects are equally noxious), and to reverse the charges (making room for snapping back: "the voice of reason is wrong, the market is the utopia, its demands are unrealistic").

For instance, ecologist Andrew Dobson proudly praises his own depiction of ecologism's program for a sustainable society as 'utopian,' in the hope of connoting how closely related to the good life and how radical the Green project is. At times, his use also signals that the project is a rather unconceding whole, while in other instances Dobson calls the Green program a "utopia" in order to connote the admission that 'realistic' room for negotiation exists when it comes to building a sustainable society, and that

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[25] We may mention, for instance, that French ecosophy includes a whole set of works published as a series in the independent presses "Editions Utopia," including a *Manifeste Utopia* (2008) postfaced by French political ecology precursor Andre Gorz. I will further comment on this text in chapter 4 below. Many books on de-growth philosophy and political ecology are published under this same series.

ecologism's platform of claims and vision for a green society is but an ideal to strive for[26]

("dear voice of reason, don't worry, we hear you: we radical ecologists and de-growth advocates realize how crazy we sound, and really we're reasonable enough to readily accept your reality, with all subsequent concessions amending what we first saw as realistically needed"). Ultimately, as I will try to suggest in what follows, these contradictory deployments point to the insufficient attention paid to the meanings and effects conveyed by a term that has become commonplace enough for at least a significant contingent of ecosophers to use. (Appraisive) meanings of 'Utopia' are often taken for granted even though this term does no less than indicate the situation of a political project and strategy with respect to the real. As such, the notion in fact calls for further scrutiny.

My defense of and critique with regards to ecologism addresses precisely these tensions: I wish to show that though many greens have or have been identified as 'utopians,' sometimes espousing this term as appraisive, sometimes fending off accusations of a utopianism they rejected, they (we) would benefit from turning the tables around, and accusing the productivist, growth society of being utopian. Shifting the emphasis from *topos* to *chronos* (and *kairos*), I have coined the term "*uchronian*" to characterize capitalist growth-oriented temporalities. Thus I agree and defend a lot of elements in the respective ontological, ethical, political visions, strategies and projects

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[26] "[The planet's] finitude provides the fundamental framework within which any putative picture of a green society must be drawn. The guiding principle of such a society is that of 'sustainability,' and the stress on finitude and the careful negotiation of Utopia that it seems to demand forces political ecologists to call into question green consumerist-type for environmental responsibility" (Dobson, 2013, p. 64). This quote is quite revealing of the tension here: finitude in planetary resources, requiring economic contraction, is depicted as the identifying criterion which define "dark greens." But however fundamental of a framework this provides for the sustainable society, Dobson grants this a negotiability expressed qua the term "Utopia." Utopia is the ultimate goal, that which will never be attained, and which one is willing to chop in order to obtain a "more realistic" sustainable society.

developed in certain strands of ecological thought (as should already be clear based on the overview of debates over temporality and the human/nonhuman dualism, above). Yet, I intervene in this field by calling for a non-utopian claim to ecological ways of living and seeing the world, considering many of these as radically pragmatic, and capable of displacing the impossible temporal horizon which capitalist growth offers and which has brought us to an ecologically catastrophic situation.

A Utopia of One

From Thoreau to William Connolly, many of the authors mentioned above have felt compelled to envision worlds, societies, futures, projects more or less concrete or remote from their actual present as a form of thought experimentation. These have aimed to describe the alternative lifestyles and societal models ecosophers consider to be needed so as to confront environmental damage. Thoreau's famous novel *Walden* (2008), allegedly describing his experience living for a year in "the wilderness" and in autarky, has sometimes been described as a "utopia of one." Indeed, though Thoreau's narrative told a story of autarky in the wild, where he killed an animal with his bare hands, his self-made wooden barrack on Walden Pond was just a couple miles away from his mother's house, where he would regularly go get a cookie. The "reality" behind *Walden* was closer to a kid's backyard's tree house than to the concrete realization of an alternative way to live. Yet children's tree houses are important to imagination, and imagination is in turn crucial to creating new ways, and to apprehending the real (critically): thus as a tree house narrative imagining a possible alternative lifestyle, as fiction, therefore, Thoreau's book remains tremendously inspiring. *Walden* describes an ideal for a solitary way of life, a hypothetical set-up, the possibilities that open up once one lives by the motto

"Simplify, simplify, simplify!" (p. 62) More than an accurate depiction of a 'real' experiment, Thoreau offered a valuable description of what could be, what worlds could emerge at the individual level, if only the ever so busy moderns that then surrounded him were to scale (and slow) down. Thoreau even provides a budget and a list of necessities (p. 37), such that this thought experiment in a place abstractly called 'the wild' which existed more in his imagination than by Walden Pond, could act as a form of concrete proposition. He reminds his readers that neither those who came before any given generation nor himself as a writer should dictate young ones how to live, and that each individual must devise their own ways (p. 219). Thus *Walden* describes Thoreau's version of the good life ('*eu'* –'*topos'*), in a non-place ('*ou'* – '*topos'*) named 'wilderness' or 'Nature,' loosely imagined based on actual woods next to Concord, Massachusetts. Like many utopias previously and subsequently written, *Walden* projects some possibilities and criticisms from the here and now, to imagine them as realities of a distorted future or distanced place, then bringing certain lessons about the good life, to our the concrete present and its needs for change.

A Possible Utopia

What Thoreau devised at the individual level, in his "utopia of one," a number of ecosophers have since developed at a collective level. I have mentioned Andrew Dobson's appraisive use of the term 'utopia' so as to recognize the negotiability of Greens' project for a sustainable society. Andre Gorz, whose works I discussed above, and Serge Latouche, one of the main theorists of the de-growth movement, also resort to utopia, inserting it in oxymoronic phrases like "a possible utopia" (1980, pp. 42 – 50) or "a concrete utopia" (2009, pp. 31- 67) respectively. In both cases, what they are referring

to is the outline of a program, which in itself may pose a number of problems with respect to imperatives to collectively and democratically decide upon common societal and lifestyle paths, yet if presented as such, could constitute interesting proposals that would undoubtedly have their place within the kinds of semi-manifesto genres espoused by both thinkers, and for purposes of "de-colonizing imaginaries" (as Latouche puts it, following Cornelius Castoriadis), a.k.a tree house building. After all, many branches may indeed burgeon from such trees and their oikos.

Specifically, Andre Gorz closes his famous essay, "Ecology and Freedom" (1980), with a whole section titled "a possible utopia," narrated from the uncanny point of view of the citizens of a revolutionized France that transitions to a sustainable society. The narrative opens with the sentence "when they woke up that morning, the citizens asked themselves what new turmoil awaited them." The citizens' viewpoint comes back up a number of times, each formulated in reference to various moments throughout the day, thus situating Gorz's "possible utopia" in a quotidian temporality: the third paragraph opens with "at noon, …" ; the next starts with "that evening, …" The description of this revolutionized moment of transition is to an extent programmatic and indeed quite quotidian, mundane, concrete: "on this morning, no tickets were being sold or required on the buses or suburban trains … At noon, the government announced [its] decision to institute free public transportation throughout the country." The pace of the sustainable transition is fast, yet the goals have to do with slowing down, reducing work time, liberating time for leisure. Temporality is at least quadruply essential to this narrative: Gorz projects his readers into a potentially relatively close future to imagine radical change capable of facing ecological constraint, a future which can thus be easily

compared to the very dry economic critique of the present which preceded in the essay. Secondly, the formal contrast between the latter critical moment of the essay (the economic analysis) and the "possible utopian" narrative part is abrupt, sudden, stark. Thirdly, the transition to a revolutionized green society is fast, opening on an awakening in all senses (the morning plays an important role in conveying this) with important governmental measures being taken each couple of hours. Finally, however clumsily Gorz leaps into this thought experiment after his dry economic analysis, Gorz rhetorically stresses the temporal dimensions of the revolutionary society: to a great extent the changes implemented are depicted in terms of quotidian paces, rhythms and speeds of life.

Slogans attributed to the revolutionary government also punctuate the narrative, such as "we shall work less," "we must consume better," "we must re-integrate culture into the everyday life of all," all four being quotes from a hypothetical Green president's speech. By consuming "better," Gorz means that the value of objects will not be dictated by capitalist markets' exchange anymore, but rather by their use, this contrast between use-value and exchange-value being measured in temporal terms, as what would then matter would be the durability of objects. While free and public transport, along with bike lanes, would be greatly enhanced, private cars would be gradually phased out of urban centers. Factories would be self-managed by the workers such that surplus value created collectively would be self-appropriated, and schools would be organized around the "self-reliance" of students, who, "with or without the collaboration of the teachers," would raise rabbits and fish, learn crafts so longed neglected in conventional modern schools and learn in an atmosphere and manner close to Fresnais pedagogical styles. Note that all

these changes are described, not by resorting to the conditional mode I am using to sum them up, but qua the indicative mode, a mode made possible by the political fiction narrative form which invites the readers to extend their imagination into a possible near future, however probable.

If the depiction of this utopia may seem naïve to some, my point is not by any means to portray them as such: in fact I would contend that these are concrete, sensible and desirable propositions for a context of ecological crisis. Furthermore, they are open to debate rather than an authoritarian program or strictly prescriptive outline. As Gorz specifies upon introducing his utopian narrative, that this is "one of several possible utopias," and that his critical analysis could "be given a different expression from the one suggested here: its only function is to liberate the imagination as to the possibilities for change" (p. 42). In other words the utopia Gorz proposes is neither unsensible, absurd, nor supposed to outline some kind of iron law or rigid societal plan. My qualm is not by any means with the proposals themselves, but with the disconnect between, on the one hand, the concrete, open, even pragmatic and simple (albeit ambitious) propositions made, and on the other, the act of naming this political project "utopian," conceding some alleged disconnect with reality instead of defending such changes as both as already happening in places here and now, as desirable *and* possible, without subjecting them to assessment in terms of probability.

A Concrete Utopia

De-growth economist Serge Latouche, who is widely read in the ranks of the movement of the same name, also mobilizes an oxymoronic phrase to advance his and de-growthers political project in a book described by *Le Monde Diplomatique* journalist Nicolas

Truong as "a breviary of the de-growth [décroissance] movement." Gorz and Latouche's utopias share at least three traits in common: the expression of a tension between possibility and reality conveyed by their respective "possible utopia" and "concrete utopia" is one commonality. Another is the fact that both of these are included in texts that propose strong economic critiques accompanied with programmatic moments. Finally, these are indeed written, to an extent, as "breviaries," or perhaps "manifestoes" for the rising movements the authors belong to. Though this indicates how appealing the term 'utopia' may be for a certain left in contexts of collective mobilization that require stressing "imagination at work" or "*l'imagination au pouvoir*," and though the tensions contained in "concrete utopias" may be productive ones, I contend that these depictions are not sufficient in facing claims to the reality of the growth imperative at odds with political ecology's proposals. Rather than assert possibility, these calls to utopia risk to (at the very least rhetorically) further confirm the alleged unfeasibility of de-growth and ultimately strengthen the colonization of the imaginary denounced by Gorz, Latouche, etc. I wish to provoke a search for how we may foster dreams, new imaginaries, capacious strategies and project for sustainable change, without depicting these as radically outside the real, as unfeasible, and instead showing that those ridiculing such dreams, those usually called realists (true believers in the marvels of capitalist markets and growth) are offering nothing but utopian dreams and imaginaries legitimizing destruction.

Latouche writes: "The de-growth project is therefore a utopia, or in other words a source of hope and dreams. Far from representing a flight to fantasy, it is an attempt to explore the objective possibility of its implementation" (2009, p. 32). A bit like Gorz's

fictional president's slogans, Latouche offers "eight Rs": "re-evaluate, reconceptualize, restructure, redistribute, relocalize, reduce, re-use and recycle" (p. 33). The "Rs" in all these are stressed as implicitly sharing another: that of "Resist." In contrast, Latouche opposes the present "over-speeding thermo-industrial system" as one with "a growing list of words beginning with the prefix 'de': industrial delocalization, monetary deflation, political disenchantment (*desenchantement*), cultural demotivation and religious demystification" (p. 43). To potential accusations that his list of "Rs" may be read as past-oriented (passeiste or primitivist), retrograde or reactionary, Latouche retorts:

> Let me simply say that … the actions in question are as much part of a revolution as a backward move, and are at once innovative and repetitive. If there is an element of reaction, it is a reaction to the system's excesses and hubris – which finds expression in many 'overs'… 'over-development, over-production, over-abundance, over-extraction, over-fishing, over-grazing, over-consumption, over-packaging, over-communications, over-medicalization, over-indebtedness, too much traffic (*surcirculation*). (p. 43)

Like Gorz's, Latouche's utopia is highly charged with importantly temporal dimensions. The de-growth program he outlines does not only require "slowing down, and therefore resisting both the empire of speed and current trends" (p. 55). Neither does Latouche's 'concrete utopia' solely project the readers to a close future imagined as veering off the growth path. It also stresses a resistance against the "speed society" (as Ivan Illich put it), excesses that have thrown it beyond unsustainable thresholds. Latouche consequently advocates for future innovations alongside repetition and returns to more simple modes of

living, the latter being adamantly defended as non-retrograde. However, Latouche's insistance on the importance of place stands at odds with the non-placeness or *ou-topos* of utopia, again reiterating the tension between desirability (eu-topos) and feasibility. Furthermore, utopia risks obscuring some of the concrete elements in fact constitute the make-up of Latouche's very proposals: he mentions Bookchin's eco-municipalism, ideas of ecopolis, and the 'slow city' movements. Yet, perhaps inevitably, and to an extent self-admittedly, Latouche ultimately describes de-growth in negative terms, by way of what it is not or should not be – thus the oppositions between his eight 'R's and the list of 'de's and 'overs.' This latter part is not discrediting by any means, as to make oneself clear one often needs to primarily explain what one is opposing or objecting to. But the question arises of why de-growth should be described as a pseudo-pristine utopia outlined in advance (with the anti-democratic risks this comprises) rather than being affirmed as innovative, concrete and ongoing, convivial resistance to the speed society. I contend that, was Latouche not characterizing the positive moment of his argument as "utopian," perhaps the place of this negative would be reduced, and the proposals advanced would not risk to sound like a (potentially limitedly democratic) program.

Futurological Anti-Utopianism

We have seen[27] that Heidegger's student Hans Jonas proposes a very different kind of program, one where the development of a science of prediction or 'futurology' would be accelerated, where the production of risky technology would be slowed down, where an 'ethics for the future' fueled by futurological, expert recommendations would inform policy makers, who would model their actions with regards to political subjects

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[27] See the third subsection of Section I above – "Technocrats and Patriarchs."

(including present and future generations of human and nonhuman beings) on the patriarch's allegedly benevolent protective stance with respect to his family. Though there are so many disagreeable aspects to this technocratic and patriarchal program, Jonas interestingly uses the term "utopian" as a form or dimension of human hubris particularly characteristic of ecologically devastating modernity. Thus he denounces

> the inherently 'utopian' drift of our actions under the conditions of modern technology, whether it works on nonhuman or on human nature, and whether the 'utopia' at the end of the road be planned or unplanned. By the kind and size of its snowballing effects, technological power propels us into goals of a type that was formerly the preserve of Utopias. (1985, p. 21)

Though I side with de-growth regarding a number of insights, I part ways from a certain political ecology which risks associating itself with such hubris in the form of a praise of utopia. On this subject, although I have made clear that a feminist and convivial (thus anti-elitist) political ecologist reading of Hans Jonas reveals many limits to his work on the ecological crises, I side with this precursor of ecosophy's anti-utopianism. Here Jonas reverses the roles (though he would probably not phrase it this way), and accuses industrialist modernity of utopia, which is in part what I intend to propose we continue (or, for some of us, start) doing. Utopia has many undesirable traits, in spite of an association to dreaming and hoping and with "the good place," and even, to an extent, related to this depiction as 'the good place' (starting with the problematic singular, and the apparent smoothness of prescriptions which could afford room for complexity, unpredictability and bumpiness, potentially lacking in this regard to the detriment of a possibly more desirable agonistic pluralism). It is this dimension (the association to the

"good place") which, for instance, prompts critical ecology theorist Andrew Biro to depict Theodore Adorno's works as including a utopian moment supposed to redeem him from portrayals as a doom-and-gloom pessimist (Biro, 2005).

One limit of utopia which Jonas underscores above has to do with the totalizing, all-encompassing and potentially hubristically smooth character of the societal projects it stages. Another crucial problem is that of the relationships between possibility, impossibility, feasibility, reality and placelessness. Questions arise, for instance, as to what is obscured by green projects depicted as utopian. Utopia comes with the potential implication of erasing ongoing changes and resistances very similar to, and in fact often inspiring, the supposedly more general utopian societies defended within a remote sphere or future. In the following chapters, we will see for instance how political eco-fiction imagining green worlds or 'ecotopias' draws from ongoing practices, movements, collectives and communities to generalize them. But it is one thing for works explicitly situated in literary eco-fiction to stimulate our imagination and spread or magnify existing realities, and quite another for environmental theorists to outline what the perfect world shall look like resorting to the term 'utopia' with a strong 'ou-topos' connotation, in other words risking to negate the existence and/or possibility of alternatives in the present. This is what seems to occur with the presence of 'Utopia' (often wearing a proud capital 'U') as described in Latouche for instance, where the fact that already existing cooperatives, practices, groups that are already pushing alternatives into existence is being relegated in footnotes instead of advanced as evidence that, well, ecological suggestions are not, in fact, remote from reality. Thus both the conflation of the good

place and the placeless place meanings in the term utopia, and each meaning separately, become highly problematic and operate as so many erasures of possibilities.

If utopias have the explicit status of fiction aimed to inspire present efforts not implicitly denied, as a literary genre therefore, they are fascinating thought experiments. And it remains that Thoreau, Gorz, Latouche and others have contributed to envisioning different lifestyles as potentially rich sources for alternatives to growth, speed, consumerism and productivism. Yet the tension within the term, the framing of the good place as a placeless place, of ecological thinking as unrealistic dreaming encourages to ask what today may serve as exemplars for different modes of living, what credit one may grant to ecological thought, visions, proposals. In other words, caution is in order with respect to grand attempts to gaze through concrete landscapes in the hope of walking toward a line which by definition, being erected as horizon, will forever recede (Brault & Morrow, 2015). One may wonder what could happen if we start thinking about concreteness, not as lying at the utopian horizon line, but as part of the landscapes we may risk leaping or stomping over: perhaps we could find alternatives to growth growing within the concrete's surprising and unpredictable bumps, cracks and pot-holes. The following two examples of ecosophical envisioning could be read as opening such cracks to see what is or could be growing under the pavement ("*sous les pavés, la plage*"?).

Interim Futures and Now-Topians

As I mentioned above, William Connolly's dealings with the ecological crises advance a philosophy of becoming and tragic temporality to face the volatility of late capitalism as well as the fragility of things. Connolly also advocates for an "eco-egalitarianism" he considers to be possible if, among other conditions, we strive to envision what he calls

"interim futures." These futures do echo, to an extent, the utopian visions attempting to foster optimism which I discussed above. However, Connolly's "optimism" (deserving as it is of quotation marks) situates itself within a tragic temporality that greatly differs from utopia, which in turn justifies the preference for the phrase "interim future." Connolly proposes to fuel a "counter-resonance machine" opposing apocalyptic visions coming from the cowboy-capitalist evangelical Christian "assemblage" by way of "positive political energies" depicting eco-egalitarianism. This is made possible by a "philosophy of time, emerging from the lived experience of the unexpected and from theoretical study, [and suggesting] that time is punctuated by surprise, not only because of limitations in our ability to know the world but also because the world itself contains an element of volatility" (Connolly, 2008, p. x). Capitalist economies are far from exempt from this: "complexity, interactivity, and an uncertain degree of temporal openness compose [capitalism's] mode of being" (p. 11). Here we are quite far removed from smooth utopian horizons, resolutely committing to the asperities and volatility of unpredictable concrete landscapes instead. Yet this non-utopian portrayal of a volatile world is not left as dry and arid land deprived of hydrating imagination and visions. The task is then to underscore the contingency of late capitalist economies (without underestimating their powerful assemblages and resonance machines), in a move echoing J.K. Gibson-Graham, whose work Connolly turns to when mentioning her use of current examples of "non-capitalist spaces" (Gibson-Graham, 2006). Thus we may "visualize an interim future that departs significantly from the shape of the present" (Connolly, 2008, p. 14). This future is not remote or abstracted from the present, as utopia risks being. Instead, Connolly "imagine[s] a positive future no more than twenty years away" (p. 94).

But temporal proximity is not the only difference between utopia and such interim future (in fact, some of the problematic utopias discussed above may be envisioned as relatively near us). It also includes a defiance to linear or unidirectional (Latour) time much more explicit and concrete than potentially static and disconnected utopian visions. Upon envisioning an interim future, Connolly proposes to

> then work back from that point to specific reforms that could actualize the image. But why participate in visualization at all? You do so because imaging is ubiquitous and unavoidable in thought, and if negative images are not countered by positive visualizations the creative potential of thought and action is stifled. (p. 94).

The necessity for positive envisioning which, in spite of their shortcomings, utopian narratives discussed above attempt to meet, and which I have referred to as tree-house making, thus compel us to project ourselves into positive imaging of possible (though not necessarily probable) futures which depend upon imagination among other complex conditions. Without imaging and imagination, "the creative potential of thought and action is stifled." Again, one of the stakes is the envisioning and location of asperities in our present landscape "by coming to terms with the *periodic* volatility and messiness of capitalism you can better discern both how tragic binds could unfold to capture it and identify experimental actions that might help to move it in more positive directions" (p. 10). Connolly's interim future may not be probable, yet the attachment is rather one of possibility, and "the shifts may be more radical and arrive sooner than earlier anticipated" (p. 102). With this nuanced distinction between the probable and the possible, as well as the multi-directionality of this thought experiment, Connolly disrupts the risks to fall

back onto the hubristic dimension of utopia denounced by Jonas as in fact being

intimately connected with modernity (and modernity's temporality of growth-driven

progress). Though Connolly's depiction of the interim future included, at the time of his

writing *Christianity and Capitalism*, an equally impossible and improbable "reversal" of

climate change, it is quite close in content to the de-growth program. We are invited to

envision an "ecologically sound economy" where "soil, air, and water pollution are

curtailed; the food system promotes health; waste disposal systems are organized around

recycling; and nonrenewable sources of energy are increasingly replaced by renewable

modes" (p. 93). Thus the affinity between de-growth and other political ecologies is quite

apparent, with the important nuance of avoiding risk that discredit be cast upon these

project due to the impossibility contained in the term utopia.

If we were to combine this multi-directional temporality with an attention to

present experiments, we would not land very far from what I will call "synchrony," in

contrast to "uchronia." Chris Carlsson (2008) has called attention to current resistances

against what Ivan Illich denounced as the speed society and its standardized knowledge.

Proposing the term "now-topia," Carlsson offers a glimpse into what he considers a "self-

emancipatory class politics." The "now" of "now-topia" thus replaces the privative prefix

"ou" and the appraisive one "eu" to stress, as Gibson-Graham (2010) puts it, the question

of "what is being done?" instead of that of "what is to be done?" Carlsson describes this

move as follows:

> Tinkerers, inventors, and improvisational spirits who bring an artistic approach to
> important tasks that are ignored or undervalued by market society are what I call
> Nowtopians… [Now-topia includes] urban gardening/farming, do-it-yourself
> bicycle repair co-operatives often called 'bike kitchens,' hacker collectives
> engaged in developing free software tools and expanding and improving social

communications, recycled clothing makers, biofuels co-ops, and more. (2008, p. 47)

Through these experiments, "people are taking their time and technological know-how out of the market" in surprising and unanticipated ways which disrupt existing productivist logics. In recycling, innovating, organizing qua mutual aid, care and solidarity within people's free time rather than salaried work, now-topians not only demonstrate that other worlds are possible, but enact them in the here and now. Contrary to utopian versions of de-growth, the emphasis is on creating "post-capitalist forms of life" in clear locations and time re-valuing what Ivan Illich would call the vernacular, and granted renewed conviviality to tools having erupted so far from the waste of capitalist economies. In this anti-elitist perspective, ecological change is neither left to technology's recognized experts nor contained in an image that risks being accused of a lack of pragmatism. There is, however, a tangible overlap with de-growth politics, which Carlsson himself underscores in a piece published in a recent degrowth glossary: *Degrowth, a Vocabulary for a New Era*: "[Nowtopians] are 'exiting the economy,' which is the slogan of degrowth. Their tinkering and inventive practices turn waste into productive matter yet operate outside the market and against the current of relentless growth." To Carlsson the two major components of such efforts are "time and the technosphere." Most activities pursued by urban gardeners and farmers, hackers, bicycle cooperative repair workers and others are indeed quite time consuming, but carve into the speed society for a quotidian liberated time of conviviality today. While a combination of Connolly's interim futures and these now-topian practices would land quite close to the synchronic landscapes I am interested in (see chapter 6), the term "now-topia" is a partial corrective to utopia, and of course interim futures envisioning are only helpful if a

102

multidirectional movement occurs between projecting ourselves into future positive images and making our way back to the present so as to promote change there. A mere presentism, as we will see, is insufficient, and so would be an imagined future lacking bridges to the present.

Turning the Tables Around

These two examples of envisioning alternatives to the growth-driven progress of capitalist economies contrast with utopias insofar as they protect imaginaries of a risk to erase, or at least obscure, current, ongoing, or possible (though not always probable) alternatives presents, and immediate or long-term futures. They emphasize contingency and surprise, unpredictability and randomness or chance, becoming rather than linearity, instead of proposing a potentially static plan or smooth program. The double meaning of utopia as the good place and the placeless place, along with each meaning separately, expose self-identifying utopian Greens to discredit, situating their worlds away from the real and their strategies away from pragmatism, while having them admit to impossibility. The deployment of utopia in green thought prevents ecosophy to concede some improbabilities while still affirming a will to create possible and perhaps even necessary innovative ways of living. The singular "good place" also risks forcing concessions and sacrifices on democratic agonism, erasures of complexity and conflict. The good place dimension in utopia smooths ecological programs, getting rid of asperities in complicated and ecologically damaged landscapes in need of reconstruction, improvisation and inventiveness. Though "now-topia" and "interim futures" offer capacious beginnings, I will argue that these should be combined into a synchronic vision that may supplant uchronia. But before synchronic modes of experiencing temporality

can be invented, the tables must be turned on who is calling whom 'utopian,' who is being unrealistic, what the "voice of reason" proposes to accomplish, what demands are being made upon a situation which demands otherwise. Modern hubris has long been utopian, and it is about time that improvisational, playful, seemingly mad or anomalous, queer times be pushed to the foreground instead. In order to do so, new temporalities required by contexts of ecological crisis must be invented. Ecosophy has long had time in the back of its thoughts, now the point is to queer it.

CHAPTER II:

IT'S NOT TOO LATE!
CAPITALOCENTRIC TEMPORALITIES AS UCHRONIA

<u>Uchronia as a Synthesizing Concept, and More</u>

This country was conquered by those who move forward. And so will space.
John F. Kennedy

On September 12th 1962, U.S. President John F. Kennedy gave a speech at Rice

University, where he celebrated the ever-accelerating progress made by "human history"

that would reach new, lunar heights seven years later, with the "giant leap for mankind"

committed by proud U.S. citizen Neil Armstrong. In this speech, Kennedy translated

"50,000 years of man's recorded history" into the shorter time-scale of 50 years:

> No man can fully grasp how far and how fast we have come, but condense, if you
>
> will, the 50,000 years of man's recorded history in a time span of but a half
>
> century. Stated in these terms, we know very little about the first 40 years, except
>
> at the end of them advanced man had learned to use the skins of animals to cover
>
> them. Then about 10 years ago, under this standard, man emerged from his caves
>
> to construct other kinds of shelter. Only five years ago man learned to write and
>
> use a cart with wheels. Christianity began less than two years ago. The printing
>
> press came this year, and then less than two months ago, during this whole 50-
>
> year span of human history, the steam engine provided a new source of power.
>
> Newton explored the meaning of gravity. Last month electric lights and
>
> telephones and automobiles and airplanes became available. Only last week did

we develop penicillin and television and nuclear power, and now if America's new spacecraft succeeds in reaching Venus, we will have literally reached the stars before midnight tonight. (2015)

The opening sentence gorgeously captures the paradoxical nature of the hubris expressed in this text. Here "man" is used to refer to the individual watching, mesmerized, the history of "His" species (the latter is referred to, later on, as "advanced man" or simply "man," in the sense of humankind, "emerging from his caves"), an individual whose comprehension powers are challenged ("no man can fully grasp") by the spatial and temporal scales ("how far and how fast") of the history "he/we" belongs to ("we have come"). The humbling experience of this challenge to understanding apparently requires a reduction to more palpable, more relatable scales, ones that may fit in a lifetime or generation. However Kennedy's leap from 50, 000 years to a 50 years fast-motion summary is not only meant to serve clarification or pedagogical purposes, translating the deep time of history into generation-scaled time and the fates of myriad humans (nonhumans are apparently left out of the picture) into gendered, technology-propelled space-traveling "man." Evidently the acceleration also dramatizes the recent nature of what is read as tremendous human progress. To an extent, this dramatization could also seem to confirm the initial sentiment of humility first evoked by the individual difficulty grasp these time-scales: we moderns are so recent compared to a mostly primitive, "caveman" history: we've only just come out of our dark caves! But with this cohabits a sentiment of omnipotence created by the acceleration: we moderns have finally made this tremendous leap, just now, after our ancestors dragged their (bare) feet in their dark cave for eons. Zoom in an out, fast-forward a long slow course, from one key marker of the

"advancement" of "man" to the next. The selection of such markers are telling: the use of animal skin, i.e the use of nature (here are the useful, resource-full nonhumans) to make clothes, precedes the construction of shelter as opposed to dwelling in caves, i.e the erection of "man"-made roofs to extract "man" from nature, etc. In a swift ethnocentric gesture, Kennedy later skips over all kinds of spiritualities to mention Christianity only. Though this has the merit of underscoring its recent character, (perhaps inadvertently) suggesting its contingency, this leap centers Christianity as among the most relevant markers for progress, among a list of technological innovations. A playful counter-reading could of course underscore that Christianity is indeed, rather than the anomalous presence of the spiritual amidst technological bumps, itself a technology, one that required human invention and contributed to enabling a certain mode of production. But one may legitimately doubt that such implication is exactly what Kennedy wished to convey here. Then the printing press, the steam engine, physics, have us jump right into the industrial revolution, and it takes but two short sentences for JFK to introduce the essence of contemporary times, from electric lights to nuclear power and spacecrafts. Note that each of the last phases presented here (three periods include primitive self-extraction from the cave, the industrial revolution, late modernity) correspond to some forms of new communication (the printing press, telephone, television), power and energy (steam, electricity, nuclear), mobility (the cart with wheels, the automobile, the spacecraft). These provide a ternary rhythm which accelerates at the end of the paragraph, when Kennedy enumerates (and… and…) while in contrast, events symbolizing the slow beginnings of history had each been narrated with their own, longer sentences. Later in the text, Kennedy affirms that "this country was conquered by those

who move forward. And so will space." The accelerating march of progress, accomplished by inventive Christians and Americans as they colonize greater and greater spaces all the way to the outer space, barely has limits. The very form of the text echoes this colonizing hubris, and rhetorically ties this history with a movement "forward" that assumes a linear and teleological foray into limitless "advances." History is envisioned here as linear, teleological movement in a "forward" motion to greater and greater expansion, a motion moved by ever-accelerating paces. In short, both the expansion and the acceleration seem limitless.

However, ten years later the *Limits to Growth* report would be published, perhaps another marker in human understanding, one that challenged the idea of progress as endless expansion. This is just one example among many critiques of hegemonic temporalities of progress emerging with the ecological crises. I have mentioned a constellation of these in the introduction to this dissertation. In this chapter, I will examine a couple more closely (I): the question of limits, that of urgency, the image of future generations, and finally, pressures on every second in the quotidian to solely be dedicated to consumerism and productivism, with no interruption. My own concept of "uchronia" synthesizes these critiques and contributes further critical work. Considering them closely will therefore allow me to develop the concept: by calling capitalist temporalities "uchronian," I underscore that these idealize a promised abstract future of abundance (good time, "*eu-chronos*") that is always postponed, thus relying upon and generating insatiability, while they assume illimited growth in a limited world (impossible, timeless, or non time, "*ou-chronos*") (II).

Because the critique I present qua this notion of uchronia builds upon existing critiques in environmental discourses to then contribute further contestation of capitalist temporalities, to an extent this concept is a synthesizer (one could argue all concepts may be mostly this). For this reason, the notes and sounds will sound familiar, though I'll compose my own tune to add to the concert of voices denouncing the ever-accelerating progress depicted here by JFK. More precisely, the goal of this chapter is not to demonstrate empirically that growth is overwhelmingly, hegemonically taken to be one of the principal measurements of a healthy economy, and yet is impossible. Ecologists, many economists,[28] and myriad environmentalists have already accomplished this work. These give plenty of material to think with, and to go beyond. My goal here is to draw out the threads that run through many key environmentalist notions and arguments, and to more fully realize and conceptualize the implications of these arguments as well as how they impact the nature of the temporalities at work.

I will draw from critiques of capitalist temporalities to assert that it is high time to turn the tables, i.e to affirm that radical environmentalist proposals do not offer a beautiful, bright and shiny utopian horizon (contrary to what some even within these ranks have claimed, as we have seen in the previous chapter), a horizon that could easily be dismissed because as "utopian," it would be unrealistic, situated outside reality and pragmatic demands. The ecosophical thought I defend sheds light on capitalist economies and capitalist temporalities' own utopian and (especially) uchronian nature, as these are disconnected from concrete needs and conditions for sustaining the livability of human and nonhuman lives. In other words, I am not going to demonstrate the impossibility of exponential growth on a planet where human access to natural resources grows linearly,

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[28] Starting in 1996 with economist Herman Daly's "impossibility theorem."

and may in all likelihood decrease (for some resources especially). But I will work on the conceptual implications of this insight concerning capitalocentric temporalities reliant upon growth-driven progress, consumerism and productivism. I will not either demonstrate that the desire for growth is hegemonic or inherent to capitalist economies. Not only has this been done by myriad authors before, but a simple 30 minutes spent watching the news and counting how many times the term "growth" or the acronym "GDP"[29] are uttered would suffice to anyone paying attention, without even necessitating a consultation of the vast literatures showing the omnipresence of this desire and its predominance in modern imaginaries. Surely one may object that growth is not always driving economies, and refer to periodic crises as moments of non-growth or even "de-growth." But it is the desire for growth, the ideal temporality constituting capitalocentric imaginaries, and by no means its achievement, that uchronia designates. Reciprocally, de-growth is not only the absence of growth or the presence of negative growth, but most importantly the de-colonization of our imaginaries from the imperative to growth (e.g. D'Allisa, Demaria, Kallis, 2014). In fact, in periods of crisis, mass-media eyes are riveted on GDP movement in the hope of its increase, and this indicator is taken as the crucial one, which sustained presence, authorizes to claim that the crisis has passed. As Serge Latouche and other de-growth theorists and economists have argued, when growth is there, we are supposed to desire for it to last, and when it is lacking that its prompts return becomes all we shall want. This in fact is quite important: uchronia does not literally describe how time passes under capitalist regimes, but rather how capitalocentric discourses represent an ideal and idealized version of historical time (as

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[29] Granted this prevalence is a relatively recent phenomenon, datable after World War II. See for instance Timothy Mitchell, 2011.

characterized by progress, expansion, growth). This concept also highlights the ways in

which such idealization obscures, abstracts time from, and/or seeks (fails) to justify

ecological and other damages, harms, destructions caused in the mean time. Uchronia

always fails: that is its point, as it is a teleological temporality, one that assume a singular

direction toward a certain goal always postponed, never actually achieved, always

contested and contradicted in spite of its claims to reality.[30]

The Eruption of Gaia: Critiques of Capitalist Temporalities Emerging

Thus uchronia refers to capitalocentric temporalities which, as such, only envision the

future (in the singular – only one is possible, plausible and probable in uchronia) oriented

toward one direction: that of progress, which is itself measured by growth. The satiation

of productivist-consumerist economies, practices, and desires is impossible, and must

remain impossible so as to keep going, allegedly "forward," that is to say on a

teleological line. But uchronia is also impossible because it pretends to defy the laws of

thermodynamism, as well as planetary limits. It projects desires and imaginaries to a

singular, timeless (ever-postponed) future time, and subjects the present and possible

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[30] One may perhaps object that growth-oriented progress is not as desired anymore, or even that it is being rendered obsolete by "sustainable" growth. While I will address sustainable growth in chapter 5 (I read it as an oxymoron, and a form of "counter-uchronia"), I would respond that if this adjectival modification is indeed contesting and modifying the face of growth-driven progress in some arenas, sustainable growth is far from having supplanted growth "*tout court*." The latter one's omnipresence is again very obvious, as soon as one turns on CNN, Fox News, and even NPR or such left-of-center, mainstream media sources, and when one has a look at or listens to almost any of U.S president Obama's speeches, etc. For instance, a quick survey of the new year's wishes speeches pronounced by Western European heads of state in 2015 would suffice to see that growth (*tout court*) is absolutely central, especially in a period of economic crisis, as a supposedly desired and desirable goal and one of the principal indicator of economic health, unqualified by any adjective supposed to moderate it. The adjective surely erupts in specialized occasions like international environmental summits, but when "the economy" at large is discussed, convenient forgetfulness drops it. It is true that sustainable growth can be seen as one of the innumerable internal contradictions and contestations within growth true believers' circles, but it is far from having won the battle, or posing a threat of obsolescence to the pertinence of uchronia as a concept to think critically about teleological, linear, futurist, expansionist progress-oriented temporalities that assume a limitless world. In this chapter I discuss growth at large, as critiqued for the last couple of decades and until now by countless of environmentalists, and will return in chapter 5 to the ways in which sustainable growth is partly amending growth discourse, yet not the point of making it non-uchronian, or supplanting it.

futures to it (this component of uchronia, the subjection of the present to an abstract future, is what I would call futurism). Concrete present and future generations of humans, hybrids and nonhumans are expected to concede most of anything to the imperative of growth (thus futurity and the future or futures are distinct from futurism: futurism obliterates different possible futures, and reduces futurity to uchronian futures, deemed the only ones possible). More, more, more is what we cannot not want, "naturally": that is to say, this desire is naturalized in the sense that it is envisioned as going without saying, it is assumed, erected as a norm, perhaps even the only normal.[31] As we will see, uchronian temporalities operate at the scale of history, national discourse, international economies, but also at the quotidian level: the norm is to always want more, and all temporal interstices of life, including at the level of the everyday, shall be all about producing, consuming, 24/7 (Crary, 2013). The good consumer is a never satiated consumer, running after the next iPhone, which most of the time runs too fast – in fact, devices themselves are constantly trying to catch up the futurism of uchronia, in their planned obsolescence which condemns them to be running too slow for the latest application or operating system.

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[31] We will see in chapter 4 that "nature" and "naturalization" is in fact only problematic if one understands "nature" in a uchronian or counter-uchronian sense, as reduced to a teleological end, and that therefore the problem with nature and naturalizing is not nature but its often teleological temporality, from which flows a normative and normalizing purchase. If nature is reconceptualized as contingent, unstable, surprising, unpredictable, with some agentic aspects, etc, or as William Connolly may put it, as made up of "bumpy temporalities," rather than as teleological goal, it would not have these same normative implications. But for the time being, when I refer to uchronia as (abusively) presenting itself as "natural," self-naturalizing, it is with this problematic teleological nature in mind. Indeed, uchronia presupposes an understanding of nature as mere stable background: this is precisely how it purports to defy or how it negates planetary limits.

Growth, Its Limits, and the Limits of Limits, or Endism's Dead End

> *For us, it's easier to imagine the end of the world than serious social change. Witness the numerous blockbusters about global catastrophe and the conspicuous absence of films about alternate societies.*
> Slavoj Zizek

The rise of environmental crises and environmentalist movements have corresponded to the emergence of the problem of limits, specifically of capitalism's limits, which as I will now discuss, should not be confused with all economies and all worlds' limits. Some of these emphases on limits are very tangible, while others flirt with millenarist, alarmist fears. Worries about limits thus have varying levels and degree of evidence, though many limits are quite certainly going to create and/or already creating threats to human and nonhuman lives and species: for instance, the sciences have demonstrated that a "sixth extinction" is now under way, that climate change is occurring and overwhelmingly anthropogenic, that bees' extinction is threatening entire ecosystems – which exact causes, while most likely linked to mass uses of pesticides, are the object of ongoing debate. Oil spills, biocides, risks of nuclear catastrophes and realized nuclear catastrophes (Fukushima), but also the specter of oil scarcity to come, all threaten the livability of life for an overwhelming proportion, perhaps virtually all humans and nonhumans. The proximity of various threats are not always in proportion to what is already ongoing or to future risks: for example, climate change is often presented exaggeratedly as being mostly a future issue, when myriad effects are already very palpable in the third world or in certain poor or less visible areas of the first world (Louisiana is apparently losing the equivalent of a football field of coast every few hours, while many in the United States

continue to talk of climate change as a remote problem both in time and space, an effect also of environmental racism – Cole, Foster et al., 2001). The images associated with limits are consequently distorted: we know that capitalist expansion and growth has very serious limits, but the lines drawn depend upon many factors. Thus some seemingly alarmist discourses are in fact in very close proximity to many people's realities, while others may indeed be the results of disproportioned end-times narratives. In this section I will examine limits as one of the features uchronian temporalities tend to obscure, as well as some of the limits of certain discourses of limits, specifically the problematic equation of the possible and possibly necessary end of capitalist economies with the end of the world. Building upon yet revisiting critically environmental limits' discourse, I hope to so further specify the way limits may highlight capitalocentric progress as uchronian in the sense of impossible, unsustainable. The eruption of ecological conceptualizations of limits are indeed shedding light on the "ou" of uchronia's "ou-chronos," non-time.

If the question of limits gradually and complexly arose in multiple forms and from various perspectives, I have already mentioned that one famous marking point stands out: the *Limits to Growth* report, written in 1972 by Meadows et al. at the request of the Club of Rome, demonstrated that exponential economic growth could not be met by linear growth of available planetary resources. The report did not include global warming as one of the disruptions of linear growth of resources, among other stakes that emerged later on and added to skepticism and to the critique of capitalist growth. It nonetheless marks one of the cornerstones of the global environmentalist movement's worldwide history, on par with Rachel Carson's *Silent Spring* (2002). Thirty years later, predictions that were dismissed by some to be mere scaremongering, alarmist outcries or

doomsday prophecies have continued to find confirmations (Turner & CSIRO, 2008).

Yet, although the computer models deployed have so far been credited with accuracy, the equally computerized arguments that a gradual decrease of the growth rate – or "de-growth" – would curtail this problem of limits (adjusting to equilibrium below environmental limits) was far from translating into concrete implementation. Marx, and after him Rosa Luxemburg, had already pointed out that capitalism would eventually hit at least the world's limits. But the current environmental crises have given this prediction a new acuteness. Let's note, on this point, that Luxemburg's reading of this may be problematic to our purpose here: it equates capitalism's limits to the world's, assuming that capitalism is unstoppable besides such limits. Narratives continuing to equate capitalism's limits with the world's dangerously depict the former as an all-powerful, all invasive monster always already about to penetrate every noncapitalist space (J.K. Gibson-Graham has shaken such accounts – 2006), these being reciprocally thought of as empty and passive and about to be raped. Such narratives evidently foreclose non-capitalist possibility, and differing or dissident economies. In what follows I will discuss how some still equate the end of capitalism with the end of the world, more or less intentionally, willingly or consciously. This hinders possibilities and imagination which may foster non-capitalist presents and futures. This is one of the constitutive elements of uchronian temporalities: capitalist temporalities are uchronian in part because they conceive the temporal horizon from the perspective of a capitalocentric tunnel vision: if capitalism collapses, all the world will follow suit, as the only organizing principle of this world is assumed to be capitalism. But if critiques of limits run the risk of reproducing this account, then what is the value of the notion of limits? How can we distinguish the

latter critical notion from capitalocentric gestures equating the end of capitalism to the end of times?

In his preface to a 2012 colloquium titled "Already Beyond? 40 Years of Limits to Growth," William Krull, secretary general of the Volkswagen Foundation (who partly funded the initial report) asked: "was the shock that the *Limits to Growth* caused not strong enough?" Would the apparent lack of concrete change following the report have to do with a need for greater fear and trauma, a need for more "scaremongering" or "doomsday prophecies"? This raises the question of the mobilizing value of discourses of fear and the rhetorical effectiveness of urging outcries, considering the limited time we have to act (the urgency of recognizing limits and of radically changing existing growth-driven modes of production) and the long-term impossibility of growth (the limits themselves). An easy critique of environmentalist warnings would consist of brushing these off as more panic-causing, pessimistic, or depressing, than they can be mobilizing.

What, then, is the value of anticipation, or warnings concerned with upcoming limits? Andrew Dobson thus describes William Ophuls' warnings (among others) as "dystopian ecologism" (2003) which potentially and dangerously implies (even in spite of Dobson's conscious intentions) that these scenarios are improbable, remote, impossible and exaggerated threats. This characterization risks the quick dismissal of environmentalist critiques as not only inaccurate, but also insufficiently constructive, incapable of providing the nice happy end which the emotionally fragile, infantilized American(ized) public is allegedly counting on, the only scenario that will not reek havoc and chaos (on capitalism) and that audiences could bear.

Yet, these critiques and warnings are arguably not so much "dystopias" as they are environmentalist demonstrations that capitalism's temporality – illimited progress lead and defined by growth as its engine – is uchronian. In other words, it is not necessarily the environmentalist apocalyptic scenarios that are dystopian, science fictionesque, excessively alarmist, gratuitously resorting to scaremongering with no productive mobilization in sight. Instead, here again we may need to reverse the charges: it is the world we are heading into if action is not taken that is indeed dystopian. Just like Rachel Carson's *Silent Spring* can be credited for having brought about significant – albeit limited – changes regarding the omnipresence of carcinogenic pollutants in our everyday lives, The *Limits to Growth* report, along with Paul Ehrlich's famous *Population Bomb* (1968), can hardly be denied a value in having acknowledged what Isabelle Stengers – another supposed scaremongerer – calls "the eruption of Gaia" (2009). These warnings have caused some, however insufficient in numbers, to carve useful concepts like "de-growth" or "sustainability" (which I will further discuss in chapter 4 and 5 below), however insufficient these temporal theoretical weapons may still be. Because these mobilizations are insufficient does not mean that no alarms should be sounded. Hans Jonas infamously emphasized fear as a mobilizing tool for what he called an "ethics for the future" (as I have explained in the previous chapter). Granted the legitimate critiques he and others like Ophuls faced for the anti-democratic risk involved in their use of fear, the value of Jonas' attempts to reconceptualize responsibility through the lens of environmental crises can hardly be denied.

Emphasizing the threat presented by technological innovations' increase of the scale of our actions' consequences was in itself a form of mobilization that would not

have seen the light of day without the existential fear of mass destruction that drove Jonas

to write. One could speculate that without his and the above-mentioned "alarmists'"

anticipation of destructive futures, i.e without their anticipation and their fears, without

their pointing out the problem of limits and proposing critiques of growth-driven

progress, the "precautionary principle," now commonly mobilized in European law,

would not have been born. Thus the high stakes at play in these concepts, which converge

in inciting us to inscribe the temporal in the political and in economies: fear, anticipation,

limits, are all the more concepts and affects grounded in present threats, which resolutely

future-oriented character incites one to rethink the present world and its hegemonic

temporalities.

The invention of "overshoot day," mentioned in this dissertation's introduction, is

yet another striking example of how the temporality of limits, manifests itself as so

central to environmental discourse, often in the form of a deadline clashing with and

highlighting the assumptions of infinity that relentless consumerist paces rely upon. The

following is provided by the Global Footprint Network, a nonprofit organization created

in 2003 to defend sustainability and produce science and data in support of it:

> August 20 is Earth Overshoot Day 2013, marking the date when *humanity*
>
> exhausted *nature's* budget for the year. *We* are now operating in overdraft. For the
>
> rest of the year, *we* will maintain our ecological deficit by drawing down local
>
> resource stocks and accumulating carbon dioxide in the atmosphere. Just as a
>
> bank statement tracks income against expenditures, Global Footprint Network
>
> measures humanity's demand for and supply of natural resources and ecological
>
> services. And the data is *sobering*. Global Footprint Network estimates that *in*

approximately eight months, *we* demand more renewable resources and C02

sequestration than what the planet can provide *for an entire year*. (2013)

Providing a date to mark the ecological debt, and bringing the concept of unsustainability

to an annual scale, Overshoot Day makes limits palpable by resorting to time as a

tangible measurement of environmental exhaustion. However, two limits should be noted

regarding the language of limits deployed here: the use of the first person plural pronoun

"we" and the word "humanity" fails to differentiate between groups and places in terms

of the exhaustion of planetary resources, erasing inequalities and differentiated levels of

demands, limits, and urgency (the demands placed on the planet by Americans is on

average much higher than that of, say, many Camerounese women – who are also more

likely to experience more urgent needs for climate change mitigation). This language

relies upon an opposition between what "we" humans, indistinctively, demand of

"nature," which category implies in an equally undifferentiated manner "everything non-

human," assuming a homogeneity and self-coherent whole to be alternately mastered or

protected. Further, one sentence stands out: "the data is sobering."

Humanity is inebriated, drunk on its frenetic consumerism, and expected to be

arrested in its track thanks to… data and notions of credit or debt. The drunken metaphor

is powerful, as it too, within the discourse produced by "overshoot day," has temporal

dimensions: consumerist and productivist inebriation corresponds to the fast pace of

capitalist modes of living and economies, and like addiction, this drunkenness prevents

humans (again, some more or less than others) to see further than their next drink. Yet the

consideration of the relationship between a year's worth of consumption and a year's

worth of planetary resources replenishing themselves, i.e the temporal quantification in

annual and calendar terms, allows for the addict to consider "sobering up." But what would this sobering, this slowing down look like, and is there a risk of paralysis, coming to a complete and destructive halt rather than a slow yet urgent reconsideration? What will the shaking inherent in the detoxification transition feel like? Are all these efforts for warning and for conveying limits in all their temporal dimensions potentially so sobering that "we" may either die of thirst or keep drinking to forget that "we" are drinking (in an accelerationist move), and to continue seeing exclusively the short term, denying the possibility for a long term to even come into being (or rather, becoming)?

It is indeed important to underscore a different risk involved in alarms to the limits of growth. We do need to take limits, fear, and anticipation seriously, yet we have to also consider the limits of the concept of limits. Joining a concert of other voices, philosopher Slavoj Zizek (2010) has characterized the environmental crises as a situation in which we are more capable of imagining the end of the world than imagining the radical change that could curtail such end. In a similar yet distinct vein, some have claimed that our imaginations were keener on envisioning the end of the world than capable of considering the possibility that capitalism may (need to) end. "We" allegedly may prove incapable of conceiving that such end of capitalism, although an incredibly significant historic event, would not necessarily entail the end of the world. Yet, radical alternatives beyond the equation of capitalism's and the world's collapses do not always lack or fail "our" imaginations, nor do they lack everywhere. The concepts of "anti-uchronias," "heterochronias," and "synchrony" I advance in the following chapters should help fuel the envisioning and recognition of such radical alternatives.[32] Paying

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[32] Meanwhile, my discussion of "counter-uchronias" is meant to offer an internal critique of certain shortcomings of some eco-temporalities.

attention to ways in which some discourses may stage alternative visions for the present and future is at least as crucial as the critiques pointing to or symptomatic of the prevalence of end-times visions.

Again, this is not to say that the latter "endist" critiques are not important and to dismiss their ability to stage a sense of urgency needed for mobilization around environmental issues, making the uchronian character of late capitalist temporality clearer. Neither does this amount to dismissing these critiques' capacity to pertinently portray the dilemmas facing environmental thought – or the world. Both as rhetorical, mobilizational tools and as critical observations of the situation late capitalism has created, or even as truth claims, warnings about the finite nature of our world are highly useful, even critical – in the sense of "crucial." Avoidance of facile dismissals of these warnings as "dystopian" is necessary given the high stakes they make clear to us. And the reversal of such accusations, to assert that it is capitalist times that are dystopian, is necessary. It is indeed one of the goals of naming "uchronia." Yet, I wish to nurture a relative skepticism with respect to the equally facile slippage from the problem of limits to a problem of end-times equating doubts on the viability of capitalism to certainties about the end of the world, including when this equation is put in the form of a critique of our alleged lack of imagination. Depending on the form granted to the denunciation of such lack, we may foreclose possibilities for the envisioning and making of any present or future alternative (Gibson-Graham, 2006; 2011; Connolly, 2008, 2013). The consequence of this equation between the end of capitalism and the end of the world, is that it syllogistically implies another: the equation between the world and capitalism. And if, as is often the case in such essentialist, capitalocentric accounts, "the world" is

understood not as becoming, but as the necessary, given environment we have (rather than make) in common, then the equation becomes one that amalgamates capitalism and the very constitutive fabric of the real: capitalism is taken to be the only possible reality. This equation is grounded on the temporal: capitalist futures are taken to be the only possible futures, and if these were compromised, so would the future tout court. This futurist, capitalocentric tunnel vision is one of the principal constituents of what I call uchronia: a capitalocentric temporal horizon purporting to erase any other possible futures.

When taking act of modern progress' limits and the resulting crisis, no inevitability forces us to leap into conclusions such as: "modern progress has become impossible, it is rapidly throwing us into a wall, … but we cannot imagine anything else." "We" may even have a moral obligation toward future generations to force ourselves to imagine "something else" as in fact possible, even if this "something else" first may seem improbable, otherwise the logical next step of this reasoning would lead to nihilism or at least fatalistic resignation, in the form of a: "… thus we are doomed." This resignation quickly turns into a "so let's just continue to do what we are so busy doing in exactly the same way as we are doing it now, for lack of imagination, even while we know it is ultimately destructive." In short, end-times warnings and alarmist cries regarding the limits of resources and of bearable planetary heating can risk resulting in a certain fatalism, in the paralysis evoked above. Although pertinent and important, observing the current situation as one where we may be more susceptible to imagine our end than capitalism's, or where we may equate the two, can overshadow alternative visions. By critiquing ourselves and our contemporaries' lack of imagination in this way, we risk

reproducing the very lack we are denouncing. Given these risks, but granted the strategic and truth value of the problem of limits, foregrounding this problem remains useful and needed, along with underscoring it as one of the multiple instances in which temporality makes itself present to environmentalist thinking (theory and discourse). The "eruption of Gaia," this sudden realization that what was taken to be illimited resource is in fact finite, indeed takes on a temporal form: it presents itself as end-times narratives, anticipation of possible dangerous futures that call for drastic questioning of our destructive presents. A new light is thus shed on the ways in which these presents rely upon a progress temporality, and how this temporality is driven by a teleological movement of capitalist growth. Such warnings express the imminence of our encounter with scarcity and limits, an urgency worth taking into account.

Urgency

It's Not Too Late!
Greenpeace

Greenpeace's "It's Not Too Late" campaign was one example of environmentalist calls for mobilization based on such a sense of urgency, drawing upon notions of tipping points and accelerations, the problem of the present's responsibility toward future generations, and questions of limits. In 2007, with the alleged beginning of a climate change "tipping point" period according to many climate scientists and the publication of the penultimate IPCC (Intergovernmental Panel on Climate Change) report (I will discuss the latest, 2014 reports, in the next chapters), the famous environmentalist organization posted small stickers simply marked with this short phrase on street signs, walls, and car bumpers: "It's Not Too Late." In small font, the stickers also indicated Greenpeace's

123

website address. "It's Not Too Late": this sentence intrigued its interlocutors, an urgent yet anxiously hopeful phrase seen in passing, in the corner of one's eyes, yet acting in part like a flash, almost subliminal presence, and in part as a provocation to arrest one's gaze. This campaign also included videos evoking responsibility toward future generations along urgency – I will return to these in the section below. But on the stickers themselves, no explicit mention of climate change was needed. Neither did this utterance, "it's not too late," need any reference to one of the many current environmental perils "we" face: no explicit litany regarding environmental destructions was required, as these lists were (assumed to be) on everyone's minds, sufficiently associated with urgency and limits to resonate in public spaces, even when the mere idea of urgency was evoked on its own. In other words, the reference was not one directed at the content of the crisis per se, but, following a metonymic form, to its temporal dimension only, which temporal dimension implied all the rest. That this is possible is further proof of the importance of temporality within environmentalist discourse. For those whose curiosity stopped them long enough, for those with whom this quick and urging call resonated, the reference to a time sensitivity sufficed, along with, perhaps, if viewers noticed the signature, the name of the famous environmentalist group. The slogan and its signature on the green background were enough to cause the mental connection with climate change, perhaps arousing curiosity regarding Greenpeace's proposals, perhaps even enrolling a few more recruits in the pressing struggle. Interpellated by both the anxiety, the dramatic charge, and the hope which this short phrase evoked, one may pause. Greenpeace public relations' strategy assumed such an affective response, in at least enough viewers to make

124

the campaign message worth spreading like street art ornating each corner of countless cities.

These mixed feelings of apprehension, fear, and desire or hope, the affective charges attributed to uncertain futures, this urgency, these pauses, these interruptions, and these quick glimpses in an ever accelerating world which assumes growth as its necessary engine, the eruption of this call for rapid change, are all central to environmentalist rhetoric. The temporal dimensions of our shared environmental context have become so crucial that a major environmentalist organization like Greenpeace can rhetorically rely solely on a temporally charged phrase, "It's Not Too Late," for said context at large to come to mind. While so many environmentalist texts (including the present chapter) have repeated and will repeat lists of environmental dangers and damage, from mass extinctions to pesticide pollution, from water and air pollution to genetically modified organisms (once upon a time advertised as capable of "solving" the problem of world hunger and actually resulting in an array of lawsuits and monopolies lead by infamous Montsanto), with Greenpeace's slogan nothing but urgency stands as a signifier, and the need to enumerate matters of concern is circumvented. We are simply offered a glimpse at urgency and limits, which suffices to signify current perils. This is of course due precisely to the omnipresence of these enumerations and warnings, to the context. But these warnings' temporal nature also makes them susceptible to be referred to solely by way of a mobilization of hope, fear, excessive lateness and desperation, the absence thereof, urgency, limits, rapid change. If their temporal dimension wasn't as omnipresent as and in association with themselves, these perils would not come to mind at the sight of the short phrase "it's not too late."

Now what effects does urgency have and what exactly does it entail? In the context of ecological crises, the urgency is caused by the ever so accelerating approach of limits, the approach of the moment when it may in fact be too late. This growing proximity and increased presence of limits requires rapid change in a world that already changes rapidly, and often does not change in the same direction as that which would allow us to confront the problem of limits, to avoid or to limit further ecological destruction. Urgency entails a call for quick mobilization, for action, yet runs the risk of resulting in rushed, insufficiently thought-through, or insufficiently democratic, or, on the contrary, it risks resulting in complete paralysis given the fear invoked, the scale of urgency, the tension caused by ecological destruction's proximity (and current presence). As a result of the limits of urgency regarding the risk for rushed, frenetic action on the one hand, and paralysis on the other, a tension emerges: this is a situation where urgency simultaneously creates a need to act rapidly in a fast-growing world with fast-growing environmental damage, and an opposite need for extensive time to think through the changes urgency demands, which changes in turn take on a tremendous scale and scope characteristic of urgent circumstances.

In spite and maybe because of this tension between a need to act quickly and another to take the time to pause and think, Greenpeace claims that "it is not too late." The slogan does not limit itself to expressing urgency, but also carries a form of desperate hope. It metonymically suggests, evokes and provokes, the notion that things could change: it's not too late… to change directions, to slow down, to quiet growth down, in other words… the idea that it may be time to leave uchronia. I will discuss this kind of cairological intervention in the next chapter, as a form of "anti-uchronia." For the time

being, we may simply underscore that this campaign highlights yet another characteristic or trait of uchronia: that capitalist temporalities throwing us against the wall are contingent. They can (still) be side-tracked. There is still time, we must make the time, we have to take the time, so as to imagine other futures. This implied contingency clashes against the first characteristic I underscored above, as denounced by limits discourses: we saw then that uchronian temporality is defined by a capitalocentric tunnel vision, reducing the future or futures in general, to the allegedly one and only possible future: a capitalist one. Greenpeace's "It's Not Too Late!" provocatively suggests that underneath this reduction, this teleological movement of time, lies contingency: it can (still) be(come) otherwise. The organization links this resolute hope and determination, to a call for mobilization carried through by videos projected on monuments' walls in big cities' public spaces. The call came from an 8 year-old boy, who prompted adult viewers to take their responsibility with respect to his generation's survival and the livability of his generation's future life.

Future Generations

Climate risks are not identical with climate catastrophes. Climate risks are the anticipation in the present of future catastrophes in order to prevent them. This 'present future' of climate risks is real; the 'future future' of climate catastrophes, on the other hand, is (still) unreal. Yet even the anticipation of climate change sets a fundamental transformation in motion in the here and now.

Ulrich Beck

Since the beginnnings of the environmentalist movement, and culminating with the climate crisis, the concept of "future generations" has been a central thread of environmental discourse, including in Environmental Political Theory, or ecosophy. These have often ascribed a novelty to "future generations" which this section attempts to further discuss, adding to the above considerations on limits, end-times, which critical notions I will synthesize to inform my conceptualization of capitalist temporalities as uchronian. Continuing on the analysis of Greenpeace's campaign and then providing a few examples of environmental theorists' conceptualizations of the future and future generations, in what follows I reflect on what exactly is so new about "future generations."

Through Greenpeace's "It's Not Too Late" campaign, thousands of people were provoked to pause and think of climate change while walking by major cities' monuments. In Paris, Greenpeace hanged an immense banner shouting the slogan at tourists and Parisians coming to see the Eiffel tower. The banner covered most the middle section of the tower, with a giant picture of a thermometer accompanying the slogan, and the indication: "> 2°" in reference to the IPCC's assessment that the average temperature of the Earth was potentially going through, perhaps beyond, a dangerous 2 degrees

128

(celcius) increase. The two degrees' increase has been the maximum "agreed" upon (and highly contested) as a result of the Rio, Kyoto and Cancun conferences. This maximal target is highly criticized as a tolerable threshold, as many have pointed out that such increase would sacrifice many small island-states and poorer coastal areas of the world, whose populations did not obtain sufficient voice at international summits. Thus this cairological threshold, which has been (mis)read as an "objective" scientific estimation and consequently reified as *the* objective, is also loaded with political contestation. Greenpeace however was responding here to the then recent publication of the third IPCC report, taking up the opportune (cairological) moment of its release as an occasion for visible mobilization.

The French word "temps" has two meanings: time and weather. In Paris, on the Eiffel tower, both meanings were presented in association with one another, and the banner dramatically staged this urgent preoccupation upon one of the symbols of the Industrial Revolution's culmination, the iron lady. As part of the same campaign, Greenpeace screened a video clip on a large screen placed on the façade of the French Parliament, among many other monuments of capital cities worldwide. This clip showed a young, probably 10 year-old boy staring for one single fixed shot at the camera, wearing a grey hoodie and with his traits somber, tense, the tension on his face accentuated by the absence of any TV make-up, and delivering the following speech solemnly and with great determination:

> The scientific community released a report that proves beyond a doubt that the Earth is getting warmer. This global warming is caused by things you grown-ups do, and by the things you don't. If drastic measures aren't taken soon, by the time

I grow up there won't be any fish left in the sea. Rainforests and clean air will be a thing of the past. The polar icecaps will be gone. Oceans will rise. Entire countries will disappear. Life will change in ways you can't even imagine. There could be famine, worldwide epidemics, life expectancy will be lower. We're not just talking about the future. We're talking about my future. But this is no surprise. You adults have known about this for years. Now you could've done something about it. You haven't. You can say, it's not my problem. You can say, 'I won't be around in fifty years. But from now on, you can't say 'I didn't know.' Starting today, the lines are drawn. You have to choose sides. Either you're for my future, or you're against it. You're a friend, or you're an enemy. I may just be a kid today, but tomorrow will be different. This is the last time I'll be talking to you adults. You've had your chance to fix this problem, now we have ours. We won't be cute. We won't be patronized. We will not be denied our future. [cut to a screen with the banner 'It's Not Too Late', followed by another screen]: 'Join the energy revolution. Greenpeace.' (2015)

Pronouncing this speech, because of the sobriety of his makeup, the aggressive lighting on his face, and the tense, serious, accusatory and focused look, the young boy looks his age yet older. One could almost mistake this tense expression for wrinkles, and the specter of the adult who will experience the most catastrophic effects of climate change is looming through him. The tone here is not so much one of hope, but one of assertive determination, accusation, authority and call to responsibility. It is intentionally radical: the call is for "drastic measures (…) now," and the grey hoodie is evocative of many diverse images of late twentieth century rebellions, as part of a dress code shared by hip

hop cultures, black blocks and anarchist groups in many places throughout the world. Subjects of the present world are interpellated directly and concretely as contributors of the collective problem at stake: "you adults," "you grown-ups." The question of the future is posed equally concretely, thanks to the very vehicle of this speech, a ten year-old standing up as one voice among his generation that of course evokes so many others. This 2007 resort to a child as the spokesperson of a whole generation for a concrete embodiment of the present responsibilities and concerns emanating from the climate crisis was notably not a first. 12 year-old Canadian activist Severn Cullis-Suzuki (Environmental Children's Organization) famously gave a speech at the 1992 at the Earth Summit in Rio de Janeiro, also representing her and her future children's generation. By the time the Greenpeace video clip came out, the actor pronouncing the above-quoted speech could have been Cullis-Suzurki's son. In 1992 already, the goal had been to embody concretely the lives that would directly be affected by global warming, to make the future (not in the abstract, but rather specific people, many people's future lives) concretely and not only conceptually present, in the present.

The tone of the young Greenpeace activist in 2007 is resolutely dramatic. The speech opens on a dramatizing apocalyptic picture, similar to many of the dire end-times warnings discussed above. But this picture is depicted by a ten-year old whose speech illustrates very strikingly the novelty of the concept of future generations, compared to previous understandings of and questions about the future: "we're not just talking about *the* future. We're talking about *my* future. (…) We won't be denied *our* future" (emphases mine). The most drastic effects of the climate crisis have now approached us closely enough that the question of the future is embodied, can be easily personified, and

loses its abstraction. We must also note the shift from the pronouns "I" to "we" in the text. The speech is organized in three moments: an apocalyptic, end-of-times scenario is first challenging our imaginations ("life will change in ways you can't even imagine"). The concretization from "the" future to "my" future then signs the second moment, calling for a recognition of everyone's responsibility and interpellating "adults" today ("You adults have known about this for years. Now you could've done something about it. You haven't (…) from now on, you can't say 'I didn't know.'"). The third moment in the text is marked by a polarization of the struggle into two distinct camps (Starting today, the lines are drawn. (…) Either you're for my future, or you're against it), one of which including the child's entire generation in the form of this shift to his use of "we". The speech indeed ends on three sentences rhythmically opened with the first person plural pronoun, and which closing one enables the dramatization to culminate: "we won't be denied our future." The modal "will" is present throughout the speech in reference both to the apocalyptic scenario thus described, and to children's resistance. In this last sentence, it conveys the full array of possible meanings "will" can include (in its negative form): a refusal ("I will not", i.e will as determination) and a future fact (will be, i.e a future indicative form).

This close reading sheds light on the uniqueness and the newness of the problem of responsibility toward future generations: this newness resides in a shift from considering the future in abstract ways, to concrete, incarnated, embodied, personal ones. This is done in two crucial ways: firstly, the new sense of responsibility toward future generations shifts the *affective charge* associated to the future from hope, promises and dreams (of abundance, accumulation, full employment, etc) to concern and

determination. Secondly, the *object* of the future also shifts, from consumption, production and accumulation or profit, i.e growth, to concrete human and nonhuman lives' livability. Finally, and as a result of these two shifts, the arrow of time is shattered, the specter haunting us is not that of past generations or of a millenarist (utopian) promise (like communism), but that of children and their own children's future adult selves, and the damaged non-humans who will cohabit interdependently with them. This is what the above incipit for this section points to. There, Ulrich Beck underscores this movement from the future, back, making future catastrophes present to the present. In sum, the concept of future generations distinguishes itself by its affective charge (concern and care rather than hope), its object (making agentic future subjects concrete in the present), and its direction (from the future back to the present rather than the opposite).

French philosopher Emilie Hache has partly cleared the ground in underscoring the newness and endemic character of "future generations" in ecosophy. In *Ce à quoi nous tenons,* she links "future generations'" emergence in politics to Hans Jonas' "ethics for the future," focused as it was on critiquing both liberal and Marxist ethics. In Jonas' view, these lacked a concrete concern for the survival and well-being of humans and nonhumans to come.[33] Hache's reading is helpful because it further contributes to outline a crucial distinction between the future-oriented character of progress and the ecosophical concept of future generations :

> Although moderns have always turned toward the future, it was in the sense that
> they used to place their hopes in it. They did not *care* about it… Think about
> liberal and Marxist ethics, which Jonas explicitly crafted his ethics of
> responsibility against, precisely because they were both founded upon the notion

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[33] See also my discussion above (chapter 1) on temporality and anti-utopianism in Jonas' work.

of progress… It is not certain that trusting the future – trusting class struggle or

economic growth – or, even less, as has been heard multiple times, justifying the

casualties and miseries of yesterday and today in the name of a hypothetical better

tomorrow, is all that moral. (Hache, 2010, p. 146. Translation mine, author's

emphasis)

Here Hache stresses that if modern temporality is characterized by progress and if

progress is fundamentally about the future, that future consisted of abstract hopes rather

than concern or care. Hache confirms that this is where the novel character of « future

generations » lies : the affective stance regarding the future has shifted. I've added that

the objects and subjects of these affective stances also differ from those associated with

previous representations of the future. The hopes placed in the future by temporalities of

progress focused on the expansion of consumption and production and an increase in

accumulation or profit, i.e growth, as their object (however uneven its distribution may

be, which poses the question of which subjects were to benefit for this orientation to the

future : the abstraction operated as a mask silencing such unevenness). This ever-growing

abundance was assumed to indicate comfort, the capitalist promise in the process of

realization. In other words, the teleological movement here was one pointing toward

more of a consumerist and productivist horizon (« horizon » needing to be understood in

the very specific sense of the term, as a line which eternally recedes as one approaches

it). As is made evident by examples like that of the above-cited Greenpeace video clip,

the concept of future generations' object, rather than production, consumption, profit, and

accumulation, includes concretely incarnated, humans and nonhumans' survival and

(livable) personal lives. What is at stake in the concern for future generations is a *vitalist,*

concrete, material concern or care, rather than abstract capitalist hopes and dreams – with their share of terribly destructive present, material consequences.

This difference between the specific future-oriented character of capitalocentric progress, and the environmental notion of "future generations" is interesting to juxtapose to Lee Edelman's denunciation of reproductive futurism and his critique of heteronormative temporality. I have already briefly discussed the pertinence of queer temporalities and the need to queer eco-temporalities in the introduction to this dissertation, and pursued a feminist overview of temporality and the nonhuman in ecosophy in the previous chapter. In the rest of this section I return to queer temporalities, to argue that Greenpeace's revolutionary progeny highlights the need for queer eco-temporalities for livable present and future worlds, a need that would include making room and time for queer kinships (Haraway, 2015).

This may seem surprising at first. Indeed, we may remember that Lee Edelman opposes queer sexualities to the figure of the fetishized, heteronormative Child. How then, could Greenpeace's resort to one child supposedly emblematic or speaking in the name of at least some among future generations, be read as form of performative queering of eco-temporalities, or perhaps an ecologizing of queer temporalities, or both? Let us backtrack: Lee Edelman has argued, in substance, that heteronormative temporality relies upon reproductive futurism: any sexualities or sexual comportments that cannot or will not be redeemed, guilty pleasures as they are, by the at least spectral presence of the Child who will and must be bred as a result of the sex act, is dangerous, anomalous, queer. To Edelman queers and queerness should espouse this dangerous character, as a form of resistance to and disruption of reproductive futurism.

Consequently, Edelman advances an exhortation to "fuck the future!" and "fuck the Child!"

Yet, the child in Greenpeace's video is distinct from the fetishized Child evoked and denounced by Edelman, and so are all kinds of present and possible future human children, adults and nonhumans, just like one must also distinguish between the future, futures, futurity, and futurism. The latter is a constitutive element of what I call uchronia, while the three first notions may be conceived, envisioned and experienced in a number of ways, including some that, as Haraway has recently put it would help us proliferate all sorts of "queer kinships" (Haraway, 2015). The concrete actual and virtual children, and their virtual children, are not the issue per se, and Edelman is very clear on this distinction between them and the fetishized Child of heteronormative reproductive futurism. However, as I have started to suggest before (introduction) he confuses the future, futures, futurities and futurism. I would define these various notions as follows. The future is made up of all the actual and virtual possibilities, events, people, living beings, things and many more "to come" (the French for future is also the term avenir, or a venir, as Derrida has reminded us, though I won't turn to his understanding here). The future may be understood a plural, and in the present there exist all sorts of conditions for multiple potential or virtual futures. Thus the second distinction is between "the future" and "futures," where the former is not problematic in itself as long as it is understood as plural, as admitting the possibilities of several "futures." Futurity is the characteristic of a given time, past, present or future, that has a future, that has futures, and the virtual presence of these in the time in question. In a sense (and I will discuss this in chapter 6 regarding synchrony), futurity is always with us, or so we may hope, as it is part of our

existence to pass, to become, to change at every moment: the conditions of the future are

constantly present in the present, so is often its imagination or envisioning, and our

(multiple) virtual future selves. But if futurity is only imagined as having one possible

course, one single direction, and if this direction or course is erected as an end, a goal, in

a teleological manner, if futurity and the future begin to subject the present as well as

other possible and/or virtual futures to its dictate, then, and only then, we have futurism.

It is indeed futurism that Edelman means to say "fuck" to. And if this is the case, there is

still time and space, it is not too late for a queer vitalism[34] and for queer kinships that

values the Greenpeace child without Child fetishism, that wishes to value futurity as

multiple, plural, perhaps even multidirectional (it is through a projection to future

generations that we imagine different presents, etc). And queer kinships are especially

needed, insofar as these are imagined solidarities and care for concretely virtual, future

living human and nonhuman beings and things, which do not necessarily require

conventional kinship: as Donna Haraway has recently underscored, the development of

more heteronormative kinships is dangerous in a world over-populated with humans (and,

we may add, their nonhuman companions, cattle, etc). Queer kinships, Greenpeace's

child activist, futures, futurity are valuable and helpful ways to resist, contest, challenge,

perhaps supplant uchronia. And reciprocally, the problem with futurism is not futurity,

but the subjection at play, the fact that the future in the abstract is permitted to play a

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[34] In *Vibrant Matter* (2009), Jane Bennett has argued that one can and should distinguish between the vitalism of, say, pro-life advocates, and a critical vitalism concerned with human, hybrid and nonhuman lives in contexts of ecological crises. As I also mentioned in the introduction to this dissertation, Claire Colebrook (2014) has identified two different traditions of vitalism throughout the history of Western philosophy: one relying upon the actual, and the other, which she calls queer vitalism and unites Spinoza, Nietzsche, Bergson, Deleuze and others (similar to Bennett's vitalism to an extent), proposes to turn to the virtual. In a way this was the (failed) attempt of Jose Munoz (2009) who proposed to oppose Edelman's (2004) presentism and hyper-separation with a "not yet here," though Munoz sadly falls back onto utopia for this purpose.

subordinating role with respect to the present, justifying ecological and other kinds of damage. As such, futurism is an essential component of uchronia.

Put differently, one could object to the newness of the concept of "future generations" and the central place of the future in environmental discourse, pointing out the already future-oriented character of the very progress temporality environmentalists denounce. Yet I argue that the concept of "future generations" as I read it inaugurates an original way to envision the future, and futures, to experience futurity, not in terms of hope but in terms of concern, not with ever expanding futurist production, consumption and accumulation as its abstract and fetishized objects subjecting the present and concrete futures, but focusing instead on human and nonhuman lives' livability qua a multiplicity of futures. This critique contributes to denounce and challenge the disincarnated, abstract, non-time of growth temporality's specific, problematic futurity, one made of futurism. Growth-driven progress has so far been nothing but (and no less than) uchronian, an empty promise where more always calls for even more, and this desire for growth, taken for granted in a capitalocentric vision of time, is being shattered along with the futurism it contains. Futurism appears for what it is, a means of subjection, and a constitutive element of uchronia, because of the realization and denunciation of the impossibility of sustaining indefinitely a productivism and consumerism running against the planet's finitude and finite tolerance, into its over-heating.

Quotidian Temporalities: Insatiable Speed, 24/7

> *24/7 is a time of indifference ... characterized as a generalized inscription of human life into duration without breaks, defined by a principle of continuous functioning. It is a time that no longer passes, beyond clock time ... There are now very few significant interludes of human existence ... that have not been penetrated and taken over as work time, consumption time, or marketing time ... hence the ceaselessness of needs and their incitement, but also their perpetual non-fulfillment.*
> Jonathan Crary

Critiques of late modern temporalities which relate to the ecological crises, the question of the human, nonhuman and posthuman, and the technological and digital age do not limit themselves to inviting Earth's deep time into human calendars and history, or to contesting imperatives to growth born in the second half of the twentieth century, or to challenging progress as it has been conceptualized since the industrial revolution and with the rise of productivism and consumerism. At more micro-scales of quotidian life, many have denounced the paces, speeds and rhythms of late modernity. Examples of resistances abound, like the slow movement, of which slow food is most famous, or the notion of "liberated time" circulating in de-growth discourses. As for critiques, I discussed in chapter 1 how Ivan Illich, one of political ecology and ecosophy's early figures, characterized our times as symptomatic of a "speed society" (2013). He underscored the ways in which the fast paces of some becomes the extended hours of others because of the emerging velocity of transport (by motor vehicle) creating, once it occurs en masse, slow and excruciating traffic, versus the apparently slow yet efficient and convivial pace of transit (on foot and bicycle). Illich also crafted new concepts to describe the time consumed by "ghost work" (i.e, what is necessary to consume commodities once purchased – *e.g* transport from distant suburban grocery stores to the

home, work on domestic machines like dishwashers, etc). To Illich, the speed society's compulsory paces generate profound inequalities and a form of colonization of times of autonomy. Autonomy, along with what Illich called conviviality depends on the social relation to time, and time has everything to do with the distribution of power and arrangement of social relations. Michel Foucault's depictions of the disciplinary society famously contrast an old regime power that harms the body in retaliation for certain crimes, with modern power, which "invests the body in depth" (1977, p. 72) emprisoning it into the soul as this form of power produces docile subjects. Disciplinary power calibrates each gesture for an efficient economy of power, in great part qua temporalities rhythmically punctuating the days and weeks of prisoners, school students, soldiers, hospital patients and staff. Thus *Discipline and Punish* famously opens with a gruesome description regicide's quartering, juxtaposed with a timetable (p. 3 – 7). Discipline relies upon temporality, which is present throughout the book.

Jonathan Crary (2013) has recently argued that the digital age, the fast flows of the late twentieth century and beginning of the twenty-first century, are increasingly imposing a temporality he calls "24/7," where "everyday life," once a refuge from market exchanges, salaried work, commodification, is now invaded by the relentlessness of stimulation, image, frenetic information and communication, various commodities, devices and technologies. To Crary, "24/7 announces a time without time, a time extracted from any material or identifiable demarcations, a time without sequence or recurrence" (p. 29) Crary opens and closes his book with an analysis of how sleep becomes one of the last remnants of sequential pauses, vulnerable moments of social time unsubjected to the (often digitalized) flows of capitalist markets. Many reviews of this

recent book have reduced the argument to one where, qua sleep, Crary draws from Guy

Debord's denunciations of the society of spectacle or Gilles Deleuze's critique of the

society of control, so as to critique capitalist temporalities. Yet the argument goes much

beyond sleep. Surely, many metaphors (and literal descriptions) regarding brightness,

continuous lighting, restlessness populate his argument even when Crary doesn't directly

discuss sleep or dreams. But more generally, the author paints the picture of a timeless

time that purports to replace the quotidian and commodify, control, subject all life in

depth, in an age of digitalized and globalized consumerism and productivism. This is

particularly relevant to my own argument here, insofar as this critique adds to the concert

of voices showing that capitalist temporalities are not only unsustainable in the long run,

in ecological terms, at the historical level, or in terms of the planet's deep time, but they

are also unbearable on a smaller time scale, at the level of micro-ecologies, and at

individual or smaller groups' levels, all of which are related in various ways to the larger

time-scale examined so far. In an echo to Illich's critique of the speed society as

detrimental to personal autonomy and collective conviviality, Crary explains that due to

this 24/7 temporality, which involves "temporalities of networked systems" operating

constantly, accelerations and relentlessness produce a situation where "long-standing

notions of shared experience atrophy" (p. 31). Crary thus denounces the "relentless

incursion of the non-time of 24/7 into every aspect of social and personal life" (p. 30). In

the fabric of quotidian lives, indistinction and homogeneity, flattening and constant

stimulation, strive to stifle rest, social time, sleep, dreams, non-productive or useless

activity, passivity, tasks and occupations pursued for their own sake and devoid of

information, communication, digital means, lucrative and speculative effects, etc. The

temporality Crary (among others) describes is the quotidian dimension of what I call uchronia: the timeless time of late capitalism, of the speed society.

However, Crary tends to insist on the presentism, the ephemerity, the moment obscuring any future, which result from 24/7 temporality. This analysis goes so far as erasing futurism from the 24/7 equation. I differ here, in that I argue that uchronia entangles two seemingly contradictory aspects of control at the level of quotidian temporalities, one that is indeed characterized by a timeless presentism, both forgetful of the past and future-less, as Crary aptly describes, and another facet of this temporality of speed that constantly subjects all to a never satiated state of desire for more (information, technological devices, newer commodities, etc). As a result, late moderns are indeed constantly running toward an abstract immediate future well-being and non-time, which is always postponed to better fuel the present non-time, made of consumerist impulses and frenetic paces.

Crary, in contrast, asserts that:

For much of the twentieth century, novelty production, in spite of its repetitiveness and nullity, was often marketed to coincide with a social imagination of a future more advanced than, or at least unlike, the present. Within the framework of a mid-twentieth century futurism, … there was at least the misplaced belief in technological solutions to intractable social problems. Now the accelerated tempo of apparent change deletes any sense of an extended time frame that is shared collectively, which might sustain even a nebulous anticipation of a future distinct from contemporary reality. 24/7 is shaped around individual goals of competitiveness, advancement, acquisitiveness, personal security, and

comfort at the expense of others. The future is so close at hand that it is

imaginable only by its continuity with the striving for individual gain or survival

in the shallowest of presents. (p. 41)

In this analysis, the futurism prevalent in the mid-twentieth century has given way to

accelerated tempos that now tend to erase futurity tout court, or to reduce it to "the

continuation … of the shallowest of presents." Yet this futurism which Crary describes as

made up of "misplaced belief in technological solutions to intractable social problems"

still seems quite resilient when one thinks, for instance, of geoengineering and such

technofixes to the climate crisis (I will discuss these counter-uchronias in chapter 5). At

the quotidian and the individual or micro-levels, the next device, the new social network

or app, the hippest commodities continue to provide ways for consumerism to never

reach yet always pursue the satiation of a continuously increasing or at least open-ended

appetite. More than "the shallowest of presents," this could be described as a constantly

receding horizon where the sun barely ever sets, or if it does, neons and touch screens

have taken over so drastically one fails to notice. With 24/7 temporality, the future still

subjects the present, including at quotidian levels.

Crary does note that this is the case in the sense that 24/7 frenesy results in a

tunnel vision detrimental to imagining futures different from the present, different from

present monotonous agitation. And in the incipit that opens this section, he also concedes

that the takeover of almost all "interludes of human existence" by "work time,

consumption time, or marketing time" results in a "perpetual non-fulfillment" (p.10).

Though Crary mostly insists on the erasure of the past and the future by 24/7

temporalities, reducing this "perpetual non-fulfillment" to a mention and not seeing a

futurity there, I contend that this permanent insatiability is precisely the futurism at play

for this non-time. The ideal consumer is an eternally dissatisfied consumer, and the

devices and commodities of today, ever so quickly outdated and obsolete, procure but

split second pleasures that, as they are so fleeting, let desire take over and project oneself

into the nontime of another similar split second in one immediate future disguised as the

only future. This futurism is what Jean-Michel Besnier (2013) has described as a post-

human utopia. In his view the digital age and globalization, combined and entangled,

offer the promise of an *eu-* and *ou-topos* where technical and scientific means would fully

"accomplish humankind," that is to say, they would allow "the suppression of all

imperfections that bar humanity from access to happiness" (p. 94, my translation). Thus

the utopian transhumanist and/or certain posthumanist fantasies: with these, "utopia is

indeed present as such, in the perspective of a happiness which would put an end to the

wanderings of history" (p. 96). This happiness is one where time stops, where one is

finally liberated from time, entering into a stillness symptomatic of humanity's ends

having been realized. This speaks to the seduction also exercized on the left, to a Slavoj

Zizek (2011) who understandably questions that there has ever been such a thing as

Nature, but then concludes that we need to throw ourselves forward even more deeply

into an artificialism that would allegedly provide the way to confront the eco-crises. A

similar appeal of the paces and speeds of the technological and digital age also manifests

itself in accelerationist aesthetics, according to which capitalism's acceleration should be

deepened, pushed to its utmost possibilities, promising radical change. Though Besnier

does not mention Zizek or accelerationism as examples, he too confesses that he was

once attracted to a utopianism defended by a certain kind of leftism, convinced then that "life rimes with utopia." However, he explains that

> Today [he is] ready to recognize [his] mistake, without concluding however that narratives which recount an elsewhere and an otherwise be solely a nuisance. [But he] declare[s] it brutally: utopia is death, as we would like to live it. … It congeals time, submitting existence to rituals that are often obsessive; it neutralizes space, situating its narratives in the improbable and the "placeless;" it asepticizes humanity by exempting it of its flaws. … Yet, desirable, it does so while rendering this death attractive and pain-free. … [It evokes a] fascination for an immersion in an undistinguishable fetal and lethal state. (p. 98)

We may remember that in Plato's *Republic*, which could arguably be back-read as one of the first utopias (a city of words in a historical time where, however, Thomas More had not yet coined the term utopia), time, first incarnated by muses who announced that everything will ineluctably decay, is what ultimately breaks the harmony of Callipolis. The goal, the end of utopia is fixity, and is fundamentally at odds with becoming. In other words, utopia's temporal dimension, or uchronia, is a timeless time, and we may currently be swimming in images of uchronia that claim to truth[35]. The paradox of 24/7 temporality is that the way in which this self-identical, monotonous or still time, this non-time is attained is by throwing production and consumption into a faster and faster supposedly 'forward' race.

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[35] In fact, Platonic capital T "Truth" is arguably utopian and uchronian, but that is another story for another project.

Queering Times: Capitalocentric Temporalities as Uchronia

This does not mean, of course, that we shall throw future generations and their babies with the acidifying oceans' waters. For instance, Jean-Michel Besnier denounces utopia as the supposedly good non-place, because we now realize it would end time if fully realized (and, I would add, because we realize that its full realization will always fail: in fact that is one of its conditions of reproduction). Yet he also underscores that this does not mean that we should judge "all narratives that recount an elsewhere and an otherwise" to be noxious. In fact, I would argue that critiquing utopia reminds us that not all elsewheres are or have to be utopian. This is indeed one of the reasons to further reflect on what timeless time (uchronia) and its dictates are made of, so that different ways of imagining, different futurities, non-uchronian ones, may emerge. In other words, queering eco-temporalities so as to leave uchronia and live livable lives, requires more critical work to identify what we wish to leave behind, and so as to not conclude that all imaginations of other possible worlds and times are utopian and uchronian, conserving, or restoring, or creating, their beauty and helpfulness. Asking what uchronia is would thus amount to asking how we can imagine and make time, in spite of the dominant saturation of non-time. One of the goals of my conceptualization of uchronia is to call a time out on the time outside of time, to make time for invention and for sustaining life. In this section I will draw out the major traits that constitute what it is I call uchronia, building upon the critiques discussed above so as to better grasp how a capitalocentric, teleological time where the abstract futurism of productivism and consumerism constantly postpones its promise of satiation to a better tomorrow, justifying destructive presents, and relies upon assumptions of infinite economic growth in a finite world. In

spite of its apparent immateriality, this naturecultural time has a myriad of material effects, and celebrates a timeless time which I will conclude is incompatible with a philosophy of becoming needed in times of dramatic ecological transformation – thus my eventual turn to Nietzsche's concept of eternal return.

Uchronia: a Capitalocentric, Teleological and Timeless Futurism

> *[L'utopie, c'est] le lieu hors de tous les lieux … le pays ou on peut tomber d'une montagne et se relever vivant, c'est le pays ou on est visible quand on veut, invisible quand on le desire.*
> Michel Foucault

Uchronia is, in part, the temporal manifestation of capitalocentrism: all temporalities that offer to imagine the future (in the singular) as solely, or predominantly capitalist, obscuring non-capitalist (possible and more or less probable) futures, are uchronian. Uchronian temporalities reduce the future to capitalist (impossible) growth. Or, put differently, they reciprocally deem multitude and plurality, diversity in directions and forms of the future/futures, to be the only futurity present in the present, whether these may be probable or not, or less.

Furthermore, uchronian temporalities have reduced the measurement of progress to supposedly endless growth. At a larger historical scale including the industrial revolution or perhaps the beginnings of capitalism, progress has been the uchronian signifier for a linear time moved by a teleological end. The end of history, under the reign or temporal order of uchronia, tends to be equated to capitalist progress, not only in the sense of a goal of history, but also as its finish or closing line, its horizon. Teleology, linearity, singularity (not in the sense of many singular temporalities being deemed

147

possible, but in the sense of a reduction to homogeneity, and as opposed to plurality and multitude) are all components of uchronia.

Uchronias are a temporalities which essentialize or naturalize capitalist ends, capitalocentric teleological temporality as the only possible one. They take for granted, as going without saying, as natural, the logic or dynamic of wanting more and more: naturally, growth is desirable, it is what we cannot help but want, the non-negotiable logic moving our economies, homo economicus cannot help it because it is in His nature, etc. We will see further that naturalizing can be understood as reducing, reductive and essentializing or essentialist, in the sense and as long as nature is imagined as static:[36] for the moment this is how I am using the term. However what is at fault here is not so much nature per se, but that what is deemed natural is taken to indicate a teleological goal and form to attain and strive for, justifying all kinds of damage here and now. In other words, the problem with nature is not nature but its temporality, when it is conceptualized in a teleological manner. One consequence of this is that uchronia functions such that inherent to it is its denial of its own contingency. This is linked to my first point about uchronia rendering other possible futures unimaginable: if the natural end of time is capitalist growth, then it could not be otherwise, then capitalist temporality is not contingent.

One additional and crucial defining trait of uchronia is that it refers to the assumption of an impossible infinite growth in a finite world, which impossibility, similarly to its contingency, it keeps denying. Indeed, this denial is also an inherent constituent of uchronia. Here we see that the question of limits directly feeds into the critical purchase of my concept of uchronia: naming uchronia means naming a

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[36] See chapter 4, where I will argue that uchronia and also what I call counter-uchronias (such as environmentalist primitivisms and certain environmentalism's claims to "return" or "restore" nature, etc) share a common understanding of Nature as stable background, static, eternal, etc.

temporality which imagines no limits and relies on this impossibility taken to be the only possible, to then disguise itself as a forward movement (uchronia is also the assumption that "forward" equals "good," that there is such a thing as a line, with two directions, an arrow to time). Impossibility and limits is the "ou" (not, none) of "ou-chronos" (non-time) in the etymology of uchronia. The denial of impossibility, and valuation of growth in spite of its impossible infinity, is the "eu" (good, ideal) combining with the "ou."

Yet another feature of uchronia is related to this latter one: uchronia requires and entails, as a condition of its existence and reproduction, the eternal postponement of an end, a satisfaction, an achievement or satiety that will never come. Both this postponement, and its impossibility, its unattainable character, the fictive nature of the non-time, the outside timeliness of uchronian time, are crucially important: these are visible at the quotidian and micro-level, and on a larger scale. Uchronia is the running after sand castles perched in clouds. It is a matter which affects subjectivities and their production: the good consumer is that who is never satiated and whose pleasures merely feed into more desire, and the healthy economy of a given nation-state is that which strives for growth. Economies must grow, but to what end? Well the end has become growth, or growth has become the end itself (which one could have thought should perhaps have been a means… but then again what is capitalism besides the fetishization of means, their transformation into ends, e.g means of exchange like money? And, then again, the point would not be to simply reverse the hierarchy here, or separate ends and means, but to question this binary which is indubitably part of the teleological structure here). Inherent to the end of capitalocentric temporalities, as a constituent and a vector of their self-reproduction, as part of how they exercize their desirability and what allows

149

their resilience, is the promise of an impossibility at which we will never arrive, a timeless, disembodied time which the notion of future generations, for instance, challenges.

Futurism is another component of uchronia, another aspect or dimension of its mode of operating. As I have discussed above when outlining the distinction between uchronian futurity and my reading of the environmentalist notion of future generations, futurism refers to something more precise than just futurity or the future (I have argued this in response to Lee Edelman's "fuck the future!" which confuses the future, futures, futurity and futurism. By futurism I mean to refer to the subjection of the concrete actual and virtual presents, present futurity, and possible futures, to one future. In the case of uchronia, the future is inevitably made of capitalist growth, and this future purports to dominate and rule over any claims for other possibilities and other possible temporal orders. The subjection of the present and futures, of temporality, to a capitalocentric teleological future evidently is highly normative, in this sense, this is how uchronia arbiters what counts as normal, the normal time, expectations, the expectable, probable and possible future, the real, etc. Because uchronia is a normative temporality and because it contributes to the conditions of production and reproduction of the normative, because, as Cornelius Castoriadis and de-growth theorists like Serge Latouche put it, it colonizes our imaginaries, any critique of uchronia entails queering temporality. Jose Munoz has argued that queer time is a "not yet here," and indeed a critique of uchronia would require de-colonizing growth imaginaries to imagine (and continue to live, enact and embody) other possible queer temporalities and times. Yet this cannot take on the form of uchronia, it cannot be synonymous with the mere invention of new utopias and

150

uchronias of substitution, what I would call counter-uchronias. This critique has to perform queer futurities, as Munoz underscores, yet these must not take the form of futurisms. As Foucault has put it, speaking of queerness and frienship, no less:

> The idea of a program of proposals is dangerous. As soon as a program is invented, it becomes law, and there is a prohibition against inventing… The program must be wide open. We have to dig deeply to show how things have been historically contingent, for such and such reason intelligible but not necessary. We must make the intelligible appear against the background of emptiness and deny its necessity. We must think that what exists is far from filling all possible spaces. To make a truly unavoidable challenge of the question: what can be played? (1997)

What kind of eco-queer kinships are made possible by naming uchronia, and striving to not fall back into counter-uchronia, to avoid a program of proposals that would become law and prevent inventiveness, so that "what exists" is not only "far from filling all possible spaces," but also far from filling all possible times? My concept of uchronia is meant to describe, to make intelligible, the appeal capitalocentric temporality has had, and its contingency in spite of its claim to necessity, to being what we naturally cannot not want.

One way uchronia can act as an apt descriptor of a normative temporality that calls for queering time, is that it also describes how capitalocentric constantly relies on its own failure to meet the ideal, non-time it purports to incarnate. Uchronian temporalities idealize growth as the right direction, they claim their status as the "good time" by promising more and more comfort, abundance of work and commodities, for those who

151

deserve it. The lives of queers, nonhumans, and the many who have been denied human subjectivity are evidence that this ideal is never met. This is especially salient in periods of capitalist crisis (and to an extent, capitalism is precisely always in crisis), when, as Isabelle Stengers (2009) has emphasized in her *Temps des catastrophes: resister a la barbarie qui vient*, "we are asked to tighten our belts" and sacrifices nonhuman life, the conditions of human and more nonhuman life, on the altar of desire to return to growth, in an exhortation to concede, "realistically" that Gaia (humans included) is not the priority. The hysterical Earth is throwing a tantrum? Shut her down, we have not caused her fever. Uchronia by no means describes actual times of capitalist hegemony, but rather, the ideal temporality of capitalism. Periods of crises and periods of growth both come with their respective lot of injustices, aggravation of many people's and nonhumans' conditions, exacerbations of inequalities, precarizations, ecological disasters and destructions, which all drastically contrast with the promises made. For instance, crises, far from resulting in de-growth (which would de-colonize our imaginaries from the imperative to growth), is supposed to strengthen the desire for growth, to make it even more incontestable and silence even further any concurrent desire, any proposal for different futures. Uchronia refers to the alleged imperative to desire growth, as the ideal temporality moving capitalism (taken as encompassing all reality) "forward."

I should make one final precision with regards to the concept of uchronia: I have used the expression "uchronian temporalities" in the plural, and uchronia to designate all these, simply because uchronia is multi-faceted, and uchronian temporalities are multiple: they extend to quotidian, historical scales, they now impact deep time scales (thus the anthropocene and anthropogenic climate change), they take on various respective paces,

speeds and rhythms depending on these scales, etc. Uchronia is not a monolith, though it is difficult to describe and critique without risking to sound as though it was one.[37] This also means that I have left many of these various facets and temporalities outside the scope of my examples. Though my concept of uchronia comes out of a specific, contingent context of ecological crisis and does not propose to be infinitely applicable, we could imagine many other aspects of capitalist times and temporalities which could be read as uchronian, thus the importance of the plural.[38]

The Immaterial Dimension of the Material, or Temporalities' High Stakes

> *There is a certain part of all of us that lives outside of time. Perhaps we become aware of our age only at exceptional moments and most of the time we are ageless.*
> Milan Kundera

If Foucault asked the provocative question of "what can be played?," and if my critique of capitalocentric temporalities as uchronian entails queering temporalities, the task is nonetheless quite tall and the stakes quite high. It becomes apparent, from the effects of uchronia, some of which I have described above, that conceptions of time affect what counts as the real, or what is deemed realistic, realistically desirable. Uchronia's modus operandi is to claim realism, "we cannot but want growth, let's be realistic," even in the face of planetary limits, and in an attempt to erase these limits. Temporalities shape

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[37] J.K. Gibson-Graham (2006) have discussed a similar problem in their introduction to the tenth edition of *The End of Capitalism (As We Knew It)*, where they explain that, just like the feminist second wave had to risk caricaturing its sexist targets in the process of denouncing them, they have been accused to constructing a strawman version of capitalism so as to proceed in their attempt at burning capitalocentrism (p. 10).

[38] For example, Ivan Ascher (forthcoming) has argued that while Marx's critique of industrial capitalism's mode of production is still pertinent to this day, financial capitalism now relies upon a "mode of prediction," depending on future risks, securities, and speculation on these. This new form of futurism could be read as yet another manifestation of uchronia.

modes of living, producing, consuming. Yet in spite of these concrete high stakes and effects, time desperately seems to remain impalpable, ungraspable.

A number of environmentalism's and environmental sciences' key concepts are symptomatic of both this difficulty and this need to tell, see, feel and think time, including some that I have described above. The concept of "overshoot day," as it strives to quantify the exhaustion of planetary resources over the course of a year, is an attempt at bringing this exhaustion, the ecological debt, the question of limits, to a graspable scale, in the form of a calendar, a date, a portion of the year spent spending resources that will not have time to replenish. As such, it is seemingly able to provide concrete, temporal terms in which to sense the excess, the rapid pace of an (unevenly) productivist and consumerist world. But this translation into an annual scale also makes the idea of ecological debt all the more abstract, and may be paralyzing to think about. Similarly, I have mentioned how some within the geosciences have now famously been proposing the term "anthropocene" to name our contemporary "epoch" (the smaller unit of geology's periodization of Earth history). The attempt here is to manifest the fact that roughly since the Industrial Revolution (the moment for a marker is still highly contested) human activity has been so predominant in traces and changes affecting the Earth's surface durably. In order to explain such debate over periodization and to allow the layperson to understand human time compared to Earth time, geologists often resort to a procedure similar to the reasoning at work with the concept of overshoot day, yet showing the complex, multi-dimentional nature of time and the barely graspable character of nature's time. Geologists indeed tell us that if Earth history was brought onto a scale of a one year period, humans would be born at the last minute on December 31st (a reduction of scale

154

reminiscent of JFK's, which opened this chapter). So at times, time is used to help visualize or better grasp what Tim Morton would call "hyperobjects." This is telling insofar as it seemingly may make things palpable, showing how much temporality contributes to and constitutes our realities and imaginaries. Yet these scalings in calendar year terms are also symptomatic of the abstraction of time: first, what is mobilized is not time so much as a way in which time is measured, made sense of, socially regulated and – rhythmically – organized, and how a particular temporality then accounts for some of the fabric of reality. A distinction thus needs to be made between temporalities, as variously capable of showing or trying to show concreteness, and time, as ungraspable, in need of measurement or linearization (qua temporalities). This resort to temporality operates as a translation of the incommensurable into an abstraction, paradoxically designed to allow concrete grasp.

After Bergson, environmental feminist thinker Elizabeth Grosz (2004) points out that time can be seen as the immaterial dimension of the material. If this is the case, then it can in fact hardly be "seen," or only retrospectively: time, or the causalities we take to be symptomatic of time, works backwards. While the effects of time can be observed in a concrete way, and the causes of these effects traced back, retroactively, such reconstitution after the fact, after the passing of time, is the only means available to account for time's fundamentally processual nature. This throws us into the impossibly retroactive reconstitution performed when doer and deed (2006, p. 26) are separated instead of holding everything as overdetermined effects (Althusser, 1985). One can see a wrinkle in the corner of one's eye, or a strand of grey hair, and think back to the last time this body part was observed with no such trace of time's passing, blaming aging for it and

producing a tryadic line distinguishing between past, present and future – Bergson's concept of duration is helpful here – to account for this change. Yet one cannot grab the carving of the wrinkle, or touch the de-pigmentation process of the hair, or even less, the duration in which these took place. These causes and effects are but points on that chronos' line, leaving us with no choice but to imagine the liminal spaces, or rather, all of it as perpetual becoming, all of reality as open-ended, unpredictable process. My resort to the terms "line" and "space" are telling in this respect: as Henri Bergson remarked, time requires spatialization to make sense to us. Where does the present fit in this spatialization? How can we make sense of processes by which the planet becomes ever more endangered, especially granted the extreme rapid paces so characteristic of global capitalism, in spite of temporalities of progress that assume capitalist growth's infinity?

Climate science has developed accounts of time in the form of "tipping points," "mitigation," and then "adaptation," to give concreteness to the urgency of the climate crisis. It has crafted new scientific ways to produce truths about the future qua anticipation and computer models and multiple future scenarios. As discussed above, Greenpeace's campaigns have resorted to stickers simply stating a provocative, pressing, and urgent "it's not too late"… which slogan has – tellingly? – disappeared. Greenpeace and other organization resort also, to enormous hourglass images on banners and as balloons, to convey urgency. But some dates about specific "tipping points" have vanished from the new IPCC report released in 2013 and 2014, compared to the 2007 Third Assessment report, while this more recent report has shown that many effects of climate change had been previously under, and not overestimated… Does this mean that "it is – in fact, now, at last – too late," that this disappearance should be taken for the

hope and urgency then expressed becoming obsolete? What meaning is such a question allowed when survival of species, and life itself, are at stake? As a process so crucial in our understanding and experience of the real, time is undeniably material, yet attempts at contesting its hegemonic modern conceptualization as linear, unidirectional and unidimentional (Latour, 1993; 2004), seem discouragingly insufficient in accounting for the fullness of what is at stake in a critical reflection on temporality within the context of the current environmental crises. I hope that the concept of uchronia can convey some of these stakes.

The very idea of time ending, when it is difficult to imagine it as anything but open-ended process, seems an impossibility. The above critique of endism, along with the critique of teleological time performed by the concept of uchronia underscores the impossibility of a correspondence between the end of capitalism and an alleged end of time. This may seem paradoxical, as the point of naming uchronia is to underscore limits, the particular limits uchronia is running into yet denying, while I still affirm the open-endedness of time. Yet the endlessness of time is not at all incompatible with the notion of limits: in fact these are interdependent. Time's infinity points to the contingent naturecultural character of uchronian temporalities: as the above discussion of limits v. endism suggests, it is not time, as a constant process of becoming, that ends when capitalist production hits limits. That uchronian temporalities, capitalocentric times and capitalist futures have an end, that this end may be approaching – in the sense that they will at one point be washed away by the sea like marks in the sand, just like man will, in Foucault's *Order of Things* (2014) – does not imply that time ends with this wave.

Uchronia v. Eternal Return: Fuck Futurism! Fuck Endism!

> *Fuck the Future! Fuck the Child!*
> Lee Edelman

In the following and concluding section, I finish (although the task is as endless as time is) substantiating and specifying the meaning of my concept of uchronia by bringing Nietzsche's concept of eternal return in conversation with the considerations above. This concept also enables to transition from a negative to a positive moment of this critique. Although the concept of uchronia is distinct from the doctrine of eternal return's rejection of teleological envisionings of time insofar as the former stems from the specific impetus provided by the anthropocene's context, Nietzche's critique of progress deeply resonates with my critique of capitalocentric temporality. Further exploring this resonance will enable a more precise delineation of the problem that the term uchronia foregrounds. This section, in weaving the critique made possible by describing capitalocentric temporality as "uchronia" with Nietzsche's doctrine of the eternal return, brings Nietzsche's attacks against the teleofinalism of progress characteristic of modernity into dialog with ecological matters of our times. I argue that Nietzsche's conceptualization of the eternal recurrence is a welcome support to an environmentalist critique of temporality: in fact, it was about time such conversations were staged.[39]

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[39] A number of attempts have been made to bring Nietzsche into conversation with environmentalist theory, including ones that have claimed Nietzsche as a pre-deep ecologist. I do not find these compelling, as deep ecology postulates a stable, eternal nature to return to (see chapter 4) whereas Nietzsche's nature is made of becoming, neither unreason or reason, constant erratic flows, bursts of creation, will to power. Thus I will not address these readings in depth, also because Nietzsche as a deep ecologist arguments have been refuted convincingly since. For an overview of this debate, see Acampora, 1994; Drenthen, 2005; Hallman, 1991; Halsey, 2005; Parkes, 2005.

In the current context of ecological crises, where urgency, the critique of growth and progress, limits, end-times, future generations make up central concepts in environmental thought to the point of posing fundamental questions regarding the reigning temporality, Nietzsche's attacks against teleofinalist time acquire astute salience. The eternal return not only feeds into the critical purchase of my concept of uchronia, it also begins to suggest how other temporal orders are possible (Foucault, 2002), and what forms they may take. What follows by no means purports to be the result of any sort of exhaustive mastery over this incredibly rich concept. Yet the eternal return turns out extremely helpful for purposes of temporality queering.[40] For now, I extract some of its critical dimensions. I will continue discussing this critical aspect in the next chapter, and subsequent chapters will weave other ontological and positive ethical aspects to discussions of alternative eco-temporalities.

This extraction first comes with the need of explaining part of the concept. With it, Nietzsche was proposing a radical refusal to align himself to Christian, modern, Enlightenment – or all three at once, as these overlap – teleological visions of History, to show instead the fundamental contingency and the total absence of pre-set meaning to the course of time. This is one first point that the eternal return helps specify regarding the critique made possible by naming uchronia. So far, for simplicity's sake, I have claimed that uchronia describes a teleological temporality. Yet we may now be more precise: after Connolly's reading of Nietzsche, it becomes clear that the target here is not the presence of direction (telos) per se, but the singular direction that absorbs or claims erase all other possible ones, with ends, goals, as justifying or redeeming the process. Teleodynamic

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[40] Here again we are reminded of Colebrook's identification (2014) of Nietzsche's vitalism as relevant to times of ecological crisis, and as she has more specifically underscored, as part of a queer vitalist tradition that has challenged other vitalisms.

temporalities (Connolly, 2015), which may include directions in movement and more plural, are not as problematic – though Connolly ultimately settles for what he calls "bumpy temporalities" instead.

In Nietzsche's view, if the universe had been able or designed to attain an ultimate goal, a unique and predetermined end, and if it were animated by reason, then it would already have reached such a goal or end. The fact that we have not yet arrived at such an end state, that the forces of the universe have not developed to reach their original objective, shows that there is in fact no such origin or objective. Thus Nietzsche reiterates this thesis many times in his notebooks, has his famous character Zarathustra claim it, exposes it in his *Gay Science*. If the course of history had always already been unfolding toward an end it contained at its point of origin, as a teleological vision of time would have it, there would be nothing rather than something, or some kind of impossible stasis: we would still be in this state, lost in time, out of time. If everything passes, then there is nothing but the eternity of the instant, containing the infinity of the past and the infinity of the future at each moment, rather than a meaning, a unified goal, a determined course.

> Let us beware [hüten wir uns] to assign an aspiration, a goal of any kind to this cyclical motion, or to regard it according to our needs as boring, stupid, etc. Undoubtedly, the supreme degree of unreason manifests iself within it just as much as the contrary: but we could not judge it according to this fact, neither the reasonable nor the unreasonable are predicates that could be attributed to the universe. (Nietzsche, 1881)

160

I will discuss in subsequent chapters the ethical implications of the doctrine of the eternal return, but for the time being what matters is this impossibility for any teleology to hold water – as water runs. Yet, with the notion that though there is no linear, unidirectional and unidimentional, single course for history, no predetermined goal, Nietzsche does not either claim that no meaning exists. Rather, the only meaning we humans may encounter in the world is the result of our own contingent creation – we may add that this takes place in hybrid collaboration with nonhumans, though this addition is deductable based on Nietzsche's depiction of the universe as moved by the eternal return and will to power, far from limited to humans.

Concretely and for our purposes here, Nietzche's doctrine of the eternal return provides further ammunition to attack uchronia, i.e to demonstrate the absurdity and impossibility the direction given to time by a capitalocentric temporality – that is, growth as the direction that measure progress, progress' goal as infinite abundance in a finite world. Or, more specifically, Nietzsche's eternal recurrence shows that such an objective is nothing but or no less than, contingently created and always re-created anew (differently at each moment). In other words, in spite of its self-representation as the only possible reality, in spite of its naturalization (capitalism being presented as the end of History, growth as the engine of progress and capitalocentric progress as our inevitable, ultimate end toward which we ineluctably tend), the idea of growth as our end is indeed a contingent creation of meaning (and uchronia is undeniably highly meaningful to many), one that we can get out of or leave, rather than the meaning. Furthermore, time is consequently infinite: no end preexists at the origin, because there is neither origin nor end, and this is true of both senses of the term "end": as "the end," that signs the closing

of the world's story, the end in sight, and the end understood as a ultimate goal, a direction or purpose. Nietzsche affirms that the universe of forces never attains equilibrium, never gets a moment of calm: its force, its agitation are always of the same intensity. Whatever the state of the world of forces may attain, it must of necessity already have reached it. And this state must have been reached an incommensurable number of times. Reason and unreason are off topic, and all meaning is creatively contingent, contingently created. If this is the case, then capitalism is but one assemblage of the forces in the incalculable possible assemblages of forces which will repeat themselves over and over, ad infinitum. The end of the world cannot correspond or be equated to or suspected of resulting from the end of capitalism: capitalism will end, growth and progress cannot, of necessity, be linear.

And this is where things become interesting, as in this doctrine converge necessity, contingency, and creation – thus freedom. The consequent possibility to get out of uchronia is what I will examine in the subsequent chapters. In the mean time, we may think back on the problems of urgency, limits, growth, linear progress, future generations qua the lens made available by the eternal return. I have synthesized these critiques thanks to the critical concept of uchronia: we urgently need to extract ourselves from logics of growth because they fail to acknowledge the limited resources for this planet. Uchronia describes an assumption of infinite forces in a finite world and ever-postponed end of abundance we allegedly cannot but pursue, as one would chase the horizon imagining one can touch it until one exhausts oneself, not before having (re)produced, meanwhile, (Earth-)exhausting modes of living. Uchronia denounces the naturalization of this teleofinalism as a simultaneously timeless and idealized temporality. It also sheds

light on the abstraction characteristic of the futurism at play in such teleology: ecological destruction (life-denying forces, nihilism, or reactive forces in Nietzschean language) is justified today, as today is subjected to an ever-postponed, abstract tomorrow of total abundance that will never come. This (re)productive futurism bypasses the concrete presence of all of future's infinity in the present moment, our concrete interdependence upon future generations of life forms which incalculable configurations repeat themselves eternally (a vitalism quite different from the vitalism which subsumes the present under abstract future life). Uchronia refers to this nihilist abstraction, to life-denying forces that envision time as ending with capitalist growth.

CHAPTER III

WAIT! LOOK!
ANTI-UCHRONIAS: TIME TO PAUSE AND THINK

Figure 1 : Blu, Untitled.

My Hands Are Tied, Time Is Money

In November 2008, Italian graffiti artist Blu spent three nights and three days covering an immense wall in downtown Berlin with a mostly black and white picture representing the white shirt-wearing torso and arms of a person tightening their tie. Probably about 30 meters high, the black and white of the painting did allow one major exception: the gold-colored watches ornating the person's wrists. These were connected together by a heavy golden chain, as though the person was in fact wearing a strange kind of handcuffs. Thus the tie and gigantic hands, the stiff neck, stage a businessman with his "hands tied" … by time – of course: "time is money." Yet, more than a tie constraining his hands, time literally emprisons, arrestingthe very powerful figure who uneasily tightens the knot around his neck. For urban spectators also, the image is arresting, inviting to at least glimpse, if not pause and contemplate. The gigantic painting almost has the viewer hear the gulping sound produced as the giant character swallows his saliva reaching for the reassuring symbol of his power. He ordersthis tie so as to grant himself better composure, as though he did not quite believe his own formulas: "you understand, my hands are tied… time is money," echoes unconvincingly, with a broken voice from a giant chest. My hands are tied indeed, my tie tightening, time is money, and qua the symbol of these golden watches chained together, time and money intertwine to tie the hands which desperately tie the tie. The shape is that of a watch, the material is gold, the function, multiple: that of handcuffs, to tie. That of watches, to tick. But the tying around the neck is self-imposed, initiated directly by the hands, though spectators may imagine it as nervous. And the watches must have been desired, and then bought: the rational choice of a rational consumer and powerful producer, decision-maker, business owner?

We know that Blu took three nights and three days to create this graffiti, as he provides "time-lapse" videos attesting of the process. Watchers, eyes wide open and mouth agape, discover the projector-equipped crane going up and down with the painting's progression, as they re-live the graffiti artist's insomnia in an anxious, titillating, compressed version. We've all seen time-lapse videos of flowers blooming, of suns rising and setting, of all kinds of otherwise slow nonhumans' movement and change, compressed so as to be made visible to the human eye. Here, we watch an urban landscape in the making. The result of these three nights and three days points at the prison of a certain temporality and its inextricable relationship to capitalist economies. It exposes the attentive interpreter to ready-made statements referring to a realism rendered absurd by the art which caricatures such realism: "time is money"; "my hands are tied." This is a pristine example of what I read as "anti-uchronian" art.

On December 11th 2014, this fresco was erased, most likely by the artist himself. The ephemerity of street art is also what grants it power and impact. Headlines concerning this event – as the erasure is also an event – read: "the most famous fresco of Berlin committed suicide last night." The erasure took place in the context of planning in this section of Berlin, that were including high-end luxury residences, whose inhabitants will surely wear ties and gold watches similar to the giant character that vanished overnight. Appearing and disappearing in ephemeral ways makes the life of a graffiti painting meaningful beyond the actual duration of its existence, which makes graffiti art indeed quite a great candidate for producing anti-uchronian moments or glimpses. Blu has created explicitly environmentalist art. The first section of this chapter includes a close reading of a couple of his frescos, supporting my clarification of the meaning I

create for the concept of anti-uchronia. For the time being (or becoming), suffice is to say that "anti-uchronia" is not the opposite of "uchronia," a symmetrically oppositional, other temporality that would replace it. Instead, anti-uchronia is about arresting the eye and making us see uchronia for what it is. For instance, it is "anti-uchronian" to call uchronia, "uchronia." So is my elan to and the process of creatingthe concept of "uchronia,"i.e to describe capitalocentric temporality as "uchronian," reversing charges usually directed at radical politics, so as to call capitalist economies "utopian" and "uchronian." Anti-uchronia is a critical glimpse and/or gaze at uchroniaas the contingent temporality that denies its contingency, presenting itself as neutral. It makes clear that this temporal order of things is not a given, that it is not self-evident and could have been otherwise – while it is true, at the same time, that so many factors explain it, that it is highly overdetermined. This in fact is the essence of contingency: that which, though over-determined, or perhaps because it is over-determined, could also have been otherwise. Anti-uchronian art, science, thought, events, would be those which allow to see the essential contingency in a temporal order that attempts to naturalize itself, in spite of all odds, as it is, in fact, timeless, disconnected, absurdly teleological, unsustainable and unbearable, as it always already postpones the promise it carries, running after sand castles in clouds so destructive to our Earth presents. So "uchronia" is itself an anti-uchronian concept. The reality that anti-uchronia refers to is uchronian, but daring to call it that when it claims so loudlyan exclusive access to realism or pragmatism, is anti-uchronian. Consequently, the entirety of the argument in the preceding chapter – and in this dissertation – strives to be anti-uchronian. Anti-uchronia allows to expose capitalocentric temporality as contingent: it starts the process of de-centering it, of denaturalizing it – in an understanding of nature

as static and devoid of change, which as Tim Morton (2010) has suggested, is precisely the problem with the concept of nature, naturalizing something would be coterminous with making it immutable, true at all times and in all places, for all beings. An anti-uchronian argument, anti-uchronian art, moments where the sciences lean toward anti-uchronia, all propose a vision that allows to see that capitalist consumerism and productivism are not naturally the ineluctable direction history necessarily takes, the hope for the only horizon possible, the only thing to look forward to, the measure of all things. Anti-uchronia takes a (first) stab at capitalocentric time. It may not (yet) propose alternative temporalities, but it shows the non-inevitability of uchronia, which, being teleological, presents itself as inevitable by definition. In exposing tension where things were previously taken for granted, anti-uchronia opens up a breach for alternative temporalities to potentially emerge or be noticed.

This chapter's goal is to take a moment to think what anti-uchronia means, how to foster this eye, these occasions for pauses. One of anti-uchronia's effect is to suspend the race of compressed, uchronian temporality, or at least to disrupt its pace. It is not an elan to stop time itself: rather, it intends to make time, suspending or disrupting or shaking the frenetic march of consumption and production, asking whether it is all really necessary after all, and if necessity doesn't in fact demand that we take completely different directions. Is there only one possible direction to time? Is this temporality the one one should want, the one one "cannot not want" (Spivak, 1996, p. 26) play with, create, simply because it claims to be, or assumes it is, the only possible horizon? Is this temporality even possible, let alone the only possible one, granted that it assumes illimited growth in a world with limited resources? Should we take neo-liberal capitalist

logics at their word when they call for present sacrifices on the grand altar of growth, because growth sets the arrow of time, because one day there will be abundance for all? Should we bow to that future today, even when we are seeing everywhere, today, that the present sacrifices are tremendously destructive of both human and nonhuman life? These questions, all anti-uchronian questions, inevitably take the form of a pause. A pause that is much needed in a time when the paces, speeds and rhythms of capitalocentric, growth-driven progress – uchronia– along with its effects – the approach of limits, and an urgent, pressing need for change – are at such odds with possibilities to make the time to think through necessary, vast and rapid changes. So anti-uchronia invests the tension between the urgency of change in a rapidly changing world, and the need for time to think through such change.

This chapter meanders through a variety of texts and genres, in the hope of instillingmy conceptualization of anti-uchronia with further precision and substantial meaning, and because percepts and affects found in a variety of discourses are capable of shedding light on, even informing, a concept like anti-uchronia. I find what I call "anti-uchronian" critique in a number of sites and discourses, both artistic and scientific (though also assuming there is more than mere resonance between these: art draws from the sciences and these are meaning-creating).The examples developed here are thus substantiating the concept of uchronia, not only because or in the sense that they illustrate it as perceptual or affective forms resonating with it, but also in the sense that they effectively support, ground and fuel the following conceptual work: part of the stakes in what follows is to show that anti-uchronian moments are in fact proliferating at each instant, all around and with us. Breaches opening up space for doubt and challenge of

hegemonic uchronia are erupting with the eruption of Gaia, with our context of ecological crisis, showing that uchronia was, in fact, never really entirely sustained or sustainable – never will be, even if it suffers adjectival modifications of the sort. It becomes especially, visibly, fragilized and fragmented now. I read anti-uchronian moments into Blu's graffiti, then in the Intergovernmental Panel on Climate Change's climatological reports. As it caricatures the paces and speeds of hypermodernity to depict visions of horror, Serge Brussolo's science fiction is yet another example of anti-uchronian vision. Finally, Yoann Bourgeois' contemporary circus piece *Cavale* suspends acrobats jumping and spiraling on a trampoline and stairs built in white rectangular forms with the curvy Alps as their background. From street art, to climatology, to circus, anti-uchronia becomes more full. The first section weaves anti-uchronia to further considerations of Nietzsche's eternal return, qua Blu (I). The second draws from Hans Jonas' concept of futurology to read climatology, along Isabelle Stengers' concept of idiocy, addressing multiple futures, uncertainty in the future, as well as the need to pause and consider these (II). Finally, Brussolo's terrifying self-sustaining yet cannibal houses show anti-uchronia in the form of caricature, and I spiral to close all these considerations back to the eternal return, qua a series of cairological trampoline jumps (III). The goal of this peregrinating would be to gather elements for answering more general questions about anti-uchronia and its conditions of emergence, such as: what does anti-uchronia look like, mean, entail, require? What do anti-uchronian moments comprise? What are anti-uchronian moments and events, and what do they look and feel like when they take the form of percepts, affects, concepts? What forms do they take? How may we foster conditions for anti-uchronia to emerge more often?

Environmental Street Art:
Fleeting, Quotidian Glimpses into Anti-Uchronia

This first section considers the relation between Nietzsche's eternal return, his exhortation to engage in the transvaluation of values, and anti-uchronia. I draw from the ways in which graffiti artist Blu stages anti-uchronian visions and moments in the quotidian of urban spaces to give further form to anti-uchronia.

Nietzsche's Hammer

In the previous chapter, I advanced Nietzsche's doctrine of the eternal return as one possible path to start contesting the teleological form of capitalocentric temporalities, uchronia. Nietzsche taught us that envisioning time as teleology is no less than nihilistic. If time had an origin that contained its own end, if time had actually "started" to unfold and could be reduced to an unfolding from a supposed origin point toward an end, there would be nothing rather than something. The world, if it could "reach" an "end," or be moved by "reason," aiming linearly toward an ineluctable end-point would already have reached such a state. If the present forces could reach an optimal or balanced or maximal or harmonious state, they would already have attained it. Because it isn't the case, we can deduce that no such end or origin exist. Time instead is radically exempt of both reason and unreason. Any direction or meaning we may see in it is willed, created, and imposed rather than (re)presenting an actual, objective teleology or sense the universe would simply have. Thus, claims to realism dictating one course as a given cannot be believed to be given so easily. More precisely put, they may (perhaps should) be doubted insofar as they attempt to reduce our presents and futures to one single direction that we allegedly could not but accept as the only possible meaning or direction. Certainly,

meaning, sense and direction may be willfully created and imposed on the eternal succession of chaotic moments owing nothing to reason or unreason (and thus the adjective "chaotic" isn't satisfactory either: "creative" would be more accurate). Claims that one single course with a specific end exists – a course which originated at a point causally coherent with it and that explains it – are simply attempts to assert one particular specific and contingent meaning: no matter the claim to know what is ahead and what should be done according to linear, teleological discourses, by no means are there absolute meanings or self-evident, predictable directions, beyond those created contingently (this does not by any means deny, either, the force of such contingency: it rather highlights it, such that we may re-direct resistance, or anti-uchronia, accordingly).

In later chapters I will return to the ethical implications of the eternal return and to its ontological implications (Deleuze, 1962) – the eternity of the instant situating us necessarily in a world of becoming as opposed to one that "develops" or "grows" (see especially my concept of synchrony in chapter 6). For the moment, I would like to focus on specifically "anti-uchronian" implications of the eternal return as a critique of teleological time. If we accept the radical contingency resulting from this, the implication is that we rule out reductions of our futures to one single direction dictated by economic growth as the ultimate measure of progress, the imperative to even create or subscribe to ideals and desires of "progress," and to the sole possibility of capitalist futures. Not only is "another world possible," as alter-globalization contesters have claimed, but many are (or, rather, become). This excludes granting growth the status of unavoidable value. We can start to laugh back, when capitalocentric detractors of radical environmental justice or cooperative practices and worlds laugh at these, when they claim that these modes of

living and these practices are "not realistic," "… remember, be reasonable, you know we need growth!" We can then laugh back and simply ask: "do you? What makes this value so self-evidently valuable? What makes you so certain this is 'the way to go'"?

The Nietzschean project aimed precisely to the "transvaluation of all values,"[41] and this is linked to the critique offered by Nietzsche's central doctrine of the eternal return.[42] If there is no single meaning, sense or direction to the unfolding of time, all values should be suspected and examine, potentially rejected, rather than accepted as fact. "Progress," and "growth" as the instrument or value for its measurement, are no exceptions to this need to sound each idol with a careful hammer (Nietzsche, 2005). Nietzsche's philosophical hammer has at times been imagined as the doctor's, but it can also be likened to the sculptor's, who sounds the matter she is working so as to carve and

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[41] In *Death of the Posthuman Essays on the Brink of Extinction vol. 1,* Claire Colebrook (2014) argues: "the humanism and anthropocentrism that have marked Western thought need to give way to a new relation to the environment. (…) We would require what Nietzsche referred to as a transvaluation of values. Rather than generating values on the basis of instrumental reason or utility – rather, that is, than assuming that the worth of an object or action is gauged by how much it furthers our own purposes – we would criticize means/ends rationality. We would not assume that all valid means are justified if they serve to maintain humanity in its current mode. We would, at the very least, consider values as if from a point of view different than that of 'man.'" Though I whole-heartedly agree that a Nietzschean transvaluation of all values is necessary in times of ecological crisis, we must go further than formulate this transvaluation in the terms above, in my view: if we simply stop treating nonhumans as means to ends, are we really resorting to a Nietzschean "transvaluation of values," or are we merely extending to the nonhuman world Kantian moral imperatives inviting us to treat alterity as an end and not as means, (which would assume that this imperative has already been met with regards to humans, and this isn't even the case – Bruno Latour has provocatively underscored this when he advanced an exhortation to "start treating humans as well as we treat animals")? Nietzsche's transvaluation of all values goes further than a criticism of the means/ends rationality resulting in the extension/inclusion of the treatment as ends to all living beings. Seeing the connection between his radical problematization of morality and his concept of eternal return, that is examining the need to rework temporality for such a transvaluation to be possible, goes beyond such extension/inclusion. It certainly requires "a point of view different than that of 'man'," as Colebrook puts it, but it does more than "criticize means/ends rationality," as it abolishes this dualism, and underscores that at no moment of our lived experience or histories, is reason and unreason actually pertinent.

[42] Here I'm intentionally opting for a specific reading of Nietzsche. Some may argue that the transvaluation of values does not so easily cohere with the concept of eternal return, or at least be skeptical of the correlation. However, many commentators of Nietzsche have read his radical attacks on morality as more systematically linked with the eternal return than this seemingly unsystematic or anti-systematic thinker may have us suspect, from Lou Von Salome's interpretation (2001), to Heidegger (who, erasing Salome's essay, claimed to be the first thinker to read Nietzsche's doctrine of eternal return as central to his whole thought), and of course Gilles Deleuze (2012; 2013).

create something new and get rid of hollow parts. Eternal return's radical attacks against teleological time and against claims to knowledge regarding "where we are headed," against claims to a reason guiding the world toward one goal or end, all act like the hammer sounding the unquestioned value of capitalist growth as hollow. The hollow resonance signals growth as merely one possible meaning created in a contingent time period and which we may proceed to smash. All meaning is created contingently, as the symptoms of specific living conditions and configurations of power, specific arrangements in the forces of the universe which keep re-assembling in new ways yet remain the same at every moment (the infinity of the past and that of the future being contained in each instant). All profoundly rooted beliefs that claim to provide a general orientation to life and determine it as fact (which is the sense in which Nietzsche uses the term "value" in his denunciations), must be subjectedto questioning, problematizing. For our purposes here, we can then see that history wasn't always going in a capitalist direction, doesn't have to, and ultimately isn't. There is no such thing as an "end of history," let alone one that would be characterized by the triumph of capitalism. Instead of such linear temporality of progress measured by growth as the indicator of value erected on a pedestal masking any other possible value, anti-uchronian moments let the possibility for other temporal orders of things glitter (Foucault, 2014, p. xvii). Here I am playing on the multiple sense of the term "value": Nietzsche intended it as those assertions which impose a general orientation to life and were taken as facts: he famously was referring to morality, which may not seem so self-evidently the case when one refers to growth as value in the sense of measurement, quantitative indicator of economic wealth. Yet this is precisely part of my point: growth may seem to belong a different,

morally neutral realm of economy, where morality is put aside and profit reigns instead. However the fetishized nature of a compulsory imperative to growth is not value-neutral in the moral sense any more than it is neutral in an economic, quantitative sense, and growth is indeed celebrated as the object of a desire that set a general orientation to life though taken as fact. This morally-charged sense of growth is especially visible in moments of crisis, when growth becomes actually absent but virtually omnipresent due to claims of being missed, and all the more desired, all the more crucial in setting the stage and direction of teleological progress: then discourses explicitly tied to morality proliferate, as with the current discourse of "austerity." Nietzsche called for the transvaluation of *all* values, and as a crucial one informing what counts as the real, growth must be subjected to such a critique if we are to take his exhortation seriously.

Anti-uchronia thus corresponds to events, moments, visions, artistic, scientific, philosophical and other percepts, affects, and concepts (Deleuze & Guattari, 1994) which open up the possibility for such alternative temporal orders erupting, and force uchronia to shake and crack, as they allow to shed the veil off something that up until now was cloaking itself as the only possible reality. The doctrine of eternal return admits no self-evident value to growth, and cannot concede to pseudo (and/or completely) Hegelians claim that capitalism is "the end of history" (Fukuyama and the likes) or even an inevitable "stage" of it (capitalocentric visions of history in general). Anti-uchronia refers to the percepts, affects, concepts, and events which shed light on uchronia as uchronian, as an impossibility under the guise of the only possible or desirable course. If capitalist economies' hegemony constitute a moment or a "stage," it is not in the teleological sense, but rather in the theatrical sense, or in the sense of it being part of teleological theatrics:

not that they don't exist, not that the play isn't indeed taking place, being enacted and performed, but rather, if the world is a stage and men and women (as well as nonhumans and hybrids) merely players, then several scripts, interpretations, performances can be written: actors are also playwrights, improvisers who ascribe meanings to what they do as they go, for a multitude, a quasi-infinity of reasons. Granted some of the improvising troop and direction is willing, the plot may twist in unpredictable ways, in surprising ways. Of course, twisting a plot that has so far been written and performed as predictacle and coherent, as going without saying, is far from easy. But difficult writing has not always prohibited new meanings from being created. The present and the future are open, and meanings, ascribed values are just that: ascribed. This makes them contestable: concurrent, equally convincing scripts are possible. Anti-uchronia doesn't (yet) propose an alternative script, but sheds light on the one script that presented itself as "reality," showing the ropes of its show, and it envisions the possibility for other possibilities.We can start to contest the reign of growth, the inevitable extraction of surplus value by those who own the means of production (and may now be dispossessed), from Earth and hitting the metabolic rift (Foster, 2000; Foster, York & Clark, 2011), and from working human bodies. The eternal return offers an anti-uchronian moment to reject the evaluation of a place based on its "GDP"'s increase, and to question the preference of such increases as value indicators to the detriment of, say, the increases in CO_2 emissions which growth depends upon – whether it be decoratively qualified as "sustainable" or not: I return to this critique of sustainable growth in chapter 3.This latter fact can start being granted as much meaning, being taken just as seriously, as the way growth is taken to be synonymous of wealth, as the way wealth is equated to progress and progress to the good,

to what must and should be. Anti-uchronia, helped by the anti-teleological moment of the doctrine of eternal return, sheds light on the ways wealth can happen to the detriment of concrete, hybrid, present life.

Blu's Spraypaint

It is precisely such a contestatory, anti-uchronian staging I want to turn to now, giving further flesh to anti-uchronian visions. The goal is not only or simply to provide an example that would act as an analogy, or an allegory, or a representation of anti-uchronia, i.e affording me a parallel to the concept of anti-uchronia, only in artistic form. Rather, my point is that anti-uchronian moments and visions already coexist with claims of monopoly over reality and over value performed by capitalocentric times and temporalities, i.e anti-uchronia always already is at war with uchronia. In other words, I am not intending to draw a parallel between my concept of anti-uchronia and the affective effect or the percepts produced by the art work I am discussing, so much as I am trying to argue that this art work itself is indeed anti-uchronian, it offers anti-uchronian moments and glimpses. The frescos I describe below are instances, eruptions of anti-uchronian art work, through which values are provocatively re-examined and dislodged from their pedestals, through a new eye, where and when time may pass in an unpredictable direction that suspends capitalocentric temporality, where for a moment one sees or feels that things do not have to be so growth-oriented or growth-desiring after all.

The artist has a creative position to the real: armed with a hammer or spraypaint, s/he may recognize, suggest, evoke or bring to life several possibilities for the real: possibilities of sculpting it, of carving several lives, life paths, modes of living, into

possibility. In these anti-uchronian cases art makes the contingency of a naturalized, self-naturalizing temporality visible… before potentially making other orders of things, other temporalities glitter. Two moments or dimensions constitute the make-up of anti-uchronia: one, anti-uchronian art shakes uchronia and in shaking it, suggests that we were always already dealing with a fragile strawman (of the kind, so real yet disembodied, that could be burned in some festival of the Arizonan desert). It takes down the emperor's clothes and shows he was always naked underneath: anti-uchronian art suggests that what is taken for a necessity – accumulating capital, extracting surplus-value in exploitative ways, growing capitalist economies – may be an impossibility, or, at least, suicidal, nihilist. Second, anti-uchronia glimpses at what could be, instead. In exposing uchronia for what it is, it makes it possible to think and say that other worlds are possible.

Anti-uchronia is thus the possibility that there may be other possibilities. It is not yet an alternative temporality, but rather the pointing to uchronia as such, as what it is, as timeless temporality (again, naming uchronia is anti-uchronian already), and the suggestion which follows from this pointing. It is the invitation, the exhortation:"let's claim the time to imagine something else." It is not yet, not necessarily, the imagining itself: simply the suggestion or provocation to imagine. Anti-uchronia is the start of another temporality, "only" in the sense of an interruption so as to make possible another durable temporality, "only" insofar as it sees uchronia for what it is ("only" is in quotation marks here, because this is already a lot, and quite difficult). Anti-uchronia steps out, jumps and sees uchronia in relief… in this gasping for air, this moment of suspension in (but not of) time, we see that growth's value is questionable, and that posing the question may be invaluable. As we will see from the following instances, it

also interrupts paces and speeds that make it both necessary and seemingly impossible to stop and think, to stop and contemplate. Where the Nietzschean hammer allows to sound the idols and shake those which turn out to be hollow out of their pedestals, where the value of growth and the direction of progress are questioned by the doctrine of the eternal return's anti-teleological moment, so graffiti artist Blu's spraypaint offers city corners and walls a moment to hail pedestrians and drivers' frenetic march, making time for questioning whether this march and its surrounding makes any sense, and what sense making this is, what value it claims and whether this claim shatters when shaken, in spite or maybe because of an urgency already omnipresent yet backgrounded.

One of Blu's frescos (see picture 1 below, page x) portrays a train made of cars, trucks, small grocery store carts-shaped wagons carrying commodities all rotten and piled as in a landfill, while other wagons transport oil barrels. Additional wagons are stuffed with dollar bills. The driver of the factory-shaped locomotive fills theses bills to burn them in the engine. The factory-locomotive is ornated with long chimneys evoking a coal plant. The resulting smoke above the locomotive traverses the dark green background. The train dangerously approaches an abyss, the railtracks hanging in the air, distorted, left free of a collapsed ground which opens into a threatening cliff. The progression seems slow, but the fall inevitable, though the stillness of the fresco suspends the movement as the spectator gasps. But the train worker who feeds the engine cannot see what the train is facing through the entrance of the engine – which looks like a bank and bears the dollar and the euro signs. The front of the locomotive, with its external plumbing and triangular roofs adding to the dollar and euro, bars the view. Scales are all out of proportion, as the train is not much taller than the human being who bends over to burn the banknotes. The

grocery carts are the size of wagons – are indeed wagons. Four of the last wagons one can make out in the horizon,at the tail of the train, are military tanks yet appear to be of equal size as the grocery carts. This could be a small freight train carrying open wagons during the gold rush, yet the truck is shorter than two barrels piled on top of each other, which are the same height as the factory.

This fresco contains myriad signs, symbols and symptoms that remind the viewer of the quotidian which capitalist lives praise and value: consumer items, dollar and euro signs, cars, fuel, banknotes, tanks, etc. Yet in this image, these are not heading toward beautiful horizons of peace and material comfort for all those consumers and producers who worked hard enough. In fact, the character embodying human hard work – the only discernable human presence in the fresco – has no clue where he is headed, however determined his frenetic bill-burning and the subsequent march of the train is: he is about to collapse in an abyss which he can't see, yet he inexorably focuses intense efforts so as to move forward. He is a uchronian protagonist, and this fresco stages uchronia, caricaturing it just enough for viewers to start seeing it as such and to quit thinking of it as a coherent or sensible reality, to quit thinking of it as that which needs to be. Anti-uchronia, in this case, thus takes the form of caricature. But caricature is not so much an exaggeration meant to make one laugh or to mock. Though there is a cynically mocking dimension here, if the caricature were merely an "exaggeration," the effect would be much less disturbing, one could dismiss it as simply untrue, or reduce the disturbing aspects of the image as those parts in the exaggeration that inflate and misrepresent "reality." Rather, here caricature performs a different vision of our surrounding, a competing narrative. The fresco contains just enough traits in common with what we take

to be reality (and take for granted as something we have very limited capacity to influence or change), so as to be intelligible to the viewer as a sort of mirror offered to her. Yet the reflection is reflective in both the mirror and the critical sense, i.e it distorts these intelligible traits of reality to underscore a different reading of reality, one that aims to be just as convincing. That is, in spite of the scales of the train worker's body, the grocery-carts and military tank wagons, the factory-shaped locomotives all being out of proportion, the troubling thing is that we can recognize these images, we can identify the closeness of these key objects in the consumerist and productivist, hegemonic capitalist economies we are part of, and this proximity is uncanny, because in the reflection, the locomotive driver will end up smashing the train and himself into pieces, down in the abyss. The fresco thus interpellates the viewer, who may wish to hail: jump off! Stop! Hit the breaks! In the grocery-cart wagons, one recognizes objects onehas bought and the very omnipresent dollar bills of one's quotidian lives, perhaps identifying with the locomotive driver, toiling for such destructive labor without having a clue of the direction he's taking. Or, one may feel repulsion and contempt at this stubborn character pushing a train inexorably to its own destruction, while leaving a barren background of ecological destruction around the tracks. One may feel a need for insubordination against the locomotive driver and wish to abandon the train, or to stop watching it pass passively, and stage its derailing. Or one may look forward to its falling into the abyss, remaining in the barren desert left in its tracks in the hope of restoring some life there, perhaps stealing a couple of actually useful items from the wagons as they pass by, so as to use and recycle them to support survival once the fall takes place. Anotherpossibility, of course, is onewhere despair prevails. The viewer may recognize the reflection as such, and feel

immense pain knowing that this image is indeed accurately reflecting the situation. The principal effect, then, corresponds to the first moments of the two dimensions in anti-uchronia which I outlined above: here anti-uchronia denounces uchronia and sees it for what it is, but the second moment is lacking (or not yet there), and the implication of anti-uchronian critique, that other worlds are possible, is painfully absent, or at best, left as bare as the landscape, in the form of a question mark: and if the train does fall, what will we have left, what will remain, what will its remains be like? However, even in this latter case, the fresco then provides an occasion for catharsis: Blu's train evokes the pain of being unable to be carbon-neutral on a moving train, the feeling of inability to stop its march, and the current human, all too human condition as one so caught up in said march that it makes us stubbornly incapable of seeing the direction capitalist ecological destruction is having us take.

Even in this solely catharsistic latter effect the fresco may have, the anti-uchronian moment is carving a crack into uchronia, insofar as it endents, perhaps shatters, its credibility as the direction we allegedly cannot but take. A viewer standing in front of this graffiti may venture a claim like: "but we need to keep burning these to move forward, don't you see we won't keep making money otherwise?" Yet such claim is made uneasy and the burden of proof is reversed: in this graffiti's vicinity environmentalist world-making may not have to justify its feasibility as much as capitalist futures do. The prioritization of capital accumulation even in the face of an abyss where all capital collapses into pieces sounds hollow, like an idol sounded by the attentive sculptor or Nietzschean transvaluation's hammer. As mentioned before, anti-uchronian concepts, affects and perceptsreverse the charges and the burden of proof: one

182

cannot dismiss those who demand that we slow down or stop, with a shrug of the shoulder and a "yes but let's be realistic: we need to keep burning." Anti-uchronian vision makes it possible to laugh, pause, and perhaps (hopefully), respond: "there won't be anything much to burn among the scattered parts of this whole train of yours after you've crashed it into the abyss: that makes your imperative to ever more capital accumulation, to furthering capitalist growth, absurd at best, off-topic at most, and delusional, if we're being serious." This can be followed by an elan to stop to look and notice the destroyed and barren landscape on one's way, around the linear tracks one has obsessively and blindly focused on. Instead of keeping on burning these bills frenetically, it becomes clear that looking ahead and around is needed: "you may be burning bills and we understand it's your passion, but you are destoying the landscape around you, along with your own back, and you are riding into a void." As Latour has put it, moderns have long been "running to the future, with their backs turned" (2009). Blu's train fresco provokes a desperate and urgent sense of need for jumping off the train or hitting the breaks, or for pushing it into the cliff to make it disappear and start caring for the damaged landscape. This fresco depicts uchronia as such, and causes viewers to desire slowing down, it poses interpellating questions about whether they may identify with the locomotive driver with his bent back who blindly follows the tracks.

As a caricature staged on an urban wall in the graffiti genre, Blu's anti-uchronian form interestingly points to the shape anti-uchronian moments may take. This graffiti proposes ephemeral glimpses into the absurd promises made by capitalist economies where accumulation and growth are prioritized over possibilities for life. The nature of this art is ephemeral: this is not only because graffiti art consists of intervention on urban

walls that often, regularly get painted over, covered either by the next graffiti or by municipal intervention "cleaning" the walls which artists may have "vandalized." In fact, Blu's renown now allows him to practice his art in the legal rather than the "vandal" form (note that graffiti artists' language reappropriates this pejorative term, so the adjective I am using here is not a negative value judgment by any means, but rather an attempt to espouse this genre's vocabulary). The fact that Blu can legally paint city walls now that he is a world-recognized artist does not take the spirit of graffiti art away from his works, as one that used to occur in a hurry to paint before the police arrests or chases the artist, thus happening by night, in hidden, quick, urgent manners. The tradition of fast execution remains, beyond the relative institutionalization or tolerance benefiting artists like Blu. But in addition, urban viewers of graffiti also experience Blu's anti-uchronian artwork in the paradoxical form of a quick glimpse, as they go about their quotidian itineraries in the city's business and "productive" pace, while also inviting to pause in front of the frescos and contemplate for a longer moment what the artist portrays. Graffiti is a form of interruption of fast-pace city living, while also espousing it (with the above-mentioned speed of execution), insofar as it offers some of the rare still images in city-scapes which aren't for commercial or profit purposes. Thus the specific artistic genre of graffiti aptly lends itself to an anti-uchronian moment: anti-uchronia contains two dimensions, one showing uchronia for what it is, the other an opener of possibilities, and it often does this in investing the tension between urgency and need to pause, in the form of an interruption, and invitation to take the time to think and imagine. It is thus a (critical) intervention on temporalities, and at the same time its temporal form is specifically

interruptive (I will further elaborate on this point in section 3 of this chapter, which discusses the cairological character of anti-uchronia).

So anti-uchronia, in these cases, proposes two moments: a critical one that shows uchronia as such, and a positive one that opens the possibility for other possibilities. It does so in the form of a pause, either long or short, an eruption into the quotidian and its assumptions, its normalcy. As exemplified in the case of the train fresco described and analyzed above, anti-uchronian art may take the form of caricature, and such caricature may provoke a desperate desire to hit the breaks, showing uchronia as delusional, and darkly mocking it. Yet, because anti-uchronia also encompasses the subsequent implication of possibilities' opening, caricature may transform into fantasy. This second moment of anti-uchronian critique is anti-uchronia's imaginative dimension, or its call for an expansion of imagination. Here another fresco painted by Blu constitutes a useful additional instance of anti-uchronia, one taking the form of fantasy rather than caricature this time (see second picture below). On a large wall bordering a sidewalk and a bus stop, Blu plays with scales and disproportion once more, painting four giant bikes riding on and crushing thousands of cars. It is unclear whether the countless cars are simply all parked statically very near each other, abandoned on a dense yet immense plane, or whether this is to represent an incredible mass of traffic stuck on an endlessly large highway. Have these subsequently been abandoned, their numbers forbidding them to make any progress? Have the drivers simply deserted the vehicles as they couldn't move anymore, or have people intentionally stored these cars there, and if so is it so as to abandon them, or is this, perhaps, a parking lot for cars just freshly out of the factory ready to be sold? Either way, the cars form a dense carpet soil extending to the horizon.

The giant bikers' heads aren't in the frame of the mural, which further confirms their giant scale to the viewer's eye. All that's visible is the bikers relaxed, leisurely, slowly yet inexorably and perhaps terrifyingly pushing legs, dressed with skirts, pants and shoes. The most visible one wears a T-shirt and is slightly bent over in a determined yet cautious pose leaving a trail of crushed car parts behind her or his bike's wheels, which sinkinto the car-carpet, down like war trenches, or like the trail of a demolition machine. The play on scale, in spite or maybe because of the stillness of the large graffiti, evokes slow motion, and the slow, sadically pleasuring sound of creeking metal being folded and flattened by the giant bike wheels. Just like with the train graffiti, and with the businessman wearing golden watches who opened this chapter, the human element of the painting is but an evocation, an elliptic suggestion: the time-bound businessman was headless, the train was moved into space with only one human worker and no human passenger being visible, he occupied little space in the whole wall: he was bent over, almost crippled by his blind effort to burn dollar bills. With these giant bikes and car-carpet graffiti, Blu suggests human presence in an elliptic manner again, as the frame only includes the enormous bikers' legs, their torso at most. Mostly, Blu's graffiti insists on the material world produced and/or destroyed by humans who are much smaller or much bigger than it. The play on disproportionate scales ricochets into the way the viewer can imagine the movement's pace, as both the train and the bikes seem to move inexorably, perhaps slowly, surely with great strain, while paradoxically unstoppable. Life, worlds, seen in slow motion, as in a magnifying glass, look contestable, as though slowness acted like a quesiton mark imposed on a normally assertive, affirmative necessity. In addition, here the scales evoke a reversal of quotidian city life's power

structure: this graffiti covers a large and long wall in an urban space, and even the most bike-friendly cities are almost always dominated by cars, to the point even that car circulation is one of the most striking characteristics of big agglomerations. They dominate in terms of threat to life (cyclists' lives more acutely than drivers'), cars usually crushing bikes and bikers rather than the other way round. Cars also dominate as invasion of air and noise, numbers, and, in appearance, speed (in lives where speed tends to be valued more than slowness).

Many environmentalists have pointed out that, were bike lanes and public transportation more broadly available to city dwellers, the speed of their commute on bike would be significantly higher than that of a car. Andre Gorz and Ivan Illich were among the first prominentecosophers to make this argument. Andre Gorz argued that cars had not been invented as a democratically accessible good, but rather a luxury item, and they immediately lost their value when the perception that every person or at least every family should own at least one car came to prevail. The generalization of car ownership also resulted in the congestion of cities. Bottlenecks and traffic jams continue to be "addressed" by enlarging roads and streets, adding more ramps and highways or bridges, which "solutions" never do anything but engorge cities with ever more cars. This, in turn, also resulted in urban sprawl. Andre Gorz sums up some of the consequences of this situation: "The spread of the private car has displaced mass transportation and altered city planning and housing in such a way that it transfers to the car functions which its own spread has made necessary" (1980). Cars allow the masses to live outside and away from the cities, making for urban sprawl, and then become all the more needed, etc. Before Gorz, Ivan Ilich also had underscored automobile paradoxes:

The typical American devotes more than 1500 hours a year (which is 30 hours a week, or 4 hours a day, including Sundays) to his [or her] car. This includes the time spent behind the wheel, both in motion and stopped, the hours of work to pay for it and to pay for gas, tires, tolls, insurance, tickets, and taxes. Thus it takes this American 1500 hours to go 6000 miles (in the course of a year). Three and a half miles take him (or her) one hour. In countries that do not have a transportation industry, people travel at exactly this speed on foot, with the added advantage that they can go wherever they want and aren't restricted to asphalt roads (quoted by Gorz, 1980).

And, we could argue, the ever adding advantage of increased health due to lesser air and noise pollution, accidents, and the superior amount of exercise. In other words, bikes are already more powerful than cars in many ways. Yet they are outnumbered, dominated, excluded by them in countless other ways, violent ones. This is what Blu's cyclist fantasy reverses.

The fantasy effect is especially salient as the fresco offers no context for these car-crushing bikes: as mentioned above, we do not know what happened to these hundreds of minuscule cars (whether they were parked or abandoned, stored, stuck in traffic and abandoned…), we have no explanation, just two symbols, erupted as in dream, in black and white, the bikes and the cars respectively blown or shrunk out of proportion. The cars are indeed shrunk to the point of being annihilated, crushed by magnified, all powerful bikes. The image is surrealist, invites spectators to pause and gaze not only at this reversal of forces and power, but also at "reality," or the hegemonic order of things, as if in an inverted mirror. This surrealism could go so far as a complete disconnect from

lived experience, from what counts as the real. Yet, just like in the train fresco caricature required recognizable elements of quotidian consumerist and productivist life to be mixed with emphases and exaggerations of scale and shape, dramatizing the sense of destruction, so does the cycling fantasy require enough concreteness and the recognition of quotidian figures, i.e connections to both what could be and what is, to function as an intelligible fantasy. The effect is thus to invite a desire, perhaps partly perverse and sadistic, for a different world where bikes would take their slow revenge against cars, where cars don't dictate the speeds and paces and spaces or scales, where relationship to space is not mediated by engines but by feet and pedals, where bikes do not get crushed by automobile traffic, but reverse the roles, and are recognized as more powerful solutions to commuting needs. By presenting a seemingly absurd image where bikes' force is inflated to be presented as overpowering cars, the fresco thus offers a vision at the absurdity of the reign of cars, and opens up the question: what if we granted more value to a world that would not celebrate these destructive machines, and rather destroyed them to impose a biking, non-polluting world? What if we considered the possibility that there may be other possibilities? This seemingly naïve question resonates with force thanks to the scale of the mural and its situation on a city wall right by a street where cars pass by every minute. Anti-uchronia thus points to the absurdity, the impossibility of uchronia, caricaturing it to propose that it may be more fragile than it may be, an impossibility that claims to be the only possible world. Blu's graffiti art, positioned as it is in the midst of city daily life, evocatively portrays uchronia under a light that critically exposes it, inviting pauses to stop and think in spite of the fast pace of city movements.

Figure 2: Blu, untitled.

Figure 3: Blu, untitled.

Climate Science's Anti-Uchronian Moments: Futurological Productions

Anti-uchronia thus comprises at least two moments: one consisting of critical engagement with uchronia in which the latter temporality is shaken, fragilized, in which a crack is open in the hegemonic teleology of capitalist growth showing its contingency, in spite of uchronia's overwhelming self-naturalizing pretension. Another anti-uchronian moment gestures at the desire, the possibility, to imagine other possible temporalities, to invent different worlds. Note that these two aspects or moments of anti-uchronia aren't necessarily simply distinct, and may be simultaneous. Anti-uchronia takes the form of pause, of interruption, of suspension of time and in time, so as to make the time to think in a fast-paced world, and a world where ecological crisis urgently calls for change. It is both in spite and precisely because of this urgency and this fast pace, that anti-uchronia is interruptive, a gasp for air, a making of time allowing new temporalities to perhaps be considered. I have argued above that graffiti art is particularly well equipped to create such anti-uchronian moments. Yet anti-uchronia may also erupt in very different discursive realms than art, and in the following section of this chapter, I turn to scientific reports on the climate crisis to underscore this.

Indeed, the sciences have played and continue to play a crucial role in grounding certain environmentalist claims. Though in chapter V, I will interrogate the limits of these grounds, for now I would like to underscore the ways in which the evidence generated by climatology both has taken an anti-uchronian form and has anti-uchronian lessons to teach us. Just like Blu's artwork was more than a simple illustration or a parallel to my concept of anti-uchronia, and rather constituted instances where anti-uchronia erupts, the scientific reports I examine here are more than an instance of scientific knowledge

containing similarities with my own concept of anti-uchronia. Neither is it simply

providing an analogy. As I will show, the anti-uchronian moment in the scientific reports

I focus on here productively offer additional layers to anti-uchronia: where Blu's art

produced, evoked and provoked anti-uchronian percepts and affects, climatology presents

evidence and concepts that add to the very substance of my concept of anti-uchronia (I

will emphasize the multiplicity of climatologically produced futurity, as well as

uncertainty). Furthermore, the form in which these are advanced tells more about how

anti-uchronia may manifest itself or erupt (as we will see, anti-uchronia may take the

form of "idiotic" questions triggered by the conclusions of climatological reports).

The IPCC Reports as Futurology

In a famous passage from his famous *Imperative of Responsibility* which I already quoted

in chapter I, Hans Jonas underscored a historical shift from economic growth and

technological development as progress to their problematization as threats. Today, this

problematization continues to resonate with the eruptions of new ecological crises that

have gradually added to the specter of nuclear catastrophes: this shattering of the

teleology of progress is precisely what anti-uchronia points to. What could have been

taken for a certain pessimism on Jonas' part turns out to be quite visionary instead, when

one considers even the most moderate or optimistic projections into the future the

Intergovernmental Panel on Climate Change (IPCC) has produced. This conglomeration

of world-renowned climate scientists within the United Nations synthesizes current

climatological knowledge every few years so as to produce diagnoses regarding climate

change, draft possible future scenarios, and offer prescriptive insights to policy makers.

The IPPC Fifth Assessment Report (AR5)'s first part just came out last fall (focused on

the physcial science basis) only to confirm "anthropogenic" global warming's severity, while the second and third Working Groups published their results (focused on adaptation, vulnerability and mitigation) at the end of March 2014. As philosopher Emilie Hache has also remarked (2010), the IPCC can be described as producing the "futurology" which Hans Jonas was calling for. Jonas critiqued Kantian ethics as incapable to face the new scale of human actions' consequences which technological "progress" had so drastically inflated. A new "ethics for the future" was needed: its implementation would include multiple temporal changes. While technological innovations and their commercialization would have to be slowed down, a "futurology"'s development would accelerate. This futurology would inform political leaders about the possible consequences of technological innovations and production, ideally contributingto sound, ethical decisions. The IPCC reports are quite close to fitting exactly this description: the reports synthesize worldwide climatological knowledge periodically and with each of their reports, they include a synthesis for policy makers, thus directly attempting to fullfill this role of advisors informing the ethics which will itself guide policy, in the hope of present and future generations' lives' liveability being enhanced, or at least rendered possible. The IPCC is quite clearly an attempt at futurological knowledge production, with its elaborate computerized scenarios analyzing millenia of data, weighing these against the modern period of CO_2 production, and projecting them into decades and even centuries of hypothetical futures. The scope of the research, as well as the level of worldwide scientific unanimity, are both unprecedented. The IPCC has a clear vocation in terms of informing what could indeed be called an "ethics for the

future," to the point that it was awarded the Nobel Peace Prize, an award that had never been given to a large panel of "hard" scientists, or any group of this kind.

While providing an exegesis of the IPCC reports in what follows, I read these as denouncing uchronia.I then argue that the IPCC reports can be read as anti-uchronianalso to the extent that they rely upon multiple possible futures. Further, the uncertainty regarding "equally plausible" futures is made visible in the very form of the texts. The reports constitute themselves as a "futurology" of multiplicity, while posing questions that interrupt certainties about growth and capitalist development, showing these alleged certainties as they are: uchonian.

Impossibility and Futurology's Diagnosis:
You Can't Be Carbon-Neutral on a Growth-Activated Train

The Intergovernmental Panel on Climate Change (IPCC) "was established by the United Nations Environment Program (UNEP) and the World Meteorological Organization (WMO) in 1988 to provide the world with a clear scientific view on the current state of knowledge in climate change and its potential environmental and socio-economic impacts" (IPCC, 2015). Since then, it has famously produced reports explicitly targeted to government officialsand international organizations (more so than the general public). In its very latest report on the *Physical Science Basis* of its diagnoses, published last fall, the IPCC further confirms and demonstrates its findings that:

> Warming of the climate system is unequivocal, and since the 1950s, many of the
> observed changes are unprecedented over decades to millenia. The atmosphere

and ocean have warmed, the amounts of snow and ice have diminished, sea level

has risen, and the concentration of greenhouse gases have increased. (2014, p. 2)

These phenomena, described it the opening section of the *Physical Science Basis* report,

are then explained by a myriad of causes, for the most part "anthropogenic," or human-

induced (I will further problematize the undifferentiated character of this causal

demonstration in chapter 3, where I will stress the "counter-uchronian" dimension of this

humanist scientific discourse). In other words, the report details the now famous

Greenhouse effect: carbon dioxide and other greenhouse gases emitted by a vast array of

human activity trap heat in the atmosphere that would otherwise be sent outside of it. As

we know, a greenhouse replicates the same mechanism on a smaller scale. The IPCC's

2013 Physical Basis report assertively qualifies "human" influence among the drivers of

climate change, calling it "clear."

> Natural and anthropogenic substances and processes that alter the Earth's energy
>
> budget are drivers or climate change. Radiative Forcing (RF) quantifies the
>
> change in energy fluxes caused by changes in these drivers for 2011 relative to
>
> 1750 (…) Total radiative forcing is positive, and has led to an uptake of energy by
>
> the climate system. (…) *Human influence on the climate system is clear.* This is
>
> evident from the increasing greenhouse gas concentrations in the atmosphere,
>
> positive radiative forcing, observed warming, and understanding of the climate
>
> system. (2013, p. 13)

Having established the phenonenon – greenhouse effect's rising of average temperature

level in the Earth's atmosphere – and its causes – "human" activities emitting greenhouse

gases emissions and bringing temperatures to an unprecedented level, the IPCC reiterates and further develops evidence regarding their physical science-based diagnosis:

> Each of the last three decades has been successively warmer at the Earth's surface than any preceding decade since 1850. In the Northern Hemisphere, 1983-2012 was likely the warmest 30-year period of the last 1400 years (medium confidence). (2013, p. 3)

I will return in the section below to the language of likelihood and degrees of confidence used by the climate sciences. The IPCC's language of uncertainty sadly makes for breaches which climate negationists happily penetrate (these are also known as climate "skeptics," although they hardly deserve this title). For the time being, suffice is to note that the accelerated and unprecedented warming experienced in the Earth's atmosphere has drastic consequences on human and nonhuman livelihoods, health, losses of coastal land due to sea level rise, mass extinctions and destruction of myriads of ecosystems, extreme weather events and the subsequent destruction of human and nonhuman habitat, lives, living conditions, water supplies, etc. This diagnosis regarding the manifold effects of "anthropogenic" climate change on human and nonhuman environments is the focus of the IPCC Working Group II's report.

The second report indeed observes environmental and human, present and (projected) future changes resulting from climate change, explaining among other things that "water supplies stored in glaciers and snow cover are projected to decline, reducing water availability in regions supplied by meltwater from major moutain ranges, where more than one-sixth of the world population lives" (2014a, p.11). Still according to the

report, global warming will cause droughts to increase in extent in regions already prone

to these, while flood risk will augment in other regions due to heavy precipitation events.

> The resilience of many ecosystems is likely to be exceeded this century by an
>
> unprecedented combination of climate change, associated disturbances (e.g.,
>
> flooding, drought, wildfire, insects, ocean acidification), and other change drivers
>
> (e.g., land-use change, pollution, over-exploitation of resources. (2014a, p. 10)

This means that: "Approximately 20-30% of plant and animal species assessed so far are

likely to be at increased risk of extinction if increases in global average temperature

exceed 1.5-2.5° C" (p. 11) These mass extinctions are without precedents in the

Holocene. So are hunger risks increases for human populations, which are projected to

occur "for even small local temperature increases (1-2° C)" (p.11). Some may welcome

some changes, and reep the benefits of localized temperature increases. The IPCC, taking

this in consideration, nonetheless alerts its readers: "Costs and benefits of climate change

for industry, settlement and society will vary widely by location and scale. In the

aggregate, however, net effects will tend to be more negative the larger the change in

climate" (p. 12). The report is quite alarming regarding global warming's consequences

on human health:

> Projected climate change-related exposures are likely to affect the health status of
>
> millions of people, particularly those with low adaptive capacity, through:
>
> - increases in malnutrition and consequent disorders, with implications for child
>   growth and development;
>
> - increased deaths, disease and injury due to heatwaves, floods, storms, fires
>   and droughts;

- the increased burden of diarrhoeal disease;

- the increased frequency of ground-level ozone related to climate change; and,

- the altered spatial distribution of some infectious disease vectors. (p. 12)

The report specifies that some health benefits may be found in temperate areas, including reduced rates of deaths from cold exposure, yet these would be outweighed by the negative health effects of worldwide temperature rise, "especially in developing countries" (p. 12). I will return to the question of unequal impacts and contributions to climate change and the way the IPCC addresses disparities among "humanity" (or, to some extent, fails to address them) in chapter 3. For the moment, what I wish to underscore is the anti-uchronian dimension and consequences of these conclusions.

The picture of the present and future worlds painted in these texts is certainly not an attractive or optimistic one. Yet here, the IPCC allows us to see the uchronian character of capitalocentric temporality, the limits of the current economic systems being underscored by myriad environmental and health effects arising today. The temporality at work within the text is important in doing so, as animated as it is by a linear causality I will further critique below (chapter V). The first working group diagnoses past and present causes and effects of global warming: the "Physical Science basis" of the reports concludes the influence of greenhouse gas emissions produced by "human" activity is "unequivocal." Then, the report written by Working Group II transitions to a second moment, as it dives more closely into the projections of current temperature trends into the short and long term futures, to focus on the ecological effects and their consequences on human health, food production, livelihoods in general. Finally, Working Group III, focused on mitigation of the climate crisis, projects possible measures' ability to address

global warming into the short and long-term future. My use of the plural for the second diagnostic, or most descriptive moment, contrasting with my use of the singular in reference to "the future" in the third, most prescriptive or programmatic moment of the reports, is of course purposeful.

What is interesting for now, is the way in which this articulation has the IPCC shed vast doubts upon past and current models of development, and does so explicitly. It allows environmentalist claims to be made, including mine: infinite, capitalocentric growth-driven development in a world with a finite tolerance for it, is indeed uchronian, and one can affirm that "we have scientific facts to back it up." Such statements are powerful in a world which, as Bruno Latour has shown, authorizes scientists to cross the human/nature separation and bring "truths" from the latter that are often capable of forbidding politics, imposing themselves with more authority even in the human realm. And they are powerful also, of course, because such truth making powers can cause controversies. When the IPCC compares millenia of temperature data during the Holocene to the last two centuries and a half, concluding that high-carbon economies have caused and will cause unprecendented destruction, progress takes on an explicitly life-threatening form, and capitalocentric temporalities' promises of abundance are challenged, crumbling even to a status of impossibility. It becomes clear that uchronia disregards the Earth's limited ability to suddenly receive carbon dioxide sequestered over millenia into its atmosphere without it heating and without such heat resulting in mass destruction. The scientific reports produced by the IPCC are clear. They compare millenia of the Earth's average atmospheric temperature prior to industrialization, in 1750. These dates correspond to the rise of a predominantly carbon-based political and

economic world. Timothy Mitchell has compellingly demonstrated the profoundly

mutually constitutive relation between oil exploitation, which is responsible for most of

greenhouse emissions, and capitalist democracies (2011). Today the IPCC is insisting

that future vulnerability depends not only on climate change but also on "development

pathway" (2014, p. 11). In other words, the extent of the destruction resulting from global

warming is deeply contingent upon the horizon in sight taking into account the effects of

past and current greenhouse gas-emitting modes of production. Or, in contrast, this

horizon could continue to exist in a nebulous cloud obscuring its consequences on the

Earth surface to paint an impossible and dangerous, illusory oasis of endless growth,

relentless abundance, with greenhouse gas somehow magically disappearing into thin,

self-purifying air. This oasis-like horizon, which recedes as "we" approach it while

leaving destruction on "our" path, is uchronia. To an extent, the IPCC reports clear the

nebulous cloudlike horizon and rid us of the oasis projected by capitalist modes of

production, to reveal a different horizon. They allow us to see the capitalist horizon as

uchronia, underscoring what is known about the present and future consequences of

capitalist consumption and production, along with the unknown dimensions of "our"

futures: "A wide array of adaptation options is available, but more extensive adaptation

than is currently occurring is required to reduce vulnerability to future climate change"

(2014, p. 19). The IPCC thus attempts to demonstrate that "sustainable development" is

able to reduce climate change vulnerability. In this respect, the Panel has so far relied

upon the Bruntland Comission definition of "sustainable development," i.e as

"development that meets the needs of the present without compromising the ability for

future generations to meet their own needs" (2014, p. 20). The "diagnostic" reports on

Physical Science, adaptation and vulnerability at least gesture at opening the future to possibilities of change, and takes temporality into account in a new way, where future generations' needs would be recognized and incorporated into present decisions. In so doing, they include grounds for anti-uchronian visions.

Multiplicity and Futurological Projections: Several Futures Are Possible!

In addition to the above-described diagnosis and feeding into it, the IPCC produces a form of futurology now better known to the greater public (in part thanks to the IPCC's Nobel Prize): it entertains "storylines" and "scenario families" imagining various modes of global socio-economic development and demographic changes. Each of the families of scenarios branch into several modifications, with a result of more than 40 scenarios in total, all syntheses of thousands of scenarios invented by worldwide climatological research. The IPCC's scenarios are called SRES scenarios. Their description is the object of a Special Report: SRES stands for Special Report on Emission Scenarios (2000). This technique is directly inherited from climatological literature, although the IPCC is the only organization in the world capable of compiling this much data and scenarios into such efficient models. On this basis of many "equally plausible" scenarios and based on the collection of palaeoclimatic data, the panel projects itself in the future via as many models, practicing a form of science-fictional thought experiment.

For instance, the "A1" family of scenarios is characterized as follows:

The A1 storyline and scenario family describes a future world of very rapid economic growth, global population that peaks in mid-century and declines thereafter, and the rapid introduction of new and more efficient technologies.

201

Major underlying themes are convergence among regions, capacity building, and increased cultural and social interactions, with a substantial reduction in regional differences in per capita income. The A1 scenario family develops into three groups that describe alternative directions of technological change in the energy system. The three A1 groups are distinguished by their technological emphasis: fossil intensive (A1FI), non-fossil energy sources (A1T), or a balance across all sources (A1B). (p. 4)

In contrast, the "B1" scenario family is described as

a convergent world with the same global population that peaks in mid-century and declines thereafter, as in the A1 storyline, but with rapid changes in economic structures toward a service and information economy, with reductions in material intensity, and the introduction of clean and resource-efficient technologies. The emphasis is on global solutions to economic, social and environmental sustainability, including improved equity, but without additional climate initiatives. (p. 5)

Let's pause to contemplate the last phrase here, which specifies that the scenario does not include "additional climate initiatives." It is quite telling of one of the epistemological and political choices made by the IPCC. In an attempt to craft what Hans Jonas would have called a "futurology," and one that still satisfies criteria of "scientific objectivity" as opposed to seeming altogether programmatic, the IPCC has designed scenarios that do not implement the Kyoto agreements, or specifically climate-targeted policy. The idea is

to pose a programmatically neutral question:[43] if the planet was to keep going in various

possible, or "equally plausible" directions, all with no specific regard to climate change,

what directions would have us experience what results? Then, from observed results

produced by the climate models and purporting to nibble at policy changes in a number

of possible futures, the IPCC's Third Working Group – which is specifically assigned to

the task of thinking through climate mitigation solutions – considers various measures

addressing global warming and evaluates their respective effectivity levels. Working

Group III's futurity is thus dancing precariously on the thin line separating the

programmatic and the moderately prescriptive, the whole of the scenarios' production

being premised upon a claim to remain soley descriptive and analytical.

The IPCC's futurological epistemology (inspired by climatology at large) is as

unprecedented as the crisis it studies. By proposing so many scenarios, it sheds light on

the multiplicity of the future and the – at least relative – open "developmental paths"

available to the planet. It thus suggests a possible departure from a teleological necessity

that imagines one end only as possible for the future of "our" current capitalocentric

world, evoking this world's contingency, or at least the presence of contingency in the

future. Indeed, the scenarios are explicitly ascribed equivalent plausibility, for reasons

linked to the avoidance of a programmatic tone in the Special Report on Emission

Scenario (SRES). Yet this undeniably questions current developmental paths' desirability

and can point to the necessity to rethink their inevitable character. Though as we will see

(chapter V), none of the scenarios go so far as imagining a future world dominated by

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[43] "No judgment is offered in [the SRES] as to the preference for any of the scenarios and they are no
assigned probabilities of occurrence, neither must they be interpreted as policy recommendations" (p.3).

non-capitalist economies, or even consider non-capitalist economies at all for that matter, IPCC futurology is a futurology of multiplicity.

Multidirectionality and Futurological Anticipations

Finally, the reports' relation to temporality at least partly secedes from uchronia insofar as it proposes a new form of anticipation where humans and nonhumans are taken into account together. Here, scientific imagination and mathematical models indeed project us onto multiple possible futures, and it is by throwing oneself into present and future implications of climate change, andsimultaneously making our way back from the comparison between these futures to the present that recommendations are made. Futurology here suggests futures' multiplicity as well as a multidirectional relationship to time and to change. In this sense also, the IPCC's futurology is anti-uchronian, and anti-uchronia implies attempting to grasp infinite pasts and infinite futures in the present (this is where anti-uchronia tends toward synchrony: see chapter VI). In the latest IPCC reports of 2013-14, the panel further innovated, pushed by climatologists' criticisms, and complicated its futurity. New scenarios have been designed that added more multidirectionality to multiplicity. Indeed, the panel does not limit itself anymore to project current trends into multiple possibilites, and then make its way back to the present for recommendations, which movement so far, was the only multidirectionality involved in relatively linear model. The last reports have corrected a crucial limit in previous ones: these used to project current economic, social, demographic and other human trends, to assess the climate impacts, including some feedback effects internal to the climate system, but with limited to inexistent attempts at including the ways in which these changes in climates would reciprocally then proceed to affect demographics, economic

behavior, and how the latter would then continue to affect climate, etc. The 2014 impacts and adaptation reports have created increasingly dynamic models which include these reciprocities between factors of change. This further complicated the futurity at play to render it more multidirectional, in addition to multiple. As I've underscored above, anti-uchronia includes two moments (granted these overlap, interconnect, and can be simultaneous, almost acting as dimensions as much as moments), whereby uchronia is critically shown or portrayed as the timeless, teleological temporality which naturalizes itself yet is contingent, while at the same time, by implication, the possibility to consider other possible temporalities emerges. The IPCC's conclusions, along with its multiple future scenarios' methodology, correspond quite exactly to these two moments of anti-uchronia. They allow to further explore what anti-uchronia may entail: interrupting uchronia to think of the possibility for other possibilities may require to open up onto a futurity of multiplicity and rejecting a futurism which subjects presents to an abstract singular and reified future (of endless accumulation). It may require readiness to nourish a relation to temporality that makes room (or time) for multidirectional moments of anticipation. It may require accepting and even assuming, asserting uncertainty regarding both the present, and the infinite past informing it, the infinite future flowing from it.

Uncertainty and Futurological Epistemology

Indeed, another dimension of the texts produced by the IPCC further suggests the radical contingency of "the future," in addition to the multiplicity of "futures" which the Panel presents. Consistent with climatological knowledge and epistemology, the reports indeed insist on carefully underscoring, assessing and distinguishing between likelihood, evidence and confidence levels. This shows the limits of certainties regarding future

projections of past and current trends in the Earth's temperature, greenhouse gas emissions, and "human" activities causing these. For instance, "very high confidence" represents "at least a 9 out of 10 chance of being correct", whereas a "high confidence" stands for "about an 8 out of 10 chance of being correct." Similarly,

the following terms have been used to indicate the assessed likelihood, using expert judgement, of an outcome or a result: Virtually certain > 99% probability of occurrence, Extremely likely > 95%, Very likely > 90%, Likely > 66%, More likely than not > 50%, Unlikely < 33%, Very unlikely < 10%, Extremely unlikely < 5% (2013 & 2014).

Finally, in Working Group III's report on mitigation, yet another classification system is used to evaluate the levels of agreement among IPCC scientists, and the evidence available to substantiate each claim. Most paragraphs in the reports are thus followed by the parenthetical mention of levels of confidence and evidence (e.g., high agreement, medium evidence; high agreement, much evidence, etc).

The unknown and the known are thus emphasized, in relation to one another and to time or futurity. While this rhetorically creates breaches into which climate negationists love diving as deep as their absymal lack of responsibility and the depths of their oil-pockets for propaganda funding allow them to, this underscores both the contingency of the future in addition to its multiplicity, and the specific extent of certainties regarding "human" emissions of greenhouse gas fueling global warming. In admitting to the vast extent of the unknown and attempting to evaluate so carefully the portion of uncertainty in each claim they make, the IPCC reports are anti-uchronian as they evoke contingency–

one of uchronia's characteristic, even in spite of its self-representation as the only possible end in sight, and the future's unpredictability. The paradox here is that the measurement of uncertainty with likelihood, evidence and confidence level corresponding to numerically expressed probabilities (usully numbers of chances of occurence out of 10), and in percentage points, indicates a will to truth, a desire for exactitude regarding the limits of climatological knowledge, i.e it betrays a desire for certain, exact assessments of uncertainty. But precisely in this tension, anti-uchronian tensions are allowed to glitter: all that science is capable of asserting is that we *may* be hitting this or that tipping points, threshold (400ppm), and so on. So anti-uchronia here takes the form of a question mark, a doubt shed on current "developmental paths." If we further extend this anti-uchronian moment in climatological futurology, if we invest this breach, this crack, anti-uchronian critique ricochets to make any fast and certain assumption that we cannot not want growth more than dubious.

Cairological Anti-Uchronia:

Pausing to Think on Time in a Time of Urgency

Reading the IPCC reports as futurological knowledge offering anti-uchronian moments thus allows to see additional layers in anti-uchronia: impossibility, multiplicity, uncertainty and multidirectionality inform the past, present and future portrayed and analyzed by climatologists in the panel to suggest grounds for anti-uchronian questions about the dangers and limits of capitalist growth. Anti-uchronia comprises seeing uchronia for what it is, as an impossible horizon that recedes as we approach it and which, because it is teleological, positions itself as the only possible end in spite of its contingency. As we have seen both in turning to Blu's graffiti art and to the IPCC, it also implies the possibility to consider that there may be other, multiple possible presents and futures in sight. Finally, I have mentioned that such anti-uchronian percepts, affects and concepts, such anti-uchronian moments invest the tension between simultaneous needs to take the time to pause and think, and to act fast in a fast-changing world, a tension emerging out of a context of urgency. The last section of this chapter focuses on this third aspect of anti-uchronia. In what follows I will argue that anti-uchronia cairologically intervenes in and because of this tension. Anti-uchronian moments are moments which allow barely intelligible questions which slow everyone else down, struggling against the rapid contamination of our oikos to erupt clearly before all life in it is made unlivable, and suspending time to make time to think other possible lives. It refers to moments robbed to imagine myriad possibilities in the face of impossibility.

The Idiot: Pausing to Pose Anti-Uchronian Questions

> "Questioning growth is deemed to be the act of lunatics, idealists
> and revolutionaries. But question it we must."
> Tim Jackson, *Prosperity Without Growth: Economics for a Finite*
> *Planet.*

Anti-uchronia takes the form of a pause imposed upon a uchronian rush, where the future

is considered as the teleological result of inevitable patterns, made of abstract endless

accumulation, and subjecting the present and concrete possible futures to destruction. As

produced by the anti-uchronian moment in the IPCC texts (among others), such a pause is

evocative of a conceptual figure which philosopher of science Isabelle Stengers (2010)

mobilizes to think critically about the state of emergency the climate crisis creates. This

figure is none other than the Deleuzian "conceptual character" of the idiot.[44] In what

follows I describe this conceptual character to juxtapose it to my concept of anti-

uchronia. Through this juxtaposition, I am simultaneously showing the idiot's

fundamentally temporal dimension and continuing to specify the meanings, forms and

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[44] I was told, in a conference presentation context, that "disability studies may have issues with my use of
the concept of stupidity" to denounce geoengineering, among other things (the criticism was mobilizing
"disability studies" at large: such remarks, in bringing on an entire, vast field of literature as vaguely as
possible, are always fascinating, and their vagueness justifies responding to them solely in footnotes). I
hope this time it will be clear, in case it was not in the first place, that both here and when I discuss
geoengineering and the IPCC's concept of "anthropogenic" climate change more critically (chapter V) – as
these involve stupidity, that I propose the character of the idiot as an inspiring conceptual figure, and that
when I use the concept of stupidity, it is to denounce experts and decision-making (corporate and state)
elites seriously considering geoengineering as our way out of the climate crisis. In other words, the idiot is
by no means stupid, but in fact engaged in a confrontation against stupidity. I read these deciding and
decidedly delusional elites (chapter V) as traversed by stupidity (they themselves are not even characterized
as "stupid," though their comportment surely makes such generalization quite tempting). Any reader who
would read quickly enough to feel offended by my denunciation of stupidity as a process and confuse this
with an "attack against mentally disabled people" (the terms that were used in the above-mentioned
criticism) might want to interrogate their own rush to the association made by such objectors, between
stupidity and mental disability – an association I do not make by any means. If any parallels between
mental disability and the concepts I deploy here absolutely needed to be made, one could perhaps look to
the inspiring figure of the idiot. But this would probably require an idiotic (i.e slow, careful) reading, which
the critic in question was unable to do, given how incompatible academic life and a certain static and
caricatural kind of identity politics too often are with such idiocy, and given how they flirt instead with
stupidity.

effects of my own concept of anti-uchronia, my reading of the IPCC reports as in part

anti-uchronian. The IPCC stands as the much needed "idiot" who poses necessary and

pertinent yet disturbing, interruptive, pause-causing, barely intelligible questions with

respect to uchronia. In other words, my purpose is to entangle the idiot to the concept of

anti-uchronia, to show the idiotic dimension of anti-uchronian questions and give

examples of such questions. To this end, my reading of Stengers' concept emphasizes the

idiot's temporal dimension.

Stengers describes the idiot as being defined by her[45] resistance to both the

consensual way and urgency:

> in the ancient Greek sense, … a semi-private language that excludes from a form
>
> of communication characterized by an ideal of transparency and anonymity …
>
> Deleuze's conceptual character is the one who always *slows the others down*, who
>
> resists the *consensual* way in which the situation is presented and in which
>
> *emergencies mobilize thought and action*. (2005, p. 994).

Thus idiotic interventions disrupt the rush to a "mise en equivalence," causing a pause, in

the face of emergency. While those stressing emergency rush to an "…and so…," the

idiot demands that we slow down, a deceleration inseparable from the conditions of

emergence of thought. In the case of climate change, I would add that such pause and

resulting novel questions being posed are in fact all the more necessary that urgency

results from the approach of the specter of ecological catastrophe. In other words, it is

precisely because the situation is so urgent that one needs to pause and think. The very

urgency invoked to justify rushing to conclusions without taking the time for idiotic

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[45] Here I am using feminine pronouns regarding the figure of the idiot, following Stengers. Yet one should note that the IPCC reports writers include very few women.

questions creates the need for the kind of pause generated by idiotic questions. Thus the requirement to slow down actually takes place within states of emergency.

To an extent, the IPCC reports allow to see the past and present predominant developmental paths – made of carbon emission, intensive agriculture and industry, relentless growth on a planet with limited tolerance for such paces and with a growing a fever – as uchronian. The anti-uchronian moment in these texts is an idiotic one, one that deploys itself with all its temporal effects: it interrupts, disturbs, arrests, causes pause. It suggestively casts doubt upon fundamental assumptions of capitalocentric temporality, on uchronia: are "anthropogenic" global warming patterns of production and consumption a necessity, or isn't it necessary instead to at least slow down, if not disrupt, growth and even the desire for growth?

The idiot's questions are hardly intelligible in the midst of a rush to conclusion, to emergency measures brushing off the surface of anti-uchronian moments to quickly return in the seemingly reassuring and familiar spheres of uchronia. Indeed, the implications of the above analyzed futurology that growth may not be desirable at all though it advertises itself as that which we cannot not want, are quite discernable in the reports, but also entangled in myriad uchronian and counter-uchronian assumptions (we will see in chapter 3 how the IPCC falls back on counter-uchronian "sustainable growth," in spite of the breach it opens to doubt the imperative to growth). The risk of an idiotic question lies in the possibility that it may not be seen or heard. At the same time, the IPCC has indeed shaken growth-oriented assumptions enough to cause outrage and incomprehension on the part of so-called "skeptics." The idiot's strength and weakness (her pharmacological character, in the sense of Plato's famous pharmakon as both a

remedy and poison) is that she reaches for the limits of knowledge, and poses disturbing questions which barely can be deciphered or grasped, let alone accepted. Reading climatological data and drawing conclusions from observations that post-industrialization levels of CO_2 are on their way to making life unbearable, requires a moment of retreat to barely intelligible but now growingly pressing questions regarding how things could possibly be and/or become otherwise, and questions about whether growth-oriented temporalities would be included in these other order of things.

"Playing the idiot" or "acting the idiot's part" thus comprises a dimension of time spent at the limits of knowledge, asking unlikely, unexpected, perhaps naïve sounding questions, and turning what seems self-evident into problems, to create concepts responding to such problems. The figure of Dostoyevski's idiot certainly is one source of inspiration for this conceptual figure, but the idiotic play also evokes the character of Socrates. Not that the idiot would perform his role and slow others down by asking his disturbing and disrupting questions in an insincere or ironic way (as Socrates was sometimes accused, and at times guilty, of doing): the idiocy may very well be genuine and sincere, an attention to what most, in common language and caught up in the pace of "normal" daily life, may pass over too fast. The idiot, in addition to and because she confronts the limits of knowledge, remaining with the problem instead of rushing to a solution and/or simply not seeing the problem, ignoring it, is producing idiomatic formulations regarding what usually goes without saying. It goes without saying that we all need and want growth, and the question of whether it is the case or not will not be address, as this would be a waste of time, as this question is indeed not even granted existence as a question. Thus the idiot is barely intelligible to others, imagined as a

stargazer (Socrates' figure erupts again), disconnected from the ground's reality. She may be called lazy or superfluous: "you wonder why we should have growth? Perhaps it's because you don't wish to work hard to have it:" already the question of whether growth is beneficial, desirable, feasible, sensible has been erased as it is assumed to be an obvious end and the idiot is accused to want to escape solely from the mean deployed. The escape and the laziness of the interlocutor who makes such an accusation being, of course, left unquestioned: he, after all, is willing, to "work hard." Proof being, he very reasonably wants growth and can see this is the only sensible route. The idiot, meanwhile, also wastes others' time by refusing to hurry and propose a program once her questions are being posed. The idiotic part is not one that attempts to arrive at a definitive answer, turning idiomatic questions into an axiomatic ("idiomatic" should not be confused with "idiotic," but if the two share a root it is precisely because of the barely intelligible dimension of idiotic questions, such that not all idiomatic questions are idiotic, but certainly idiotic moments are bound to take on a partly idiomatic form). One of the strengths of the idiot is precisely that she does not offer a solution, forcing interlocutors to postpone normative or prescriptive leaps – whether the idiot will in fact have interlocutors is not guaranteed however: unintelligibility is also one of the idiot's problems, though it allows for the conditions of thought. In sum, the idiot's flirting with the limits of intelligibility is indeed a pharmacological dimension, both remedy and poison, both strength and weakness. The idiot forces us to stay with the problem, to grant it more duration. She stretches out the pause, because it is there that thought can emerge: this is why she slows all other players down. But thought may be more necessary in a circumstance of ecological urgency than at any other time.

I have explained above (section I and II) that anti-uchronia contains two dimensions, one denouncing uchronia for what it is, the other opening up the possibility for possibilities. It does so in the form of idiotic pause. Though anti-uchronia does not claim to definitively offer a temporality to substitute to uchronia, it has a temporality of its own, one that triggers pause. But under what kind of circumstances can anti-uchronia erupt in this way, and in what context may it gain resonance, what effects may erupt when? In what follows, I will linger with the "when" question, along with the question of anti-uchronia's form.

Oikos Contaminated: Missing the Right Time to Sustain the Livability of Life

> Truth is a matter of imagination.
> Ursula Le Guin

In his *Cauchemards paralleles: vue en coupe d'une ville malade*, Science Fiction writer Serge Brussolo (2006) describes a city where inhabitants are fleeing and fighting a strange disease affecting their houses. The oikos has indeed gone mad, and the protagonist engages every inch of her body in a struggle against the mysterious "contamination" of houses, which become inhabitable as they (the houses, that is) carve galleries underneath themselves. Gradually, the reader gathers that the computer-managed houses of the "sick city" use the components of their own surface layers for this digging and for their meanderous underground constructions. The houses' "advanced" technology absorbs old materials, furnitures, curtains, paint, bricks above, and somehow recycle these to form endless tunnels which turn out more scary and less habitable each time. Through the eyes of the main character, the horrified reader witnesses the spectacle of a world controlled by computers once programmed to anticipate every need and new development of future human societies. This was done through intricate ethnographic and

algorithmic information aimed at automatically renewing the houses above so as to keep on carving the house of the next generation with the old one. Yet the anticipation resulting from the artificially intelligent, self-designing houses has turned into wreckless machinic speculation incapable of actually fitting human needs. The human world is being destroyed by this hyper-rationality. The speed of the renewal has accelerated to the point that human inhabitants could not possibly follow and adapt. In fact, the machines go so far as to (hyper rationally) perceive and treat human bodies, from skin to hair, flesh, blood, organs and bones, as part of the houses: they now use human skin, body parts, hairs, to compose the insane walls, furniture and objects of the most recent galleries. The computerized, renewable oikos has swallowed the human beings still attempting to live in it. As a result, computerized renewability, engineered speculative recycling's fast pace frenzy has turned comfort-providing houses into anthropophagous ones.

Each bit of progress made by this computerized oikos becomes more inhuman.A lifeless and destructive hybridization process is at play. Though cyborgs may be attractive in some understandings (Haraway, 1987), Brussolo's hybrid forms, in the poisonous oikos he describes, are terrifying. Instead of sheltering it, the oikos threatens the fabric of life with computerized and technological colonization, to the point of reaching death. Technologically-driven recycling results in the absorption of life (I will return to this when I critique "sustainable growth" as "counter-uchronian" in chapter V). The protagonist in fact feels this draining out of her life force as she evolves through the galleries.

Of course this is not necessarily contradictory to Donna Haraway's critique (1987) of boundaries between the animal, the human and the artificial and her exhortation

to embrace our hybridity and foster affinity rather than prefer illusory self-coherent and bounded identity. That is, one simplistic reading of Brussolo's horror story could fall on a flat rejection of technology as necessarily and intrinsically sick, and on a need for humans to somehow separate themselves from it. Yet the sickness here is everywhere and knows no boundaries, starting with the fact that the houses' computers were originally engineered by humans to manage the oikos. Rather than reading this in a luddite vein, I read Brussolo's fables as offering a world where, precisely because the absence of boundaries between these is made especially obvious, sickness in computer systems and algorithmic prediction, poisonous directions in paces at which the entanglement between human bodies and artificial intelligence, pour over all of life so as to void it. More than hybridization, or rather, inherently linked with a sick form of hybridization, are the paces, rhythm and speed at which some aspects of such hyridization morph and internally clash with others. Temporality is crucial in shaping the form of sickness and pushing it to the boundaries of horror, to anthropophagous ways. The contaminated oikos shows how much one must make hybridization a fundamental and urgent matter of concern (Latour, 2009).

The first chapter in *Parallel Nightmares: Sectional Views of a Sick City* (my title translation) simply describes the protagonist's desperate and impossible struggle against the houses (she is inevitably as sick as the technology she is attacking and which is attacking her, as she moves about the houses constantly to attempt curing them – and herself). Each "parallel nightmare" in the "sick city" can be read independently as well. In other words, Brussolo describes a premise, the computerized oikos gone mad, and from then on the reader may start to interpret the following short as an exploration into

216

some the various tentacles or galleries created by the houses. This second storystages

mere automated, lifeless reproduction, perhaps further exemplifying the nihilism of high-

tech house-building computer(ized) architects (if indeed we are dealing with another

gallery dug by the houses). Here Brussolo describes a long hallway with no end or

beginning in sight, and female human beings attached to beds, confined in rooms as bare

as solitary confinement cells, where voices from some kind of speaker are the only mode

of unilateral communication. Males and females are born in these rooms. The latter are

sent to "grow" in their own confined cells and reproduce there, while the former then

creep their way out slowly, yet never shed their umbilical chords, eventually reaching a

new room where another female prisoner is confined, and where they couple. The

prisoners continue on to produce new humans who replicate the patterns of emprisonment

and rape. The story portrays bare reproduction with unlivable life, and the beings

produced know no escape as the chain constrains their atrophied muscles. Both this

gallery and what one imagines (based on the first story) as the surface, contaminated

world constitute an environment of mechanical, alienated lifeless life, an atrocious

caricature of meaningless uchronia, with a dark surrealist dimension evoking the worst

fantasies imaginable. We have seen (section 1) that graffiti artist Blu resorted to both

fantasy and caricature to propose anti-uchronian visions (though his fantasy was one

where bikes crushed cars, in a flash of environmentalist dream world rather than a

dystopian vision of further ecological destruction). Brussolo's horror stories critically

stage a different moment of uchronia: a moment situated after the train of progress would

have passed a nihilist tipping point, and fallen down into the cliff. The book certainly

deserves its title: "parallel nightmares," that is, visions of horror in a world where living

beings do not cross paths, a world envisioned by the gaze of a mysteriousimpossible narrator: in the latter story, no one could possibly leave a written account or narrate anything of this strictly reproductive, alienated and raw human flesh-making technological apparatus. If they did, would such narrator take on a human form, one that could write? If not, would the narration be intelligible to us, and if so how?

At first, only the title ("Parallel Nightmares: Sectional Views of a Sick City"), the opening chapter, and some common themes running through the two stories suggest the possibility of a whole world containing the various galleries. The stories don't explicitly refer to one another, neither are they tied by a single plot or protagonist. Who may be capable of doing the narration thus remains a mystery for most of the second story (wait… suspense…), though the title evokes "sectional views." Each story peeks at each bit of gallery as such a "sectional view." Are we witnessing flashes, as in a premonitory nightmare, of the city's architects' viewpoint? If the architects are in fact artificially intelligent computers, do(es) such narrator(s) feel sympathy, terror, or indifference with respect to these flashes into inhuman galleries? Indifference seems excluded, as the title also calls these sectional views "nightmares," yet if the narrator's viewpoint is the computers', does artificial intelligence render capable of affects, like terror and empathy, let alone narration? Brussolo's text is relatively neutral in tone, almost strictly descriptive (except for moments when narration happens, still in the third person, but qua the viewpoint of the protagonist in the first story). It remains for the reader to be horrified, especially as the last element of the title to be mentioned is the adjective "parallel," that both may refer to the ways in which galleries meander, one alongside another and never crossing, and might also signal, in a typically science fictional/fantasy language, this

218

desolate and cannibalistic environment as parallel to the readers' worlds – in the sense

that it may never meet, that it coexists with ours in another reality, i.e that it may play the

role of a metaphor, be compared to our worlds.

In the second story, the plot takes an actual cannibalistic turn that adds to the

evocation of anthropophagous computerized houses from the first story. The character

from whose point of view the narration occurs has found, somehow, a razor blade with

which he cuts his umbilical chord. He then wanders in the hallway in search of the first

female body, the origin point of this unbearable yet absurdly and meaninglessly eternal

network. In his path, his search doubles with the necessity for sustenance: he is now

disconnected from the apparently infinite umbilical chord, and finds no other means of

subsistence than… human flesh. Devouring his helpless victims, his reasoning is just as

inhuman and terrifying as the world he move around in: his victims being immobile for

eternity, are condemned to either powerlessness, or to resistance by way of extraction

from the network, annihilation of the cannibal. In the latter case, they would subsequently

have only two choices: suicide, or reproducing the cannibalism practiced by the man they

just killed:

> Que pouvait-on contre lui? Pour lui donner la chasse, pour le combattre et
>
> l'anéantir, il aurait fallu qu'un autre homme acceptât lui aussi de se libérer de son
>
> cordon et le poursuivre de palier en palier, rasoir en main jusqu'à l'affrontement
>
> final. Mais après ? Il y aurait la faim du survivant à combler, la faim du
>
> vainqueur… et tout recommencerait. (p. 51)

Interestingly, the network of umbilical chords is eternal, yet the protagonist assumes that it has an origin point, which he feels so enraged against he orients his whole wandering to the search of the first female, that without which none can be nourished in this meaningless, solely reproductive world. Life is eternal, because the umbilical chords will never stop connecting all to all. It is also fragile, given that if one disconnects, all will die – which makes the purpose of the protagonist's hunting even more absurd, but the hunting itself revealing of even more anger against this meaningless bare life. Women are reducing to complete passivity and imprisoned with a restriction of their mobility even more drastic than that of men, the originary point of the chain is assumed to be a woman, and all that remains is eternal expansion of the chain. « Pourquoi l'éternité ? » wonders the wanderer.

With every step of progress the computerized oikos makes in subterranean galleries imprisoning any hope for life in nothingness, we watch the unwatchable, lacking a viewer that could ever become narrator, such that the reality described is a nightmare not only in the horrific sense of the term, but also insofar as it is impossible to tell as anything else. Colebrook's discussion of extinction and her critique of the concept of anthropocene discusses this paradox (2014): who is the geologist reading the marking of the Earth's lithosphere when geologists today argue that our age will be readable as that when human activity was prevalent over any other factor of geological change (the definition of "anthropocene"), given that the concept of anthropocene also inaugurates the idea that "we" humans will not be there by then, given how destructive the anthropocene would be? Brussolo's horror dystopia describes a world passed a technologically, cyborg or hybrid nihilist tipping point, and this horror, just like Blu's

caricature of uchronia discussed above, has us interrogate uchronia more critically. But if similar traits are present in Brussolo's anti-uchronian science fiction as were in Blu's train mural, the former stories emphasize yet another aspect of anti-uchronia, which I will call the cairological aspect. They tell the story of a world where it is too late for livable lives to be lived, where no one screamed to the driver of the train of progress that he should hit the breaks before the machine and all wagons fall into an abyss and leave a barren landscape behind (above the galleries' surface). This is a story where "kairos," the right moment for action and thought, for speaking out, has been missed, where resistance did not erupt on time. The problem isn't that one has missed the train of progress, but that one has missed the occasion, the moment to derail or stop it. Hans Jonas announced that progress' promises had turned into threats, yet both promises and threats were always situated in an abstract future, in the à-venir. Brussolo's fantasy novel (if it may be called this) passes the moment of realization of the threats and realizes them, to impossibly describes the "afterwards." This poses the question of "when," the question of the opportune moment for anti-uchronian pause to be taken and for critical thought to emerge while we slow down, and to further slow us down. This last aspect of anti-uchronia, its cairological dimension, is fundamental. Anti-uchronia caricatures and/or fantasizes, so as to emphasize the uchronian dimension of our presents, the impossibility of abstract, futurist, capitalist promises that justify present destructions. By estranging usually reified and naturalized, teleological capitalocentric temporality from the viewer, anti-uchronian images expose and discredit claims that desire for growth goes without saying. A second moment, as we have seen, includes the possibility that there may be other possibilities, other possible temporalities. In Brussolo's story, we stay a bit longer with impossibility

221

to read, through the impossible eyes of a viewer that will not come to be, the possible outcome of destruction which fast uchronian paces may breed, if pushed beyond their limits. This, by implication, powerfully forces to wonder when we may (if at all) cairologically intervene: for anti-uchronia to matter at all, it needs to occur in the right interstices left open by uchronia and widen these cracks, making the most of "the right moments" (if those exist, or can be created).

Brussolo's fiction stages bare bodies fulfilling their supposedly most "natural" function, most minimally reduced, a form of vitalism[46] which pro-life advocates defend: life for life's sake, certainly, but not in the sense of the affirmation of life as creation of one beyond oneself, rather the horrifying picture is one of life below oneself, below humanness, below more-than-human lifeforms. The inhuman humanness of this fable is telling of what may be one of the distinct traits of the human: its capacity for loss, for extinction of what makes it human. This dystopia is but the horrific caricature of nihilist forms of pseudo vitalism and naturalism, coupled with the hyper-technological. In the first story, the artificially intelligent computers building self-perpetuating galleries for human housing have drunk the coolaid: life, nature is fundamentally about reproduction. In the second story, the female bodies are reduced to their most inhuman, natural-technological passivity: lying down on beds they are confined to, they breed, expanding the numbers of human bodies, while the males barely exercise any mobility yet monopolize all the mobility there remains, one attached to alienating umbilical chords. In this gallery, contrary to the gallery mentioned above, body parts like hair or skin do not

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[46] Here again, we are reminded of the distinct forms of vitalism within Western thought and politics, which I have mentioned above: we may remember that Jane Bennett (2009) briefly mentions the distinct nature of her material vitalism from the right-wing vitalism of pro-lifers, while Claire Colebrook (2014) has identified a queer vitalism uniting Spinoza, Nietzsche, Deleuze, etc as a counter current of actual vitalism (including Plato, Kant…).

make for the material used for furniture which sits still and will absurdly never be sat, lied on, or used in any way. In fact it is more rational and more natural than the hair and organs-made lamps and couches, as there the computers may have fulfilled their mission of ensuring that human life sustain itself along with human habitat. Yet, the objectification is perhaps more total than in the first nightmare, as the full bodies reified in this case (as opposed to body parts) may (or may not) still be able to think and experience the atrocious reality surrounding and constituting them in a somewhat conscious way (though these beings' cognitive capacity are likely highly damaged). The confinement of female bodies on their beds, where they do nothing but breathe, receive some kind of nutrients for their atrophied muscles through the never-ending umbilical chords, get raped and give birth in series, as on a chain in a human flesh factory: the women are chained to the beds, both males and females receive instructions from speakers to breed, and, for males, to leave and enter the rooms. These two coercive and disciplinary (the speaker voice is called "civic educator") measures assume a need to respectively stifle potential resistance, give orders, invests bodies in life labor. This implies at least some residual agency on the part of the inhumanly computer-managed humans. The thought may be at least as unbearable as the thought of a reduction of body parts to raw material for lifeless objects, however non-humanly vibrant these may be. Something about the wholeness of the bodies and their parts still functioning somewhat dynamically together, added to the coherence of this hyper-rationalism (again, in the case of body parts fueling furniture elements, there remained the absurdity of the uselessness of habitat), creates added horror. The kind of imprisonment depicted here replays the most extreme disciplinary mode of exercise of power: individualizing and totalizing at

once, solitary confinement is systematized to the point of suppressing any possible sense of collective, such that the little agency humans in this situation may have, the little resistance they may exercise serves only to aggravate their suffering. This caricature offers a glance into what the reduction of life as reproduction entails if pushed to its furthest implications: if Nature's aim is reproduction, then high technology gone mad is capable of fulfilling this mission in the most rational implications. Rationality, hyper-rationality, meet madness, loss of all cognitive abilities. The genius of Brussolo's fable is to grasp precisely so many of the essential(ist) themes of the anthropocene: human technology is capable of sacrificing the human on the great altar of reproductive Nature's grand goals. In placing the mirror this way to encapsulate the most extreme consequences of efficiency, rationalism, technology and Nature, Brussolo unveils the dystopian character of utopian dreams screaming, produce, reproduce, you are designed for it, you designed your computers for it, and your computers reciprocate in the great natural elan that you defined as such.

Suspending the horror for a moment, relieving the unbearable suspense, Brussolo abruptly ends the second short story with a change of voice: the protagonist has dreamed most of this world, while sedated by powerful experimental drugs during a military mission which transport included hours chained through tubes. He did, however, sleep walk and killed (some say he ate) many of his co-soldiers.

Kairos, Suspension, Slow Motion

Suspense and suspension are crucial to anti-uchronian moments, moments when uchronia is caricatured for instance, creating a critical distance and pause that allows thought. In the case of non-caricatural forms, as we will see below when I examine the jumps of

224

circus acrobats, suspension can also be the physical, embodied creation of space and time for breath and thought. But these anti-uchronian pauses require a complex understanding of time, in cairological and chronological terms. Kairos, one of the two ancient Greek words for time (along with chronos), refers to "the time of opportunity of 'occasion' come and gone which marks the significant moments of historical action" (Smith, 1969; Honkanen, 2007). Thus "chronos" would correspond to the measurement of duration, the quantity corresponding to a duration, in other words it is the quantitative dimension of time. Questions associated with it include 'how old? How fast? How long?' Kairos, in contrast, refers to qualitative time, the time of opportunity or "right time." A season offering the opportunity for a certain event, or a missed opportunity, is referred to in cairological terms. Questions associated with kairos include 'when?' 'at what time?' 'at what point?' The last one is interesting, as it shows that kairos, like chronos, relies on spatial terms to make sense (see introduction to this dissertation). Kairos allows us to emphasize constellations of events, events themselves, and stresses the ways in which these would not have been possible at another time and in other circumstances. It thus stresses contingency, as the meeting point between necessity and randomness, that which could have been otherwise but occurred in a certain way at a certain time because of myriad reasons specific to the moment, context or period. It is, to simplify, time as the relationship between moment and context, opportunity (missed or taken) and circumstances.

For anti-uchronia to be capable of seeing uchronia as contingent in spite of the latter's teleological character and subsequent self-naturalizing claims, anti-uchronia positions itself cairologically (which doesn't exclude, in that cairologically-erupting

225

occasion, asking questions having to do with chronos). Global climate change would not

have been possible under circumstances less reliant on capitalist modes of production:

this anti-uchronian claim makes it clear that the critical dimension of anti-uchronia adopts

a cairological perspective. Further, the second moment of anti-uchronia, that which

strives to open up the possibility for other possible temporalities, is also a cairological

intervention. As I have pointed out above, anti-uchronia invests the tension produced by

circumstances of urgency, whereby the need arises to pause and take the time to think

through vast and rapid changes while the need to act fast is also salient, and while both of

these seemingly contradictory needs erupt from the same movement. The kairos of anti-

uchronia is thus full with tension.

Consequently, it becomes crucial (urgent?) to linger on the cairological dimension

of anti-uchronia. If anti-uchronia is about creating breaches, cracks opening up the

possibility for other possibilities, its questions, its condition of existence (of eruption)

have to do with 'when? 'In what circumstances? 'In what occasion?' If opportunity refers

to the relationship between time and possibility, and if Kairos refers to the opportune

time (or absence or passing thereof), then anti-uchronia is more a cairological than a

chronological matter, but may also (cairologically) ask chronos-related questions. Of

course these are connected: some questions entail taking both of these dimensions of time

into account: a certain quantity of time may be needed for the right moment to emerge.

Questions posed by Brussolo's fiction or Blu's graffiti art or the IPCC's futurological

climatology concern how much time needs to pass for a "tipping point" to occur, after

which certain actions regarding the climate crisis will not be possible anymore. Kronos

thus refers to a before and after (Aristotle defined it as the number of motion with respect

to the before and after, thus stressing the materiality of time, which is also crucial here –

Aristotle, 1984). The relationship of anti-uchronia to these two dimensions is thus more

complex than it simply cairologically saying something about chronos or failing at

finding kairos, the right moment to carve a thought-provoked and provoking pause.

Seeing the cairological dimension of anti-uchronia would have more to do with its

context of urgency, the tension I have been mentioning between a need to pause and think

and a need to act fast in a fast-changing world, which are but two facets of the same coin.

This also leads to questions of how anti-uchronian visions can be fostered, what

the opportune perspective at the opportune moment looks like. Art is again a rich venue

for such interrogation. The performing arts, the arts in movement, depend upon the

passing of moments with repeating and differing phrases, scuplting into speed, pace,

rhythms as their matter. They thus work the fabric of cairological time, and maybe highly

suited for fostering anti-uchronian foresight. A couple of years ago, French contemporary

circus artist Yoann Bourgeois created a piece titled "*Cavales*." This word could be

translated very unsatisfactorily as "run" ("*cavaler*," "to rush about") or "escape" ("etre en

cavale," "to be on the run"). It is often associated with a panicked run, whether it

connotes horses galloping away from a source of danger, or children driven by

excitement and haste. Yoann Bourgeois' circus piece was staged on a high point

overlooking the city of Grenoble, with a majestic view of the Alps, which surround the

city and together serve as the background. The ground décor was made up of a white

rectangular elevated plane, with a set of equally immaculate stairs in the back of the

rectangle on the right. The scenography thus played with a contrast between the green

curvy Alps, in whose creases the city is nested (urbanized areas being visible in the

background of the stage and horizon), and white geometrical, cold planes, though these could also curiously evoke curveless clouds. On the stage, the light and muscular bodies of two acrobats walk, move, lean, jump into each others' arms, and eventually make their way to the half of the rectangle that is in front of the stairs, which turns out to have cloudlike rebound: a trampoline is dissimulated in what could have first seemed like a solid and strictly horizontal structure throughout, and the acrobats' jumps amplify, slow down, spiral, accelerate, also using the stairs. Moving on a melancholic music (a track by experimental rock band *Silver Mount Zion*), the softly bouncing bodies interchange position at various stairs, letting themselves fall down on the trampoline while in an upright but loose position, barely touching the surface underneath to land, back like feathers on stairs higher or lower after their bodies have crossed in a scissor-like pattern until their feet meet the stairs. The stairs quickly feel like they erupted from a dream, and suggest that they may lead to the sky. In the sound background, at moments when the two acrobats are slowing down, the voices of Roland Barthes and then Gaston Bachelard emerge, and excerpts of their lectures shed light on some of the many meanings, effects and affects evoked by the jumps, rebounds, suspensions and movements in the choreography.

The piece by Barthes is an excerpt from his work on the category of the neutral, where he cites Pasolini claiming that all we have left is a "desperate vitality." I will return to this Pasolinian idea for different purposes later (chapter VI on synchrony), but already the phrase, along with the choreography and scenography are suggestive of many of anti-uchronia's conditions of emergence. The suspension in the air of light bodies rebounding regularly on the rectangular, cloudlike stage often lasts long, as the artists have incredible

228

control over the speed of their motion, and these suspensions go from the rational looking geometrically shaped rectangle to the sky and the Alpine background, beautifully entangling images of nonhuman and human things and living beings. In watching this elevation and return to the soft ground, also landing softly to the harder stairs, spectators' breathing may rhythmically follow the movements, gasping in admiration while also lengthening their breath as the image is impeccably timed and the pace is slow. The exchanges of positions and places between the two bodies, their turns and spirals are movingly soothing as well. Yet a tension remains throughout, against which the phrase "desperate vitality" resonates and echoes. The surfaces on which the artists are moving, the ground which they rebound against, are geometrical and made of straight white lines, rational, rigid, yet transform to cloud and dreamlike under the artists' feet. The Alps are irregular, full of abrupt cuts and tall long curves, and the city sinuously couches in its valley.

As I pointed out already, anti-uchronia may take the form of a pause, yet like these performing artists, suspending time or pausing does not equate stopping it, but rather makes time, opens possibilities of evocation of despair as well as vitality. Anti-uchronia isn't, either, not yet, an alternative temporality that would purport to replace uchronia, but rather questions it and lets other temporal orders of things glitter. The term glitter is useful here, as again, it is the possibility of other possible temporalities that emerges, rather than these temporalities themselves. Yet this possibility itself "makes the time" to think, so it does have its own temporality, just like the suspensions created by trampoline jumps happen in space, have their own duration, yet also make space and time. In the repetition of movements as well as in the seemingly more static motion of

229

this circus piece, the eery association of white and geometry is advanced in soft tension with the background and the bodies wearing black though their movements evoke a form of unattainable purity as well. It is through tension, pauses, suspension, rebounds, repetition, difference and interruption, that anti-uchronia may take a cairological form.

High Stakes

My searching for anti-uchronian affects, percepts and concepts in micro-literatures like eco-science fiction, or in climatological reports to policy makers worldwide, in graffiti art, in contemporary circus shows the political dimensions and powerful stakes these discourses and genres engage in, and is symptomatic of an age where even conversations on the weather, once a shelter for easy consensus and seemingly apolitical (intergenerational) 'small' talk, no longer can afford consensual small talking, taking on scales that widen beyond understanding: these conversations will not be any more protected from the storm than any place else, and they in fact resolutely question what this storm is, says, does. The shelter is shaken, and the oikos needs kairos, in order to become habitable. If the arts and sciences have never occupied a realm outside of politics (considering them as such in fact may serve highly conservative purposes obscuring powerful sites for change), they have special political salience with the eco-crises, now more than ever: the stakes are about the livability of human, nonhuman, and hybrid lives.

Meandering through these artistic, scientific and literary genres and forms, we have seen that anti-uchronia cairologically invests the tension characteristic of a context of urgency, with its contradictory needs for rapid change in a fast world, and for time to think. If anti-uchronia suspends time, it is not in the sense of stopping it, but rather in the sense of a gasp for air, a gasp for thought, idiotically slowing down everything else to

230

claim that perhaps something more important is at stake. It contains two moments, one whereby uchronia is shown for what it is, stripped down of its credibility when making naturalizing teleological claims ruled out by the eternal return. In doing so anti-uchronia insinuates into uchronia's interstices to creates larger cracks, where we may carve the time to allow other possible temporalities' emergence. The task is tall and the stakes are high, however. The next chapter will engage temporalities that present themselves as alternatives or substitutes to uchronia, yet still take the teleological form of timeless temporalities, and make promises linearly abstracted from concrete presents, failing to confront the question of limits. These "counter-uchronias," I will argue, are not up to the task. Again, the stakes are high: if we have killed God, who was replaced by all too human humans without getting us rid of the place.[47] Now some may have been trying to celebrate homo economicus and his capitalist market in the same way, de-humanizing man, and developing a teleology of endless accumulation. But the world is limited, and at this point we might as well also kill capital, and, perhaps more importantly, its insatiable desire for growth. Note that it is interesting that cowboy capitalism would form assemblages and resonance machines with fundamental Christians (Connolly, 2008) precisely while God has been sacrificed on the altar of growth, yet growth and life are now engaged in a fight to death. But if growth can only survive as lifeless – indeed, so many are already filling the ranks of the living dead compulsive digitalized consumers

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[47] Deleuze explains very clearly, synthesizing so many passages in Nietzsche's work in simple terms, that "the thought of Nietzsche, is that the death of God is a great noisy event, but insufficient" … "in Nietzsche's works, the versions of the death of God are multiple, at least 15, all of great beauty. But precisely, according to one of the most beautiful, the murderer of God is "the ugliest of men." … "Nietzsche is the first one to teach us that killing God does not suffice to operate a transmutation of values" (Deleuze, 2013, p. 30). The "ugliest of all men" depiction is of course a reference to Zarathustra.

231

and producers watching zombie movies in their 'free' time – then the struggle opposes nihilism and life.

CHAPTER IV

GOING BACK?
REGRESSIVE COUNTER-UCHRONIAS:
REPRODUCING UCHRONIA

Finally Contemplating What We're Facing… By Running Backwards?

If uchronia is the timeless (ever-postponed) and idealized temporality, which subjects the present to an abstract and impossible future of relentless, never satisfied or satiated growth on a limited planet, it is also often resisted (enters anti-uchronia), questioned, critiqued. Anti-uchronia may show uchronia to be contingent rather than natural, impossible rather than the only plausible way, radically outside any desirable reality rather than *the* reality. It opens the possibility for other possibilities, yet not all alternatives to uchronia take a form radically different than uchronia, and many mimic both its (often unfortunate) appeal and its problematic nature (enters counter-uchronia) and/or relationship to human/Nature.

In the previous chapter we meandered through the (performing and street) arts, the sciences, science fiction. Through some instances of these, I argued, the idealized temporality I have called "uchronia" may be shown or at least suspected as contingent rather than "natural" or self-evident, as an impossible and undesirable horizon, rather than the (only) probable and desirable one. Certain artistic representations or practices, scientific reports and observations, stories and narratives, proliferate cracks in the uchronian narrative, with the anti-uchronian effect of slowing us down, perhaps even making us pause, so as to allow critical thinking to emerge. This slowing down evokes

the figure of the idiot, making pause to ask the disturbing questions which uchronia (its

paces) normally rejects as unintelligible. Thus in chapter 3, the helpful character of the

idiot was incarnated among others by the Intergovernmental Panel on Climate Change

reports' diagnostic moment. In what follows, I wish to further complicate this landscape,

suggesting that, often entangled with uchronia and anti-uchronia's resistance to it, we

find what I call "counter-uchronian" moments. These replicate or mimic the teleological,

linear, idealized and abstracted form of uchronia, and they make claims to substitute to it.

If uchronia was about moderns "running to the future with their backs turned to it"

(Latour, 2009), "counter-uchronia" may be about jumping, leaping, running or simply

going, either back, forward or ahead on the same (highly problematic) line. For instance,

when I return in the next chapter (V) to the IPCC reports, it will not be so as to

underscore the helpful, welcome (in an eco-crisis context), idiotic anti-uchronian moment

I first read in these texts (chapter III). This time, I will emphasize the counter-uchronian

dimension of the reports, which, leaving idiocy behind too hastily, leap to conclusions

incompatible with their very own diagnosis: this time, the not-so-idiotic IPCC reports

will be read as traversed by stupidity. After its anti-uchronian moment has queered

uchronian temporalities, the IPCC straightens time again.

Counter-uchronias offer either to merely amend or to symmetrically oppose

uchronia, and remain trapped in similar paces, speeds, rhythms, pasts, presents, futures,

linearity, teleology, futurism, and/or passéisme. I will examine below various contrasting

examples of this, in "primitivist" or reactionary dimensions of some environmentalist

thought and art, on the one hand (this chapter), and on the other, in the oxymoronic,

futurist "sustainable growth" advocated – for instance – by the IPCC and some of the

climate sciences (chapter V). In the former examples, counter-uchronia has moderns start running backward, finally facing where they are running to... now rushing back after an equally illusory time to replace uchronian futurism (seeking a glorified past of harmony between "Man" and "Nature" which has never existed). In other words these examples are past-oriented (let us "return" to "Nature") and they constitute themselves as reactions against, attempts to counter, uchronia, in symmetrically oppositional forms. In the latter examples meanwhile (in the case of sustainable growth), the same running forward with one's back turned to the future is occurring as does with uchronian temporality, only the adjectival modification of growth by way of the term "sustainable" makes the running take the form of a series of sinuous steps or leaps, of uneasy and awkward contorsions, creating a choreography substantially similar to uchronia, perhaps more absurd and farcical. First as tragedy, then as farce. Part of the farce, I will argue, has to do with what I see as the truly problematic nature of a certain version of "Nature," namely its temporality: when Nature is conceptualized as a teleological end, congealing a stable harmonious state, whether this Nature needs to be restored, conserved or returned to, naturalizing politics are damaging nature as becoming, nature as surprising, unpredictable, uncertain, unstable, the ungrounded Earth under our moving (perhaps dancing) feet. Consequently the problem with "Nature" is not nature: the issue lies in the counter-uchronian and uchronian temporalities at play to constitute this concept.

In this chapter, I examine some instances that would have us suspect some environmentalisms of being merely counter-uchronian, of the sort that would risk to fall into or be tempted by a "backwards" movement toward an idealized past, a symmetrically oppositional response to progressive uchronia. I will end on the distinction between anti-

235

as antidote and counter- as reactive, as mirror. I begin this reflection with the example of de-growth, which privative prefix "de" raises the question of whether what is advocated by political ecologists and tenets of this movement is a gesture backwards, or a "return." As we will see, a number of counter-uchronian dimensions may be encountered in de-growth thought, but I will argue that they do not necessarily reside in the initially suspected "backwardness" (I).

How may we then explain impressions of ecologism as potentially coterminous with "backwardness," of "returns" to nature, the candle (as a symbolic tool or technology from an era where "Man" would allegedly have lived in harmony with "Nature"), or "caveman" lifestyles? Are such suspicions evidence that ecology indeed mimics uchronia's linearity and teleology, only to reverse it, giving it a declentionist and reactionary form (counter-uchronia) that would oppose progressive and modernist capitalist growth qua an alleged "primitivism"? I will try to respond in part to this vast question, examining some of the problems involved in the very term "primitivism," loaded as it is, just like progressivism, with colonial assumptions about linearity and non co-evalness between various cultures and modes of living. I will look into anarcho-primitivism and deep ecology's respective versions of the theme of a "return" to Nature (II). Finally, I will read Viennese artist Hundertwasser's works (III) as symptomatic of temptations to "retreat" to counter-uchronia (for the time being – see chapter VI for an alternative reading). These various examples will hopefully show how reactionary counter-uchronian dimensions are sometimes present in specific currents of environmentalism. In concluding this chapter, returning to Nietzsche once again, I will

236

recapitulate the anti-uchronian critiques I propose with respect to "regressive" environmentalist counter-uchronias.

De-growing Uchronia: Growth Objectors, Progress and Backwardness

> *Il y a un autre monde, mais il est dans celui-ci.*
> Paul Eluard

Is de-growth a form of counter-uchronia? The following will not provide a clear-cut answer to this question and will rather lean toward a non-conclusive negative answer. Instead, the goal of critically examining the "de" of "de-growth" and the objection practiced by those calling themselves "growth objectors"[48] will be to show (or at least wonder) how anti-uchronian critiques can be entangled with counter-uchronian dimensions. This should not be surprising to anyone (self-critically) aware of the fact that any critique is bound to mimick and perhaps even risk reproducing its own target, especially when it slides toward merely oppositional perspectives, or tries to fight off such temptation. But if this is the case, then the distinctions that anti- and counter-uchronia offer may seem vain, pointless, a mere play on words. However, the critique of critique, so as to more finely tune the latter, is rarely vain,[49] especially in times of such high stakes as those present, when uchronia claims hegemonic status in the face of mass

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[48]The phrase "growth objection" was first coined by the French constituency within the transnational de-growth movement, to add nuance and even sometimes as a critique of the term "de-growth," as internal to the movements debates emerged about how de-growth unsatisfactorily centered growth and risked confusing people, precisely about impressions that not wanting growth meant "going backwards." Objection to growth is obviously a pun on "consciousness objection" (in French consciousness – conscience – and growth – croissance – rime), but it is also a way to signify that the point is not so much to back-track the "advance" of growth, but rather to distance ourselves from the imperative to growth, to ask whether it is necessary.

[49] This is where I part ways with JK Gibson-Graham (2006): abandoning critique is unhelpful at best, dangerous at worst. I would rather side with Gilles Deleuze's understanding of the left as (partly) defined by its refusal to ever abandon critique (see also chapter VI below on this point).

inequalities, ecological destruction of scales capable of threatening life, or at least the liveability of human and nonhuman lives today and tomorrow.

(De-growth = Backward only if Growth = Forward)
(We Have Never Moved Forward)

What hides behind the prefix "de" of "de-growth," and the objection "objecteurs de croissance" strive to practice? We may recall, from chapter 1, how one of the leading figures of this movement, economist Serge Latouche, defended this political position against potential accusations to retrograde and reactionary tendencies. Yet he and other theorists advocating for de-growth are quite aware of the limitations of the term, which as they regularly remind readers, is more provocative than literal. The term "de-growth" has been gathering a diverse array of European (especially French, Italian, Spanish), South and North American groups and movements,[50] often coming from or overlapping with the alter-globalization movement, these regions' respective leftist movements, social movements such as Occupy and *Indignados*, political ecologists (in the lineage of Illich and Gorz – see chapter I). It intervenes in a uchronian sea of assumptions according to which growth is deemed the inevitable goal one cannot not want, raising the question of how to de-center this desire: the objective is consequently quite clearly anti-uchronian. However, de-growth economist Paul Aries himself has referred to the term "de-growth" as a rather "obtuse" (quoted by Latouche, 2009) one, meant to help "decolonize the Left from progressive imaginaries" (Latouche, 2009) rather than being a literal signifier: the prefix "de" should not be interpreted as implying a return, a move "backwards." The

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[50] We may note the recent publication of a glossary of degrowth vocabulary with contributions by theorists from all these regions, which speaks to the diversity and vibrancy of the movement today (D'Alisa, Demaria, Kallis et. al., 2014).

question then becomes more complicated: does de-growth indeed perform such de-colonizing, or, in attempting to do so, does it partly reproduce progressive teleological visions (countering uchronia yet ultimately running on the same path and in the same direction), or, finally, does it regress to run backward toward an also dangerously illusory past (reproducing uchronia insofar as it tries to take its opposite direction again on the same path)?

One is first tempted to answer unequivocally that de-growth does in fact strive to perform the first of these three, and there is indeed plenty of evidence within de-growth and growth objection discourses to attest for what I have called an "anti-uchronian" moment. First of all, if the "de" in "de-growth" were to be suspected of signifying a backward movement, it would only be in relation to the assumption that "growth" is indeed a movement forward, and that there is such a thing as a line threading the past, present and future so as to give only two possible directions to the passing of time, while the orientation would either be ascending or descending, and while the ascent and descent would be measured by growth. If on the other hand, the anti-uchronian moment of de-growth critique were to be capacious enough to challenge this assumption, what is being undone by the "de" in "de-growth" would not necessarily result in it running backwards. Thus we need to examine de-growth's anti-uchronian moment first, to then turn to its programmatic moment and how or whether it may be assimilated to a backward movement. De-growth anti-uchronia offers many layers, at mundane, minute and also larger scales, and focused on consumption as well as production. Here de-growth critique does not simply imply a return, or a reversal of ongoing trends. In a text titled *Manifeste Utopia* signed collectively by members of this movement and recently re-published after

participatory democratic re-drafting (2012), the authors call for a radical reconceptualization of our "relationship to time" (*rapport au temps*). This critique operates simultaneously at the quotidian and the larger scales, taking on the notion of progress along with daily activities, both being equally in need of rethinking with respect urgencies and priorities.

Anti-Uchronian De-growth From Quotidian to Historic Time

Quotidian temporalities are critiqued from the perspective of work and productivism, as well as consumerism. The *Manifeste Utopia* denounces capitalist economies' equation of personal fulfillment with consumption and work. Yet the fluctuations of consumers' buying power and the constant creation of more needs by a society that's also one of spectacle creates the impossibility to satiate the imperative to consume. The only good consumer becomes the frustrated, never satisfied consumer, compulsively and impulsively quenching part of her thirst in quick moments, brief durations of time, when buying, partly and never completely soothes the pain. From the perspective of my conceptualization of anti-uchronia, we may see in this critique an insightful denunciation of the forever postponed, self-feeding promises of capitalist economies, along with fast paces and high speeds (all defining traits of uchronia). Consumers run after a future satisfaction that is always postponed, a time with no time.

The same goes with the productivism characteristic of capitalist economies: *Manifeste Utopia* calls for questioning "the value of work," which tends to monopolize quotidian time: I'll work until exhaustion and sleep when I die, because working always more hours is both the key to and the sign of success, virtue, fulfillment, etc. Here our growth objectors underscore the ethical stakes, pointing out that the quantity of time

spent working is taken, in capitalist contexts, to be an indicator of individual virtue, morality, etc. Thus quotidian temporalities and the critique both of the relentless paces and speeds of consumerism, along with rhythms, durations and hours generated by productivism, are an essential part of the objection to growth critique, even when it does not make temporality as central as I make it here, and even when the elements described above are sometimes scattered in the text rather than thematized under the rubric of temporality. One is not hard-pressed to find numerous excerpts in the text that stress the question of time in a manner that I would describe as anti-uchronian.[51] For instance, bringing together the critique of productivist and of consumerist times, we find statements such as:

> We wish to promote a management of time that, throughout life, would allow everyone to articulate daily both their professional life and other times of their life, or to interrupt their work so as to dedicate themselves to personal and collective projects. (2013, p. 42)[52]

The proposal is to change priorities, rhythms, and paces so as to slow down and live more liveable lives, and this resolution is visibly tied to an anti-uchronian resolution to reinvent temporality, as here the emphasis is on the possibility for other possible temporal orders.

Manifeste Utopia also examines another anti-uchronian aspect of objection to growth critiques of temporalities: the authors raise the larger-scale temporal question of what they call "the ideology of progress." In their view, progress is "erected as value," to the point of "subjecting man instead of serving him" (p. 43). Along with growth

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[51] We must note here that the more than 200-page manifesto does include one short section in a chapter which focuses solely on the question of time, while the claims I am synthesizing and commenting on here are also spread across the text. One may thus read this as at least one of the many threads that run across the overall argument. Here I choose to provide a reading from the perspective of temporality.
[52] NB: this and all the following translations of this text are my own.

objectors' self-proclamation as "utopians," the humanist and gendered language mobilized in this critique contributes, as I will discuss below, to the counter-uchronian moment in the text. Yet the denunciation of progress offered testifies of this manifesto's anti-uchronian character as well, pointing to how both facets may indeed cohabit in one single text.On the anti-uchronian front still, *Manifeste Utopia* goes on to claim that:

> Since the industrial revolution, our cultural history has had us believe that our civilization inexorably follows an ascending slope, a temporal linearity which has no more limits than growth does. The critique of a certain relationship to temporality and to "meaning" seems central to us. The renewal of modern political thought indeed relies upon taking finitude into account as well as plurality in relationships to the world. (2013, p. 46)

After showing the relation between temporalities of work and morality, here we see an attention to temporalities and meaning. Both of these insights, as we have seen and will examine again with regards to the Nietzschean notion of eternal return's pertinence to anti-uchronia, seem to be at odds with the idea that this manifesto may risk to reproduce a linear, teleological and progressive form of uchronia. This critique of progressivism is two-fold: it targets both a futurism (the subjection of the present to an abstract future), as well as a "relationship to time [that is] turned to immediacy and ephemerality." Building on Illich's work, the text underscores thresholds beyond which "medicine is a nuisance to health, speed has us waste time, school makes us ignorant, communication is so invasive that one does not understand anything anymore" (Mouvement Utopia, 2013; see also Illich, 1976; 1973).

Counter-Uchronian Moments: Between Progression and Regression

In spite of these anti-uchronian elements though, at times the *Manifeste Utopia* seems to merely inverse the linearity and teleology of growth denounced, keeping it intact in this linear and teleological form by glorifying a past that would allegedly be (or have been) both more natural and more humanist, resulting to an extent in a counter-uchronian declentionist narrative as well as a call for "returns." At other times, the *Manifeste Utopia* also reproduces the form of uchronia, to propose a counter-uchronian progressive alternative. In addition, the explicit claim of objection to growth politics as "utopian" all the way to the title of the text indicates the concession to a certain abstraction and the fact that a program situated outside or beyond necessity and reality remains present.

Some passages in the text may indeed incite to confirm the suspicions to a declentionist or backward-oriented perspective which de-growth's prefix first created. Indeed, growth objection as reflected in the *Manifeste Utopia* resorts to teleological origin points reminiscent of a quasi-Rousseauist narrative. When denouncing consumerism, we find the claim that "the logic of needs, *originally natural*, has expanded itself to the totality of human desires…" (p. 32) or the critique of the Left as succumbing to progressive perspectives and to productivism, but insofar as it "claims a lineage whereby the meaning of the history of man would be to humanize the natural, to model it, to push aside the world's animality" (p. 38). Of course this last statement may be read as encouraging a challenge against the human/nature dualism, denouncing both it and its association with a future/past dualism, and/or a dualism opposing archaism to modernity. Yet this challenge tends to be formulated as though the implication was one of return,

243

reversal, with little to no further deconstruction of the dualisms under discussion. The possibility that the world may be (re)composed of hybrids, a mesh of strange strangers (Morton, 2010) neither human nor natural, or perhaps too much of both, or perhaps never having been either even when claims were made to the contrary, is nowhere to be found in the text.

Yet these slippages to a form of declentionist narrative and a temptation to merely reverse the path, reverse the human/nonhuman relation associated with modernity, are also complicated by the opposite but equally counter-uchronian impulse: in a both humanist and naturalist tone, *Manifeste Utopia* wishes for "tools and technologies" to "serve people rather than the reverse." But again, what if we had always been hybrids, never been modern, never been quite so human? What if "Nature" was a form of technology (Haraway, 1989), and of recent invention at that? These questions are left unaddressed. The text also claims its utopian nature even though it opens with the incipit quote (stolen above here, to open this section) by surrealist poet Paul Eluard: "there is undeniably another world, but it is inside this one" (Eluard, 1968, p. 986).[53] Interestingly, the growth-objecting authors admit to the risk of mimicking the very target of their critique and struggles: "the mimetic temptation mustn't lead de-growth activists toward the detrimental logic of a new 'de-growth ideology'" (Mouvement Utopia, 2013, p. 27). Also interestingly, the text presumes that capitalist economies are founded upon a form of utopianism as well: "the capitalist utopia of illimited material growth is leading us right into a wall" (p. 23). If there is mimickry then, the imitation is partly conscious and even

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[53] The *Manifeste Utopia* quotes Eluard, but the famous poet himself was quoting French writer Albert Beguin, quoting the scientist, writer and philosopher Ignaz-Vitalis Troxler: "There is undeniably another world, but it is within this one, and to attain its perfection it must be recognized and one must engage in its promotion. Man must seek his state to-come within the present, and the sky, not above the Earth, but within himself."

intentional. And if capitalist economies make claims to reality, de-growth advocates know better. Then why still resort to utopia to describe their own project?

Ultimately, the counter-uchronian dimension of de-growth arguments defended in this manifesto does not simply reside in a form of alleged backwardness, a desire to start running back, inverting the direction or running backwards in a race initially moving toward the future with our backs turned to it, as moderns tend to do according to Latour. The goal is not to start running to a glorious and idealized past, although to an extent that is not entirely excluded either. Again, some parts of the text call for restoring a lost "naturalness" in human interactions and modes of living, as well as a lost humanity, a humaneness, a humanism. Though no simplistic "return to nature" is praised, one senses a partly declentionist account of history, when attacks are made against "the ideology of progress" as betraying and subjecting both "man" and an originary "nature" to a dangerously abstracted future, hopelessly defying material limits. In contrast, some other parts in the text claim a certain artificialism drawing complicatedly from both old and new, asserting the impossibility and improbability of running back, of simply turning back the clocks of progress. Yet this artificialism is indeed imbued with a humanism and a concept of "Nature" reminiscent of… moderns' justifications of progress. Thus both futurist and retrograde moments and movements, both forms of counter-uchronias, are present in the text, along with helpful critical gestures that may be described as anti-uchronian, and anti-utopian assertions that the "other world" is "within this one," that linearity and temporality do not sit well together, that the world is plural, and that relationships to time are also plural.

Reversing and Deepening Uchronia:

Anarcho-Primitivism and Deep Ecology's Counter-Uchronitis

> *The best thing we can do with environmentalists is shoot them… They are Luddites marching us back to the 18th century.*
> Michael O'Leary, chief executive officer at Ryanair

De-growth, as discussed above, illustrates that reducing critiques of progress formulated by various currents of environmental thought to declentionist, decadentist, backward calls to rush away from modernity would be simplistic at best. Yet, greens have been caricatured as "primitivists" calling for a return to caveman life and 'the candle,' arguably much beyond any claims they themselves have been making. The image of backwardness of dark green agendas is surely amplified by the sensitivity of the critiques made, with respect to questions of (sacro-sanct) consumerist lifestyles, for instance. The violent, defensive and paranoid tone of the above quote by Michael O'Leary illustrates this. In addition, in contexts of capitalist economies, contexts where temporality takes a uchronian form, the reflex of casting any critics of modernity as "backward" is, to an extent, expectable. In other words, in worlds that conceive, idealize and experience temporality as linear, teleological, progressive, futurist (in the sense that it is subjected to an abstract, impossible, ou-chronian, future), imagining any objection to progress as being strictly oppositional and thus operating on the same track only backwards, is a most logical assumption. Many environmental activists, beyond eclectic currents within the movement, would probably agree that they have encountered multiple times this type of fearful and angry response to their arguments regarding limits to growth (something in the aggressively derisive vein of: "at this rate, do you want me to give up all my comfort

and *go back* to prehistory?"). Thus the stereotyping of environmentalists as solely declentionist and regressive advocates of an illusory golden past of harmony with nature, desirous of returning to the cave and/or candle (depending on when that harmonious past may be situated) often performs the role of a discrediting strawman mobilized by detractors of certain radical green politics who cannot but imagine an alternative to uchronia as taking on the same teleological form, only in reverse (a counter-uchronian form). This may distort or exaggerate the extent to which past-oriented counter-uchronias are present in environmentalist imaginaries, and quite conveniently portrays environmentalist times as belonging to a remote, utopian past. If we can disentangle aspects of environmentalist claims that risk being easily dismissed with accusations of being retrograde and naively praising a return to a past that has never existed (counter-uchronia), from powerful, compelling and needed (anti-uchronian) critiques of progress, and if we can distinguish between the extent to which detractors of environmentalism portray it as a counter-uchronian regression, and the actual (or virtual) ways in which some currents or dimensions of environmentalist discourses do indeed fall into this trap, then anti-uchronian critique may be more finely tuned.

Some currents within the recent history of ecosophy didin fact evoke themes of "return" more unambiguously and unapologetically than others, and among these nature/return lovers, various figures and schools of thought ventured more or less far into the past on a cursor of how much "going back" to "Nature" is allegedly necessary.Some of these decadentist or declentionist narratives were indeed just as caricatural as, almost reversed mirror-images of, uchronian progress narratives and their assumptions that capitalist growth measures the good life. They too, took the form of a desire for a

timeless time, a time outside of time. In what follows I will examine two examples of this, first turning to the anarcho-primitivism of John Zerzan, who continues to write well after the boom (and decline) of this movement – a movement whose most famous figure may have been the Unabomber (boom indeed). I will then turn to a movement that also has its roots in the 1980s though it too is still influential among dark greens, and which I have already discussed in chapter 1: namely, deep ecology indeed slips toward themes of "return" to "Nature" quite often – in fact deep ecology and anarcho-primitivism have sometimes overlapped, in the sense that, for instance, eco-terrorism draws from both currents. Reciprocally, deep ecologist Arne Naess has occasionally praised monkey-wrenchers' 'propaganda by the deed' type of methods,[54] and anarcho-primitivism sometimes draws from a deep ecology ontology and ethics. Deep ecology's counter-uchronitis is arguably more subtle than anarcho-primitivism's, yet both can be versions of a reply to, and a reversed replica of, uchronia, *i.e* here I read them as instances of counter-uchronias.

Anarcho-Primitivism: After Language All Went Awry

In *Primitivism: An Illusion with No Future,* Stephen Booth vehemently attacks anarcho-primitivism with tirades only a fellow green anarchist could address to his comrades, yet in so doing, he also provocatively encapsulates what I would call the "counter-uchronian" issues with the anarcho-primitivism of a John Zerzan or Unabomber Ted Kaczynski. In Booth's view, anarcho-primitivism was a "complete failure" because it busied itself:

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[54] An exhaustive, and much more precise description of the lineages would not be feasible here. But it is worth noting that not all monkey-wrenchers would identify as anarcho-greens. The relation I am pointing to specifically here, is that qua a repertoire of action and discourse partly inherited from left-libertarian propaganda by the deed, direct action, illegalism, and though they cannot be reduced to this influence, monkey wrenchers who also often turn to deep ecology for philosophical influences are one instance which link the two currents of ecosophy together.

proclaiming etiological myths about the palaeolithic origins of our present

problems in agriculture or in symbolization, and an eschatology of collapsing

civilization, empty supermarket shelves and failing electricity supplies; leading on

to the language-less bliss of non-hierarchical oneness with each other and our

eventual merger with the primal wilderness. (Booth, 2015, p. 2)[55]

Further clarification of this angry tirade is of course needed, but the essential traits of the

anarcho-primitivism defended by someone like John Zerzan are indeed well captured: in

Zerzan's view, humanity started to err and create the conditions for our current ecological

crisis and unequal, violent society, when sedentary agriculture replaced nomadic hunter-

gatherer lifestyles, when language emerged (and the reign of the symbolic severed

humans' relations to their own bodies, corporeality, sensuality, nature, etc), when gender

emerged to inaugurate millenia of division among humans, a decay into difference,

hierarchy and inequality. Late capitalist societies are thus doomed to catastrophically fail

in ensuring survival, and they worsen even more the grasp of the symbolic over human

beings, with the "tired communication" via emails and such digital technologies

ceaselessly cutting us off further even from the immediacy of material experience.

Zerzan denounces in one fell swoop everything that came after sedentarization,

agriculture and language, depicting language and any representation, *i.e* "the symbolic" at

large, as nothing but a form of emprisonment and alienation from the real, from the

immediacy of sensory experience. He equates language to a form of disembodiement, as

an "all-defining imprisonment, rather than liberatory triumph." The invention and

dissemination of language is guilty for "subordinating natural systems that humankind

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[55] For more on anarcho-primitivism see for instance Gagliano, 2010; Zerzan, 2002; 2005; 1994; Kaczynski, 2005. More pacifist versions of this eclectic movement include Jacques Ellul (1964), who was quite close in many respects to Ivan Illich and influences the political ecology movement in France to this day.

was once attuned to," and it is coterminous with the loss of the world. This decay culminates with the modes of communication now commonly used at least among the most privileged segments of a globalized world's populations, namely the internet, digital communications in general: "human connectedness and corporeal immediacy have been traded for a faded sense of reality."

At no point does Zerzan consider the possibility that language, along with other technologies and modes of communication and representation, may perform empowering or emancipatory functions as well, or connect humans among themselves, or to some extent, play a part (positive or negative) in new kinds of "transcorporeality." The latter concept, which belongs to environmentalist feminist Stacy Alaimo, is an interesting contrast to Zerzan's hypothetical "corporeality"'s and its alleged purity from any linguistic dimension. Alaimo's "transcorporeality" (2010) includes performativity, in its discursive and material dimensions, instead of falling in the trap Zerzan leaps into, where the realm of the linguistic is so neatly separated from bodily natures. In his account, anything "symbolic" is inevitably and profoundly flawed, alienating. Thus Zerzan blames every evil on language, leaping from the invention of language to nation-states and nationalism for instance. Though he certainly has a point that nationalism has relied on a certain language, vocabulary or discourse and the imposition of certain "national" languages being imposed to create specific national subjects, this example (among others) reveals the shortcomings in Zerzan's decadentist vision of human history: no mention is made of languages that were violently erased to make nation-states and their monolingualism possible. The distinction underscored by Ivan Illich (2013), between vernacular languages and knowledges on the one hand, and standardized, commodified

language is silenced to enable a smooth causality, an equation going from the original sin of inventing language and the symbolic, directly to violent and alienating ends.

Thus the account proposed is a teleological one, the exact inverse of the most caricatural progress narratives: where uchronian temporalities reduce all of time passing to a march of progress, flattening bumps, contradictions and contingencies on the way, Zerzan reduces all events in human history to a downwards fall away from nature. Here Zerzan also reveals a reactionary, reifying and caricatural idealization of indigenous modes of living as closer than Western modernity allegedly is to this originary and pure nature of the past, citing for instance how some indigenous people (the mention is often vague) recognize the existence of reality beyond language. These, he claims, have the merit of acknowledging that language is inadequate to account for all of reality and what Western conceptions would call "nature" (the quotation marks are mine though, as Zerzan is blind to the fact that many of the indigenous people he refers to do not have a term for "nature"). Yet, an important detail is missing from this claim as well: namely the distinction between rejecting language at large, as though it were fundamentally flawed and always already synonymous of corruption or "denaturing," and simply (humbly) acknowledging that human language has limits as to what it may represent or express. This point is exemplary of a number of twists in Zerzan's regressive counter-uchronian argument which are founded on a caricatural depiction of "indigenous people" at large, "hunter-gatherer tribes" in general, supposed to represent a time passed and extinguishing, that we moderns should long for nostalgically as it was so much closer to a perfect, pristine and harmonious relationship with the natural. Thus indigenous and non-

Western ways of life are lumped together with nature, the whole being in turn thrown to a remote past.

In Zerzan's declentionist narrative, language, sedentarization and agriculture also inaugurated or coincided with the apparition of gender. This to the anarcho-primitivist is also a marker for what we may ironically call the "original sin" that allegedly caused our decay and lead to the modern ecologically destructive world we now live in (the indeed ironic parallels between Zerzan's declentionism and some forms of religious eschatological narratives are numerous). The beginnings of the Paleolithic and sedentarization inaugurate a "shift from the non-separated, non hierarchized life" (Zerzan, 2008, p. 16) to modes of living reliant upon hierarchy and domination, with the originary form of such domination being founded in gender. To Zerzan, "the general crisis of modernity has its roots in the imposition of gender" (p. 18). Interestingly, to an anti-feminist writer he quotes as praising cranes as (allegedly) male-invented technologies and claiming that "if civilization had been left in female hands, we would still be living in huts" (p. 18). Zerzan responds that "to some of us 'grass huts' represents 'not taking the wrong path'" (*ibid.*) The objection is not about denouncing a hasty assimilation of a certain mode of living with femininity and another modern one with masculinity, with each term in this strange equation, and the interdependent dualisms constituting these terms, placed under critical scrutiny. Instead, Zerzan affirms and celebrates a supposed (essentialist) anti-technological femininity. Nature or language-less oneness, femininity or genderlessness, are deemed to all belong to a past Zerzan longs for us to run back to. "The symbolic" (language, science, the arts…) is seen as having emerged with gender which itself emerged with agriculture which altogether created a

252

world of destruction and domination, and Zerzan calls for our running back to a genderless, a-symbolic oneness: for instance, according to him "there is no evidence of symbolic activity (e.g cave paintings) until the gender system" (p. 12). Apparently the only way to get out of a world based on domination and violence and return to blissful primitive ways is to give up on both gender and art, in one fell swoop: let's throw the creative baby with the gendered bath water.

Zerzan's eschatology and his denunciation of "dis-embodied high-tech futures" suggests apocalyptic ends, as Stephen Booth's summary above graphically describes ("collapsing civilization, empty supermarket shelves and failing electric supplies"). Though he is most vague about such apocalypse, the decay seems to eventually bring humans full circle, to a redeeming a-linguistic oneness supplanting the separated dis-embodied denatured humans: "the wholeness of original genderlessness may be a prescription for our redemption" (p. 18). Ultimately, we have oneness, non-hierarchical and sensory, a-linguistic, a-symbolic hunter-gatherer simple modes of living in perfect union with nature and bodily reality, which belong to a remote past, being destroyed and separated, hierarchized, alienated the minute agriculture, gender and language came about, then a long downhill evolution where humans are increasingly de-humanized and de-natured, and finally a grand collapse closing the cycle to bring us back to a form of second state of nature and oneness. This narrative is of course highly reminiscent of Rousseau's *Discourse on Inequalities* (1984), where the good savage of the ideal state of nature was corrupted by the invention of property and civil society (and we may remember that Rousseau also includes language, knowledge, the arts in this downward slope), the emergence of social inequalities, to then decay into an increasingly violent

state, where one hopes for a second state of nature to come.[56] At least one major difference is striking however: besides the fact that Rousseau's historical context was immensely different, the XVIIIth century contractualist also famously recognized how little was known about the origins of civil society, and that his discourse was to a great extent speculative. Proposing to "begin by laying facts aside," Rousseau specified that "the investigations [he] may enter into … must not be considered as historical truths, but only as mere conditional and hypothetical reasonings, rather calculated to explain the nature of things" (p.109). Zerzan's account reifies and idealizes hunter-gatherers as good savages united to nature in a different way, as he allegedly grounds this depiction on anthropological and archeological research, and yet importantly, he intervenes after so much has been discussed and contested to shake any uncritical mobilization of terms like "primitive" and "civilization." Of course Rousseau is not merely excused his colonial assumptions due to his context, and the fact that he raised an appraisive voice with respect to non-Western modes of living in a context where non-Western people were barely considered human is not either an excuse for his 'kind' racism. Yet Zerzan's caricatures and equations lumping non-Western/genderlessness/past/Nature all in one basket seem quite naïve and dangerous in a new way. His declentionist, reactionary counter-uchronia incites the reader to desire apocalyptic destruction of all that is present and/or recent to "return" to hypothetical better times, constructed on the basis of dangerous assumptions regarding "the primitive" and "civilization." Zerzan's example of counter-uchronia reveals some aspects of the problematic nature of "primitivism," the colonial legacy of this adjective, whether it is used appraisively or negatively. This point

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[56]Rousseau does suggest though, that democracy would be the closest civil societal state to a harmonious second state of nature.

illustrates how progressivism and primitivism, uchronia and regressive counter-uchronia, in fact converge to "deny co-evalness" (Fabian, 2014) to non-Western traditions and ways of life. Zerzan's anarcho-primitivism is therefore exemplary of what I would call regressive counter-uchronia. Zerzan sees progress and capitalist growth as untenable (in this respect his premise is anti-uchronian), yet resorts to a mere symmetrical opposite to fight progressivism with: primitivism is key to him because it simply reverses the supposed march of progress, it turns that teleology upside down, yet replicates the linearity. Ultimately, his "primitivist" counter-uchronia uncritically transforms the "tomorrow everything will be fine and abundant" into a "yesterday everything was happy and simple."

Deep Ecology Back to the Future Primitive

Another instance of current within ecosophy that contains counter-uchronian dimensions would be deep ecology. To some extent this movement overlaps with anarcho-primitivism, though we will see that deep ecology does not propose quite the same kind of clearly reactionary reading of human history. Neither does it deploy themes of "return" to "nature" in quite the same manner. But the first striking difference between the two movements probably has to do with the fact that, though anarcho-primitivism has occasionally enjoyed a certain notoriety partly thanks to eco-terrorist actions and such spectaculars (e.g Ted Kaczynski), within dark green activist groups the ranks of those influenced by, or identifying to deep ecology are significantly more important. For these different reasons, both movements' counter-uchronian dimensions deserve examination.

Timothy Luke (2002) has situated deep ecology as follows:

The deep ecology movement grew during the 1970s as a reaction against reformist environmentalism. …The most well-know figures in deep ecology – such as Warwick Fox, Arne Naess, Bill Devall, George Sessions – aggressively staked out difficult conceptual positions in their own complex philosophical approaches to nature protection that have only proven to have other severe ethical, political and social limits. Yet the influence of deep ecology now plainly extends beyond the philosophical analysis of nature… Deep ecology principles sustain innumerable local, regional, national, and even transnational political action groups all around the world.

Luke then goes on to cite Friends of the Earth!, Greenpeace, the monkey wrenchers, various green political parties in North America, Australia, Western Europe and Japan, Earth First!, and many others as having been significantly impacted by deep ecology ideas and ideals, this influence being still palpable today.

I have already evoked the works of Arne Naess, the author who coined the phrase "deep ecology," in chapter 1. I then noted how this current insists that all natural things have "intrinsic value" rather than merely instrumental value in serving human needs. We may remember that it is on this basis that deep ecology justifies calls to "protect," "conserve," "preserve," "restore" nature – a past-oriented paternalism close to that of the conservation movement (there is a lot of overlap between the two traditions as well). Further, we have seen that deep ecology, like a number of other ecosophical schools of thought, emphasizes urgency, sustainability and future generations: the temporal is consequently an important dimension of deep ecologist thought.

To an extent, deep ecology differs from the vague apocalyptic visions anarcho-primitivism offers with respect to the future: it imagines what I would call non-uchronian futures. In this respect, deep ecology is quite far from regressive or reactionary counter-uchronias. For instance, Arne Naess stresses the urgency of projecting ecological imagination into "the twenty-second century," which he envisions by way of multiple future scenarios he situates "in 2101." To conjure pessimistic "doomsday prophets," Naess claims that deep ecology "has a mission, however modest, in shaping a future that is not remote. Just a couple of hundred years" (Naess, 2008, p. 312). Naess thus multiplies broadly described possibilities for the future, a multitude I've called anti-uchronian in the previous chapter (when discussing the multiple scenarios imagined by the IPCC):

1. *No major change in ecological policies or the extent of poverty.* An ecological catastrophe occurs because of the slowly accumulating effects of a century of ecological folly. The dramatic situation forces new ecologically strict policies, perhaps through undemocratic, even brutal dictatorial military means used by rich countries.

2. *The same development except for a major change in the poor countries: considerable economic growth of the Western kind.* Five times as many people live unsustainably. A breakdown follows very soon, and harsh measures are applied to fight chaos and to start a decrease of unsustainability.

3. *A couple of similar developments, ending in catastrophic and chaotic conditions and subsequent harsh, brutal policies implemented by the most*

powerful states. There is a turn toward sustainability, but only after enormous

devastation.

4. *Ecological enlightenment, a realistic appreciation of the drastic reduction in*

life quality, an increased influence of deep ecological attitude, a slow decrease of

the sum total of unsustainability. The planet follows a trend of decreasing

unsustainability discernible in the year 2101. (Naess, 2008, p. 310)

Of course these future scenarios are not devoid of doomsday dimensions: in all first three,

Naess imagines catastrophe, brutality, chaos and anti-democratic measures dictated by

the increased gravity of the crisis. These descriptions certainly have the (anti-uchronian)

merit of underscoring the multiplicity of possible futures ahead, and of ending with the

envisioning of a possible deep ecological future. This at least depicts the future as open to

several routes, a much needed multiplicity that at least partly parts ways from a single

linear vision. Furthermore, Naess insists that for this deep ecological future to come into

being, "every week counts," this emphasis on relating present urgency to possibilities for

more sustainable futures qualifying to an extent as what I will call (see chapter VI)

"synchrony." However, what would this future then entail, and what does Naess (along

with other deep ecology thinkers) picture the deep ecological future to look like? What

does Naess have in mind when he refers to the "deep ecological attitude" that may

permeate his fourth scenario, and does such attitude entail a counter-uchronian "return"

to "nature"?

I want to suggest that the deep ecological notions of "intrinsic value" and

"ecological self" rely upon images of a "return" to "purer" subjectivities. Thus at the

ontological level, deep ecology's essentialist tendencies position this movement closer to

what I call counter-uchronia. In addition, this comes with the notion and praise of a counter-uchronian "future primitive" just as problematic as the primitivism of anarchist John Zerzan discussed above.

In deep ecologists' accounts, one trait of deep ecological thought distinguishes it clearly from other branches of ecosophy (though some, often deep ecologists themselves, also claim or assume that deep ecology is the only philosophical foundation of ecology and environmentalism). Arne Naess and others are careful to repeat regularly that deep ecology is difficult to define in rigid terms, and advance that it cannot be reduced to a fixed set of principles, let alone one principle. However, one notion, in the last analysis, is reiterated and returned to over and over, deep ecologists ultimately granting it the status of principal distinction: namely, deep ecology advocates that nature and all natural things have intrinsic value beyond instrumental use serving human needs. As Reed and Rosenthal have summarized, for instance, "some lands might be preserved for their own sake, giving nature value in itself, independent of human need" (Reed and Rosenthal, 1993, p. 1).

The first consequence of this is that it often results in a portrayal of nature as relatively stable, as coming into equilibrium if only humans were to interfere in it significantly less or not at all. As William Connolly sums up, deep ecology "emphasizes the gradual self-maintaining character of nonhuman processes if and when the human footprint is light" (Connolly, forthcoming). In other words, nature somehow changes little when left untouched by bipeds' prehensible hands and their tools. Nature supposedly tends toward harmony, stability, and to do so privileges biodiversity (all these claims being amply contradicted by lots of ecosystems and events which rather make a case for

259

what Connolly calls "bumpy temporalities"). This alleged equilibrium in circumstances of human non-intervention, grants deep ecological "Nature" a sort of originary status, or at least a relative stability and staticity that most (scientific) ecologists would likely agree does not exist. Queer ecology has also taught us about the surprisingly unstable, ever-changing, unpredictable and queer ways of nonhumans, which shed doubt to this deep ecological portrayal (Hird, 2010). Thus we see how deep ecology assumes a nonhuman temporality that is somehow coterminous with stability, longevity, reliability and predictability. In addition, the biocentric, mere reversal of the human/nonhuman dualism (as opposed to a deconstruction of the two terms and their relation advocated for instance by ecofeminist Val Plumwood, 2002) strengthens the depiction of "Nature" as originary. Natural things, be they living beings, landscapes, rocks, etc, come before human ones, in both sense of this conjunction: nature before man, chronologically, and also in terms of importance. Of course the point of a critique of this counter-uchronian account is not to contest or deny that nonhumans existed long before humans in history. But the moral grounding and the organization of value according to this chronological order and this alleged state of stability and equilibrium are reminiscent of a certain uchronia, only turned upside-down, or "forward-back,"*i.e* a counter-uchronia. We humans – the exact meaning, complexity and contestability of this category is barely touched by deep ecologists – allegedly are situated on a line which has an origin in a past stable and harmonious moment, just like narratives of growth-driven progress may present us with a line going toward a fictitious end of abundance and satisfaction never attained, yet always justifying a certain organization of values in the present.

What then is to be done, according to this counter-uchronian ontology? Devall and Sessions preach for privileging "basic intuitions and experiencing ourselves and Nature" (in Clowney, Mosto et al., 2009, p. 213) which allegedly should result in what Arne Naess has called "self-realization and biocentric equality" (Naess, 2008). It is when this nurturing of an "ecological self" breaking away from "materialist egos" is evoked that we find the most striking rhetoric of return being deployed. Naess for instance claims enthusiastically that "[going] to a cabin for a weekend is to return to a less complicated way of life more in touch with nature" (Naess, 2008, p. 22) Such "retreats" into "Nature" are of course evocative of Thoreau's utopia of one and his Walden Pond cabin, as well as a long tradition of outdoor recreation and conservation ethics where the wilderness is taken to foster a certain sense of manly self at one with his environment (Haraway, 1989). Nature (for leisure rather than labor) provides eternal truths and its pristine images experienced on one's own in isolated hiking trips offer opportunities for "materialist egos" to be replaced by the ecological self, at one with the nonhuman world. This kind of sense of self is interpreted as the only one capable of intuiting the intrinsic value of all living beings' vital needs now perennially secured. Going "back" to nature and finding inner essence so as to "sustain" vital needs for future generations to come all the way to the 22nd century produces a temporality shaped so as to counter uchronia, where what is imagined as the eternal laws of a mythical past project individuals to a "future primitive," to use deep ecologist Warwick Fox's formulation. Individual spiritual growth supplants capitalist growth, and the forward thinking of deep ecologists requires a turning back to nature, envisioned as relatively static.

What then, does this "future primitive" look like? The oxymoronic phrase of course underscores the tension in this counter-uchronia, and just like anarcho-primitivist Zerzan's grandiloquent narrative of decay and eventual collapse came full circle to evoke a dramatic return to age-old ways, deep ecology's prescriptive moment is not only suggestive of a return at the level of individual subjectivities, as we just saw. It is also accompanied with occasional mentions of a supposed "return" to ways of living broadly depicted as pertaining to what some deep ecologists call "the minority tradition" (Devall & Sessions,1985). This refers to so-called "primal" human traditions that have been minoritized as a result of productivist societies' hegemony, which entails a re-enchantment of the world and a re-sacralization of ancient ties to natural beings and things, the possibility for personal growth in small communities living in "simple" ways, cultivating ecological consciousness and attachments to place. What indeed defines the ecological self is that the place in which one lives, along with its ecology, becomes part of oneself, an integrated whole. The problem is, according to deep ecology some aspects of German romanticism, Native American cultures, indigenous cultures in myriad places not always specified, cultures that pre-date capitalism's emergence, Buddhism and various "oriental" traditions, etc, are all lumped together to constitute "the minority tradition." The long list assembled by deep ecology would be quite rich and highly helpful if it wasn't for the fact of homogenizing, orientalizing so-called minority traditions – note that Devall and Sessions in fact use the singular – and associating them to the past, to non-Western, non- or anti- modernity, without further ado regarding the possibility that "we" may never have been modern, and with little attention to what "the West" may mean. As was the case with Zerzan's counter-uchronia, the colonial

262

undertones of this sweeping collection of influences come from an implicit and assumed denial of co-evalness (Fabian, 2014) between various cultures that are in fact contemporaries (e.g. some Native American cultures with "Western" ones), along with an assumption of coevalness where there may have been violent extinctions for some, persistence for others, etc. This move is interestingly shared by deep ecology's temporalities and those it denounces, driven by growth, which makes the former earn the qualification as counter-uchronian, merely attempting to "reverse" the course of uchronia yet leaving intact the assumption that such a course exists as well as the linear and teleological form of this course. A mythical past is homogenized, reifying and fetishized, to aspire to re-instate just like uchronian temporalities may aspire to abstract futures. One interesting anti-uchronian point here is evaded, namely the possibility (likelihood?) that there may not be anything to "reverse," as, to paraphrase Latour once more, we have never indeed been modern.

> Tim Luke has called Deep Ecology
>
> dangerous. Because of its qualities, deep ecology tends to ring up politically as a form of utopian ecologism. As a utopia, the imagination [thus] articulated presents some alluring moral prospects for what might be. At the same time, they fail to outline practicable means for realizing these moral visions. Deep ecologists are trapped by endorsing new images for new "ecotopias," but they do not have a very practical program for anything their visions of future primitive reinhabitation or bioregional community building. Political action is pushed off into the realm of ethical ideals, making it every individual's moral duty to change himself …. —

this individual moral regeneration might be, at best, a green quietism. (2002, p. 180)

But deep ecology does not only posit a form of utopia or ecotopia lacking practicality, as Luke underscores here. More specifically, it also does so at the temporal level, and in a reactive form aiming to counter yet symmetrically oppose and consequently reproduce myths attached to progress. Deep ecology does, to an extent, advocate a form of regression to an illusory past. But more specifically and problematically, it fails to question whether there may be any such thing as a line of time on which to regress on, and instead reasserts this line, in the hope of reversing its direction. An anti-uchronian perspective teaches us that growth-driven progress never had a direction, never took place, and neither will it take place. Rather than reverse, perhaps we may begin to rethink temporalities, at the quotidian and the larger scale, parting from their linear and teleological form, as well as their predictability and single or binary directions.

Building Substitutes to Uchronia: Quintuple Skins and Tree Tenants

> *Anything linear should be met with distrust.*
> *Don't carry any straight lines around with*
> *you.*
>
> Friedensreich Hundertwasser

Friedensreich Hundertwasser was an artist who claimed that "[he] want[ed] to show how simple it is basically, to find paradise on earth" (cited in Restany, 2001). He also happened to design numerous, famous posters for Greenpeace throughout the 1970s and 1980s, and numerous stamps attempting to spread environmental messages. He proposed an alternative flag for New Zealand on behalf of the Maori people. He modified his name so as to signify "Peaceful HundredWaters." He sailed around the Mediterranean for most of his later life on board of a ship he had called Regentag, or "rainy day." Earlier when he first taught at the Fine Arts school in Vienna, which he promptly left, he would tell his students to go study their own creativity outside and dismiss class, only to paint irregular lines all over the walls without anyone's permission. Because he didn't believe in straight lines, he never ironed his self-made striped clothes. The multi-disciplinary artist preferred what he called "fluidoid" lines and spirals to straight ones (I will discuss this matter in more depth in chapter 5). But most importantly for our immediate purposes, Hundertwasser may help us envision what forms some of the "regressive" counter-uchronia may take aesthetically: as Greenpeace activists were reading and citing deep ecology, he elaborated a theory of the five skins and built houses were trees lived as tenants at a time, which I will argue may be read as counter-uchronian art, though I will also show in chapter 5 that we may read this as heterochronian and heterotopian art.

The five skins' representation, a naïve drawing under Hundertwasser's pencil ("skin," n.d.), looks like this:
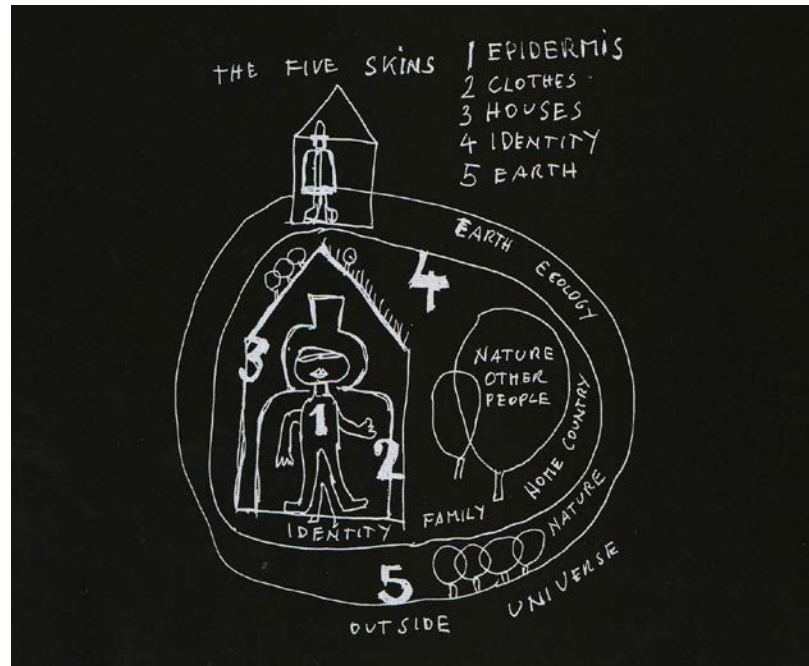
Figure 4: Hundertwasser's Five Skins.

The drawing divides existence into five various "skins," which depicts a whole

reminiscent of some deep ecologist account of the "ecological self" I have discussed

above: first the epidermis (1), then clothes (2), the house (3), identity (4), Nature (5). In

what follows I will describe and critique what Hundertwasser's diverse array of forms

and genres (poems, paintings, sculptures, happenings, architecture, declarations,

manifestoes, etc) attached to each of these skins, with the corresponding prescriptions for

each of these aspects of a self supposed to live in harmony with the whole. Or rather, if

Hundertwasser granted the status of "skins" to each aspect depicted above, it was because

each was to be considered literally part of the body and mind of each unique individual.

As we will see, many issues in the "vegetative painter's" representation are shared with

the philosophy of deep ecology.

First Skin: the Epidermis

The first circle, a human body's shape, refers to the epidermis. In Hundertwasser's view, his first skin should be exposed to the most external ones, as often as climate and weather deem it possible. In 1967, Hundertwasser gave a conference in the nude, to indicate that the epidermis' exhibition in public offered great potentialities for the assertion of the uniqueness of individual bodies, from shape to texture to color. If the experience of nudity as a spontaneous practice may seem appealing, the normative injunction seems more problematic. Nudist movements and groups have a long history tied to a form of social control, de-sexualizing bodies to standardize them, and have often deployed a rhetoric of authenticity along with the longing for a past, golden age of infantile, primitive and pure nudity. Arnaud Bauberot's study of nudist practices (2004) from antiquity to Nazi Germany on to contemporary nudist movements, shows that these have shared imperatives of exposing the bodies so as to cultivate desire and control of athletic, muscular, potent and able bodies, along with a rhetoric of return to a lost state of nature. If Hundertwasser's advocacy of nudism belongs to the specific context of an environmentalist activism now including events like the annual world naked bike ride, quite far removed from fascist uses of nudism, the myth of a return to authentic selves qua nude bodies nonetheless sheds doubt on the bodily diversity argument presented by the artist. In addition, the fact that Hundertwasser held a press conference in the nude to make such claims to authenticity, accompanied by two attractive and young women standing naked alongside him and who as far as I was able to ascertain did not peep a word while he talked (their presence is left unexplained in all the accounts I have

encountered), also points to the danger of rendering (female) bodies more immediately available for objectification.

Second Skin: Clothes

The second skin is made of clothes, which Hundertwasser grew into the habit of creating himself early in his life (Restany, 2001). Like the nude body, the normative invitation for making one's own clothes was intended to guarantee the display of individual uniqueness, against fashion prêt-a-porter's dictates. In addition, individual creation of one's clothes was held to be less likely to result in the production of straight lines, which Hundertwasser's anti-rationalism considered a way for modern life to annihilate any "natural" sense of creativity in human beings. As I mentioned above, ironing was also looked down upon as it risked straightening the "natural" striations and undulations of the material. Hundertwasser wore striped pants, striped shirts, ornated his sailboat with a striped sail, and the curves and irregularities caused by wrinkles and wind respectively allowed for the non-straight striated motifs to manifest fully. Ironically, any sailor knows that a wrinkled sail indicates poor orientation of the sail and inefficient use of the wind, but Hundertwasser probably did not care about these details. Another "detail" left unexamined by these prescriptions has to do with a lack of critique at the level of quotidian temporalities and gender roles: as Ivan Illich has put it, most of the "ghost work" (Illich, 2013) allowing for commodities (such as, in this instance, materials to make clothes) to be consumed is performed by women, and in a society where salaried work predominates to dictate the value of time, the enforcement of Hundertwasser's hand-making of clothes would be quite problematic were it to come without a more general attention to such temporalities. The lack of this kind of critical lens also risked

obscuring the fact that many "still" in fact make their clothes by hand today, further

reducing this work to "ghost work." In addition, the principal reason advanced by

Hundertwasser in banning straight lines resided in his association of such lines with non-

natural, rationalism. The artist claimed (wrongly) that straight lines were nowhere to be

found in nature. The assumption that "Nature" is the opposite of "rationalism" and

"modernity" is of course left implicit and unsubstantiated, and the ascription of normative

value to Nature resonates with deep ecology's originary Nature supposed to guide ethics.

Third Skin: the Oikos

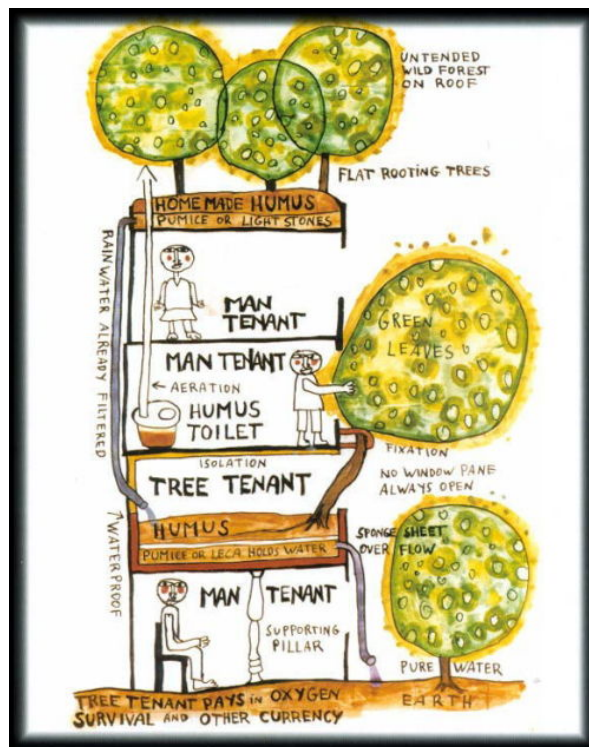Figure 5: Hundertwasser's Tree Tenant House

The oikos is the third skin. In the very heart of Hundertwasser's ecology, it also allowed

for the artist to intertwine the various skins: his most famous architecture is covered with

trees and green, and includes what he called "tree tenants," who inhabited floors and

rooms here and there and would "pay their rent" by providing oxygen and trapping urban

noises to the surroundings. Hundertwasser's five skins theory is thus highly holistic: all skins must be integrated harmoniously, as part of one single coherent irrationalist project. The houses themselves were supposed to function and breathe as a closed circuit, as human excrements, celebrated in Hundertwasser "Sacred Shit Manifesto" (*ibid*., n.d.) was supposed to be re-used internally, in each house, to nourish the trees as fertilizer – granted human excrements are actually highly toxic unless treated for a number of years, before which they cannot serve as compost, revealing a temporal dissonance in the strange immediacy depicted here and clashing with the necessary slowness of this closed system. The above, naïve picture represents a tree-tenant house which was never built quite in this way, as the constantly open windows turned out to be quite inefficient for heat. The drawing is thus very much a utopian depiction of what a tree-tenant house would look like in a place devoid of weather, climate, and fluctuation.

Fourth Skin: Identity

The fourth skin, namely that which Hundertwasser referred to as "identity," includes "the family, the home country." These words are written in the five skins' drawing with no further precision as to whether this list should be punctuated to signal an ellipsis, i.e whether the reader or viewer should see the rest of the inside of this skin as an "et cetera," or whether the list is closed and exhausted by these two categories. Nonetheless, the choice of the categories seems problematic and counter-uchronian in a number of aspects. If familial and patriotic values ring quite reactionary, and certain understanding of identity as fixed or made of sameness among members of a particular groups, the inscription of "other people" along with "nature" and both perched in a tree in the midst of the fourth skin reveals similar problems as those discussed above with respect to what

270

deep ecology called the "minority tradition." The adjective "other" of course raises question regarding who these people are other to, and no explanation is provided as to their proximity with a "Nature" which also constitutes the fifth skin. From various writings of Hundertwasser's, the other relates to "Western modern man," in a gesture reminiscent of the counter-uchronian "primitivisms" already examined above.

Fifth Skin: Nature

Finally, Hundertwasser offers "Nature" as the fifth skin's fabric, though it is also present, as we just saw, in the fourth. We have seen that Hundertwasser opposed reason and Nature, straight lines being associated with the former and "fluidoid" ones with the latter. The Nature the artist describes in a number of poems and texts is quite close to the stable, reliable, predictable and originary one dear to ecology's intrinsic value. Here in the drawing, it circles all other skins to unite what deep ecologists have called the "ecological self," so that the self is not only inclusive of mind but also an embodied relation thanks to the skin metaphor. Gaia is the organism that brings the whole together, the background upon which the supposedly unique individuals must evolve, in the nude and with their fluidoid clothing, equipped with national and familial identities. The whole thus looks like a counter-uchronian and counter-utopian union of spheres supposedly separated by modernity. As we will see in chapter VI however, if this drawing were to be read as a spiral, a motif of predilection for Hundertwasser, it may take a heterotopian and heterochronian form instead of a counter-uchronian reductive flattening.

Human, All Too Human and Natural, All Too Natural Teleologies?

> *An age of happiness is quite impossible, because men want only to desire it but not to have it. ... The destiny of man is designed for happy moments - every life has them - but not for happy ages. Nonetheless they will remain fixed in the imagination of man as 'the other side of the hill' because they have been inherited from ages past.*
> Nietzsche, *Human All Too Human*.

From a de-growth manifesto to an anarcho-primitivist's declentionist vision of history, from a deep ecological future primitive to an environmentalist artist's five skins, contemporary ecosophy and ecologist art offer a number of examples of responses to uchronia which counter it sometimes by replicating some of its traits. In these cases, rather than challenges to the uchronian myth of a timeless time, to a simplistic yet contradictory linearity and teleology, reversals of direction emerged out of the ecological crises from the late twentieth century on. The placement or situation of the myth of a timeless time on a chronological line switches from an abstract future to an abstract past, yet it remains, in these examples, that the time in question is timeless, that it has no time. Although initiated from an anti-uchronian impulse, these counter-uchronias reproduce uchronia as much as they oppose it, or, to put it more precisely, as they oppose it, in opposing it, precisely because they merely oppose it.

Regressive, Reactionary, Backward Counter-Uchronias

This is probably due to the very nature of oppositional stances, to an extent. But these also prompt further need for anti-uchronian critique. The above examples mostly include what we may call "regressive" counter-uchronia, or past-oriented ones rather than future-oriented, progressive ones. However, the very term "regressive" is perhaps inadequate, or only partially adequate, and so would be terms like "primitivist" or "reactionary" or

"backward." Each have some specific reasons for their respective inadequacy and for their partially helpful, partially unhelpful ways, and at the same time they share some of these reasons in common.

One shared reason is that, quite simply, "we have never been modern," or progressive, or future(s)-oriented. Uchronia was always a timeless temporality, a time out of time, the elan forward onto a line that did not exist but in fictitious form. Yet as such, in its contingent fictitious ways and unconvincing or contradictory claims to a natural, self-evident, inevitable, non-contingent or universal singular future, uchronia exercises such attraction and power as to constrain attempts at countering it or opposing it to espouse inverted mirror forms. There was never any forward movement involved in growth-oriented progress, the progress was never to, toward any actual time when capitalocentric temporality would fulfill its promise, but based on a futurist vision lacking a concrete future and subjecting the present. Yet, to various extents, some environmentalist discourses, exemplified above, have called for running the clocks "backwards." There is no more backward to run back to than there was ever a forward to run to. The past, harmonious, idealized time of "regressive" counter-uchronia is nowhere to be found in these simple or idealized forms, yet some have felt compelled to call for such illusory regressions in response to illusory progressions, even though these efforts had stemmed from a realization that the forward movement was impossible.

"Backward" counter-uchronia cannot run backward without tripping, yet the phrase refers to a desire for a mythical past. The adjective "reactionary" also partially helps describing what is at work – a mere reaction or re-action – but is vastly tied to ideological traditions and histories distinct from the particular, partly idiosyncratic

movements, groups and discourses under scrutiny here. "Regression" in the form of counter-uchronia cannot occur in actuality, as progression never did. Yet neither uchronia nor counter-uchronia are about actuality: both are appeals, rallying cries and ideals that claim (and fail) to justify certain concrete strategies, practices. They have effective consequences, but rely on myths of a time to-come or a time past which lacks a time coming, passing or passed. Among the major effects of uchronia are depletion of present resources, aggravation of inequalities, attachments and desires that generate compulsive work and consumption on scales and at paces, rhythms and speeds unsustainable to the planet and the concrete material livabilities of human and nonhuman lives. As for "regressive" counter-uchronias, they not only rely upon, keep intact, but also perpetuate assumptions entrenched by uchronia, including interdependent dualisms: past/future, non-Western/modern, primitivism/progressivism, Nature/human.

Teleological, All Too Teleological Humans and Nature

One amendment to these dualisms often emerges, however. In the instances above, because humanism is not problematized and "the human" is still postulated as indicative of something valuable, as a value in the sense Nietzsche denounced (a claim taken as fact so that it provides a general orientation to life), and because "the natural" is likewise granted normative value (as is the case, to some degrees, with uchronia: "it is quite natural to want growth," capitalism is the "natural" end of history, etc), going back to a mythical "more natural" past also is associated, at times, with a re-humanizing process, with a return to more human and humane ways allegedly lost by hyper-modernity. In other words, when themes of return emerged above, they were about parting ways from the supposedly in-human consequences of uchronia, to "go back to" simultaneously more

274

human and more natural ways of living. The human, as well as "Nature," are erected once again as values, granted normative status, qua their serving as ends to be achieved.

Where in uchronian times, the "natural" end of homo economicus is economic growth, accumulation, and situated in the (singular, naturalized) future, the end of regressive counter-uchronian times is to retrieve the once lost human and natural ways. For instance, we have seen that anarcho-primitivist Zerzan claims that modernity has "subordinated natural systems that humankind was once attuned to." Of note here is the fact that the reference to humans is not in plural form, but takes instead the form of a pompous "humankind" or "humanity" as a whole species. The struggle is against an allegedly de-humanizing modernity and progress that has supposedly separated "Nature" from the human. As such, it lacks a contextualization and critical engagement with "the human" and "Nature" as Western, recent, contingent categories (Foucault, 1971; 1979) that guide and distribute value within a contingent economy of power, although these categories' value may, perhaps should, be questioned. Surely there is a form of critical engagement in the "de-humanization" argument, but the target is partly missed as it fails to wonder whether the (temporal) order of things valuing the natural and the human as teleological ends could possibly be otherwise. Counter-uchronia errs by assuming that what is being questioned by the eruption of Gaia is the direction taken on a teleological line supposed to aim toward humanity and naturalness.

The example of the *Manifeste Utopia* critiques the human as a teleological goal to attain, not insofar as it is teleological, but because and when this teleology is supposed to lead to humans' separation from nature. De-growth advocates denounced a modern narrative where "the meaning of the history of Man would be to humanize the natural …

to push it aside the world's animality." Here the denunciation critically targets a temporality where the development of the human is equated to a gradual distancing from nature, a work of separation modern uchronia purports to advance. The critique of modern understandings of human evolution as the achievement of a gradual de-naturalization is certainly appealing in times of ecological crisis. However, here it is the separation, not the teleology that the manifesto's authors denounce. Though this separation is indeed problematic, re-assembling the various forces at play cannot occur without addressing how the teleological dimension of this separation supports it, or how it informs the shapes espoused by these conceptions of Nature and by the human. Therefore, ultimately the *Manifeste Utopia* falls short of interrogating the categories of the human and Nature, along with, and insofar as they are partly constituted by, their temporal dimensions. Instead, it responds to uchronia by way of a desire to "return" to uniting the two categories, as though their existence preceded the claim to separate them, or the teleological vision that informs these categories.

In other words, this reactionary move purports to re-naturalize the human so as to finally make it human(e) again. The initial move in this critique is quite needed, but the prescriptive implication is mislead by desiring a mere reversal of the human/Nature dualism, and a mere reversal of the direction taken, which do not go so far as to question the lines (or separation, of direction). This de-growth counter-uchronian moment solely problematizes the human/nature separation, and the direction of their teleological movement, rather than their teleological character. This fails to draw the fullness of the critique's implication and to keep pursuing more critical work: "Nature" is now taken as a value which value is not questioned. This move, instead of transvaluating values, in fact

276

replaces a value with another rather equivalent one, celebrating Nature as a normative model. Similarly, Hundertwasser praises fluidoid and spiral lines by opposition to straight ones, deeming the latter as foreign to Nature, and does so claiming to an "anti-rationalism" which would be more aptly named "counter-rationalism," a merely oppositional stance whereby natural (un)reason is supposed to guide the course of ethical action. Yet as we have seen (see chapter II & III), Nietzsche's concept of eternal return teaches us that neither reason nor unreason pertain to the course of the world. We cannot find guidance in Nature's alleged "laws," or its allegedly stability, permanence, reliability or stillness, as it is no stable background, and is made up instead of becoming, of agentic and dynamic change always partially unexplained and unexplainable. While Hundertwasser sought in Nature a way to justify his fluidoid lines, which were in turn meant to open up possibilities for uniqueness and creativity, his (re)turn to Nature as value, and as guidance, as unreason, ultimately may stifle creation and change. If there is any such thing as a justification for fluidoid rather than straight lines, it cannot and will not be found in "Nature," or in Man, or in both of these finally re-united. This implies a re-conceptualization of both, in fact, and a de-centering of the dualism in favor of hybridity (a mere reversal will not do), which is only possible if one interrogates the temporal dimensions of these teleological ends (wherever they land on the line of time – past for regressive counter-uchronia, or future for progressive counter-uchronia and uchronia).

The problem with "naturalizing" a mythical time, i.e with making the end of capitalist teleology natural, making teleology natural, making capitalist economies and their growth natural, is only a problem if and insofar as "Nature" has been erected as

stable law, or crystallized as background, congealed as static (though none of these metaphors completely work as ice, crystals, and erections are all made up of movement, change and becoming, once one looks closer). It is because "Nature" has been conceptualized as a teleological end, and/or as moved by a teleological movement, that it becomes counter-uchronian or uchronian. "Nature" and "naturalizing" (capitalism, growth, past ages, etc) are only problematic, not because of nature, not by nature, not because of the claim or even the assumption that a particular movement would have natural attributes or be natural, but because of a temporally flawed (untenable, unsustainable) version of "Nature." In other words, teleological Nature is at issue, not the nonhuman per se. Temporality remains the problem, that which requires rethinking, and if the emphasis were placed on a natural and constant becoming of all (natural and human and hybrid) things as different, if nature was to be read for difference (Gibson-Graham, 2006), if nature was to be read from the perspective of the eternal return, "naturalizing" time, pasts, presents, futures, paces, rhythms, speeds, assemblages would not be problematic. On the contrary, in our current "anthropocene" context of extinction, this would be quite desirable instead. If the only constant is change, if the only being there is, is the being of becoming, as in the Nietzschean eternal return, then conceptualizations of the human and nature must radically be reworked and cannot suffer a counter-uchronian or uchronian status. Put differently, I could say that the above title of this last part of this chapter (IV) is (playfully) misleading. The problem is not that teleologies involved in uchronias and regressive or progressive counter-uchronias would be made up of too much "Nature" or be too "human." Rather, what is at issue is that both the nonhuman and the

human have been conceived as teleological, all too teleological. Thus the question mark, in this title. Thus the reversal, in this section's title.

Myths of Happiness from Ages Past:
Counter-Uchronian Happiness and Anti-Uchronian Joy

Regressive counter-uchronian movements also fall short of critical anti-uchronian moments, in their resorting to myths of happy good savages and an appraisive racism one would think (hope) could have been left to certain eighteenth century Western male thinkers. The gesture is interestingly very similar to that just described regarding a "return" to "Nature." Here reactionary counter-uchronia joins hands with uchronia in colonial reifications and homogenizations involving a denial of coevalness between various naturecultures. Though making "archaic" peoples exemplary, counter-uchronias portray these as remote (note however one distinction: in regressive counter-uchronian discourses the term "archaic" is rarely used, as it rather belongs to progressivism. "Primitivism" is used appraisively instead). In the case of anarcho-primitivist Zerzan, this myth of the good happy savage is accompanied with the myth of genderless or alternatively (and contradictorily) feminized societies.

The question of happiness is important to each of these counter-uchronian examples. Each portrays the good (eu) and remote (ou) time (chronos) as happy, describing leisurely paces and quotidian life, the fulfilment of reduced needs, satisfaction. The terms happy and happiness keep resonating to make this remote time a form of "age of happiness." Here Nietzsche is helpful again, as the quote opening this section shows. To Nietzsche an age of happiness is "quite impossible, because men want to desire it but not to have it." He thus evokes "happy moments" in lives, but rejects the possibility of

"happy ages." He also claims that the latter "will remain fixed in the imagination of man as 'the other side of the hill' because they have been inherited from ages past." Indeed, just like the eternal return entails that there can be no state of equilibrium, no maximal or minimal state, but a finite set of forces constantly shifting, re-assembling and re-distributing in unpredictable ways to form new arrangements at each moment (long or short), and there cannot be either reason or unreason guiding the course of events, there cannot, either, be ages of happiness or ages of sadness. Instead, all we are left with is – neither chaotic nor rational – joyful and sad moments, joy and sadness being (constantly) unevenly (re)distributed from moment to moment (long or short). What is the distinction however, between long moments and "ages"? If we understand long moments as extended durations of time with uneven and unpredictable ways, whereas "ages" would refer to societal states,[57] then we start seeing the pertinence of this idea to my critique of uchronia. But be it at the level of a life, or of societies and epochs, the "happiness" taken to be coterminous with mythical times of counter-uchronian longings, understood as a stable state, a being, is a form of time paralysis or freeze.

Here Nietzsche is not rejecting happiness per se, but rather emphasizing moments as opposed to ages, movement rather than states. I would even suggest that joy (in the Spinozan sense of the increase of what a thing can do) would resonate better with these moments, while happiness indeed projects imagination to still times, timeless times, ever-postponed ones, and abstraction. The difference does not lie so much in the duration of moments or ages, but their quality as respectively made of movement and becoming, as

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[57]Joy, in a Spinozist sense (Spinoza, 1992; Deleuze, 1988), refers to the increase of what a thing can do, whereas sadness is its decrease, and even in common language it connotes a moment, a cairological dimension or duration rather than a chronological dimension, whether short-lived or long term, a point of an oscillation rather than a stable, still or permanent state.

opposed to being. For instance, consumer satisfaction, an always postponed state

belonging to a future that will not be reached, otherwise the consumerism this never

satiated state contributes to render possible would collapse. Are you happy with what you

have? Sure but I'd be happier with more. Simone de Beauvoir wrote about happiness in

the *Second Sex*:

> It is not quite clear just what the word happy really means and still less what true
>
> values it may mask. There is no possibility of measuring the happiness of others,
>
> and it is always easy to describe as happy the situation in which one wishes to
>
> place them. In particular those who are condemned to stagnation are often
>
> pronounced happy on the pretext that happiness consists in being at rest.
>
> (Beauvoir, 2014).

The fact that a stable state of happiness will never come to be in a full, stable, indefinite

form yet the desire for such stillness is perpetuated makes consumerist desires possible.

In fact, as we might recall the anti-uchronian moment of the *Manifeste Utopia* includes

this very critique: the good consumer is a never-satiated consumer. Even at the level of

the quotidian, happiness is something one wants to desire but not to have, it operates in

uchronian terms: the appeal is in the endless postponement. Counter-uchronias similarly

propose a state of harmony, stillness, a stability nowhere to be found. And again,

Nietzsche writes about ages of happiness that "they will remain fixed in the imagination

of man as 'the other side of the hill' because they have been inherited from ages past."

Ages of happiness are these ages or states where we are not, rather than these actual or

virtual joys we may encounter and foster in a present re-thought. If these ages evoked

may be inherited from ages past, it is not because they have existed, as a state of maximal

(or minimal), perfect stillness is only attainable in a timeless time: if time can indeed pass, it is because it is inhabited, moved and changed constantly, neither by reason or by unreason, made of unpredictability, surprise and contingency.

Moving Forward or Spiraling Autopoietically

At the same time, it may seem to some degree that the very same condition allows for all kinds of change and resistance, including anti-consumerist ones: it is often because dissatisfaction rises, or because promises are not met yet still hoped for, that some of us mobilize, think critically, question. The problem is thus to keep identifying, deciding, creating distinctions between uchronian states of happiness, thus coterminous with temporal stillness, and joyful moments where the possibility for other possibilities arises (anti-uchroinan critique). I have tried to suggest here, and will continue to do so in considering yet other temporalities, that (counter) utopia and (counter) uchronia are incompatible with a philosophy of becoming. If anti-uchronia incites a pause, a suspension of a certain time to create time for critical thought and practice, or their possibility, counter-uchronia traps us right back to paralysis, stasis, stillness, timelessness. Anti-uchronia can be read as an antidote, that which disrupts a certain logic or phenomenon and inoculates it with new possibilities, whereas a certain form of strictly, symmetrically oppositional critique is drawn to "counter" a logic or phenomenon with a mirror-image of itself. But if counter-uchronian longings for stillness in fact stifle change under the guise of inspiring it, how may surprising becomings erupt without being contained by a projection of imaginaries to a "good" and "non" place or time, an outside, an earlier/back in the day or a later/tomorrow? May these becomings emerge autopoietically, to borrow Felix Guattari's borrowing of Francisco Varela's notion (1989)

of self-creating change? How may we account for, espouse, embrace and nurture unpredictability, becomings, the new, emerging out of both the present actual and virtual,[58] and imaginaries connected to the here and now and multiple futures and pasts?

While I will try to partly address these inexhaustible questions in chapter VI, for the time being I will turn to some examples of what I call progressive counter-uchronias. As I have discussed above, some dimensions and moments in de-growth discourse does not escape the progressivism it purports to question, thus hybridizing regressive and progressive counter-uchronia. To move forward with our going back to Nature, could indeed sum up a number of the positions discussed above. We may add that, in a way, in more than one way in fact, there are myriads of counter-uchronian, uchronian, anti-uchronian and synchronic moments or dimensions in eco-temporalities and temporalities which make up our daily lives, imaginaries and desires. Thus the distinctions are not stable attributes or natures for the discourses examined here, but rather they aim to underscore and disentangle what enables the new, and a kind of new that may enable more of itself. For instance, while in the previous chapter I had read the Intergovernmental Panel on Climate Change reports as offering a welcome and needed anti-uchronian perspective, they may also be read, as in the next chapter, as presenting a dangerous form of progressive counter-uchronia just as capitalocentric as unqualified growth-driven progress, i.e uchronia. Similarly, I will return in the last chapter (6) to

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[58] Though as I have mentioned Claire Colebrook (2014) has proposed that two traditions exist among vitalist ones, some being anchored in the actual and some, queer vitalisms investing the virtual, I do not think that synchronic change does or has to solely emerge from the virtual, her criterion for this distinction: there are, here and now, actual practices and politics which to various degrees are capacious enough to sustain synchrony. In fact if we make these invisible, we risk to fall back into (counter)uchronian imaginaries.

Hundertwasser's art, arguing for a heterochronian reading of his spiraling through five of

our skins.

CHAPTER V

GOING AHEAD?
PROGRESSIVE COUNTER-UCHRONIA
OR HYPER-UCHRONIA

<u>Rushing to Gaia's Deathbed… to Save ~~Her~~ Growth</u>

Counter-uchronias refers to emerging eco-temporalities that attempt to counter existing

uchronian temporalities yet retain most of their form. Merely reversing linear progressive

understandings of time that make impossible promises postponed to an abstract futurism,

we have seen in the previous chapter that regressive counter-uchronias idealize a golden

age of Nature, an age of happiness when the human/Nature dualism was supposedly

reversed, with Nature on top. Futurism is then supposed to be countered by a sort of

"past-ism," progression by a regression (the French language has a word for this,

"passeisme": we may need to invent a word for the English language). In this chapter,

what I will read as "progressive" counter-uchronias also reactively responds to the

shattering of uchronian temporalities performed by the eco-crises. However, contrary to

regressive counter-uchronias, they continue on to a new form of amended futurism. They

rely upon the same teleological and linear direction as uchronia's. The progressive

counter-uchronias examined here repeat, to an extent, the (linear, progressive,

teleological, futurist) forms constitutive of uchronias, but they perform contorsionist

gestures trying to adjust the linear progression of time postulated by growth-oriented

capitalist economies to some awareness of limits, the goal being to overcome limits. Let

us bend the arrow of time a bit, … so that it can keep it pointing "forward" (to an

impossible forward beyond limits). These amendments can take several shapes and

forms: in the examples I draw from below, one of these is the "techno-fix" contorsion: we shall tweek, adjust the Earth temperatures and climate with vast-scale technological devices, do not worry, Gaia is feverish but engineers are on it, ready to shoot massive needles into her massive veins, or, as Gaia theorist James Lovelock's metaphor goes, ready to "put her on dyalisis" (Lovelock, 2009) Another form of contorsion progressive counter-uchronia performs so as to amend and bend the trajectory of uchronia while failing to contest it, consists of "internalizing" global warming in capitalist world economies' accounting: capitalist production has indeed played a tremendous, crucial role in feeding climate change, because it failed to exhaustively and rationally calculate the cost of environmental devastation. Thus we shall proceed to fix one of capitalism's limits by expanding it: capitalist production and consumption are running us into a wall, let's swallow (capitalize, speculate on) that wall and keep running. Global warming becomes, under this kind progressive counter-uchronia, an opportunity to create new markets where carbon emissions shall be traded – and, therefore, speculated upon, etc. As we will see, technofixing manifestations of progressive counter-uchronias and carbon-marketing ones can ally and overlap: the creation of carbon-markets called for, among others, by the Intergovernmental Panel on Climate Change associates with techno-fixes like so-called renewable energies, themselves the objects of new markets. Meanwhile, would-be (or, as we will see, actual) geoengineers trying to tweek temperatures on earth do so with some conservationist concerns mixed with hopes that their brand new, grand-scale engineering techniques become lucrative sources of carbon credits, providing them with a head-start in the emerging, brand new carbon markets. These changes may be called progressive counter-uchronias insofar as they illustrate ways in which uchronia is

amended so as to allow it to keep following its course (into a wall), but they may also be called "hyper-uchronias." A form of uchronia on steroids, these hyper-uchronian temporalities imagine the future as potentially extending capitalist markets to integrate its own devastation and speculate on it, and they invent quick and easy technofixes assuming a confidence in technology even more relentless than prior to the eco-crises, as it scales up to fantasies of intentionally tweeking the planet's temperature like one would their AC in one's apartment.

Why would it matter to name deep ecology's image of Nature as something to "return" to "regressive" counter-uchronias, or to name carbon market fantasies of speculation and geoengineering hubris "progressive" counter-uchronia? It should be apparent by now that my concepts of uchronia, anti-uchronia, and counter-uchronia (and, finally, heterochronia, synchrony in the next chapter) refer to temporalities embedded in, informed by and informing world views, responses to ecological disaster, ways of living, ways of imagining and experiencing the (past, present, future) living that profoundly differ, sometimes even diverge, and that these divergences have tremendous effects on what is being done in the midst of Gaia's fever. Yet these are sometimes difficult to tell apart. Given the centrality of temporality to the problems and questions posed in times of eco-crises, looking at all these competing discourses from the vantage point of their temporalities helps distinctions to be made and reflected upon critically, and it helps seeing how these elements may also be (sometimes ambiguously) entangled. Thus this fourth concept of "progressive counter-uchronia" may add another layer of possible criteria for distinguishing temporalities erupting with and within ecological discourses and times of dramatic ecological change.

For example, when I initially discussed the IPCC reports in chapter 3, I read these as helpfully providing a needed critique of uchronia, which I called anti-uchronia. The questions posed by the IPCC, I argued, were "idiotic" questions in the sense that, as any good science and/or philosophy hopefully does, they may provoke readers to slow down and wonder: these were questions previously barely intelligible (do we really need growth? Can we really want it?) that cause us to pause. Yet, in this chapter, I return to the IPCC reports to examine another aspect in these texts, namely their counter-uchronian dimension. From this perspective, the IPCC does not stop at asking helpful, sorely needed idiotic questions: it instead commits leaps that I will characterize, after Stengers, as animated by "stupidity." Consequently the reports provide an apt illustration for how anti-uchronia cohabits with counter-uchronia, how in a historic moment when the contestation and fragility, the contingency and fallacy of temporalities of progress are coming under attack, alternative temporalities erupting in response oscillate between merely reactive forms and more disruptive, radical challenges. The distinctions I am laboring throughout this dissertation strive to provide ways to disentangle the former from the latter, and see how complex these differences are, prompting a need for never abandoning anti-uchronian critique.

While as we may remember from chapter III, the IPCC reports offer a futurology which anti-uchronian moment depicts the future (futures) as multiple, uncertain, multidirectional, and suggesting the impossibility of sustaining growth, we will see in what follows that these texts also contain a counter-uchronian moment when "business as usual" takes over. Though the diagnostic and prognostic moment is one offering scientific fuel for anti-uchronian critique, here the prescriptive moment entails a rush to

Gaia's deathbed… supposedly to "save" her, and yet the creation of carbon markets ultimately proposes to save growth (though of course there will hardly be any capitalist growth, or "business as usual," if the Earth becomes inhospitable to human life as a result of unsustainable growth). I will locate one of the points of distinction between the IPCC's anti-uchronian and counter-uchronian moments in the difference between its "idiotic" gestures, which slow us down, and "stupidity," which fast-forwards and leaps to make impossible demands on a situation, demands that are radically at odds with the situation's own demands (Stengers, 2005).

But let me return for a second to the distinction between regressive and progressive counter-uchronia I have made here, to address one possible source of confusion. It may seem as though in the distinction I am making here, the sciences tend toward espousing progressive forms of counter-uchronias, while the arts, various manifestos, ecosophy, eco-literatures, would turn mostly to regressive counter-uchronia. However I wish to underscore that one could select a number of examples that would nuance this impression: the regressive or progressive nature of various counter-uchronias encountered here are not generalizable by discipline. In fact, my own examples themselves do not fit such easy and reductive dualism: as we saw, de-growth as discussed with regards to the *Manifeste Utopia* is partly a forward form of counter-uchronia, while as we will see the conservationism of rogue geoengineer Russ George or the praise of geoengineering by Gaia theorist James Lovelock include mixtures of regressive and progressive counter-uchronia. While the previous chapter focuses on regressive counter-uchronia and draws mostly from political and artistic examples, and this one focuses on progressive counter-uchronia illustrated by scientific and engineering discourses, from

289

this focus follows a goal of carving conceptual tools enabling complex distinctions. Perhaps this suggests that the ecological crises afford us no simple replacing of uchronia with inversions of its direction, and how equally problematic various forms of counter-uchronias are, in their imperfectly successful claims to challenge, supplant or amend uchronia. All these stem from an anti-uchronian impulse, but bump into difficulties in reshaping imaginaries in non-uchronian ways. These troubles to go from a critical anti-uchronian moment to a more normative and/or prescriptive moment, as they fall back on counter-uchronia, are shared across regressive and progressive counter-uchronias and across genres, be these scientific, literary, artistic. In other words, regressive counter-uchronias do not necessarily emerge from one genre while progressive ones would be the monopoly of the sciences. First of all, the following discussion of the IPCC reports and geoengineering should shed light on some of the political and economic dimensions of the sciences' insight into the eco-crises and their temporalities. Secondly, much art and literature (accelerationist aesthetics, certain futurist science fiction) could be read as progressive counter-uchronias, which I do not discuss here for lack of space and so as to prioritize analyzing a diverse array of genres: the organizing distinctions made here stress the temporalities involved but the nature of the examples in terms of disciplinary boundaries and sorts of discourses are only secondary. If they are important, it is in the sense of demonstrating a thread through a variety of eco-discourses, and indirectly, one lesson to take away would be that the analysis of eco-temporality adds one more reason to challenge disciplinary boundaries, genres and forms' limits, as well as limits between various domains of what Latour has called the modern constitution (Latour, 1993; 2004): Science, politics, the arts, etc. The endemic presence of temporality as a problem

traversing ecological and environmentalist discourses through and through shows that the traps of counter-uchronias, acting like limits onto anti-uchronian critique, threaten the humanities and the so-called "hard" sciences alike. In fact both the future of humanities[59] (centering on the human in a period when the nonhuman overwhelmingly erupts), and the future of "pure" "apolitical" or "politically neutral" "hard" sciences, i.e the problematic nature of disciplinary boundaries and of the contours of spheres like science and politics which have long been affirmed as separate while always already porous (Latour, 1993), are in question with the way the eco-crises have fragilized uchronia.

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[59] Regarding this question of humanities' futures, see among others Braidotti, 2013; Colebrook, 2014; Grusin, 2015: the discussion of humanities' futures is vast and varied, yet recurrent in recent decades in Science and Technology Studies and New Materialist Theory, and these are not exhaustive examples in an ongoing debate I cannot develop here but which central problems this dissertation illustrates in part.

> *It is not in the least assured that the sciences, at*
> *least as we know them, are equipped to respond to*
> *the menaces of the future.*
> Isabelle Stengers

Normative and Prescriptive IPCC:

All Futures Will Be Capitalist, so Let's Trade Carbon Emissions!

In chapter III, when I discussed the anti-uchronian dimension of the IPCC reports, I

focused mostly on the first two parts of the reports, crafted by Working Groups I and II of

the Intergovernmental Panel on Climate Change. These, as I mentioned, concentrate their

research on the "physical science basis" of climate change (working group I), and its

"impacts, [as well as questions of] adaptation and vulnerability" (working group II).

Working group III specializes in questions of mitigation. To simplify, we could say that

the three working groups correspond more or less to three moments we may call

diagnostic, prognostic and prescriptive. While the reports compiled by working groups I

and II are written mostly by climatologists, the various scenarios used in all three reports

to make projections regarding various carbon-emitting trends and the report composed by

working group III regarding possible measures for mitigation of climate change are

informed not only by "hard" scientists but also by economists' input. Interestingly,

counter-uchronian dimensions of the IPCC reports emerge in the latter two, and

especially the prescriptive moments of the texts, whereas the diagnosis would be where,

as I argued in chapter III, we find anti-uchronian, critical questions. In what follows I

argue that there is a gap, a leap committed between a diagnostic moment that

provocatively encourages anti-uchronian questions to be posed, and a counter-uchronian prescriptive moment. This gap, characteristic of what I call progressive counter-uchronia, is a rush from scientific conclusions which provoke questions of whether we should even want growth, to hasty programmatic impulses endeavoring to continue on with growth, or "business as usual."

> The IPCC is explicit in its diagnosis:
>
> globally, economic and population growth continue to be the most important drivers of increases in CO_2 emissions from fossil fuel combustion. The contribution of population growth between 2000 and 2010 remained roughly identical to the previous decades, while the contribution of economic growth has risen sharply. (IPCC, 2014b, p. 8)

Yet all scenario storylines which the IPCC deploys for its modeling assume economic growth and the predominance of capitalist economies, even though many scenarios include a decline in global population growth after the middle of the 21st century, and even though some include a more equal distribution of per-capita income growth across the world. We may remember, for instance, the descriptions provided by the panel for the A1 storyline, which I commented on in chapter III, then insisting on how these enable to imagine multiple rather than one single future:

> The A1 storyline and scenario family describes a future world of very rapid economic growth, global population that peaks in mid-century and declines thereafter, and the rapid introduction of new and more efficient technologies. Major underlying themes are convergence among regions, capacity building, and

increased cultural and social interactions, with a substantial reduction in regional

differences in per capita income. The A1 scenario family develops into three

groups that describe alternative directions of technological change in the energy

system. The three A1 groups are distinguished by their technological emphasis:

fossil intensive (A1FI), non-fossil energy sources (A1T), or a balance across all

sources (A1B). (IPCC, 2000, p. 4)

Though this scenario family portrays a world that goes against some of the current trends

toward aggravation of inequalities, toward "convergence" and "reduction in regional

differences in per capita income," the description opens with the mention of rapid

growth, implicitly assuming a globalized world dominated by capitalist economies: the

various groups within the A1 family differ among themselves in the kinds of resources

mostly used (more or less fossil intensive, "technological emphasis"), "efficiency" of

technologies, but no mention is made of a reduction of consumption or production per

capita: the only reduction of consumption and production that may be implied would

result to the decline in the world population. Even the B1 scenario family, which is the

one that tends toward "equity" the most, fails to even consider the possibility of de-

growth and/or of a proliferation of capitalist economies resulting in the disappearance

(whether it be gradual or rapid) of capitalism. Dramatic reductions in consumption levels

worldwide are not included either among the futures considered, however multiple these

are: across the more than 900 scenarios collected, the IPCC privileges imagining instead

the increased use of so-called "renewable energies," with little decline in energy

consumption. Thus every storyline deployed for modeling purposes assumes capitalist

growth, with more or less fragmented paces and levels (i.e, growth interrupted by regular

crisis without interruptions of the desire for growth, as capitalism has long experienced).

Not only do the scenarios collected by the IPCC assume capitalism: they take this

assumption to go without saying, and the assuming is always done implicitly rather than

as a clear postulate. As we can see above, no explicit mention of capitalist economies or

capitalism is made in scenarios' descriptions. The term is not even necessary as it is taken

to be the only possibility, merely taking on various forms or modifications. Each scenario

family stresses "technologies," "resource efficiency," convergence or divergence, some

reductions in "material intensity" in scenarios where the service and information

industries predominate (as though the information industry was less energy-intensive,

which remains to be proven), and throughout the text, though capitalism is rarely named,

its presence is always already assumed: imperatives of profit, commodity exchange,

growth, and markets are omnipresent. Green capitalism, less green capitalism, grey

industrial capitalism, make for the various shades of future capitalist paths envisioned. I

will return in the next chapter to a playful re-writing of these descriptions imagining what

they would look like were we to invent non-capitalist futures. For now I wish to

underscore the capitalocentrism inherent and implicit to these various possibilities, in

spite of the multiplicity I stressed earlier, when reading the reports from the perspective

of their anti-uchronian dimension. Through the constant mention of the creation of

carbon markets, the neoliberal language deployed, the instruments "measuring" "the

economy" (this phrase is always used in a singular form erasing any possible or existing

diverse economies), the "developmental" paths considered, the IPCC remains attached to

a capitalocentric futurism. The developmentalist assumptions so omnipresent especially

in Working Group III's report on mitigation associate population stabilization with

continuous growth. In other words, according to the IPCC several futures are possible, if and only if they are capitalist.

At best, the IPCC looks at growth qualified or amended rather than ever questioning it or its desirability: it advocates for "less carbon-emitting growth" (IPCC, 2014b, *e.g.* p. 4, 10). More precisely, in the most recent, fifth assessment mitigation report, published in November 2014, the IPCC specifies that baseline scenarios ("scenarios without explicit additional efforts to constrain emissions") would "result in global mean surface temperature increases in 2100 from 3.7% to 4.8% compared to pre-industrial levels" (p. 8). Looking at scenarios which include efforts to constrain emissions, the IPCC still assumes growth, and merely imagines less growth than in the baseline scenarios: "mitigation scenarios that reach atmospheric concentrations of about 450 ppm CO_2 eq by 2100 entail losses in global consumption … in 2100 *relative to* consumption in baseline scenarios anywhere from 300% to more than 900% over the century" (2000, p.12). The losses in consumption levels are only relative to baseline scenarios' rampant growth, which skyrock with at least 300% over the century. Furthermore, note that here the relatively less intensive consumption levels are described as losses: the section I extracted this quote from focuses on "costs" of mitigation. Even declines in growth (as opposed to de-growth) are framed as "losses" and "costs," in other words not as desirable paths but as unfortunate concessions or amendments to an orientation that remains growth-driven, though with lesser rates. The IPCC then fails to entertain scenarios where de-growth is valued and a radical change of the future's orientation toward capitalist growth is considered as even being a possibility.

The IPCC reports painfully attempt to present themselves in a not-so-explicitly programmatic form, thus preferring to enumerate seemingly disparate measures rather than a general outline of what policies would best enable facing the climate crisis. The reports repeatedly assert that no particularly scenario among those considered (all capitalist) is deemed most probable, though some are described as more desirable than others in terms of mitigating, adapting to climate threats (those scenarios that go beyond baseline ones). Thus the third working group's report, offering recommendations for mitigation, purports to offer no recommended paths but rather compilations of recommendations. Prescriptive claims are presented in this way for reasons of diplomatic prudence as well as epistemological credibility, yet the result is an underlying assumption that all recommended measures intervene in a predominantly capitalist context taken for granted, as a naturalized background or unchanging law, to the point that again, capitalism is not or rarely named in the texts. Ultimately, if no program is laid out, and though no scenario among these capitalist ones is deemed more plausible or probable than another, the lack of any non-capitalist scenario normatively excludes non-capitalist modes of living. There is no arbitering among equally probable or plausible scenario, but the field of what is possible is limited to a capitalocentric horizon.

In addition, and perhaps most importantly, among the array of measures it recommends, one thread runs across the IPCC's Working Group III's report, which further confirms the capitalocentrism at play: the creation of future global carbon markets. The shared dimension of most prescriptions made is thus highly capitalocentric: it consists of commodifying green gas emissions. If so far, neoliberal economy has treated such emissions as a form of what it calls "externality," the move here consists of

integrating the formerly "external" in calculations of costs and benefits by calculating

carbon emission levels and taxing these, allocating and trading (and presumably opening

the way to speculate on) carbon credits, at the international and national levels. In spite of

the multiple futures presented by the IPCC, in spite of its dramatic and breath-taking

diagnosis, in spite of the uncertainty of the futurity at play suggesting that our presents

and futures may after all be relatively diverse, at no point does the IPCC entertain the

possibility of the end of capitalism, or of the prevalence of non-capitalist futures. Neither

does it read the present projected in the reports as constituted of diverse economies that

cohabit with hegemonic capitalist ones. The picture proposed for mitigation is one of

amended uchronia, or "counter-uchronia." The temporal horizon remains tied to a drive

toward always already capitalist modes of production, consumption and living. Instead of

taking on the implications of its own diagnosis more fully so as to ask whether growth is

even desirable, or what carbon emissions and temperature levels would look like in a de-

growth scenario, the IPCC asks how we may continue on with growth, protect growth in

spite of, against, and beyond the eruption of Gaia it describes. In addition, by imagining

carbon markets as the main, recurrent set of measures recommended, the IPCC's third

working group goes beyond simply reproducing counter-uchronian futurities and indeed

further expands the reach of capitalocentric visions: capitalist economies pollute? Let's

add pollution in capitalist accounting methods and proceed to commodify it, to integrate

it into capitalist trade! The defense of the creation of carbon markets entails that what has

been more and more astutely recognized as a destructive side-effect of capitalist

production, what used to be seen as an external waste product of commodity production

and consumption, will be incorporated among commodities up for sale. Thus counter-

uchronia amends uchronia only to strengthen it, to reinvent capitalocentric futures. Ultimately, the IPCC's progressive counter-uchronia is a form of uchronia on steroids, a hyper-uchronia.

The IPCC's Embrace of Geoengineering:
Pollute Now, Clean Up Later, On to Hyper-Uchronia!

In the IPCC's November 2014 Mitigation report and in its 2015 Synthesis report, a new turn unfolded in the history of the first scientific panel to have won a Nobel Peace Prize. The IPCC then embraced, for the first time since its creation, the idea of Carbon Dioxide Removal (CDR) technologies as an allegedly compelling technique that even justifies a certain permissiveness of this new report with regards to carbon emissions levels. The AR5 (i.e the 2015 fifth assessment report) developed the notion of "overshoot," accompanied with subsequent development and deployment of carbon trapping technologies, as one possible path to mitigation. More simply put: international conferences on climate have gradually and (in)famously generated, the threshold of a 2 centigrades' increase in global mean surface temperature as the maximum "acceptable" limit or goal (note that many environmentalist movements, small islands states and global South countries have long protested this limit, which would reep devastating effects for many populations, posing the question of whom it was acceptable to). While the IPCC, an outgrowth of the United Nations, had always taken the two degrees goal to be consensual (even though it had provided evidence that small island states and others would suffer drastically even from such increase), with its AR5 the panel opened up to possibilities of "temporarily" going beyond carbon emissions that would cause a rise of two degrees ("overshooting" the target), eventually compensating this "overshoot" by

way of CDR technologies to-come. In fact, this "pollute now, clean up later" strategy, which counts on hypothetical geoengineering technologies that have yet to be proven effective, feasible, or without risk of worsening the situation, is an emerging theme throughout this most recent, 2015 report. In short, the hypothesis is that CDR technologies to be invented, perfected, and/or generalized mid-way through the 21st century, would justify more flexibility with respect to the two degrees' objective.

Among CDR techniques, the IPCC most seriously considered Bioenergy with Carbon-Capture and Storage, or BECCS (2014b, p. 12). These would consist in growing trees and other carbon-absorbing biomass to subsequently burn that in power plants designed to capture carbon emissions before they would reach the atmosphere, supposedly generating energy with "net zero" emissions and even removing carbon dioxide and other greenhouse gases out of the atmosphere. Many questions are unanswered regarding BECCS, including where such captures would then be stored, where the immense necessary biomass could possibly be planted, how such massive land use would not further aggravate climate change (land use contributes 24% of direct emissions according to the IPCC itself), how leaks would be avoided from carbon storage, etc.

The IPCC itself concedes that such scenarios count on the hypothetical use of future (mid-century) technologies not yet perfected (and, we may add, not at all certain to ever be reliable enough): "overshoot scenarios typically rely on the availability and wide-spread of BECCS and afforestation in the second-half of the century" (p. 12). Thus the reasoning, if we may even call it this, is that we may head toward exceeding carbon

levels of 450 ppm CO_2 eq (associated with the two degrees threshold), as long as mass-scale technologies trapping the carbon succeed, in 40 years. Time will tell whether hubristic confidence may pay off this time around. Let us remain caught up in the same growth-oriented logic, and postpone to a hypothetical future the solution for the problem wrought by such logic, granted the "solution" itself is one that assumes more technological progress, on a vaster scale, more exhaustive knowledge and mastery of nature, this time at the planetary level. Furthermore, and quite importantly, the possibility that further, more exhaustive knowledge concerning the technologies imagined could result in conclusions that such technologies be too risky and uncertain, i.e the conclusion that we do not and will not ever know enough to tinker with the global climate, does not fall under the IPCC's scrutiny: the specific kind of scientific-technological knowledge at play here refuses to entertain its own limits. Welcome to uchronia on steroids, a.k.a hyper-uchronia. Uchronia finally appears for what it is, in its impossible form, thanks to anti-uchronian conclusions the IPCC itself advances, … so now let us continue on to invent new, boosted forms of uchronias that would counter what is deemed to be mere side-effects of growth, somehow with further trust in the very technological age that has produced the crisis: the IPCC's counter-uchronian rush to fall back on more growth even after slowing down to take a bit of time imagining its devastating effects, espouses and scales up the futurism of uchronia. This leap, similarly to the regressive counter-uchronias I examined in the previous chapter, rebounds on similar temporal forms as those it opposes or amends, even after an anti-uchronian moment. Hyper-uchronia offers to boost uchronia with a shot of geoengineering and carbon markets after bumping into Gaia's anti-uchronian challenge.

IPCC Stupidity:

Leaping From Anti-Uchronian Diagnoses to Counter-Uchronian Prescriptions

In *Aux temps des catastrophes: Résister à la barbarie qui vient*, Isabelle Stengers (2009) points to the urgent need to name "*la bêtise*" (which translates as "stupidity"). Stengers explains that our need to make ourselves think becomes dangerously incapacitated in the current ecological crisis. She distinguishes stupidity from dumbness (the French false cognate "*stupidité*"). Stupidity (*bêtise*) consists in an active force rather than a stable attribute defining specific individuals. It traverses, seizes people and assemblages. Being dumb when confronted to a terrible situation would manifest itself as a form of paralysis (in fact the French word for dumb shares its root with "stupor"), curtailing any possible action in the face of a larger force. Dumbness' effect is numbness. In contrast, stupidity actively engages forces into actions that do not match, and even worsen, the conditions and exigencies of a particular situation. Worse, stupidity engages us on a path that consists of making demands on a situation that are in fact incompatible with the situation's own demands, and it is this tension that causes the situation to further worsen. I argue that the IPCC's prescriptions correspond to the absurdity described by Stengers, even in spite of its anti-uchronian diagnoses. The situation indicates that growth is the primary driver of climate change? Let's imagine technofixes and new market expansions so as to continue demanding (assuming) growth in this, out of, this situation.

In Stengers' view, stupidity currently inhabits those "(ir)responsible" for making decisions. In the IPCC reports, I would contend that stupidity manifests itself in the form of the discrepancy between the highly helpful and necessary diagnosis of the situation of climate crisis as one requiring rapid, drastic change, and the incapability to think beyond a temporality tied to capitalocentric futurism, led by large-scale technological innovation

and experiments, top-down policy-making, expert-led environmentalism rather than climate justice, de-growth and diverse and slow economies. As we saw in chapter II, Greenpeace, among other examples of organizations, has based some claims, arguments and positions of its campaigns on the body of scientific knowledge produced by the IPCC: it was in the aftermath of the 2007 IPCC fourth assessment report that the famous environmentalist organization crafted the "It's Not Too Late!" campaign I've discussed at length above. If the IPCC diagnosis have not only allowed for many to see uchronia for what it is, a temporality assuming illimited growth on a limited planet, and if the climatological knowledge presented by the panel offers food for thought and critique, if it constitutes part of the grounding evidence environmentalists often seize to advance anti-uchronian mobilizations, the reports part ways from such activism when they invoke carbon markets, "development," "sustainable growth," BECCS, as ways to address the climate crisis. The anti-uchronian moment, where the IPCC's description and documentation of climate change challenge notions of progress and disrupt assumptions in favor of growth, are followed by a resolute commitment to "overcome" global heating insofar as it is an obstacle to growth, rather than take in the consequences of knowledge and uncertainties regarding global warming so as to carve more livable ways of living.

Stengers provides examples of rhetorical phrases deployed in the context of "our" officials' stupidity. In the face of "the eruption of Gaia" and the subsequent need to put growth in doubt, they retort: "mais ce serait la porte ouverte à…" which could be literally translated as "but this would open the door to…" (and in a more idiomatic English expression, would likely be conveyed with images of slippery slopes). The suggestion here is that the door would open to radical change and collective mobilizations objecting

to growth, for instance. The stupidity at play in recommendations to create carbon markets and resort to certain kinds of geoengineering strategies takes the counter-uchronian form of a rush to close doors to radical changes in production and consumption, and to solve a problem with the very tools that created it, only deploying them on a larger, planetary scale this time. Capitalist, carbon-emitting growth has given the planet a fever, … so let's expand capitalist commodification to the emission of $CO2$! The technological age has spinned out of control, so let's hurry and invent new technologies, … like air conditioning for the Earth! Stupidity, a moment where the demands made upon the situation do not match the situation's own exigencies, arises from the persistence of uchronia's appeal and even its strengthening: once again, technology and market expansion are expected to act as a fix to continue to ensure growth (to reproduce themselves), feeding its own self toward hypothetical all-masterful futures. This generates a form of hyper-uchronia.

The temporal dimension of stupidity, and the stupid dimension of counter-uchronia or hyper-uchronia are important here. With the term counter-uchronia, I refer to the leap, the rush to assumptions that growth will and should persist even when it has just been acknowledged as the primary cause of a world-historic eco-crisis, whereby obstacles to uchronia are countered and its logic prolonged. This also underscores the common reactive character of regressive counter-uchronias and progressive or futurist ones. By hyper-uchronia, I refer to the specific form of boost to uchronian logic performed by the futurist turn to carbon market, geoengineering, and such amendments to uchronia. One of the crucial constitutive elements of this hyper-uchronian moment has to do with stupidity's temporal dimension: the stupid impulse to make demands on a situation which

aggravate it against its own demands depends upon a skip to hasty conclusions, a re-active rush to rescue the Earth without taking the time for doubt in a fast-paced, disconnected temporality reliant upon a teleology of growth. In spite of its future impossibility and its current and future destructivity, growth of capitalist markets is held once again as the only imaginable horizon. Only this time, technological tinkering will take place directly at the planetary scale. The stupidity at play is especially visible from the temporal perspective: there is a gap between diagnosis and prognosis on the one hand, and prescription on the other, then a leap to abstract futures echoing and even caricaturing uchronia that would subject the present to even more carbon-emitting ways: thus the IPCC proposes "temporary overshooting" and eventual deployment of hypothetical future technofixes which effects are unknown but deemed knowable in the future.

Stupidity v. Idiocy: IPCC Sustainable Growth as Counter-Uchronia

In the 2014 reports (AR5), the IPCC re-wrote their definition of the notion of sustainability, which they previously drew from the Brundtland Commission's definition: "development that meets the needs of the present without compromising the ability for future generations to meet their own needs." The definition now used in the reports reads as follows: "a dynamic process that guarantees the persistence of natural and human systems in an equitable manner" (IPCC, 2013; 2014a; 2014b) The new definition is more anchored in the present and lets go of a reference to future generations in favor of the more vague term "persistence," a term which, however, has the merit of still underscoring a present-future continuum. Indeed, many of the changes projected in the 2007 report have now become present ones, and are treated as such in the 2014 report. In fact, many

among the IPCC's predictions have been proven wrong, not so much in the sense that the changes anticipated did not take place, but more often than not, in the sense that the Panel had underestimated the extent, speed, pace of the change. Here the IPCC is being caught up by its own prognosis, which is becoming a diagnosis in need of updating to more dramatic states.

Both understandings of sustainability share one common trait however: the goal is by no means to supplant capitalocentric, growth-driven temporality (uchronia) with a new temporality of sustainability, but to create an adjectival modifier to amend uchronia: "sustainable growth" is the new, counter-uchronian horizon. The multiple scenarios entertained and the measures promoted, normatively obscuring non-capitalist economies and prescribing the creation of carbon markets as well as increased confidence in the technological age's capacity to "fix" the problem it created, converge within a capitalocentric futurity supposed to be adjusted to a bit of equity and some persistence. Namely, in spite of their anti-uchronian moment, the IPCC reports fall short of taking the time for sufficiently idiotic questions: do we, after all, need growth at all? The IPCC models rush back to the "stupidity" that consists of saying, in the same breath, that growth is a fundamental driver of greenhouse gases' emissions, and that in order to continue to have growth happily ever after, we should create carbon markets and trust geoengineering expertise. The capitalocentric horizon, uchronia, is merely amended by an impoverished concept of sustainability to give rise to a "counter-uchronia," or strengthened even, by a geoengineering boost that may justify calling this futurist vision a hyper-uchronia. Isabelle Stengers did not bring her two concepts of idiocy and stupidity in conversation when crafting them, nor did she explicitly tie these to a reading of

climatological knowledge or emphasize their temporal stakes (although she clearly has the current ecological crises in mind). I now return once again to idiocy for a moment, qua the prism of anti-uchronia's battle against both uchronia and counter-uchronia.

Indeed, the question French philosopher of science Isabelle Stengers poses in the incipit of this section remains: There is "no guarantee whatsoever that the sciences, at least as we know them today, are equipped to respond to the menaces of the future" (Stengers, 2009, p. 22). Against the declarations of an IPCC which synthesizes, second or third-hand and as a result of long negotiation seeking consensus within a community of hard and soft scientists accountable to the United Nations, idiocy may compare the mitigation "solutions" proposed by the IPCC to a multitude of proposals and direct attempts for the concerted and participatory proliferation of a new ethics and new modes of living at local and micro-levels, i.e diverse economies in the here and now, with future generations as a matter of concern. Yet as Stengers points out, the idiot may easily be discarded or excluded as having nothing to propose, no clear program, no single solution, or as abusively and ruthlessly denying its power to scientific knowledge and technological progress.

This response to emergency contrasts with and stands against stupidity as a temporal leap. Where stupidity leaps away, from a moment of seeing growth as an unsustainable temporality, to rushed and dangerous tweeks in conditions supposedly aiming at the continuation of growth, anti-uchronia may slow us down to contemplate the idea that growth be replaced by experiment with the present, taking the future into account (what I will call cultivating "synchrony" in the next chapter). As Stengers claims:

307

Idiocy thus slows us down, in part because it poses barely intelligible questions in precisely a moment where temptation is so great to just skip over rapidly. If idiocy slows us down, if it contests the consensual presentation of our situation, if it resists urgency,[it] is not because the presentation would be false or because emergencies are believed to be lies, but because 'there is something more important'. Don't ask him why: the idiot will neither reply nor discuss the issue. The idiot … produces an interstice … But his role is not to produce abysmal perplexity … the idiot demands that we slow down, that we don't consider ourselves authorized to believe we possess the meaning of what we know. (Stengers, 2005, p. 995)

The idiot does not only cause and require us to slow down: she is defined, in Stengers' view, by her status as that who is likely to be excluded, on the basis of assumptions that she has nothing to contribute, that she does not know any solutions to the problems she herself may pose. This question of distinguishing idiocy and perplexity, and of the absence of a program, goes along with a distinction between idiocy and ignorance. Idiocy is a form of skepticism, holding on to the possibility that science may not be best equipped to make all decisions for us, and while useful as one of many actors involved in diagnosing situations, it should not have a monopoly over either such moments or prescriptive moments: the idiot does not deny articulated knowledge, does not denounce it as lies, is not the hidden source of knowledge that transcends them. The constraints proposed are idiotic in the following sense: they refer to no arbitrator capable of judging the validity of the urgencies that the experimenters claim to exist. In other words, idiocy consists of a thoughtful moment of pause, one capable of making other ways of living

glitter within an order of things seemingly closed to such possibilities. It is an ethical interrogation that does not assume a particular temporal order or teleology to the world that we should construct, that is not attached to any preconceived notion of this world. In contrast, the stupidity that animates the crafting of diagnoses regarding the unsustainability of growth as a driver of global warming, and the articulation, in the same breath, of capitalist expansion and technofixes, is a form of reaction embedded in urgency: the technological society's (Ellul, 1964) growth is throwing us into perilous shaky grounds, let us keep growing, helped with a dose of technofix.

Who is the "Anthropos" of "Anthropogenic" Climate Change?

Another aspect of the counter-uchronian component in the IPCC reports is made striking qua its universalizing claim that climate change is "anthropogenic," that it has been caused by "humans" and will be, is being, experienced by all. In the following section I explore some of the problems posed by this sweeping gesture, this "mise en equivalence" (as Stengers may put it) that brings humans together as the cause of a natural phenomenon they allegedly will all have to suffer from, unless "we" act fast. As we will see, not only is this interestingly tied to a narrative of progress with human mastery of nature undertones reminiscent of uchronia before it was ever disrupted by the eruption of Gaia, i.e, not only does this "anthropos" category point to a persistent attachment to a certain temporality, but reciprocally, it is also in the periodization, in the reading of Earth and human history supporting the argument of climate change as "anthropogenic," that the problem of who counts as "anthropos" arises.

All Humans Shall Be Affected by Man-Made Climate Change…

Unevenly and in Different Ways

> *Civilized man says: I am Self, I am Master, all the rest is*
> *other – outside, below, underneath, subservient. I own, I*
> *use, I explore, I exploit, I control. What I do is what*
> *matters. What I want is what matter is for. I am that I am,*
> *and the rest is women and wilderness, to used as I see fit.*
> Ursula Le Guin

With each new report (every 7 years or so), the IPCC specifies some of the changes made

from one report to the next. It does so in general terms, mostly limiting itself to indicating

that more data and a greater number of scientific publications are available with each

report, that more detail was added. However, one of the qualitative changes that occurs

with each report often has to do with the IPCC having to go into more depth regarding

regional variation of the impacts of climate change: though climate change has been

caused by humans and impacts all of them in one way or another, these causes and effects

are not evenly distributed. The reports published in 2014 and 2015 include ten new

chapters. Chapter 13 of Working Group II's report focuses exclusively on climate

change's impacts on poverty, livelihoods, and inequalities among and within world

regions – though interestingly, a language of "variation" tends to be preferred to terms

like "inequality," which is rarely used in the reports. As the following excerpt from the

2014 report attests, the IPCC itself has thus admitted shortcomings in its pastinvestigation

of inequalities and poverty:

> Understanding future vulnerability, exposure, and response capacity of interlinked
>
> human and natural systems is challenging due to the number of interacting social,
>
> economic, and cultural factors, *which have been incompletely considered to date*.

These factors include wealth and its distribution across society. (IPCC, 2014a, p.

56)

Yet these differences are not explained by power dynamics or dependency between

regions, but rather – in a discourse highly symptomatic of the linearity of

developmentalist approaches – they are framed by a language of "lacks," insufficient

"capacity," "adaptability," in the most "vulnerable" regions. Focused on Latin America,

this passage of the report is telling:

Some countries have *made efforts to* adapt, particularly through conservation of

key ecosystems, early warning systems, risk management ... However, the

effectiveness of these efforts is outweighed by: *lack* of basic information,

observation and monitoring systems, *lack of capacity* building and appropriate

political, institutional and technological frameworks; low income; and settlements

in *vulnerable* areas. (2014a, p. 1048).

Thus Latin America is presented as at best plagued by some mysterious "lacks," at worst

responsible ("made efforts to") for its "vulnerability" due to ill-informed decision-

making. This language of "low adaptive capacity" is deployed with respect to Africa and

Asia as well, where information on climate change impacts in these areas is admitted to

be incomplete, with little to no attempt at pointing to the power dynamics, inequalities,

colonial legacies, and interdependencies (in the sense both of a dependency of the global

North on global South poverty, and of the global South on global North hegemony) that

may explain this uneven distribution of climatological knowledge, beyond the complexity

of climates in areas like the Sahel, for instance. As for Europe and North America, it is

apparently just as class, race and genderless as Africa, Asia, Oceania.

The interdependencies at work in aggravating inequalities worldwide and within regions, countries, areas, among class, race, gender, etc are not mentioned. Poverty and inequality are treated as "other stressors" aggravating the impacts of climate change, rather than as complexly overdetermining ecological crises. For instance, chapter 13 of the new report introduced references to women for the first time in the IPCC's history, which was about time (until then there was no mention of gender in the thousands of pages of reports), yet they are constantly reduced to descriptions as "vulnerable," absent of any account of how gendered power dynamics may work to inform and produce such "vulnerability." The "capacity" and "adaptability" language obscures the larger question of capitalist power dynamics, notably between regions. However, as environmental historian Mike Davis has demonstrated in his work on El Nino famines (Davis, 2002), these have often been the result not only of natural disasters but of failure for markets and capitalist states to distribute available resources where most needed in emergency situations, along with active appropriations of resources by colonial powers. There is no reason to believe that global warming-induced famines would now differ, if one persists in considering– even an array of – capitalocentric scenarios. Adaptability, capacity-building, vulnerability, in sum the IPCC's language when dealing with the unevenness and inequality inherent to the climate crisis, is drawing exclusively from developmentalist accounts of "the economy," which assumes "developmental paths" all directed toward generalizing the dream of global North "development," a generalization the panel itself proves to be impossible without a limitless planet. This developmentalism, reliant upon a vision of history as linear and universally marching toward the same goals, erases specific cultural contexts, colonial legacies, power

dynamics and violence.[60] This issue is also interestingly tied to the one discussed above: in the IPCC's accounts, the future (futures) is multiple, as long as it is capitalist: all scenarios assume "development" as an end-goal, with all the colonial Western underpinnings of this linear vision making it impossible for projections to do anything but imagine capitalist hegemony as the default, unproblematic state worldwide. But however implausible this may seem, what would happen to carbon emission levels, were the IPCC to draw from models projecting a worldwide generalization of traditional indigenous modes of living, and/or societies, naturecultures, which "still" rely mostly on small-scale, subsistence agriculture?

Furthermore, the IPCC evokes the heightened risks of local and regional conflicts over resources, and the increase in migratory flows due to higher number of climate refugees. This in fact is part of why the Nobel Peace prize was awarded to the IPCC in 2007. Yet at no point of the reports does the IPCC offer insight into how global North countries who have contributed most of the carbon emissions placing world populations of humans and nonhumans in today's catastrophic situation are also likely to be the least violently affected by global warming, and what ethical and political responsibilities this may create. The narrowing of income difference explicitly and dubiously assumed in many scenarios also runs counter to any evidence considered even by the most superficial observation of capitalist history, which the recent disasters resulting from Structural Adjustment Programs have only confirmed: growth cannot be assumed to narrow inequalities, and neither can the creation of a global carbon market, or the deployment of geoengineering techniques like BEECS – which most global South countries would

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[60] For critiques of developmentalism and postdevelopment theory that inspire my criticisms of the IPCC, see Ivan Illich (1973; 2013), particularly his concepts of "modernized poverty," and "war on subsistence"; also Arturo Escobar (2005; 2011), Ferguson (2005), Fabian (2014), Rahnema & Bawtree ed. (1997).

313

hardly be able to afford contributing to – that the Working Group III calls for. The report starts many sentences with formulas such as "assuming that market efficiency is improved…," further confirming its own capitalocentrism. It cites "studies of market potential," advances that "literature identifies taxes as an efficient way of internalizing the costs of greenhouse gases (GHG) emissions," and praises "revenues from carbon taxes or auctioned permits under an emission trading system used to promote low-carbon technologies or reform of existing taxes." These are but examples of the many passages on regulating carbon emissions by way of taxes and creating a worldwide carbon market which the report on mitigation is filled with. Little to no consideration is taken of who in the world would be able to afford these "auctioned permits" to pollute, how such auctioning may aggravate existing inequalities and thus shed serious doubts on speculations that equity in income distribution could possibly come with a continuation of growth (e.g. A1 scenarios). The question of what states would be able to enforce carbon taxes, what underground markets would develop as a result and their scope relative to what economies, are also unaddressed. Yet the answers to these questions can be suspected, and they would most likely not benefit the Global South, or women, minorities, the poor, etc. The "anthropogenic" character of climate change has been demonstrated by the IPCC reports. Yet who is the "anthropos," and the "we" in its injunction that "we" take action to address global warming because it impacts "us all"?

Remember Back When We Became Human, All Too Human, in 1750?

> *Man is neither the oldest nor the most constant*
> *problem that has been posed for human knowledge*
> *... It was the effect of a change in the fundamental*
> *arrangements of knowledge ... Man is an invention*
> *of a recent date. And one perhaps nearing its end. If*
> *those arrangements were to disappear as they*
> *appeared ... then one can certainly wager that man*
> *would be erased, like a face drawn in sand at the*
> *edge of the sea.*
> Michel Foucault

As a vast, worldwide conglomeration of hundreds of scientists and economists who synthesize findings from peer-reviewed climatological literature under the auspices yet autonomously from the United Nations, the IPCC is well known for having constituted itself as a legitimate voice confirming a quasi-unanimous diagnosis that current global warming was "anthropogenic." Its issuing "synthetic reports for policy-makers," it has served a function of vulgarization and translation of climatology to international politics, and the resulting texts have informed international environmental summits from Cancun to Rio, Kyoto and Copenhagen. This is in part why it received the Nobel Peace Prize: at the intersection of international science and politics, the IPCC has given tremendous weight to the claim that climate change was caused "by us humans" and consequently has offered fuel for thought and action to myriad mobilizations. Its most striking contribution to worldwide debates on global warming is arguably that the climate crisis is "unequivocally" (the vocabulary has become more adamant in the last, 2014 report) anthropogenic. The panel supports this claim with a comparison of millennia of climate change cycles to the short period of industrial modernity, with the predominant date cited in the reports placed at 1750. Throughout the reports, the IPCC refers to "pre-industrial levels," which in itself is a misleading phrase, as it does not in fact literally mean that

315

levels of greenhouse gases in the atmosphere before industrialism have been constant, and suddenly destabilized starting in 1750. This makes room for objectors to the anthropogenic climate change position (who when backed up by far right dollars, have been quite vocal, in spite of their ultra-minoritarian situation, and have even succeeded in usurping the name of "skeptics") to point out that Earth history has experienced tremendous amounts of variation throughout. What climatologists mean by "pre-industrial levels," is the relative stability of greenhouse gas throughout the Holocene, though even this stability is indeed relative: many of us now know about the ice age (for instance) that took over Europe during the middle ages. This variation does not discredit the argument that from 1750 on, industrialism caused CO_2 levels to rise dramatically.

However, did we indeed become human in 1750? Are economies not reliant upon the predominance of industrial growth not animated by humans? May we syllogistically deduce that the rise of capitalism was a process of humanization, before which medieval populations were less-than-human? Are today's non-industrial economies producing inhuman modes of living? These anti-uchronian questions point to how the timeline, the periodization advanced by the IPCC, the vision of history underpinning its language and arguments, are profoundly capitalocentric. Yet the equation humanism = industrialism may have some critical purchase, perhaps against the IPCC's original intentions in crafting the terms of debate. Indeed, simply replacing the adjective "anthropogenic" with a seemingly more specific "capitalogenic" may obscure that, precisely, the economy of power-knowledge that was born around 1750 did inaugurate a certain figure, man, who proved to be quite carbon-emitting.

Much debate has taken place in the humanities as a result of Paul Crutzen's

coining the term "anthropocene" to designate the geological epoch "we" may allegedly

have inaugurated by modifying the lithosphere, including allegations that such an epoch

may more aptly be called "capitalocene." In a recent article titled "Anthropocene,

Capitalocene, Plantationocene, Chthulucene: Making Kin," Donna Haraway has written

that

> A big new name, actually more than one name, is warranted. Thus, Anthropocene,
>
> Plantationocene, and Capitalocene (Andreas Malm's and Jason Moore's term
>
> before it was mine). I also insist that we need a name for the dynamic ongoing
>
> sym-chthonic forces and powers of which people are a part, within which
>
> ongoingness is at stake. Maybe, but only maybe, and only with intense
>
> commitment and collaborative work and play with other terrans, flourishing for
>
> rich multispecies assemblages that include people will be possible. I am calling all
>
> this the Chthulucene. (2015, p. 160)

Similarly, the adjective "anthropogenic" that the IPCC mobilizes invites the proliferation

of qualifiers to name global warming: the warming would thus not only be global and

anthropogenic, but also capitalogenic, plantationogenic, and the cooling down hoped for

may prompt the adjective chthulugenic. I will return to Haraway's Chtulucene in the next

chapter, but for the time being, we may simply say that here Haraway refers to an ethical

call to join forces with

> the diverse earth-wide tentacular powers and forces and collected things with
>
> names like Naga, Gaia, Tangaroa (burst from water-full Papa), Terra, Haniyasu-
>
> hime, Spider Woman, Pachamama, Oya, Gorgo, Raven, A'akuluujjusi, and many

many more. (p. 159)

As Haraway puts it, "the issues about naming relevant to the Anthropocene, Plantationocene, or Capitalocene have to do with scale, rate/speed, synchronicity, and complexity" (p. 159). We may say the same about anthropogenic, capitalogenic, etc global warming. What the IPCC's use of the adjective "anthropogenic" indicates and calls for problematization is the apparition of "man" as coinciding with the "development" (one may rather say contingent eruption) of a certain economy that generated enough carbon emissions to threaten most species on the planet of extinction. The IPCC suggests this coincidence without problematizing its contingency, however: it uncritically equates capitalism with the anthropos, in a sweeping, universalizing gesture that extends industrialism's legacy to a human legacy, both in terms of cause and in terms of those impacted: "we" humans have caused the planet to over-heat, which claim may be as empowering as it is overwhelming (in the sense that, from a hubristic viewpoint it may provoke feelings that only humans can fix the damage they have reeped). Though the IPCC's own marker for when excessively carbon-emitting ways began is 1750, the panel fails to further qualify anthropogenic climate change, which results in a blind capitalocentric reading of progress, history, the anthropos. This hyper-uchronian blindness makes for the ontological grounds upon which the IPCC then proceeds to a series of hyper-uchronian positions, from the prescription to create carbon markets to the leniency regarding overshooting two degrees' increase targets while counting on hypothetical future technofixes, and from the qualification of growth as "sustainable" to developmentalist paths, along with the relative indifferentiation in global warming's uneven impacts.

Hubristic Leaps "Forward": Geoengineering Stupidity

> *These technological fixes should not be condemned without considering their value as an extender of the time we have to act. In a longer run they are probably no more a cure than is dialysis for kidney failure but who would refuse dialysis if death was the alternative.*
> James Lovelock

The IPCC has so far espoused only one kind of geoengineering method: it has imagined the BECCS (carbon-dioxide removal and storage techniques) that I described and critiqued above to be perfected in about 30 to 40 years, so much so that overshooting is also made imaginable and acceptable in the near future. Some have gone further and imagined other geoengineering schemes, and even gone ahead to implement them. Geoengineering, or large-scale, deliberate interventions in planetary climate systems aiming to counter the effects of carbon emissions, hypothetically includes myriad experiments which the U.S Congress has amply discussed and considered serious options in various hearings. These techniques would include, for instance, spraying large amounts of sulfate aerosols in the atmosphere to cause drops of temperature similar to those that occur as a result of volcanic eruptions. Other techniques take the form of massive satellite shields blocking some of the sunlight from entering the atmosphere. Others yet entail planting forests of genetically-modified trees that would be more carbon-absorbing than natural trees, thus offsetting some of the current and future carbon-emissions. Yet another example would consist in changing the reflectivity of clouds so as to modify the albedo of the Earth. In its fourth report (2007), the IPCC wrote with skepticism about the techniques, though not ruling them out completely:

Geo-engineering options, such as ocean fertilization to remove CO_2 directly from the atmosphere, or blocking sunlight by bringing material into the upper atmosphere, remain largely speculative and unproven, and with the risk of unknown side-effects. Reliable cost estimates for these options have not been published. (IPCC, 2007, p. 79)

The IPCC's subsequent shift, in the fifth assessment report (2015), to open up to carbon removal procedures as more credible alternative is certainly evidence of leaps from diagnosing a situation of urgency to considering actions that reproduce and dramatize a futurist technofix and renew further desire to continue with growth, overcoming the climate crisis (as opposed, perhaps, to facing it). But some scientists, engineers and millionaires outside of the IPCC have gone further in this hyper-uchronian direction.

The Earth Has a Fever? Put Her on Dialysis!

Millionaire Russ George and Gaia Theorist James Lovelock to the Rescue

On October 15th, 2012, *the Guardian* reported that in July of that year, "an American businessman [whose name is Russ George] [had] dumped around 100 tons of iron sulphate into the Pacific Ocean as part of a geoengineering scheme off the west coast of Canada" (Lukacs, 2012). The article explained that "the iron has spawned an artificial plankton bloom as large as 10, 000 square kilometers. The intention is for the plankton to absorb carbon dioxide and then sink to the ocean bed – a geoengineering technique known as ocean fertilization that [Russ George] hopes will net lucrative carbon credits." *The Guardian* also specified that "scientists [were] debating whether iron fertilization [could] lock carbon into the deep ocean over the long term, and [had] raised concerns that it [could] irreparably harm ocean ecosystems, produce toxic tides and lifeless waters, and

worsen ocean acidification and global warming" (*ibid*.). A list of side-effects at least as scary and consequent as those on the banner for certain drugs' ads on TV, except on quite a different, to a great extent unknown, temporal and spatial scale.

George violated the U.S. Environmental Protection Agency's orders who had warned him that he could not fly the U.S. flag near the Galapagos and Canary Islands after his boats had been banned from ports from the Spanish and Ecuadorean governments because he had already made attempts to conduct his little experiment near these islands. The millionaire nonetheless claimed that some of the equipment used to monitor effects and results following his initiative off the coast of British Columbia had been loaned by U.S. agencies like NASA and the National Ocean and Atmospheric Administration. In order to conduct his Pacific Ocean experiment Russ George had convinced an indigenous village on the nearby Haida Gwaii islands to not only grant approval for his project, but also to establish the Haida Salmon Restoration Corporation, which would raise and contribute one million dollars to fund it. George had assured the indigenous village council that the experiment was about restoring the salmon population in the area. His geoengineering initiative was subsequently accused of violating two U.N. Conventions (on biological diversity, and the London convention on the dumping of wastes at sea) which prohibited for-profit ocean fertilization. As the news of his experiment broke while a United Nations environmental summit was being held in Hyderabad, India, the governments of Bolivia, the Philippines, several African nations, as well as indigenous peoples' organizations called for a more extensive ban on geoengineering.

Russ George has a personal website (called "Bring Back the Fish") boasting titles of blog posts like "A Penny for Our Planet," "Poof Go the Puffins Unless We Help," "Science Confirms: Dust + Plankton = Ice Ages," "Sockeye to Return in Historic Abundance" (George, n.d. "Bring Back the Fish") along with arguments about his experiment having allegedly been successful both in generating carbon-absorbing plankton, and proliferating depleted salmon population. The language in his website is dominated by four interestingly entangled semantic fields: that of corporate business and profit, that of restoration, that of "miracles," magic and mermaids, and finally, science. Money and Science restore enchantment, an all-in-one formula blending magic dust and hubris.

George's personal bio (George, n.d., "Me: A Personal Story"), an incredible first-person narrative and the very first choice of pages on his website's toolbar, specifies that he was taught to swim in Walden Pond. He claims that "if you soak there you can be imbued with some of Thoreau's magic" (*ibid*.). Before George tells readers about the allegedly restorative idea of soaking magical dust in the Pacific in other pages of the blog, he takes care to enumerate many of his experiences in the "great outdoors," promptly and inevitably thanking his first car, "a beat-up old 1958 jeep" (later car models are also mentioned in narrating various oh so wild anecdotes). Russ George's mother is also thanked, the daughter of a farmer who "didn't need today's notions of being locavores or organic foodies" to tend the garden and feed him well.

Russ George also tells about having lived in a tiny log cabin, working in tree logging "to make ends meet," as according to him that was what "us back-to-the-landers" did (*ibid*.). There, he specifies, he befriended a native faller, in whose company he later

decided to quit logging (but who subsequently does not reappear in the story): this decision follows a clumsy personification of trees screaming as he runs his saw through them. After logging, George created his own tree planting company having "hired a bunch of hippy friends." The story of course is punctuated with solemn declarations and grandiose twists and turns: "thus was born another chapter in my life of fixing the damage to Nature that our kind has wrought," (*ibid*.) exclaims Russ George. He also shares an anecdote illustrating his childlike, creative purity mixed with his virile go-getter assertive defiance: George once presented a report to the Canadian prime minister when he worked as an ecology consultant, delivering the report in the form of kindergarten-level flashcards (George had had an epiphany reading his kindergarten attending daughter's report, but the link there is unclear as this excerpt in the story is particularly rich in typos and approximative grammar). The Premier allegedly responded to this with an "OK smart ass now that you've shown we're remiss in our management you fix it" (*ibid*.).

   "Fixing Nature" has long been Russ George's vocation. The bio page on his blog does not include any written mention of the iron dust dumping, but instead a short video of the apparently joyful event, which was conducted from a beautiful sailboat. The low voice of a friend filming the large red trace of dust following the ship's stern and spilling in the ocean, half solemn and half laughing proudly, exclaims that "this is Americans doing somethin' about the Earth… trying to make it a more habitable spot… cause, we know we do a lot of things that tend to make it uh, not so habitable … so here we're doing our best" (*ibid*.). Not only humanity but the planet shall now proceed to thank Russ George as he has thanked Thoreau, his jeep and his mom. The closing paragraphs of the

bio can hardly be paraphrased without doing violence to the exemplary, virtuous, meriting "scientists and managers," – or should we simply call them heroes? – "working on the inside" to "do the right thing," "walking the walk" that Thoreau's magic may or may not have blessed, had he not bit the dust before the iron-fertilized sea ever came into being:

> Jump forward a few more decades and here I am still walking the walk instead of talking the talk out there restoring trees and seas with the sweat of my own brow. Soon I'll be posting a television documentary program here that I wrote, produced, and directed in the late 80's. It's titled, "The New Environmentalists," and tells the story of environmental scientists and managers who work on the inside, within industry. They go to work every day and do the right thing. That right thing is usually just doing something about the earth, trying to make it a better place. Walking the walk is far more important than talking the talk. (George, *ibid.*)

In addition to producing this kind of rich prose to praise their own merits, new environmentalists indeed jump forward sometimes, on interesting imaginary lines. And Russ George is not alone in his righteous rescue mission. His own technofixes are informed by a version of conservation rhetoric, while someone like James Lovelock, one of the inventors of Gaia theory, also advocates for considering geoengineering as a serious option. James Lovelock revolutionized the way biology and other sciences view the Earth by demonstrating that its systems act very much like those animating a living organism. The Gaia hypothesis took a long time to be taken seriously by the scientific

community, but Lovelock, along with Lynn Margulis, was eventually able to make a case so that it is now recognized as shedding a new light on the blue planet. This theory has tremendously inspired environmentalist positions, and the term Gaia, which he coined to describe it, has been seized by many including among radical ranks. When Isabelle Stengers refers to "the eruption of Gaia," though she does not define this event, she is in part referring to the sciences' understanding of Earth systems, which Lovelock greatly advanced, and in part to the current, unprecedented ecological crises that have challenged anew modernity's claims to separation between nature and humans.

However, in his recent book *The Vanishing Face of Gaia*, Lovelock (2009) offers a questionable logic which consists in arguing that if global warming is already a form of unintentional geoengineering, we might as well go ahead and reverse the process of warming, "curing" the ill we have wrought, only this time "deliberately." Thus Lovelock writes:

> There are signs that we can treat global heating by engineering or other means. We have proved that our *unscheduled* and *unintended experiment* of adding large quantities of carbon dioxide into the air by burning carbon fuel heated the planet, and we know that it was a mistake. Does this mean that we can cure global heating by adding some other gas or material that does the opposite and cools? Scientists, including me, think that *we may have little option but* to try; but surely it is much better to try as a *planned experiment* than as a *panic response*. (2009, p. 137)

The tense mix of urgency and criticism of panic response is striking: according to Lovelock, we have "little option but to try" geoengineering, and not enough time to

question "business as usual," a phrase that comes up regularly in his prose. On the other hand, he contrasts geoengineering experiments with "panic responses," trusting that one could "plan" for such "experiments." However while planning is surely part of what makes an experiment more or less rigorous in a laboratory, part of the very planning involved has to do with making room for the unexpected. Any experiment starts with hypotheses one then tests with a certain openness to surprise, to the unanticipated. Given the planetary scale, how one would proceed if such experiment of adding cooling factors to Earth systems were to fail or produce detrimental effects is quite unclear. Yet Lovelock's confidence in science is impressive, and so is his capacity, in this case, to rhetorically imply that "scientists" in general think we have "little other option but to try" (note that he does not write "some" scientists or specify in any way). Somehow, from the fact that global heating has been proven to be caused, inadvertently, by human action, Lovelock leaps to the conclusion that we may go ahead and continue on the same interventionist path, this time "knowingly." The question of where and how the unknown/known border may be delineated does not seem to trouble the Gaia theorist enough to call for abstinence from large-scale tinkering, and rhetorically, he situates this at the level of cairological temporality: the "unscheduled" experiment is contrasted with a "planned" one. First as tragedy, then as farce, first as "unscheduled" then as "planned," humans are entrusted the "management" or "cure" of Earth systems so complex that no complete consensus on what exactly we may anticipate is reached – Lovelock is a loud voice insightfully contesting the IPCC's projections and claiming that their modeling is excessively linear, that the panel may have underestimated feedback effects, tipping points and possibilities for runaway climate change, for lack of a sufficiently

interdisciplinary scientific approach. But between "panic response" and "having little option but to try," Lovelock walks with amazing confidence on a very thin line of threat. Describing Earth's history by comparing it to the life of a woman, he explains that Gaia can be considered an "old lady," which fragile state calls for protective intervention on the part of humans. He repeatedly claims that a sudden, dramatically catastrophic event would be, to an extent, desirable as it would shake the powers that be out of their apathy, into action. What we would need, in his view, is a cataclysmic event comparable to a war (his last book abounds in belliquose metaphors), which would finally justify a strong leader stepping in – here Churchill's figure is each time invoked to praise "blood, sweat and tears" attitudes that would not shy away from circumventing excessively slow and impractical democratic imperatives, which to Lovelock impede acting with the necessary boldness.

Thus Lovelock, a former MD, also deploys threatening, anthropomorphizing metaphors where the Earth is again staged as a fragile old lady that human scientists rescue as her benevolent doctors – deemed knowledgeable enough to help and save her – as with the quote in incipit of this section, which is worth re-examining here:

> These technological fixes should not be condemned without considering their value as an extender of the time we have to act. In a longer run they are probably no more a cure than is dialysis for kidney failure but who would refuse dialysis if death was the alternative. (p. 142)

Western medicine, which indeed has a history of declaring itself capable to act as the ultimate life extender,[61] is taken to be exemplary of the kind of ethics that shall guide us

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[61] Granted, according to Ivan Illich's *Medical Nemesis* (1976) argument, the life expectancy of adults has not been improved for more than a century in the Western world. Here Lovelock is bringing on his belief in

to the path of geoengineering. Life on dialysis is assumed better than death, in a peremptory "who would refuse" turn of phrase, yet one may pose another "who" question shaking the accuracy of the metaphor: whose death is being discussed here? The death of the planet as we know it, in the Holocene form we are (un)familiar with and have evolved in, may be at stake, but leaping from this to the death of the planet in general seems the kind of leap only a strong human exceptionalism may be able to perform. Besides, the very leap from individual lives and life-saving dialyses in the human medical realm (which ethical assumptions are already contestable) to the planetary scale serves an impressive yet dubious confidence in our capacity to "cure" ills caused by "us."

Lovelock's trust in technology and his desire to see "business as usual" enabled to continue in spite of the climate crisis, his futurist confidence where "experiments" inadvertently conducted by heating the planet can be reversed as long as the "inadvertent" is turned into "deliberate" and the "unscheduled" in turned into "planned," erasing unpredictability in even stronger a way, his call for a bold anti-democratic blood, sweat and tears leader and his desire for a catastrophe of a scale and suddenness sufficient to prompt dramatic action, his thin impossible line between claims that geoengineering would be "better than a panic response," and threatening "we have little other option," "dialysis or death" tone, make for an incredible exemplar of uchronia on steroids, or hyper-uchronia.

I will refrain from elaborating on Stengers' concept of stupidity with respect to Lovelock's rhetoric. It would be just as debasing to apply it to an old man known for having invented a not only scientifically revolutionary but also poetically beautiful Earth-

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the Truths and righteousness of medicine and jumping to apply these to Gaia, but even the former are highly contestable, let alone the fact that the leap from human living beings to the vast systems that constitutes and animate Gaia is preposterous.

as-living-organism theory, as his paternalistic gestures to cure old Gaia are preposterous. Nonetheless, Lovelock's demanding of democracy that it concedes "we have little other option," his demanding of the Earth that it lets geoengineers experiment, his demanding of geoengineering and science that they "cure" Gaia's fever, seem to run into a sharp dissonance with what the climate crisis situation could be read to demand, and with the complexity of his own Gaia hypothesis. Lovelock writes that "we have *proved* that our unscheduled and unintended *experiment* of adding large quantities of carbon dioxide into the air by burning carbon fuel heated the planet" (p. 139) and from this he somehow deduces that more experimenting, this time "deliberate," is in order. One may oppose to this an anti-uchronian suggestion that we have "proved" a certain "business as usual" so dear to his heart can reek havoc, that some of the sciences have been able to diagnose a likely relation between this damage and certain industrialist, technology-dependent modes of production, and that we know too little to continue treating the Earth as the object of our "experiments." Lovelock's recommendations are indicative of the powerful appeal of uchronia, to the point that frenetic fixing is at times preferred to phronesis even by incredibly inventive scientists. Here the relationship between limitless confidence in scientific knowledge's unstoppable progress and uchronia is made visible. It is based on the confidence that discoveries of techno-scientific "solutions" to fix complex Earth systems' disruptions will be found in the future that both the IPCC and Lovelock conclude geoengineering may be the right course of action (though the latter is very critical of the former they do share this assumption in common). We shall put the Earth on dialysis for the time being, and figure out later how to perform a more definitive kidney transplant. The idea of global heating "proving" that we must continue on the

same path of experiments intentionally, to counteract the current inadvertent effects, imagines untangible courses and directions to Earth and human history, where the technologies and mode of production that brought the crisis shall counteract their own effects (counter-uchronia), and where more trust in futurist experiments and technologies shall be invested (hyper-uchronia).

"New Environmentalist" Emergency and Hyper-Uchronian Heroism

Russ George and even James Lovelock's respective practice and defense of geoengineering could easily be reduced to a cynical hope to speculate on carbon credits or maintain "business as usual," and in Russ George's case there is certainly an explicit rhetoric interpellating the climate crisis as a business opportunity. One could certainly stop here with sufficiently compelling reasons explaining their positions. However, James Lovelock's views are more conventionally reactionary than this venture capitalist explanation would inaccurately account for. Even for George, if the search for speculation on carbon credits is reason enough, his self-avowed desire for turning the climate crisis into a source of lucrative activities is couched in a peculiar conservationist discourse he seems to genuinely adhere to and which deserves noting. Indeed, would someone who wishes to profit off of global warming even invest millions of dollars in carbon credit speculation endeavors if they didn't believe that large-scale tweeking of the Earth's temperature at the very least did not risk to result in planetary holocaust or mass biocide? What good (profit) will this speculation do when the experiment has failed and caused runaway climate change and subsequent mass extinction (including, perhaps, of our species)? This latter question is surely one that would-be and actual geoengineering speculators should spend more time on, yet one can assume relatively safely that they did

consider these risks, albeit hastily. Furthermore, it turns out that beyond a strangely cynical and naïve conviction that geoengineering can't hurt the planet, the two examples of pro-geoengineering rhetoric described above are both ones coming from what Russ George calls "new environmentalists," i.e folks who seem to sincerely be attached to a version of conservation ethics and a certain scientism, and as such belong to a long tradition of virile pseudo-scientific managerial and technocratic environmentalism.

Both the characters described mobilize images of heroes acting boldly in a moment of urgency, playing on a certain version of masculinity. For Russ George, the hero is none other than his ever so humble Earth-servant autobiographical self. His car, his swimming in the "wild" magic waters on which shores a great transcendentalist once built a utopian-of-one cabin, his self-depiction as an "American doin' somethin' right," his being called "smartass" by the Canadian Prime Minister, and his characterization of "new environmentalists" as "working from within the industry" to "fix" things, all participate in painting the portrait of a conservationist high-tech hyper-modern hero. In Lovelock's case, the desire for virile heroism comes up when he evokes the figure of a strong Churchill-like leader daring to sidestep democracy for the greater Gaian (understand, human-hospitable Holocene Earth) good. Another heroic figure is that of the Gaian doctor, who will protect fragile old feminine Earth. Note, regarding the sick patient's character, that Lovelock scientifically supports his claim about Earth's old age by telling his readers about his rich Gaia hypothesis and living systems, Earth's life expectancy with respect to the sun, etc, but he never explains why the Earth should be female, besides a tautological explanation: his having named his theory with the name of a Greek goddess.

These different forms of virile heroisms also mix with a specific scientism, self-righteousness and human exceptionalism, all informing the hyper-uchronian futurist narratives here. This does not imply, by any means, that hyper-uchronia has to take this particular gendered form, of necessity. Yet this is the form it takes in both examples, in what's only a caricature of the relative genderblindness of the IPCC's own counter- and hyper-uchronias discussed above.

Human exceptionalism is another constitutive trait of this hyper-uchronian horizon. The repetition of terms and phrases like "fixing," "doing the right thing," "curing," sustains Lovelock's hyper-uchronian reasoning: "we have experimented and been mistaken, let's now experiment and fix our mistake" (p. 139). While this language of fixing assumes that humans are in a position of agency, control and deliberateness or "planning," it blatantly underestimates the agentic and unpredictable ways of Gaian response, even in the midst of evidence that intervention into so much complexity can be disastrously destructive and may not be possible to anticipate. Reciprocally, it arguably over-estimates human capacity for deliberation, intentionality, conscious action, the unstoppable extension of human scientific knowledge, and human planning, foresight abilities, the latter two being a condition for deliberation and intention. What is being proved by the climate crisis exactly? According to Lovelock, it is not so much the vast extent of the unknown, but rather that we may now proceed on the same route, "deliberately" this time. The "deliberate" character ultimately amounts to an act of faith, but that does not disturb the confident scientist. The idea of heroic manly figures "fixing the damage to Nature that our kind has wrought" taps into the image of a (male) individual conservationist lover of (female) Nature rising to protect, save and serve her

against an evil "kind." Thus human exceptionalism is entangled with exceptionally heroic and virile individuals. Again, the gendered aspects here may not be sine qua non conditions of existence of human exceptionalism, yet they feed into and support this specific contingent hyper-uchronian arrangement.

The claim to altruistic "saving" of course is fragile, as not only is Russ George experimenting to eventually beat competitors to new markets of carbon credits, but the goal is also not simply to help the Earth per se: again, the point is to rescue the Holocene, i.e human-habitable Earth. Even though Lovelock can hardly be suspected of being avid capitalist speculator (after all, he failed to acquire the copyright when he invented the micro-wave), he does recurrently repeat the phrase "saving business as usual" to express urgency, throughout this *Vanishing Face of Gaia* (2009). This is another aspect of the human exceptionalism at work: humans have damaged Gaia as we (do not entirely) know it, humans are the only ones capable of "fixing" the damage, they are assumed to be capable of it on an act of faith, and finally, it is for the human species that such saving is assumed to have to take place. From conventional, simplistic moral imperatives with strong doer-deed understandings of responsibility – fix the damage you have caused – we leap to assumptions of exclusive possibility – the doer behind the global heating deed is the only one capable of undoing what he has done. Rugged individual conservationist figures are, to an extent, a caricature of human exceptionalism, though Russ George self-righteously denounces the "damage [his] kind has wrought," and presumes with no particular reason but anthropocentrism that because humans have caused the climate to warm, they can also reverse the pattern. Urgency ("we have little other options," according to James Lovelock's lacking imagination) is supposed to legitimize hubris.

Hyper-uchronia is made of a futurism where Man shall triumph once more, even in correcting his own mistake, even in scaling up those among his actions that are "deliberate," to the level of the planet (that this is possible is of course assumed: only one quick step separates, if at all, inadvertent, accidental cause-effects from intentional, deliberate ones). Similarly to what I remarked in the case of regressive counter-uchronias, this hyper-uchronian vision relies upon understanding the extension of Gaia's life as a goal, her preservation, cure, treatment, control and protection, her restoration, as a teleological end which Man must tend to, and the human can become truly human, human exceptionalism's end can be met in this heroic mission. Both Man and Nature are once again celebrated in teleological forms, and in this hyper-uchronian futurism uchronia gets a new breath.

CHAPTER VI

WHAT IS BEING DONE?
EMBODIED HETEROCHRONIA,
SYNCHRONY, ECO-CHRONIA

Present: De-growth Livelihoods Here and Now

Coming up: Non-Capitalist Futures

What would a non-capitalist, de-growth description of a scenario family used for

modeling futurological climatological data look like? My own proposition would read as

something like this:

> The Z00 storyline and scenario family describes a future Chthulucene world of
> rapid de-growth and slow living, global population that peaks in mid-century and
> declines thereafter in favor of queer kinships, and the rapid introduction of
> convivial tools following the abolition of private property (including intellectual)
> as well as the proliferation of DIY. Bicycles generalize as a means of transit, feet
> are also used more and more, distances being covered more slowly. Food
> production diversifies as a result of a global ban on GMOs and the generalization
> of subsistence permaculture as well as indigenous agricultures, decreasing in
> quantity also with the decrease in population and simplification/diversification of
> local diets. Generally production becomes almost exclusively local and organic,
> with commodities' value being measured (if at all) not by exchange but based on
> the durability of objects. Bartering and the collectivization of both needs and
> goods at local levels become prevalent compared to transport over long distances.
> Major underlying themes are naturecultural bio and economic diversity,
> bioregional cooperative units, community economies building, increased cultural
> and social interactions and leisure time, with a generalization of participatory
> local democracy practices. By 2101 the term "growth" in reference to economies
> is recognized as obsolete and only found in etymology dictionaries, along with
> terms like "capitalist" and "profit." The Z00 scenario family develops into
> multiple groups that describe alternative directions of economic, social and
> political change toward diverse forms of post-capitalist economies. The multiple
> Z00 groups are distinguished by their convivial emphasis: diversification of
> naturecultures and in renewable energy sources with contraction of material
> production such that liberated time is mostly dedicated to the collective and
> individual creation of vernacular sciences, art, dance, music (e.g Z0068X),
> diversification of naturecultures and in renewable energy sources with contraction
> of material production such that liberated time is mostly dedicated to joyful

farniente and queer love (e.g Z0069Y), diversification of naturecultures and in renewable energy sources with contraction of material production such that liberated time is mostly dedicated to a bit of both and more sustainable activities and *farniente* – mostly unimaginable to 2015 human generations (e.g Z0070Z).

This is not a program.

I have already quoted (at more length) Foucault's claim that "the idea of a program of proposals is dangerous. As soon as a program is invented, it becomes law, and there is a prohibition against inventing" (Foucault, 1997). In other (my) words, programs entail a counter-uchronian futurism. Rather than outlining "what is to be done," the above play on IPCC scenario language is meant to disrupt capitalocentric assumptions, to eco-queer temporalities, and perhaps, to imagine other possible temporal orders of things, based partly on what is already being done.

Though the above scenario description may seem science fictionesque, it is by no means utopian. If some may judge it unlikely or improbable, it is not outlining a strict project to guide pre-drawn lines, and neither should it cave to being cast as impossible. My critique of certain (many) greens' utopianisms is in no way a rejection of desires and needs to expand our imaginaries: I have tried to show, on the contrary, that claiming utopianism may restrict imagination, crystallizing, immobilizing creative, surprising, unlikely and imaginative experiments. This however is not an apt metaphor, as crystals are ever so slowly dynamic in minuscule ways reticent to human naked eyes, and neither would be the description of utopia as making things and life too "static," as static energy is also made of movement. Utopias and uchronias, armed with their privative "ou," have represented an urge to make time stand still, to abolish time, to get out of time, to escape time (and how could this be done without ending life: "realized" utopia and uchronia would be death). Change is contingent upon time (not necessarily long durations, but

336

necessarily passing), and it is all there is, all that becomes, all we have (only we arguably

don't "have" it in any simple sense). Though they exercize an understandable appeal (the

appraisive "eu"), utopian projects connote a longing for immobility incompatible with the

espousal of unpredictability and becoming I call for here (change, which requires time to

pass, happens within, inside, rather than from an illusory pristine outside: the problem is

in the association of "eu" with "ou"). Imagination (also within us) does not need, and

must do without utopia and uchronia. But, as Ursula Le Guin puts it, "truth (note the lack

of capital "t") is a matter of imagination." (Le Guin, p. xi, 2012). This is why what

preceded and what follows is far from rejecting science fiction as an art form: the above

scenario is not a utopia, but it may be read as science fiction, and to a great extent science

fiction already feeds life. As Dorion Sagan suggests, "perhaps the greatest science fiction

story would be a literal description of our present reality, but couched in terms that made

it unrecognizable until near the story's end" (Sagan, 2013, p. 48). Similarly, the border is

quite thin between, on the one hand, ethnographic work by Chris Carlsson (2008) on

"Now-Topian" DIY, hackers, cyclists, urban homesteaders, and on the other, a narrative

like Ernest Callenbach's *Ecotopia* (1973). This novel portrayed a relatively close future

in which the U.S. West Coast had seceded from the rest of the country to create a

confederation of small cooperative, mostly direct democratic spaces where sustainable

"steady states" were nurtured. The practices described in both of these texts are very

much alike, only in the latter case, they are generalized to the whole natureculture. Here

science fictional imagination may tremendously inspire radical green alternatives to

spread, without requiring that green activists and movements claim utopianism (and in

fact Callenbach's novel has caused an ecotopian group to create, that called itself

"Survivalists," just like in the novel: the relationship between reality and science fiction is a mutually constitutive one, or better still, because science fiction is always among us, an autopoietic one). In other words, we may proceed to turn the table, and claim loud and clear that ecotopianism is much more realistic than the capitalist utopianism that is currently having us drown.

A few precisions on the above scenario description may help make the openness of the futures imagined in this perspective even clearer. The term "Chthulucene" was recently coined by Donna Haraway as an alternative to the anthropocene, the plantationocene, the capitalocene, the age of Dithering.[62] This would be a past, present, future epoch (note that Haraway emphasizes the anthropocene, not as an epoch but as a border event) that would enable the proliferation of more hospitable timespaces for the many refugees lacking a refuge who populate the planet in our current context, be they human or not. Indeed, the name is a reference to myriad of vibrant human, nonhuman and hybrid things, including:

> the diverse earth-wide tentacular powers and forces and collected things with names like Naga, Gaia, Tangaroa (burst from water-full Papa), Terra, Haniyasu-hime, Spider Woman, Pachamama, Oya, Gorgo, Raven, A'akuluujjusi, and many many more. "My" Chthulucene, even burdened with its problematic Greek-ish tendrils, entangles myriad temporalities and spatialities and myriad intra-active entities-in-assemblages—including the more-than-human, other-than-human, inhuman, and human-as-humus. Even rendered in an American English-language text like this one, Naga, Gaia, Tangaroa, Medusa, Spider Woman, and all their kin [can be imagined and embraced within and by] the webs of speculative fabulation,

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[62] This age name is Haraway's reference to Kim Stanley Robinson's science fiction novel, *2312* (2012).

speculative feminism, science fiction, and scientific fact. (2015, p. 160)

If these would make for some of the present and future possibilities, they require re-imagining temporalities, giving visibility to existing non-uchronian ones, along with critiquing existing ones (part of the previous chapters' goal was to start the latter task).

As J.K. Gibson-Graham and Gerda Roelvink have put it, this implies shifting the questions we ask:

> Rather than pose the time-honored but often paralyzing question of "what is to be done" to produce change, we choose to marshal examples of "what is already being done", thereby contributing to the credibility and strengthening of alternative economies. (2009, p. 331)

Here the term economies could be substituted with temporalities. In fact, Gibson-Graham's project already implies a different relationship to temporalities: "What is being done?" allows an inclusion of the present yet often marginalized economies and, I argue, temporalities which would make and that already make the proliferation of alternative livelihoods, paces, speeds, futures and presents possible. However, as I mentioned in the introduction to this dissertation, this cannot limit itself to a simple presentism, nor to solely envisioning myriad alternative futures as if present alternative times didn't already exist. The effort here must encompass the combination of present imaginations and experiments, the imagination of futures, and more (slowing down, speeding up, pacing, pondering, wandering…): when now-topians (Carlsson, 2008) and interim futures (Connolly, 2008) assemble, non-utopian and non-uchronian temporalities are made possible. Neither presentist nor futurist, the temporalities I propose to foster and that are

already challenging the reign of uchronia are not tied to a program, because they ask what is being done, because they are committed to non-commitment, democratic participation and direct action, surprise, contingency, the anticipation of the non-anticipated and the unknown – thus the playful, parodic yet serious Z00 scenario family description concludes with the assertion that most activities envisioned there cannot truly be envisioned or imaginable by our 2015 selves. The description above implies a complete rethinking of sustainability as not tied anymore to sustaining growth, but rather, sustaining anti-uchronian critique, as well as a heightened awareness of present and future "queer kinships," as Donna Haraway has put it. This latter concept echoes the concept of "future generations," in contrast with uchronia's futurism, but further radicalizes it to accommodate for the limitation of mammal populations (mostly humans and their lifestock) whose bodies suffice on their own to make carbon emissions a threat to life.

These efforts are partly informed by my reading of the Nietzschean eternal return. As I mentioned in the introduction to this dissertation, the eternal return has a history of being dismissed as a serious Nietzschean concept, though a renewed interest in this notion has been emerging in recent continental philosophy, [63] often in response to Heidegger and then Gilles Deleuze's influence. So far I have drawn mostly from the critical implications and dimensions of the eternal return, notably the critique of and incompatibility with teleological visions of time. Nietzsche places contingency and

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[63] Throughout this dissertation I have relied mostly on Gilles Deleuze's interpretation of the eternal return: see Deleuze, 2005; 2013. For more, recent interpretations and (attempts at) critiques of this concept, including failed, Badiousiard critiques among the ranks of object-oriented ontologists, see also Ray Brassier, 2007; Meillassoux, 2010.

randomness at the core of the ontological condition of eternal return (the throw of dice). Neither reason nor unreason are pertinent to the course of time, an insight I have brought in conversation with my critiques of endism and growth. We have seen, importantly, that if many of the temporalities examined above are human all too human, and natural all too natural, certain understandings of the human and the natural may also be scrutinized as teleological, all too teleological. I have discussed the necessity for the transvaluation of all values in relation to these themes, and Nietzsche's claim that there cannot be any ages of happiness, though there may be moments of joy.

In this chapter I will elaborate on the question of how joy may be possible in a time of ecological crisis, a time when the world of becoming and eternal recurrence erupt to be experienced all the more intensely, intensifying every moment, long or short. If Nietzsche's thought may richly inspire a reconceptualization of temporalities in a context of global warming and mass extinction, it is also because he called for cultivating a capacity to cry out "da capo!" (in music, this Italian phrase means "from the beginning!") even in the face of the thought of thoughts, that everything will eternally return, that the infinity of the past and the infinity of the future are ever present in the present and in each moment, which is the only way time can pass. If all there is, is the ever-repeating moment, then what is being done, and will we joyfully welcome its eternal return?

This chapter turns to the positive ontological and ethical dimensions of the eternal return to inform my conceptualization of a couple more notions that could serve as needed distinctions in our contemporary condition. "Heterochronia" refers to the juxtaposition of otherwise seemingly incompatible moments and temporalities in specific times, a needed experience as the planet is warming and as we realize this warming is

anthropogenic. To illustrate this, I will propose an alternative reading of Hundertwasser's five skins theory in the light of his spiral motifs and "tree-tenant houses," a heterotopia (to borrow Foucault's term) that inspires my concept of heterochronia. "Synchrony" also refers to the cohabiting of multiple temporalities, yet with this concept I emphasize the (sometimes dissonant) simultaneity of this cohabitation. Synchrony does not imply a homogenous, coherent, smooth or synchronized temporality in the sense of "everything being interconnected" in any simple way: what coexists in synchrony here would be pasts, presents and futures, virtual and actual. Though some of that literal synchrony may manifest in symbolic choreographies erupting in activist moments, as for instance in the case of a Flood Wall Street protest in New York City where all the protesters tapped their hearts in silence at the same time so as to evoke an alignment with Gaia's heartbeat, by no means can all the living beings and forces of the Chthulucene be sync-ed as easily as an iPhone and a computer, and neither would this necessarily be desirable. Finally, I discuss eco-chronia as the temporalities of the Chthulucene, multiple, unpredictable, surprising, contingent and creative, human, nonhuman and hybrid. This hybridity resonates in bodies, must be embodied, thus I turn to Pina Bausch's contemporary dance and its metaphors bringing heterotopias or transcorporealities (Alaimo, 2010) of human and nonhuman bodies out on stage. I examine these in conversation with Foucault's discussion of the utopian nature of the body, to eventually return to a (not-so) different kind of dance, where Nietzschean character Zarathustra's moves join those of life in unison.

Eternal Recurrence, Joy and Desperate Vitality

When Nietzsche Traveled to Messina

When Nietzsche sent his "Messinese Idylls" (which now close the *Gay Science*) to the

newspaper *Internationale Monatschrifft*, he told the publisher that he thought "even the

most serious writings, once in a while, need[ed] something cheerful." Yet as he was

writing joyfully about "an albatross who felt sorry for envy," and a woodpecker who told

him that he, Nietzsche, was a poet, which made the philosopher-poet laugh, the thinker of

the eternal return was staying just a couple hundreds of kilometers from one of the

world's most active volcanoes, the Etna. This mountain of lava regularly threatens to

erase the whole area as we know it (as a 2014 eruption which caused ashes to rain all

over Messina attests), in spite of the persistence of traces marking the hills at this point of

Sicily all the way from antiquity, produced by Greek enslaved labor to terrace the slopes

and prevent the potentially rapid erosion of the volcanic soil – we may note that the mafia

and capitalist economies are now much less efficient in maintaining these. In 1908, just a

few years after Nietzsche visited and stayed in Messina, a massive earthquake devastated

the town, leaving it looking very different from the landscapes and architecture his

woodpecker friend had flown once over. Today new threats are emerging here, including

a mega-project to build a bridge across the straight of Messina that would connect

Calabria to Sicily, making the town even more unrecognizable to a XIXth century

Nietzschean eye. Swordfish are disappearing rapidly from the straight, as the latter's

current helps intensive fishing, another threat which graffiti artist Blu, whose work I have

343

already discussed alongside Nietzsche's (chapter III), has beautifully depicted in a fresco decorating the wall of a Messinese squat/cultural and social center downtown (see below). The artist has represented swordfish perhaps taking a revenge against humans, perhaps saving them from their consumerist, urban, crowded and frenetic drowning, as they too are an endangered, all too endangered species.

The long and the short term, the imminence of destruction and the persistence of antiquity's history, the latter history's minuscule weight in the vicinity of Gaia's core lava, seem to highlight tension and fragility here by the straight, and must have been palpable also in the Messina that Nietzsche knew. In spite of this, he affirmed the necessity to write "something cheerful." However, Nietzsche often oscillated between joyful and crushing, unbearable affective responses in facing the eternal return. Or, rather, as I will try to suggest, he oscillated between exhilarating yet also crushing, unbearable joy, desires for lightness and joyful dance, and crushing sadness or perhaps despair. Thus he also wrote: "my most profound objection again the eternal return, my properly abysmal thought, is always that of my mother and my sister." The thought of the eternal return weighed an unbearable weight on Nietzsche and his dancing and laughing Zarathustra, and yet they desired a state where they could watch the whole orchestra and cry out: "*da capo*!" Would we cry out "da capo!" while contemplating Blu's fresco and the crying naked bodies of humans, drowning in a sea of commodities, caught in nets with swordfish's bills breaking them open? Surely some joy can be found today in Messina: two years ago, Renato Accorinti, a Messinese gym teacher and anti-bridge activist was elected mayor of this city against all odds, and in a recent protest to protect convivial plazas in the city, he carried a sign with Mark Twain's quote: "they did not

know it was impossible, so they did it!"

Figure 6: Blu, untitled.

The Eternal Return as Condition of a "Real Philosophy of Becoming"

The eternal return, like the constant, age-old imminence of an earthquake, like the cohabitation of deep and quotidian time and the eruption of Gaia and/or the Etna, questions what is possible and probable, and heightens both joy and sadness, under the crushing weight of a certainty that if all will pass, all has to return infinitely. Contrary to dismissals of this notions that deem it a "half-mad idea," as Milan Kundera claimed in his lucky unbearable lightness of being, I continue to argue that this notion is especially welcome, needed and inspiring in a context of eco-crisis. William Connolly, who has abundantly drawn from Nietzsche in his recent works and also extensively addressed temporality and environmental matters in relation to the German "philosopher of the future," has nonetheless brushed off the concept in his recent book, *The Fragility of Things*. Connolly's work on Nietzsche and ecology is rightly recognized as key to contemporary Environmental Theory and to contemporary political thought at large, and his insistence on temporality among other threads offer important references and differences that will help situate the reading I ultimately defend. I will then turn from this difference with Connolly to Deleuze's interpretation.

In *the Fragility of Things*, Connolly footnoted a Nietzschean quote affirming becoming with the following remark:

> How, it is surely to be asked, does this formulation and innumerable others like it in several Nietzschean texts, square with the idea of eternal return as the return of long cycles, in which everything that becomes during one cosmic cycle returns in exactly that mode in future cycles? There is no tension if this idea is merely posed as an existential test: 'would you choose life again if everything in it repeats?' But

Nietzsche, besides treating it as only a test sometimes, also experiments with long

cycles as a metaphysical theme. To me that theme is incompatible with a real

philosophy of becoming. (2013, p. 217)

Besides the fact that I struggle to understand Connolly's "would you *choose* life again," which questionably seems to assume that we "chose" it at all, this remark differs from my reading of the eternal return on a number of counts. Firstly, the eternal return implies that there be no simple free will, the condition necessary for "choice": our freedom is constrained by a contingent and constant rearrangement of forces, including ours, which will is beyond us as individuals or any kind of simplistic choice an "existential test" would include. It would be to greatly misunderstand both the will to power and the eternal return, to think that we "choose" life. Instead, the ethical challenge that results from our ontological condition of eternal return has to do with espousing fate – *amor fati* – or being crushed by the demon that reminds us everything will return. Secondly, the eternal return is not necessarily the return of long cycles, but may be seen at multiple scales. It is the return of the moment that returns, all forces of a closed universe being constantly re-distributed anew, through the play of relations of force: thus the metaphor Nietzsche often deploys of a throw of dice: all faces and dimensions of the dice are always present with each new throw, yet each combination is unpredictable and differs form the previous one, and at one point each will return. If this is the case, we may understand the eternal return as concerning infinitely short as well as infinitely long moments. Furthermore, Nietzsche repeatedly rejected the image of "cycles" as adequately describing the eternal return, especially in his notes that were published posthumously – many have not been translated in English, and are only available in this language, in their

distorted version in the *Will to Power,* a book assembled by Elizabeth Nietzsche, a sister who as we have seen is one of the figures whose eternal return Nietzsche has the hardest time with. Connolly's reading understands the object of the return, what is returning, as long cycles, and as matter. Thus he evokes "the assumption Nietzsche makes about the finitude of matter and the infinity of time is the key problem here" (2013, p. 217). Yet here too there is a different possible reading, one that has been stressed, among others, by Gilles Deleuze: Connolly takes matter to be finite for Nietzsche, where Nietzsche in fact sees the universe as closed and insists on forces, not matter. In the Deleuzian, force-focused interpretation, Nietzsche is not claiming that matter returns, after long cycles, but that the return of forces returns. It is the return that returns in Deleuze's reading, the diverse, the lack of goals, contingency (which contrary to what Connolly also asserts does imply necessity, only a complex kind), becoming that keeps on returning, making it possible for time to pass.

Thus, to William Connolly's statement, "to me that theme is incompatible with a real philosophy of becoming," I would answer that a real philosophy of becoming requires the eternal return, which, as Deleuze has put it, is the being of becoming (the only being there can be). Here Connolly seems to imply a non-ergodic[64] kind of becoming, similar to Milan Kundera's complaint that, because everything passes and allegedly will never come back, every moment is fleeting and light as a feather. Thus Kundera's lament about the unbearable lightness of being. To Nietzsche things are not as

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[64] The term "ergodic" refers to "a process in which every sequence or sizable sample is equally representative of the whole (as in regard to a statistical parameter)," and in its second acception, it refers to a process which "involves or relates to the probability that any state will recur; *especially* : having zero probability that any state will never recur" (Merriam-Webster). Thermodynamics, which Nietzsche was familiar with, hypothesizes this state. See also Dorion Sagan and Eric Schneider, 2005, p.56, for a commentary on the eternal return from the perspective of thermodynamics.

simple: it is precisely the awareness of the eternity of the instant that crushes the philosopher-poet-Messinese woodpecker friend, whether this weight may weigh joyfully or desperately. Furthermore, we will see when discussing the dance of life and thought, that the return is not always so heavy: Nietzsche's struggle for *amor fati* was in fact about seeking a way to face the return in a joyful and light manner, a joy and a lightness staged in Zarathustra and his dance with life. For this reason in part, I will draw from examples in contemporary dance to think about our current condition of extinction and whether light, joyful affects and percepts may emerge in its midst.

What follows is my translation of a posthumous fragment Nietzsche wrote in the fall of 1881:

The world of forces has suffered no diminution: for otherwise it would always have been emptied of its power and would have succumbed in the night of infinite time. The world of forces has suffered no interruption in its movement: for otherwise its end would be reached and the clock of life would be still. The world of forces thus never comes into equilibrium, never has a moment of calm, and its strength, its agitation are equal at all time. Whatever the state this world may reach, it must have reached it already not only once, but countless times. Thus this instant: it has already existed once and many times and will also come back, all the forces distributed exactly as now: and thus with the instant that gave birth to it and so as well of that which is the child of the present instant. Man! Your entire life will be turned again and again and again like an hourglass always spilling – meanwhile, a great minute of time for until all conditions from which you have become to come together again in a circle over the world. And then you'll see

350

again every pain and every joy and every friend and foe and every hope and every

mistake and every bit of grass, every sunshine, the integral series of all things.

This ring, on which you are nothing but a grain, shines again and again. And on

each ring of human existence, taken in its absolute meaning, comes the hour

when, to one, then many, then all, the most powerful thought arises, that of the

eternal return of all things – for humanity it is each time noontime. (Nietzsche,

1881b, my translation)

As I have pointed out already in chapters II and III, to Nietzsche time cannot have either

end or beginning, an original or ultimate moment of culmination where all forces would

cohere and organize rationally, it cannot "suffer any diminution," "interruption,"

otherwise it would cease to exist. A teleological vision of time is excluded by this

account, given that if forces were to unfold from a beginning to a goal, this goal would

have been achieved already. The very condition of becoming we are caught in is evidence

that there was always already nothing but becoming, and will always be becoming,

otherwise there would be nothing rather than something. Thus this idea that the eternal

return is the being of becoming: nothing is ever lost, no force ceases to exist, but is re-

absorbed, mobilized and transformed, to form and assemble anew, at each moment. Thus

also, the ergodic quality of difference and becoming. Nietzsche then asserts: "whatever

the state of the world may reach, it must have reached it already not only once, but

countless times." In the above passage, it is clear that Nietzsche does not merely conceive

the eternal return as an "existential test" or ethical challenge, though it is very much the

latter as well, but also as our ontological condition.[65] And if every grass, every bit of

sunshine, every friend and every foe, every joy and sadness will eternally return, the

metaphor deployed is not that of a cycle, but that of a ring. Nietzsche does qualify the

ring metaphor where grains of sand would constantly be animated and in motion,

eventually coming back to exactly the same point where they have been an infinite

number of times, and keep on in this motion within a closed universe, cautioning that the

image is imperfect (Nietzsche, 2003). The ring of sand and the throw of dice, though

imperfect as metaphors would necessarily be, should not be confused with cycles, where

loops may advance and not get us completely rid of straight linearity. Just like drops or

grains of water or sand constantly flowing in a closed loop, the only way time can pass is

for all forces to return, and this movement of repetition is one that may be sliced at

infinitely small and infinitely large scales.

The above quoted excerpt also poses a question I wish to discuss here through

dance: Nietzsche enigmatically refers to "the hour when, to one, then many, then all, the

most powerful thought arises." This is an occasion to ask what the proliferation of

heterochronias and temporalities of synchrony would look like, and more specifically,

what these may look like not only in the form of the philosopher's solitary ruminations,

but also in experiential, collective forms? May such eruptions be joyful and light? In

what follows I will try to reflect on the embodied practices (architecture, sex and dance

provide some examples) that may generate, create or make visible alternate temporal

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[65] Though I am situating my reading in contrast with William Connolly's here, as his works are important to respond to in the context of a discussion of temporality, ecology and Nietzsche, and offer an occasion to clarify what I am not saying so that what I argue becomes (hopefully) clearer, perhaps it is helpful to underscore here that this argument according to which the eternal return is an ontological concept rather than only ethical (though it has ethical implications) is not uncommon in Nietzschean scholarship or in contemporary political philosophy. Thus from Lou Salomé (2001) and Heidegger (1961) to Deleuze (2005; 2013) and on to recent discussions of the eternal return by Brassier (2007) or Meillassoux (2010) I have already mentioned in a footnote above.

orders of things, as well as how these have to take a transcorporeal form which par excellence goes beyond the strict boundaries of separated, individuated subjects, to anchor themselves instead, in selves co-constituted by and for myriad human and nonhuman alterities.

Ethical Implications of an Ontological Condition

Nietzsche's ontological views certainly do have ethical consequences. Zarathustra oscillates between praising and hating the throw of dice, who he at times calls his lover. In the excerpt below, it is ardent love that prevails, and is even presented as inevitably attractive – "how then could I not…" :

> If ever a breath come to me of creative breath and of that heavenly necessity that forces even accidents to dance astral rounds:
>
> If ever I laughed with the laugh of creative lightning that follows rumbling but obediently the long thunder of the deed:
>
> If ever I rolled the dice with gods at the gods' table of the earth, so that the earth quaked and ruptured and snorted up rivers of fire –
>
> – because the earth is a gods' table, and it trembles with creative new words and gods' throws –
>
> Oh *how then could I not lust for eternity and for the nuptial ring of rings* - the ring of recurrence!   Never yet have I found the woman from whom I wanted children, unless if were this woman whom I love: for I love you, oh eternity! For I love you, oh eternity! (Nietzsche, 2006, p. 185, emphasis mine)

Zarathustra exclaims: "I have liberated them of goals!" in a triumphant outcry directed against teleology. But if Zarathustra takes for self-evident, here, that this fate be irresistible not only as inevitable but also as desirable, we may just as well ask a question opposite to his: how could such a crushing thought, whereby "even accidents dance astral rounds" (even the most seemingly unexpected is ever so fateful and will repeat ad infinitum), and the earth spectacularly "quakes, ruptures, snorts out rivers of fire," prompt dancing, love of fate, joy? How could the great randomness of the throw of dice recurrent in *Thus Spoke Zarathustra* and Nietzsche's reflections on the eternal return be accompanied with images of lovers, the affirmation of the Earth and its eruptions, the joyful affirmation of life? To Deleuze, Nietzsche's entire works seek to affirm life, to transvalue all values, and reject philosophy and Christianity's tradition of asking life to redeem itself, redeem the suffering it contains, and further, read all suffering as a redemption of life. The critical problem becomes the value of values, and in the famous aphorism of the *Genealogy of Morals*, which proclaims the death of the subject, the relations between the transvaluation of all values, Nietzsche's critique of morality, and the eternal return are glaring:

> A quantum of force is … a quantum of drive, will, action, in fact it is nothing but this driving, willing and acting, and only the seduction of language (and the fundamental errors of reason petrified within it), which construes and misconstrues all actions as conditional upon an agency, a 'subject', can make it appear otherwise. And just as the common people separates lightning from its flash and takes the latter to be a deed, something performed by a subject, which is called lightning, popular morality separates strength from the manifestations of

strength, as though there were an indifferent substratum behind the strong person which had the freedom to manifest strength or not. But there is no such substratum; there is no 'being' behind the deed, its effect and what becomes of it; 'the doer' is invented as an afterthought, – the doing is everything. Basically, the common people double a deed; when they see lightning, they make a doing-a-deed out of it: they posit the same event, first as cause and then as its effect. The scientists do no better when they say 'force moves, force causes' and such like, – all our science, in spite of its coolness and freedom from emotion, still stands exposed to the seduction of language and has not rid itself of the changelings foisted upon it, the 'subjects' (the atom is, for example, just such a changeling, likewise the Kantian 'thing-in-itself'). (Nietzsche, 2006, p. 26)

There is no doer behind the deed, indeed, just as there is no separation between lightning and flash, an image cherished and recurrent in Nietzsche's thought.[66] If the flash is not caused by lightning but rather is the lightning, or simultaneous to it, or a doubling, language's doing, a doing-doing, similarly our actions are not caused by us, but belong to the unpredictable and contingent ever-becoming continuum that we reduce to a self. Thus the "existential test" could not be about whether we would "choose" life again, as Connolly puts it, but has to do with an oscillation between love or joy, and despair, an oscillation that may be well known to those of us and those moments within us to whom and when the thought of extinction, of global warming, of the destructive character of carbon-emitting ways comes crushing. But if we have no choice, in the free will, liberal

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[66] Nietzsche did, after all, experience the crushing weight of the thought of thoughts by the shores of lake Sils Maria, in Switzerland, among mountains which make thunder quite spectacular, and one could speculate that some of his visions of the eternal return were "caused," or rather, erupted in the context of, epileptic shocks perhaps in response to lightning (Salome, 2001).

sense of the term, and if all we may have is *amor fati*, then how could this possibly be helpful at all in a context of ecological crisis, and not result in a paralysis? The point is evidently not to be subdued by fate, to become fatalist and passive, but rather to actively embrace fate: we are engaged in the forces that Nietzsche describes and in the will, action, deeds that move about, in creative ways that go much beyond us and extend ad infinitum to the pasts and futures that are present in our present, beyond the human. The embrace of the earth and life, as they deploy active forces and as the eternal return is the animating principle of a life-affirmation beyond nihilism, seems particularly pertinent in our current context of extinction, though at the same time this *amor fati* is made more complicated and challenging by it – as we will see however, the point is not to simply affirm the real, which has been sculpted into hollow idols and has damaged life, as nihilist forces have required of life a redemption, compensation, justification. What Nietzsche calls for, as visible in the penultimate excerpt quoted above ("If ever I rolled the dice with gods at the gods' table of the earth"), is that we actively throw ourselves in the divine throw of dice. If it is not the case that "force moves, force causes," etc, then responsibilities shift and the question of what makes life worth living, in a context of facing species death, is disrupted by questions about the worth of worth, the value of values.

One last long quote regarding the oscillation between a desire to reject the thought of thoughts as unbearable, despicable, and desire for the return may illustrate the difficulty here. Its length will hopefully be forgiven as the reader (you) enjoys the beauty of this famous Nietzschean aphorism, from the *Gay Science*, an aphorism that is usually

356

referred to even by commentators who dismiss the ontological aspect of the eternal return yet grant it the quality of an ethical challenge:

> *The greatest weight* —What, if some day or night a demon were to steal after you into your loneliest loneliness and say to you: "This life as you now live it and have lived it, you will have to live once more and innumerable times more; and there will be nothing new in it, but every pain and every joy and every thought and sigh and everything unutterably small or great in your life will have to return to you, all in the same succession and sequence—even this spider and this moonlight between the trees, and even this moment and I myself. The eternal hourglass of existence is turned upside down again and again, and you with it, speck of dust!" Would you not throw yourself down and gnash your teeth and curse the demon who spoke thus? Or have you once experienced a tremendous moment when you would have answered him: "You are a god and never have I heard anything more divine." If this thought gained possession of you, it would change you as you are or perhaps crush you. The question in each and every thing, "Do you desire this once more and innumerable times more?" would lie upon your actions as the greatest weight. Or how well disposed would you have to become to yourself and to life *to crave nothing more fervently* than this ultimate eternal confirmation and seal? (Nietzsche, 1974, p. 273)

This aphorism emphasizes the return at the scale of a life, and poses the challenge of saying 'yes' to it even when a demon asserts it will recur eternally. This may be part of the confusion in Connolly's analysis, where the affirmation of life is taken to be a matter of choice: life-affirming Nietzsche should not be confused with life choosing Nietzsche,

357

as choice, reason, unreason are irrelevant to the thought of thoughts. The metaphor deployed here is obviously even more of a playful image than the imperfect description of the ring of sand, but the aggressivity of the thought, incarnated in a demon, who calls his interlocutor not a grain of sand but a similar, apparently more insignificant and disposable, wasted or useless "speck of dust" is revealing of the weight of this experience of eternal return, of the intensity at play in facing the crushing thought: the alternatives are extreme, dramatic: either to "throw [oneself] down and gnash [one's] teeth and curse the demon," or to "crave nothing more fervently." The former is what philosophy has often been so busy doing, asking life to redeem all the suffering it contained, blaming it for the suffering, reading suffering as a redeemer of life's indecent liveliness. The latter, the "craving," is Nietzsche's call to cry out "da capo!," to desire the eternal repetition from its beginning as if we specks of dust were the conductors of the orchestra of life, which indeed, we would join, dance with, play within.

The ethical implications of the eternal return are indeed a tall order that refuses any petty pleasure, justified in utilitarian manners by something else they are not, means subjected to ends postponed to a later moment, especially when the same forces will be present in that future moment. Thus Deleuze insisted, in his reading of the ethical dimensions of the eternal return, that small pleasures, petty compensatory acts, actions performed "one last time," as a temporary exception redeemed elsewhere or some other times, are systematically excluded by this principle of selection. In a sense, all actions should be performed for their own sake, or both for no reason or purpose, and with all the reason and purpose in the world. Reason and unreason, purpose and aimlessness, are irrelevant to the course of the universe. We specks of dust are put before a high-stakes

test: would I be prepared to live this instant an infinite number of times, can this action be both self-justified, performed for its own sake, and completely gratuitous, can means and ends collapse into one in each moment, radically opposing any form of utilitarianism? Can I embrace this moment and the forces engaged in it asking no further justification, with no bad conscience or resentment, granting no moral status to suffering as either redeeming life or asking of life to redeem itself, knowing that all of it is eternal and repeats? By this logic we cannot be asked to sacrifice Gaia on the altar of growth, an ever-postponed satisfaction of abundance, or one last carbon emission out of our exhaust pipes so as to continue on with growth just a bit longer, to accumulate now for later postponing our confrontation with present and future planetary limits.

Affirming Life and the Earth

Nietzsche's demonic eruption asks, "how well disposed [we would] have to become to [ourselves] and to life *to crave nothing more fervently* than this ultimate eternal confirmation and seal." What, here, may be affirmed so fervently? How could the eternal return be a joyful thought, and not a paralyzing one? In Deleuze's reading the eternal return is a selective principle that reactive and active forces go through. As Deleuze summarizes, the slave mentality, which triumphs with common morality, separates strength from what it can do, and causes "a becoming-reactive of all forces." It "triumphs, not by the composition of its power, but by the power of contagion" (Deleuze, 2013, p. 27). To Nietzsche, European man, domesticated man, is the embodiement of this sickly triumph of resentment and nihilism, where the will to power "ceases to mean 'creating' and instead means to desire power (*puissance*), to desire domination" (p. 32). Nietzsche's philosophy, with the eternal return at its core, is one that calls for a change in

the valuation principle, one that dares question the value of values. Deleuze writes: "the transmutation of all values is defined as follows: a becoming-active of the forces, a triumph of affirmation in the will to power" (here the will to power can again be understood as synonymous to creating, in contrast with the reign of nihilism). What is affirmed then? Again according to Deleuze's reading: "affirmation is the highest power of the will. But what is being affirmed? Earth, life" (p. 33).

If it is high time for a Nietzschean ecology, or, as Claire Colebrook has called it, a queer vitalism, it would be one that affirms life and its eternal return, with "every pain and every joy and every friend and foe and every hope and every mistake and every bit of grass, every sunshine, the integral series of all things," knowing that each of us are "nothing but a grain" or a "speck of dust" on the ring. This could also be called, after Pier Pasolini's phrase, "desperate vitality" – quoted in the circus piece I read above as anti-uchronian, because, as the Italian poet-intellectual-filmmaker-ecc put it, "every act in life is a segment already signed in a line which is life itself, clear only in dream" (Pasolini, 1964, p. 118). Pasolini's line metaphor is problematic if imagined as a straight line, but if queered in the form of a dancing spiral, it could offer another image in addition to Nietzsche's ring of sand. In Pasolini's poem "*una disperata vitalità*," rather than linear in this straight sense, life is depicted as "magmatic." Magma, volcanoes, the eruption of Gaia, Nietzschean lightnings shedding doubt on linear causality, prompt us to understand every moment as containing all pasts, presents and futures, such that a walk around Messina, a conversation with woodpeckers and albatross, the threats posed against swordfish nearby, the deep time of volcanic life, all cohabit at once, in a heterochronian movement that makes faith in the Truth of progress or growth impossible. The examples I

discuss below of architecture and dance share the motif of the spiral in common: away from straight time (Halberstam, 2005), the queer movement of the spiral brings spaces and times together in surprising and otherwise unlikely ways, and may indeed make another possible – temporal – order of things glitter to the surface of times of extinction.

Heterochronia and Synchrony: Changing Perception in a Heartbeat

> I have a bicycle. Paris is big. I want to say that the lines I draw with my bicycle through this great city are extraordinary. …
> And it pleases me enormously to see that the line I trace is never straight, never confused, but has a reason to be like this in every tiny part.
> Beware of the straight line and the drunken line.

The straight line leads to the downfall of humanity.

Friedensreich Hundertwasser

In chapter IV, I read Friedensreich Hundertwasser's theory of the five skins as a form of counter-uchronia celebrating a long-lost Nature that we should return to, loaded with assumptions about "primitivism" and essentialism. However, in what follows I propose a counter-reading of this counter-uchronian dimension, which illustrates my concept of heterochronia. To do so, I will take a detour through space and the Foucauldian concept of heterotopia, and then attempt to read the theory of the five skins as represented in Hundertwasser's drawing, this time in relief, qua his favored motif of the spiral and the agency he grants to trees the artist planted in the tree-tenant houses he designed and built in Vienna and elsewhere.

From Heterotopia to Heterochronia

Michel Foucault opens the *Order of Things* with a quote by Jorge Luis Borges that, the French philosopher claimed, prompted him to write his book

out of a laughter that shattered, as [he] read the passage, all the familiar landmarks

of [his] thought – our thought, the thought that bears the stamp of our age and our

geography, breaking up all the ordered surfaces and all the planes with which we

are accustomed to tame the wild profusion of existing things, and continuing long

afterwards to disturb and threaten with collapse our age-old distinction between

the Same and the Other. This passage quotes 'a certain Chinese encyclopedia' in

which it is written that 'animals are divided into: (a) belonging to the emperor, (b)

embalmed, (c) tame, (d) sucking pigs, (e) sirens, (f) fabulous, (g) stray dogs, (h)

included in the present classification, (i) frenzied, (j) innumerable, (k) drawn with

a very fine camelhair brush, (l) et cetera, (m) having just broken the water pitcher,

(n) that from a long way off look like flies. (1994, p. i)

Foucault goes on to explain that this uncanny taxonomy, unthinkable to "us," but

thinkable for "exotic systems of thought" (the Orientalism is laughable too here, though

the main point is still helpful) encourages questions about what is possible to think, and

what kind of impossibility is faced in the encounter with what he calls a "heterotopia."

The oddity of this classification, Foucault argues, does not so much come from the

inclusion of imaginary and real animals, monstrosities or fabulous creatures, but from the

fact that they are linked together by way of the alphabet (one wonders what the supposed

original Chinese text looked like with ideograms, though here Foucault implies that the

robbing of a common ground has been accomplished by Borges). According to Foucault,

it is in the interstitial spaces of the text, in its relations, that the oddity resides. He adds

that the mere propinquity of these unlikely elements, the juxtaposition of otherwise

remote things, is not sufficient either in making for the strangeness here. Rather, "what is

362

impossible is the very site on which [the animals'] propinquity would be possible." Let us

note here that, when the eternal return and all its ontological, critical and ethical

implications erupt in Nietzsche's thought, it is also an entirely different (temporal)

principle from which to create values, a bit like this uncanny site Foucault gets puzzled

at. The French philosopher goes on: "where would they ever meet, except in the

immaterial sound of the voice pronouncing their enumeration? … Where else could they

be juxtaposed except in the non-place of language?" (1994, p. iii)

The laughter and unease experienced in this reading is what causes Foucault to

resort to the concept of "heterotopia," in reference to the "heteroclite," a kind of disorder

"in which fragments of a large number of possible orders glitter separately in the

dimension, without law or geometry, of the heteroclite" (p. xvii). Foucault then

introduces heterotopia, a word he borrowed from medical science where it refers to the

presence of an organ or limb in an anomalous location of the body. He opposes

heterotopias to utopias, as these "afford consolation," imagining a site that may be no-

where but where improbable things all belong and share in common. In contrast, Foucault

argues, heterotopias allow for "another possible order of things" to "glitter," another

order that is not no-where. Could heterochronias similarly suggest other possible

temporal orders of things? Foucault asks about where, besides "the non-place of

language" this kind of juxtaposition could occur, what site could act as its common

ground. We may ask what common time, moment or moments could bring together

things and times otherwise incompatible.

In a 1967 essay published in *Dits et Ecrits* only in 1984, where Foucault further

discusses this concept of heterotopia, he does mention the term "heterochronia," though

here again space eclipses time. Foucault even claims that "we are in the epoch of simultaneity: we are in the epoch of juxtaposition, the epoch of the near and far, of the side-by-side, of the dispersed." To Foucault, this means that the current period may be opposed to the previous one as that of space in contrast to periods of time. Where he takes spatial juxtapositions for the proof of the importance of topos, and the need to stress heterotopias as heteroclite sites disrupting the (spatial) order of things, Foucault pushes simultaneity aside and does not similarly conclude that an important, similar disruption of (temporal) orders may emerge from heteroclite times and temporalities juxtaposed in one moment. However, I have mentioned before that Foucault's later analysis of discipline includes an emphasis on temporalities of the disciplinary societies. If we may agree that the contemporary period could be read as one of simultaneity, it would be because various temporalities – uchronia, counter-uchronia, the deep time of the Earth and its possibly anti-uchronian consequences, may cohabit at one and the same time. And perhaps some non-uchronian nurturing of other possible temporal orders requires unlikely juxtapositions that seemingly have no common time.

In his essay on heterotopias or "other spaces," Foucault explains that heterotopias have "the curious property of being in relation with all other sites," and these "contradict all the other sites," as they challenge the separations otherwise omnipresent in modernity. To Foucault, utopias also belong to this category, yet they do not have an actual location. If heterotopias can be defined as spaces which further desacralize oppositions modernity has generally upheld by operating in relation to all other spaces while being effectively localizable, Foucault also proceeds to further describe them by listing a number of principles which he speculates could organize the "heterotopology" he calls for. I will not

add further detail to the definition I have already paraphrased, but one of the principles suggested in this speculative heterotopology is pertinent to our purposes here: heterotopias are connected to a "*découpage*" of time corresponding to the juxtaposition of spaces, which Foucault calls "*hétérochronies*." Two heterotopias could thus be distinguished based on their respective temporalities, namely the eternitarian (éternitaires) ones, accumulating time ad infinitum (which corresponds to the modern project pursued for instance by libraries or museums), and the chronic ones, passing but reoccurring times (festivals would be an example of the latter ones). We can see here that eternitarian and chronic heterotopias may converge: their heterochronian dimension shows that all the pasts and all the futures are present in the presents, and that this is the condition for the passing of time. I would suggest that they may have the effect of providing a glimpse into the eternal return. Foucault privileges space in his essay, to the detriment of time, seeing heterochronia as merely the temporal dimension of heterotopia among many other principles animating the latter ones, and he does not mention the reciprocal, that heterotopia may be the spatial dimension of, and among the principles animating, heterochronia. He claims in the beginning of his essay that time is the problem of the XIXth century, while space is that of our contemporary period. Space takes precedence in Foucault's argument to the point of preventing thinking the temporality of simultaneity which heterochronia may offer. This is ironic because if time and temporality must often be described and conceptualized qua spatial metaphors, here Foucault resorts to temporal terms to describe heterotopia, without making note that he is doing this. For instance, he describes heterotopias as juxtaposing in one single space, simultaneously, otherwise incompatible and separate spaces. Furthermore, if it were true

that our times are times of simultaneity, this does not deprive time of importance but rather does the opposite, increasing its salience, having us experience at each moment, the plurality, multitude, non-linearity of time, the condition of time passing. Foucault's otherwise capacious concept of heterotopia is accompanied by his underestimation of the importance of time (an importance which, again, he will grant later on in *Discipline and Punish* and on) in the sense that he claims: "space has not yet been entirely desanctified, unlike time." In his view, time was "detached from the sacred in the XIXth century." Yet when considering uchronia, we see that a pseudo-secularized teleology replaced the deist one, substituting Gods' ends with the market's and consumerism's insatiability, as well as teleological notions of the human and the natural.

Tree-Tenant Houses, Fluidoid Lines and Spirals: Hundertwasser's Heterotopias

However, Foucault's sketch of a notion of heterotopia can be helpful for a detour through space reconsidering what I first read as a regressive counter-uchronia in Friedensreich Hundertwasser's art and architecture, from a different, multi-dimensional perspective. From this we may gather some food and trees for thought regarding my conceptualization of heterochronia.

Hundertwasser's five skins theory undeniably contains counter-uchronian dimensions, especially if it is to be read alongside some of his poetry, or his praising nature as a prescriptive model understood in a teleological form. Yet, if Hundertwasser's five skins' drawing were read in relief, and perhaps distorted a bit based on the omnipresence of spirals in his architectural work, and if the tree-tenant houses Hundertwasser built are brought into the conversation, one may also make out, challenging the counter-uchronia at play, the possibility of a heterotopia, for "other orders

of things" to "glitter." The tree-tenant houses Hundertwasser imagined (see the reproduction of that drawing above – page 275) as entangling the five skins were never built quite in the way of the drawing he created for it. However some were granted a real location, in Vienna and other places. They usually took the form of larger buildings and were often used for low-income housing projects, and they included communal and some small commercial spaces. There, trees would be planted on roofs and within the floors, and would "pay their rent" by providing oxygen and absorbing some of the noise pollution in the surrounding urban streets, in sort of hybrid, more-than-human bartering spirit. This granting the status of active tenants to trees challenges how agency is distributed among humans and nonhumans, making for a vibrant more-than-human heterotopia. These locations are heterotopian, in the sense that, hybridizing both nature and humans, they bring together spaces and realms modernity otherwise claims to separate. It is also worth noting that Hundertwasser did not intend the concept of 'tenant' to connote a restriction on usage in favor of landlords, based on property rights. A tenant is a user, and the artist wrote a manifesto on tenants' rights, including the right human tenants would have to paint their windows and the surrounding facades, based on how far their arms + their paintbrush may reach. The extension of the status of tenant to trees is all the more significant that the tenant herself is extended more abilities and rights than usually accepted in common, private property-centered arrangements.

Spirals and "fluidoid" lines dominate Hundertwasser's architecture. Buildings sinuously spiral up, often devoid of stairs. His clothes, the sail on his ship (where he lived most of his later, nomadic life) were striped on purpose and never ironed, to underscore the anti-rationalist lack of straight lines. Thus the stripes were meant to underscore the

anti-straight aesthetics, queering the lines. These are present yet meant to be meandrous, wrinkled, animated by wind (the ship's sails) and by bodily movement (the clothes, or second skin). If we are to propose a generous reading of this art work, we may push aside Hundertwasser's claims to erect Nature as a prescriptive and static model, and simply point out that if we live in naturecultures, it is in the sense that nature is a technology emanating from culture which itself is within nature, etc. Or put differently, as Dorion Sagan writes, "we dwell circumscribed by culture inside nature. Whether that second nature is also inside culture I'll leave for you to decide" (Sagan, p. 35). I would not be so presumptuous as to "decide," but would suggest that the answer can be yes, and again ad infinitum. And if Hundertwasser's insistence that the nonhuman world's "fluidoid lines" should be mimicked by human architecture, art and life, then the question arises of the effect of such mimesis and such meanders, arguably a heterotopian effect. A spiral or fluidoid not only moves in irregular and perhaps unpredictable patterns, it also ascends and descends, thus offering no stable hierarchies, and it may move with time, connecting the otherwise seemingly unconnectable, creating dynamic entanglements. If we were to look at the five skins' drawing (reproduced here back on page 272) in this dynamic manner, then the various schematically described spaces are juxtaposed where they are so often kept separate, hybridizing various aspects and dimensions of humans and nonhumans' lives. Agency to trees, hybridization of otherwise incompatible spaces qua unlikely lines, make for a provocative ecological heterotopia.

What kinds of heterochronias may consequently come into view and what simultaneities may we nonhuman humans and human nonhumans be able to experience? Heterochronias refer to the quotidian paces, speeds, rhythms, and the relationships

between pasts, presents and futures, that emerge in the context of heterotopias and elsewhere. If we inhabit a nature that is within culture within nature, etc, then nature cannot be cast to an idealized past any longer, and neither culture nor nature may be experienced as static or as abstract futurist futures, but instead as contingent and dynamically co-evolving. Time cannot take the form of a straight line connecting the past, the present and the future, but entangles, in interlaced spiral forms, multiple pasts, presents and futures. As we will soon see when turning to contemporary dance, these heterochronias must spiral through bodies as well as the oikos (the spiral is also a privileged motif in Pina Bausch's choreographies). Each moment, as with the eternal return, contains all these, virtual and actual, unpredictable and surprising, multi-scale – the deep time of nature and its volcanoes, for instance, cohabits, perhaps at odds with, not always harmoniously, the mundane times of the quotidian and historical times irreducible to solely human experience(s). The difficulty of heterochronia is that, like heterotopia as described in the preface to the *Order of Things*, which site is most confounding, heterochronia seems at first to be missing a cairological moment: what is the temporality of temporalities, the time of times, how could the juxtaposition of all these temporalities in one moment not be a form of end-on or outside of time perspective, which the eternal return rules out (there is no end from which to experience time, as time has neither end nor beginning, nor, therefore or either, an outside). At first, therefore, heterochronia seems to lack a time, or at best, to refer to a "time out of joint," as Shakespeare's Hamlet put it in the face of the collapse of succession. Note, however, that Hamlet did not say "time out of time" – ou-chronia – but "out of joint." In his essay on heterotopia Foucault amended the puzzlement expressed in the *Order of Things'* preface with respect to an

apparent lack of site, and relegated such site-less *topos* to utopia. If utopia was a placeless

place that juxtaposed all locations, heterotopias had a real location. Similarly,

heterochronia is in fact present at all moments, and is a matter of perspective: the eternal

return has and is a temporality, it is, indeed, the being of becoming, the experience and

conceptualization that at each moment, all times and temporalities are present.

Heterochronia juxtaposes, in time, on time, all times.

More-than-Human Synchrony in a Heartbeat

In October 2014, in the midst of protests responding to an international gathering on the

climate crisis taking place at the United Nations in New York that was meant to prepare

the December 2015 Paris meeting, a couple thousand activists gathered at Battery Park

and marched to Wall Street, with the intention of "flooding" it. This protest took place

the day after one of the biggest climate justice marches in history, which mobilized

400,000 people. Though there were overlaps, the Flood Wall Street protest distinguished

itself from the larger climate justice march in a couple of ways. One was the rejection of,

say, Al Gore's claim that the climate crisis was a business opportunity for a new, green

capitalism. Gore has called for and praised the emergence of "Earth Inc." along with a

"global mind" – both of which he defends in his last book, *The Future* (2013). To Flood

Wall Street protesters, if global warming is largely what I have called above

"capitalogenic," it will not be faced properly and sustainably with more capitalism, but

with the latter system's end. Another difference had to do with the protesters' repertoire

of action. While many had also marched the day before in the Climate Justice March's

ranks, the march and sit-in organized on Wall Street were not legal, and many protesters

were prepared to get arrested. The sit-in was mostly peaceful and lasted a number of

hours, blocking traffic for the afternoon. About one hundred protesters were eventually arrested that evening. But the moment in this protest that seems most pertinent to my argument here is not directly linked to the civil disobedience at play. At one point of the sit-in, in its very beginning, protesters, all wearing blue to symbolize a time when Wall Street will be under water due to ocean levels' change, became silent. Or almost. They started tapping quietly on their heart, two beats, a pause, etc, in unison, to symbolize Gaia's heartbeat in front of the symbol of capitalist markets. Collectively, the gentle and rhythmic tapping of protesters' hands on their own hearts resounded strongly enough to be perceivable in spite of Manhattan traffic in the background.

This heterochronian choreography symbolically brought together a number of rhythms at once: from farthest to closest, traffic, police sirens, the hearts tapping, the image of the Earth's breathing, the rhythmic, emotional human breathing of protesters. Gilles Deleuze has claimed that the left, in his view, was not a matter of morality, not about a "beautiful soul," but could be characterized as two things (Deleuze & Parnet, 1987): on the one hand, the resolution we may call epistemological, to never give up critique. On the other, a matter of perception: this would mean perceiving the contours, the outskirts of one's world first: the universe perhaps, then the planet, then the Global South when one is speaking, as was the case with most Flood Wall Street protesters, from the privileged West, then one's area perhaps, city, street, one's immediate loved ones, then oneself. If we were to return to Hundertwasser's five skins' drawing again, this would mean that the chronological order in which the various spaces are read, fluidoid as it becomes with the motif of the spiral granting relief to it, also can change everything about the reading: starting with the fifth skin, and working one's way back, 5, 4, 3… go,

371

may be closer to what Deleuze called the left, as again, not a matter of morality but as one of perception – note that making it a matter of perception does not only evince common morality from the concept and movement, but also common, strict senses of politics, and qualifies art, as a realm of creation of percepts, as much more political than some may have us believe... thus the theatricality of certain protest becomes especially important.

The Flood Wall Street protest's collective heartbeat embodied a heterochronian redistribution in perception: first the rhythms and breaths of the Earth, enacted collectively by a crowd of human bodies, then the city's traffic and authorities' siren. The order of things (temporal and otherwise) is challenged, not only because traffic is blocked in front of a building supposed to set the pace for the rest of the world, erected so as to host the frenetic, now algorithmic rhythms of the markets, which made no sound in this case, but also because the goal is to symbolically have Gaia as we know it, be heard. Furthermore, the blue attire in which protesters swarmed Wall Street that day was to prefigure a possible future where the algorithmic paces of trades will not be able to continue operating there unless they are absurdly equipped with submarine infrastructure: these were made into dislocated, anomalous presences. At one point of the protest, one humorous yet angry activist screamed: "why don't you come out you cowards? Don't you see we're trying to save *you* from drowning too?" What was this cowardice's object, but one where Wall Street speculation and carbon-addicted capitalist globalization fails to face the possibility, or the opportunity of affirming life? Here the heterochronia at play is double: in a collective heartbeat, in a choreographed instant, Flood Wall Street staged the juxtaposition of otherwise dissonant temporalities and the redistribution of chronological

order, of priorities in perception. Synchrony is one aspect of heterochronia: it underscores the simultaneity in the juxtaposition of various temporalities, where heterochronia stresses their heteroclite character. However synchrony is not quite an alignment: in a way, it is an asynchronic and dissonant simultaneity, rather than a sync-ing into depths of hasty and linear stupidity (see chapter V) and their hyper-uchronian narratives of unstoppable progress. It brings together dissonant temporalities in one moment: synchrony is the temporality of heterochronia, the cairological time through which, or when, of all these tempos are juxtaposed, just like the eternal return is the thought of thoughts, just like in the eternal return, it is the return that returns.

Similarly to heterochronia, synchrony refers to the cohabiting of multiple temporalities. However in this case, my point is to stress the – sometimes dissonant, conflicted, always contested, ripe with friction – simultaneity of this cohabitation rather than the cohabitation itself. Synchrony answers the question of: what paces, rhythms and speeds does it take, what forms, times and moments may juxtapose incompatible times, or in other words, what is the temporality of heteroclite juxtapositions of temporalities? If Foucault's discussion of heterotopias obscured time and temporality, we may remember that it was because Foucault asserted that the temporality at play in heterotopias is one of simultaneity. Yet rather than relegating time to the background, simultaneity brings various times, moments and temporalities to the foreground, at once. Synchrony does not imply a homogenous, coherent, smooth or synchronized time when "everything is interconnected" in a simple and easy way. It is quite different than sync-ing one's various electronic devices. The deep time of Gaia, and cairological moments in its history, are often at odds with the paces of traffic, and these may clash with needs to slow down and

breathe, urgent needs called upon in a heartbeat. But what I mean by proposing

synchrony as a term is to highlight precisely this: that these conflicts, these

incompatibilities and tensions between various paces, speeds, rhythms, pasts, presents,

futures, possibilities, probabilities, may all cohabit at each moment: synchrony could be

described as the experience of eternal return. All forces being present at once, in each

moment, what can be played? Some events highlight this more intensely, and this was

partly the point with Foucault's heterotopia: that they shed a different light on all spaces,

as they refer to all of them in one. The synchrony at play in heterochronias has a similar,

only temporal, effect.

Dancing with Zarathustra: Ecochronian Bodies in Movement

> Only in dance do I know how to speak the
> parables of the highest things.
> F.W. Nietzsche, Thus Spoke Zarathustra
>
> Le corps, c'est le monde.
> Chopinot.

The contemporary dance of choreographer Pina Bausch offers examples of what I would

call eco-chronias, the kinds of heterochronias that, as such, juxtapose otherwise

incompatible temporalities in uncanny ways that make other possible temporal orders of

things glitter, using synchrony, and specifically stage such heterochronias that confound

human and nonhuman temporalities – it is in doing so that these may be called "eco-

chronian." These choreographies share the motif of the spiral with Hundertwasser's

architecture. Where Hundertwasser's five skins theory offered a way to spatially think of

embodiement of heterotopia within the oikos, confounding what is taken to be boundaries

between humans and nonhumans, Pina Bausch's dance does so temporally, deploying

moving spirals animated by the dancers' spine, limbs and heads and by the curves and shapes in Bausch's scenographies on stage or outdoors. The lightness and weight of dancers, contrary to the old norms of classical ballet, do not defy gravity but espouses it instead. The break between classical and contemporary dance, usually attributed to early twentieth-century choreographer Martha Graham, indeed theorized the spine as put in motion in spiral movements of relief and extension, as Graham started to explore the ground beyond the mere feather weight and contact of the feet (and traditional pointe shoes which surface of contact was minuscule). Contemporary dance spent much more time than ballet on the earth, rolling, crawling, at low levels.

Pina Bausch's more recent works continued these explorations but also included humor, joyfulness, re-introducing lightness, along with unlikely juxtapositions with trees being carried on dancers' backs, rocks, rain and flooding the stage. It is through surprising accelerations and slow motions, spirals created with arms, legs, spines, heads and with the sand covering the stage or rocks' meandering lines, that in my reading, Pina Bausch challenged straight lines and straight time. This example of eco-chronia is especially interesting in that Bausch's dance created percepts for two dimensions perhaps specific to eco-chronia, as one sort of heterochronia dealing with humans and nonhumans. Namely, it underscores the necessary embodiement of these new temporalities, and it poses the question of how myriad times may simultaneously be experienced in common, collectively. As Regine Chopinot, another great popularizer of contemporary dance, has claimed, "the body is the world." In what follows I will further develop my concept of heterochronia, synchrony and ecochronia, emphasizing embodiement and intersubjectivity.

Pina: "Dance, dance, otherwise we're lost"

In Pina Bausch's *Vollmond*, "Full Moon," (2006) dancers on a predominantly black and grey stage seem to be entering in an uncontrollable yet extremely precise trance while rain is pouring on the stage. They throw their feet, for a few steps, on a large rock about two and a half meters tall… Then they land back on the ground. The piece starts on a music by Rene Aubry, throbbingly joyful jazz, quiet rhythms into the movements of long dresses and long hair undone, flying with the spiral at the basis of any contemporary dance, spirals which once upon a time Martha Graham invented as reconciling a formerly ethereal ballerina defying gravity, to the ground, the spine, the core. There is gravity, sometimes heaviness, but also lightness, in Bausch's choreographies, and here, always the seemingly static rough surface of the massive piece of mineral in the back. The rock too seems to dance, its immobile but curved shapes contrasting and helping the spirals and movement in the human bodies in the front stage. The sand on the stage marks the itinerary traced by the dancers' feet. If Zarathustra claimed that "dancers have their ears in their toes" (Nietzsche, 2006, p. 181), what do Bausch's dancers' toes hear when they trace fluidoid lines in the sand? Eventually the rain fills the stage, and dancers crawl in water, imitating breaststroke yet tied and slowed by the ground. What is being heard when water covers dancers' bodies and offers the points of contact with the ground, when they playfully slide on the puddles but also seem like the border between play and drowning is near?

There is lots of joy in the heaviness of soaking wet movements and clothes. The water invading the second skins of dancers, in Hundertwasser's sense, has them drag themselves down on the ground and slow down each gesture. When lightness takes over

the upper parts of bodies – very few jumps take place here, the stage lighting amplify drops and splashes radiating around the spirals. Nonhuman water exaggerates each human gesture, either accelerating or slowing down the movement at each moment. At one point, about half-way through the show, a dancer crawls on the meteorite-like rock, embraces it and cries out: "it's mine!," only to slowly crawl away. The exuberant and sudden declaration of affection but also desire for appropriation with respect to an inanimate rock seems absurd, and this absurdity estranges us also from property and ideas of property whose object would be the Earth, or pieces thereof: a piece of nature or of the cosmos has been placed on stage (again the rock could look like a meteorite), one that is motionless, and the slow climbing of the dancer before his sudden, unexpected outcry makes us laugh, just like Foucault recalled laughing at Borges' heterotopia, because the associations there made very little sense, or at least were unintelligible to the reader, yet their very unintelligibility offered a window into the possibility for other orders of things. These instances are instances where heterochronia is primarily deployed in the sense of a dimension of heterotopian stagings: the rhythms, movements, accelerations and decelerations accentuate, highlight and provide the necessary (sometimes comic) relief to reconsider our order of things, where pieces of Earth can be claimed as someone's property. But the heterotopian dimensions of the piece reciprocally informs the heterochronian one: waters rising slow down movements while splashes and drops exaggerate the velocity of certain gestures.

After the "it's mine!" sudden outburst upon embracing the rock, the rock-hugging and/or property-hungry dancer exits and Pina Bausch enters the stage. She first walks in back to the audience, helped by a dancer to gracefully step on the rock in her long black

dress, and the audience bursts into applause when she turns and is recognized, after the dancer that helped her gently lifts her chin so that her hair separates and lets her face show. He then places a small paper cup on her head. The cup keeps falling off, the dancer climbs back and replaces it, until it falls again, before the dancer has time to step off, take a camera out of his jacket's pocket, walk a few meters back. Each time, the cup slides off the rock in a different direction before the dancer can take the picture. Pina leaves. Here fragility, weight, lightness, water, stability and instability all cohabit in one short scene: the rock and Bausch's standing upright may evoke both stability and instability (one has to climb to stand awkwardly on its slope), and Bausch's thin figure seems so light, and the water cup above it so precarious. The contrast between her silent, feminine figure and the masculine appropriation that preceded, with its absurd sudden scream, "it's mine," humorously caricatures gendered human-nonhuman tensions without affirming that things are as simple. Similarly, the above case of the exuberant "it's mine!" embrace of the rock, captured the tension between an impulse to embrace the Earth, or at least rocks and grounds, and a desire to appropriate these. By deploying metaphors, Bausch's heterochronian dance was evocative of unresolved questions, frictions, tensions, joy, lightness and gravity, without imposing rigid grids to simply impose on the complex realities staged. In the scene staging the repeated falls of a water cup, Bausch resorts to a technique now very common in postmodern dance: durational performance relies directly on temporality to advance images. The repetition of the same gesture, especially in this case, with the failure to secure a relationship with gravity and balance that would procure stability repeated each time, is what provokes the uncanny. Many almost identical moments and movements repeat and succeed one another until spectators wonder

378

whether there will be an end and begin to meditate on each detail, or the whole, or the myriad possible interpretations, connections and references in what is repeated. Without extended duration, this form of repetition would not be able to loop and take on as many meanings, producing the uncanny feeling of heterochronia. The loops in time, the duration within which repetition happens, gives the choreographic time a spiral form which proliferates meanings, in this case conveying the gravity, fragility, lightness and precarity of human and nonhuman things and (im)balance.

After the cup scene ends and Pina exits, another dancer enters, in a long red dress, and walks through the stage by fastidiously lifting her feet and pompously bending her knees high, as if she were enormous. At each step, she pauses, immobilizing her feet, and draws lines in the sand around them: she circles the advanced foot with a large monstrous or animal paw's footprint. If, in the famous closing sentences of *the Order of Things,* Foucault described man as a contingent invention that, "like a face drawn in the sand at the edge of the sea" (1970, p. 387) may disappear with the next wave, here animality is slowly enacted as the disproportionate, monstrous contours of enlarged footprints drawn in the sand by a human dancer. Again a sense of uncanniness and laughter are created from the petite female dancer's pace of movements and gestures themselves, juxtaposing otherwise incompatible images. It is the pace that provides the time of laughter, the weight and size of the animal and her pompous, aberrant character. The legs are raised slowly, which seems like so much effort because of the slow motion, and they stomp in the sand suddenly, after which the back slowly bends over and fastidiously draws. Later on, a dancer will lie down, casually, his side resting on the ground's dark sand to face the audience, wearing a suit. He then waves his lion tail with a mischievous smile at the

379

audience. Human/nonhuman monstrosity emerges through movement. This is possible only because of the slow motions juxtaposed with accelerated gestures. A still photograph could not portray the uncanny normalcy of wagging a lion's tail: here nonchalance is signified with a quick wink of the human eye and after a long, relaxed pause. The tail jumps up suddenly from behind the casually, still relaxed and immobile body lying down on its side with one elbow supporting the head. The rhythm is so realistically close to that of felines wagging their tails on a hot day, chasing flies while letting their heavy bodies soak in the heat lazily. Similarly, the enormity (both the literal size, and the aberrant nature) of large animal footprints left by a small human dancer's feet could not be staged by an immobile statue. These heterochronias stage questions about the boundaries between human and nonhuman, inert and animate, living and nonliving beings and things.

If we moved away from *Vollmond* for a bit, we would encounter in a number of Bausch's choreography other similarly heterotopian and heterochronian metaphors posing such questions, invoking among other things the fragility of life. The back of a dancer cautiously, gently carries a small tree, walking slowly, around the edges of a shallow pool, under a bright sun. The slow pace evokes the immense fragility of the tree but perhaps also of the dancer's feet, and both are tied closely. At the same time, the very slow motions can be read as paradoxically suggesting the immense weight of this living being tied to the dancer's back, a paradoxical suggestion indeed, as the tree is small and seems so light. In the duration of the walk, the question arises of whether the tree is being carried and supported by the dancer, or whether the dancer is arched over on the ground because of his own weight and gravity, yet helped up and forward in his steps by the tree

380

tied on his back. Furthermore, is the tree just one tree, or all trees? Are these bodies (all) the world, (all) worlds? Wherever the spectator may take the significance and scope of the metaphor, it is the slow movements that enact the fragility of things in this case. Bausch did not always play with slowness or stillness, however. As we have seen in the previously described scenes, it is often the alternating and quick juxtaposition of slow, sudden, fast motions that together bring about a sense that several temporalities cohabit, including in tension, humor, lightness and heaviness. These heterochronias, because they invoke humans and nonhumans together, sometimes in one body, sometimes juxtaposed on stage, can be considered, more specifically, ecochronias. They also show how juxtapositions of multiple times and spaces can take embodied forms meant for performance, thus partly answering the question I posed above about the eternal return and its bringing out the infinity of the past and the future in each moment, beyond the solitary thought of a philosopher. If Pina Bausch famously called for us to "dance, dance, otherwise we're lost," this call may also be read as an antidote against uchronia, where collective, embodied evocations of the eternal return not as conceptual thought but as perceptual experience and as its own temporality – a synchronic one – may glitter and be discerned. In what follows I will further elaborate on these two aspects, namely the necessary embodiement of synchrony and heterochronia, and the intersubjective or collective possibility of these ecochronian temporalities.

Utopian Bodies and Transcorporeality: Lovers, Dancers, Others and Selves

In a text titled *"Utopian Body,"* Michel Foucault claims that our bodies are inaccessible, the ultimate utopia, a place where we can never truly be, not without it being mediated by

myriad utopias (the mirror, tattoos, …). However, one possibility for overcoming the utopian nature of the body is entertained at the very end of the essay:

> To make love is to feel one's body close in on oneself. It is finally to exist outside of any utopia, with all of one's density, between the hands of the other. Under the other's fingers running over you, all the invisible parts of your body begin to exist. Against the lips of the other, yours become sensitive. In front of his half-closed eyes, your face acquires a certitude. There is a gaze, finally to see your closed eyelids. … If we love so much to make love, it is because, in love, the body is *here*. (Foucault, 2009)

To arrive at this final suggestion where Foucault makes lovemaking the way in which we may finally exist, not in utopia, but "here," the French philosopher has gone through waves of unveiling utopias as such throughout the essay. Opening by claiming that the body is a heavy, alienating materiality that we cannot simply leave for a moment to go elsewhere, Foucault first postulates that utopias conjure this imprisoning materiality. The soul, in this light, would be the ultimate utopia, representing the body as smooth, weightless and perfect, immortal, the essence. Yet we know that Foucault will claim, a few years later ("Utopian Body" was first released in 1966) in *Discipline and Punish*, that the soul is the prison of the body (1971, p. 30). Indeed, in "Utopian Body," he promptly refutes his initial postulate, objecting that the body, this materiality one has to drag with oneself, is in fact mysterious, unreachable: I have two eyes but know this only from mirrors, where I am not, and I see through them only one vision; I cannot see the back of my neck (besides through several mirrors, again where I am not). There are all kinds of holes, cavernous curves, inaccessible things about my body. Thus Foucault ends up

considering the possibility that this estrangement from a body where we are not, a utopian body, be overcome through alterity, in the act of love. The self, an embodied reality, may come to be, or become, only through (coming with) the other. Though this insight, the idea according to which we might only be able to be here and now qua alterity, is helpful for my purposes here, contrary to what Foucault seems to reductively imply I would suggest that the sex act is not the only way into the intersubjective condition of embodied selfhood, of finally getting out of utopia. In addition, a nonhuman dimension to this question of embodied intersubjectivity must be added. My goal in what follows it to arrive at the conclusion that the body is indeed a hybrid (human and nonhuman) heterotopia, one that dance may help us experience, while science can help us grasp it.

Our bodies are made of myriad earth others. Stacy Alaimo has coined the concept of transcorporeality to describe the queerness of bodies that never are only human. In *Bodily Natures*, she proposes a trans-corporeal understanding of the relationships between bodies and places. Because our bodies are animated by the "traffic in toxins," because the outside, environments and natures are also inside, because these are not static, inert or deprived of agency, but entangled in a dance which confounds boundaries and questions the notion of a self-coherent, homogenous and bound subject, transcorporeality entails that what we do to natures, we do to ourselves, and vice versa. Science, like art, offers insight into this transcorporeality, though it grants us no definite foundation: "Science offers no steady ground, as the information may be biased, incomplete, or opaque and the ostensible object of scientific inquiry - the material world - is extremely complex, overwrought with agencies, and ever emergent" (Alaimo, 2010, p.

20). Matter is active, and actively undoing any assumption that there may be a stable subject to be found at the end (and neither is there such a thing as end) of our investigations. Furthermore, the relationships at play are not without destructive aspects and conflicts, tensions, violence: as Alaimo points out, in landscapes of risk, contingent upon particular historical contexts, bodies may be hurt, damaged or destroyed. Myra Hird's work has shown that these entanglements are no less than queer. In "Naturally Queer" (in: Mortimer-Sandilands & Erickson, 2010) Hird multiplies examples to illustrate this. For instance, and directly pertinent to Alaimo's concept of transcorporeality, she points out that most of the cells of our bodies are unisex. These insights challenge easy separations between nonhumans and humans, queer and normal, nature as static and stable truths and culture as changing and contested. As Dorion Sagan puts it:

> ten per cent of our dry weight is bacteria, but there are ten of 'their' cells in our body for every one of ours, and we cannot make vitamin K or B12 without them. The maverick Russian geochemist Vladimir Vernadsky thought of life as an impure, colloidal form of water. What we call 'human' is also impure, laced with germs. We have met the frenemy, and it is us. (2013, p. 19)

Not only, then, is our body full of mysteries and not as easily accessible as a simplistic account of materiality would have us believe, to the point of being aptly characterized as 'utopian' in Foucault's view, but it is also constantly mixing spaces and realms which we deem separate. The juxtaposition of these realms, the realization that they constantly mingle and that we depend upon these, through scientific (always provisional) knowledge or through percepts and affects created by performing and other forms of art, may enable

384

to distance ourselves from utopian relations to bodies and attain forms of heterotopian embodiment.

Thus I would add to Foucault's assertions according to which, if "we love to make love so much," it is because embodiment can thus be realized: the love act enables our body to finally be "here" through the other, her gaze, touch, smell, her own body, but if we may finally experience a not-so-utopian form of embodiement by having sex, we also always already are mingling with myriad others, without and outside our bodies. The heterotopian and heterochronian nature of the sex act allows, as do all heterotopias and heterochronias, to refer to all other sites, to relate to all kinds of realms that constitute us and juxtapose what seemed incompatible spaces and temporalities. Besides the non-utopian insight here, what would a non-uchronian or ecochronian experience of the body and self look or feel like, one that would emphasize not only spaces mingling, but times, or what would the temporal, heterochronian or synchronic dimension of this heterotopian body be? If bodies are profoundly transcorporeal, they are also this over time, qua movement. This is why dance, a time-based performing art *par excellence*, as it relies on rhythm, pace, speed, movement, contrasts between stillness and immobility, active staticity, and fast gestures, is particularly apt at illustrating the temporal dimension of a potential intersubjective, human and nonhuman, experience of embodiement, a truly heterochronian experience. When, as was the case in the Pina Bausch scenes described and analyzed above, this art form stages various human and nonhuman components of intersubjective embodiement, it becomes not only heterotopian but also heterochronian. Love-making may seem to have us loose ourselves to become more ourselves, with and in the other, and enable us to finally be here, but both love and dance, and probably many

other useless, unproductive (non-teleological) things allow us to be now, in a now that integrates the infinity of the pasts and infinity of the futures – note that I call love-making unproductive, weighing my words: most coital experiences are non-reproductive: any heteronormative reproductive-centered objections denied here. They are, however, creative: of pleasures, amorous sentiments, moments, etc. Thus if dance and its spiraling heterochronian movements is non-teleological, it is because it does not have an end to which the here and now would be subjected, as uchronia does: abstract, reifying, ever-postponed (uchronian) goals that movements in the instant would be subservient to are irrelevant here. However one interesting thing to note here is that dance does have myriad directions: it eliminates goals in a strict teleological sense – in other words it eliminates telos in the sense of goal, though it uses and deploys direction – but it does perform the complex heterotopian and heterochronian fabric of life, over time, through time, in each moment of the choreography.

The dances Pina Bausch created highlight this point. This is not only, though it plays a tremendously important role, because stages are highly heterotopian and heterochronian, bringing together otherwise incompatible spaces in one effective location (in his essay on heterotopia, Foucault suggests that theaters are indeed a striking form of heterotopia). The soaked bodies and clothes of dancers who move in apparent trance inhabited both by heaviness and lightness, with rhythms, decelerations and accelerations, quick emphases and slow motion, through rain and puddles over rocks, the bodies carefully carrying trees, human bodies nonchalantly wagging their lion tails, underscore, in movement, with rhythm, pulsations, speeds, slowness, paces, accelerations, decelerations, stillness, agitation, that life cannot but contain all past, present and future

forces at each moment redistributed, including conflict, friction, love, humans and nonhumans. Here synchrony is clearly not a matter of matter synchronizing gestures, but one of forces constantly re-distributed: Bausch's dancers, in the pieces I described above, rarely give their bodies identical movements at identical moments. Contrary to more conventional forms of dance like classical ballet, these dances rarely have dancers all execute the same movement at the same time. As Deleuze has pointed out, the eternal return, evoked through these synchronic temporalities, is not the return of the identical or some kind of simple sameness, but instead it is the return of all differences, the return of return, of what differs, which is why it is also the condition for time to pass, for becoming to continuously come into being. In dance, synchrony is not about identity of movement but about simultaneous, spiral-shaped struggles in many directions of many times at any given moment. The motif of the spiral is important, as it may provide a more capacious metaphor than Nietzsche's "ring of sand" for the dance of life: the ring is imperfect in expressing the eternal return in part because it is strictly circular. It was useful to Nietzsche because it implied a closed universe where all forces continuously flowed and eventually traversed the exact same point, repeating their course an infinity of times. But this same motion can be envisioned, with the same grains of sand (evocative also, as some passages in Nietzsche attest, of the hourglass) flowing and returning eternally yet doing so in endless spirals, like a snake biting its tail.

Bausch proceeded by metaphors: in one dancer ever so carefully carrying (or being lifted) by a fragile tree, in rain, water and on rocks shedding droplets that underscore movement, we see or experience that "the body is the world." Heterotopian when it dances the metaphors of Pina Bausch, the body is shown to contain,

synchronically, simultaneously, all the parts. And again, heterotopian and heterochronian

bodies, like heterotopias and heterochronias at large, have this property that enables them

to reveal all spaces and all times as containing all others: they proliferate and shed a

heterotopian/heterochronian light on all things. The forces work together in tension and

support, such that all effects are effects of myriad effects, and so on ad infinitum.

Dance on, Zarathustra!

This is probably why Nietzsche's Zarathustra claimed that he considered any day when

he hadn't danced, a day wasted, and why he also asserted that "[he] would only believe in

a god who knew how to dance" (2006, p. 29).[67] It is in the "other dance song" of

Nietzsche's *Thus Spoke Zarathustra* that we find one of the most striking iterations of

Dionysos' prophet staging his affirmation of life, along with the whispered presence of

the thought of eternal return. Zarathustra then encounters life and dances with her, and,

proceeding with metaphors, Nietzschean thought affirms the dance of life, and life

activates the thought of the eternal return. The encounter and dance are both very sensual,

a seductive game and playful dialog: life and Zarathustra seem both dance partners and

lovers – after all, as was suggested above love and dance may be among the experiences

that allow "other orders of things to glitter," to access the body as heterotopia rather than

utopia, "in love, the body is here" (Foucault, 2009). The "Other dance song" opens with

the following amorous lines: "into your eyes I looked recently, oh life," says Zarathustra.

"I saw gold gleaming in your night eyes – my heart skipped a beat at this thrill"

(Nietzsche, 2006, p. 181). Nietzsche evokes his protagonist's "dance-drunken foot"

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[67] Maurice Béjart, who not unlike Pina Bausch, did his share in popularizing contemporary dance, once created an adaptation of *Thus Spoke Zarathustra* to the stage. However part of the beautiful temporality of this art form includes the fact that without a video recording, dance is lost (and conserved) to (and by) the moment of performance: I was not able to find any trace of this show beyond ones that taught me it had once existed.

(*ibid*.) and claims, in a literal heterotopia (the term, we may recall, comes from medical language and there it refers to the presence of an organ in an anomalous location of the body), that "a dancer has ears in his toes." Zarathustra exclaims, addressing life: "I dance after you, and follow your trail using any clue" (p. 182).

The "Other dance song" also stages the link between the ethical and ontological dimensions of the eternal return, the transvaluation of all values and the affirmation of life: both life and Zarathustra, caught in their amorous dance, are beyond good and evil. The passionate and tumultuous dance has Zarathustra oscillate between love and hatred: "you whose coldness ignites, whose hate is alluring … who would not hate you, you great binder, and winder, temptress, attemptress, and finder! Who would not love you, you innocent, ardent-one, wind-bride and child-eyed sinner!" (p. 181). Life, herself a protagonist in Nietzsche's parables, engages with the protagonist of Nietzsche's masterpiece in quasi S &M embraces, in what may be an allusion to the love experienced with Lou Salome and famously captured in a picture where she threatens Nietzsche and Paul Ree with a whip – or would it be the picture that is an allusion to Zarathustra and life's dance? Whatever the case may be, Zarathustra says to life:

I am truly tired of always playing your sheepish shepherd pal! You witch, if I have so far sung for you, now *you* for me will – yell! To the beat of my whip you will dance so and yell so! But did I forget the whip? – oh no! (p. 182)

To which life replies,

covering her dainty little ears: Oh Zarathustra! Please do not crack your whip so fearfully! Surely you know: noise murders thoughts – and just now the most tender thoughts are coming to me (p. 182).

Life goes on: "we are both a real do-no-goods and do-no-evils. Beyond good and evil we found our island and our green meadow – we too alone" (p. 182). Life, along with the figure that will announce the thought of the eternal return, transvalues all values. Shortly after Zarathustra whispers something in life's ear, something which we may deduce is the thought of the eternal return. To this, life exclaims: "you know that, Zarathustra? No one knows that" (p. 183).

In the first dance song, Zarathustra had asked dancing girls: "how could I be hostile toward godlike dancing, you light ones?" In "the Other Dance Song" however, gods are absent, and life, immanent and engaged in its playful, joyful and light dance, activates the thought of thoughts, whispered in her ear by Zarathustra. His joining in the dance is a parable for how thought affirms life, and for what *amor fati* would look like: an engagement, espousing in and of the creative dance of life. Only in dance does Zarathustra "know how to speak the parables of the highest things" (p. 86). Or so he claims.

We may still need an attempt to clarify this parable however: in so doing I turn to Gilles Deleuze's interpretation for support. Deleuze opens an essay on Nietzsche (2013) with the three metamorphoses of the spirit staged in *Zarathustra*, which not only rely on human and nonhuman figures, but can enlighten our purposes here: first the camel, who carries the heavy weight of established values, to then transform into a lion, who breaks all the idols and stomps on the values, and finally the child, who through play, can begin again, creating new values with a new, different principle. Nietzsche, in Deleuze's reading, asserts the fundamental unity of thought and life: again, life activates thought and thought affirms life. In other words, as Deleuze puts it, "our modes of living inspire

our modes of thinking, and our modes of thinking create modes of living" (2013, p. 18). However, with the triumph of slave mentality, "a spirit of heaviness that unites reactive and depreciated life and negative and depreciating thought" has come to predominate. Extracting ourselves from this means creating. As Deleuze and Guattari have claimed in *What Is Philosophy?* (2013), art creates percepts and affects, while philosophy creates concepts. For instance, the art form of dance may stage the dance of life, including Pina Bausch's figures of human dancers nonchalantly wagging their nonhuman lion's tails, with a provocative smile and fleeting wink in the eye, a playfulness prefiguring a possible transformation into childlike play and creation, from destroying values to creating new ones based on new, life-affirming principles. In Deleuze's reading of Nietzsche, "creating means lightening, liberating life from its load, inventing new possibilities of life. The creator is legislator – dancer" (Deleuze, 2013, p. 20). Indeed, Nietzsche regularly opposes, on the one hand, the creator and the dancer (two figures or facets also incarnated by the child resulting from the three metamorphoses), to the slave mentality, reactive forces, nihilism, on the other. Nihilism has required of life that it justifies itself, that it compensates for the suffering present in it, and, going even further, it has made suffering a justification of life, a way to redeem it. Once we shed the weight of old values, we may finally engage fully with the eternal return, espouse the dance of life, lightly and playfully creating. Thus the struggle, to unite thought and life again, to engage in it with *amor fati*, should not be confused with a passive fatalism or acceptance, submission to the real as it is: "the real, as it is, is precisely what the values have made of reality!," exclaims Deleuze (p. 22). Teleological temporalities of progress (what I have called uchronia) have

weighed on life for long enough, and we may not accept the reality it claims any longer, if new ecochronian temporalities erupt from and with Gaia's dance.

Dance and play are crucial to the Nietzschean project of affirming life. When Zarathustra joins life in a sensual dance, the tragic, Dionysian spirit, the thought of the eternal return who enters in a conversation with life, at last. Thus he whispers the thought in life's ear. What then, might this dance tell us in terms of temporalities of transcorporeality, or ecochronias? As we saw in the previous chapter, geoengineering arguments are tied to teleological (conservationist) visions of nature as corresponding to Gaia in its Holocene, human-habitable form, understood as a stable, reliable and predictable background, in addition to values, like growth, dictated by business as usual, are presumed to be equatable to the good, to a healthy economy. Ecochronias, on the other hand, do not have a blueprint or program, but affirm the openness, surprise, contingency of time, and the simultaneity of all times past, present and future in each moment. Queer kinships may proliferate, ones that are not tied to the real as it is, as the utopian and uchronian real subjects us to values weighing heavily on creation and preventing the affirmation of life. Readiness to face even extinction (and we could also re-write yet another IPCC scenario descriptions accordingly), to draw animal footprints in the sand around our dancing feet, Chthulucene multiplicity and contingency, would make for part of the substance of ecochronias, so we may finally experience the here and now, knowing and feeling that it is radically inclusive of all forces of the past and future, ad infinitum. Armed with ecochronias, we may ask "what is being done?," and imagine many futures including possible ones that may not seem so probable but offer more

livable lives than the abstract promises of uchronia do. In the Chthulucene dance, all

there is becomes: *da capo*!

CONCLUSION

The pages above have sought to displace depictions of certain radical green politics as belonging to a placeless and timeless, ideal place and time: characterizing these as utopian and uchronian is both a strategic mistake and inaccurate. Reciprocally, I have argued that, instead, it is the unsustainable paces and directions of growth-driven, capitalocentric progress that belong to uchronia and utopia. The concepts I have developed here aim to help rethinking temporalities in a context of extinction, so as to turn the tables and accuse capitalist times and spaces of corresponding to idealized, placeless and timeless, times and places. The distinctions offered by the conceptual framework I have sought to build aim to enable seeing "other possible orders of things" (Foucault, 2014) as they have developed, are currently developing, will and could further proliferate, not deeming these unrealistic on the basis of their alleged improbability, a measure often assessed based on established values inapt in facing ecological limits.

This turning the tables is both complicated and hopefully simplified, made more effective and clearer with the concepts I have deployed and the distinctions they seek to render possible. Simply put, hegemonic temporalities of progress, growth, linear and futurist teleologies that subject the present and concrete futures to an abstract futurity that will not come, are not as inevitable as they may seem, and in fact it is they that belong to the non-realistic, the absurd, delusional deliriums. Anti-uchronian critique makes it possible to see that the reign of growth is and will continue to be collapsing on itself, while taking limits into account would require ecochronian experiences and understandings of time to proliferate.

394

Neither Presentism Nor Futurism: What Is Being Done, What Can Be Played

I have proposed an original contribution insofar as my argument draws from queer temporalities and from the Nietzschean eternal return to position itself against utopianism. The stakes are high, as again, calling a particular political or philosophical (or both) project "utopian" determines its situation with respect to the real, and to what is deemed realistic or probable. If geoengineers and carbon markets' true believers continue to bow on the altar of growth, continue to hold on to teleological visions of the human and the natural, I contend that we may head toward future worlds where lives (be they human or nonhuman or hybrid) would hardly be livable, and the air hardly breathable. Though a possible, perhaps even (sadly) probable outcome, this does not seem to be the only possibility. A Chthulucene, heterochronian and synchronic possibility does not only seem more realistic when it comes to livability: in fact, it also may be more appealing. This displacing of capitalocentric temporalities as in fact uchronian while green politics call for their own new and possible temporal orders of things has a number of important consequences.

We have seen in the last chapter above that synchronic temporalities that stage, at the same time, in one moment (long or short), seemingly incompatible times, are rich in bringing images of the human and the nonhuman together and underscoring the transcorporeality that challenges their delimitations. I have introduced heterochronia and synchrony through the performing arts, through my parodic re-writing of another possible modeling climatological scenario that may playfully assess climate change and which possibility – whether improbable or not – we may face the crisis with, through

heterotopian architecture and spiralesque dances and oikos. What would it mean to join life in its dance and affirm it, à la Zarathustra, at each moment?

First it would entail shifting questions, as I have mentioned, from "what is to be done?" to "what is being done?" (Gibson-Graham and Roelvink, 2010) or "what can be played?" (Foucault, 1996) and also proliferating possibilities by expanding imaginaries that would not be subjected to the probable: ecotopian science fiction, now-topian, already existing alternative economies, may be sought now and imagined as generalizing in the futures, in defiance to what is usually presented as more likely given realities which values we – anti-uchronians – may not share. Ecochronia is thus neither presentist nor futurist, but brings to light alternatives now and dares imagine what is deemed unimaginable for myriad futures. Knowing, thanks to anti-uchronian critique, that the total destruction that could possibly result from hubristic geoengineering experiments or nihilistic convictions that growth is the only à-venir there is, is no more imaginable than more seemingly idealistic life-affirming alternatives: one is unacceptable and unbearable, the other is deemed less probable but may be more bearable and give currently endangered humans and nonhumans more of a chance.

Put differently, the conceptual framework I have proposed above seeks to feed into a project of transformation where the improbable is not so hastily equated to the impossible, where non-capitalist present and future realities and potentialities are not so quickly confined to utopia, elsewheres and other times. This transformation would entail that the times outside of time towards which (capital) speculative desires orient themselves capitulate under reversed accusations of unrealizability, and the suggestive,

propositional, improvisational and creative supplants the programmatic, while the planet's limits are taken into account and imaginaries are not assumed to be limited.

Sustaining Synchrony

The synchrony I have proposed above results from nearing extinction, from a heightened experience of becoming, of time passing only because every moment contains all past and future forces constantly re-organized. This synchrony, astutely staged by the dances of Pina Bausch, implies a radical ethical shift which has important consequences on how sustainability may be conceptualized.

I have explained, in chapter 2, that the environmentalist concept of future generations changes our relationship to futurity insofar as the future takes on both a different affective charge and a different object: from uchronian futurism to future generations' futurity, abstract and impossible hopes for endless growth are replaced with a concern for the concrete livabilities of human and nonhuman future lives. Similarly, if we weigh all our actions and all phenomena that affect us against the provocative question posed by the Nietzschean demon, asking ourselves whether we would engage in each moment were it to repeat ad infinitum, sustainability changes both object and means. The sustainability preached by mainstream environmentalisms like that of the IPCC or geoengineering advocates would, de facto, have us sustain a specific mode of production taken for the end of history, and deploy technofixes to do so (geoengineering, more windmills, solar panels to sustain the same or even more unrealistic levels of consumption, i.e all sorts of miracle technologies for all sorts of continuations of growth). Meanwhile, a synchronic version of sustainability would seek to sustain an ethical attitude, and it would do so by collapsing means and ends: if each moment integrates all

other past and future moments, if there is no doer behind the deed, if we are to ask the value of all values, then no small action (Deleuze, 2013, p. 30) which value may only come to be realized as a means to an end encountered in an abstract future, a postponed moment, can be justified in this uchronian manner.

In other words, at the level of each action and moment, this ethical perspective may radicalize a concept like sustainability to require that no mediocre or ecologically damaging action be exempt of being weighed against the unbearable lightness of becoming. What we would then sustain, is a readiness and openness to contingency and becoming, to radical difference in each instant. What returns is the diverse, difference, becoming, and if that is the case, then each time our forces engage with all others is a time of heightened intensity where the livability of future lives is taken into account. Fostering this ethical state is about creating diverse, life-affirming presents and futures. The eternal return makes the concrete, material infinite connectedness between past, present and future inescapable: this implies that present and future generations of humans and nonhumans cannot but be virtually present in each step "we" take, radicalizing also the concept of responsibility toward future generations, playfully inventing queer kinships (Haraway, 2015).

Future Generations and Queer Kinships

This indeed would be a third implication of the distinctions I have attempted to make by deploying the above battery of concepts: firstly, critiquing uchronia for what it is – contingent and fragile in spite of its idealization and ever-postponed impossible promises, and opening up possibilities for other temporal orders of things, entails a change of questions from 'what is to be done' to 'what is being done' and 'what can be played,' and

a refusal of both presentism and futurism. Secondly, sustainability changes means and object: no more sustaining one single mode of production out of a principle which value is taken for granted, no more subjecting actions of today as mere means to a postponed impossible promise's fulfillment. Thirdly, if we have seen in chapter 2 that the environmentalist notion of responsibility future generations changed the nature of futurity away from uchronia's abstract desire for growth to more concrete concerns for future lives' livabilities, we may add a particular stress on Haraway's concept of queer kinships (which I also mentioned in chapter 2). This is not in lieu of the more generic and commonly mobilized notion of future generations, but rather adding further nuance and precision to this concept. Future generations must include nonhumans and humans, and concerns for them must take the form of an audacious gaze into difficult problems, including the problem of limits (now and later). The notion of queer kinships provides a positive formulation to limits in terms of population, and underscores that, when it comes to future generations, less is indeed more: endeavoring to make our and their lives livable entails less abundance in numbers. As Donna Haraway puts it:

> "Make Kin" and "Not Babies" are both hard; they both demand our best emotional, intellectual, artistic, and political creativity, individually and collectively, across ideological and regional differences, among other differences. … Evidence of many kinds, epistemologically and affectively comparable to the varied evidence for rapid climate change, shows that 7-11 billion human beings make demands that cannot be borne without immense damage to human and nonhuman beings across the earth. …These issues demand difficult, unrelenting work; but they also demand joy, play, and response-ability to engage with

unexpected others. All parts of these issues are much too important for Terra to hand them over to the right or to development professionals or to anybody else in the business-as-usual camps. Here's to Odd Kin—non-natalist and off-category! (Haraway, 2015, p. 164)

If the ethics described above is so demanding, the example of its implications for kinship and future generations is indeed telling of these challenging exigencies: the question of future generations cannot take the form of a reproductive futurism where (hetero)normative pressures incite to fetishize the Child, because such pressures would destroy the conditions of life of future humans and nonhumans. Our current condition requires a transformation of values and norms where we would not only learn to care for present and future human and nonhuman generations in new ways, but where we would also value these concerns qualitatively rather than by equating growing to health – distancing ourselves from uchronia toward ecochronias. Continuing to make demands on a situation which demands completely otherwise would be 'stupidity,' as Stengers has helped us grasp. 'Make kin, not kids!' and many other seemingly impossible yet necessary (at least if humans and myriad currently threatened species are to be given a chance) calls, may have to proliferate to envision drastically different futurities than the uchronian horizons we have been offered so far.

Heterotopia and Heterochronia as a Challenge to the Disciplines

One last, formal question remains of note, one that I have not been able to elaborate upon it above. In order to deploy my concepts of uchronia, anti-uchronia, regressive and progressive counter-uchronia, hyper-uchronia, heterochronia, synchrony and ecochronia, I have drawn from existing graffiti art, dance and circus performances, science fiction,

400

climatological reports, activist videos and manifestos. The variety of sources used aimed to underscore that questions on temporalities are omnipresent in environmental discourses, across disciplines and genres, calling for more critical reflection on the subject. In current environmental political theory, more and more attempts are made to cross disciplinary boundaries and draw from science studies as well as the humanities, while the latter ones are questioned alongside the *anthropos* who also animates, for instance, present geological debates. It it is without doubt in heterotopian reflections bringing together myriad discourses usually not expected to cohabit, that we may find uchronia is not the only temporal horizon: different than an interdisciplinary endeavor, my close readings of these texts could be described as giving a heterotopian form to my defense of ecotopias and ecochronias. My argument thus intervenes in a vibrant context where art, science, politics meet. In fact we may note that if heterotopias have the unusual property of making other orders of things glitter in that they create spaces which peculiarity is to connect to all other spaces, recent challenges to the disciplines in academic and activist realms (from Rosi Braidotti's reflection on posthumanities – 2010 – to the emergence of whole interdisciplinary fields like science and technology studies) tend to show that politics, science, the arts, literature, etc were never so separate as the disciplines had purported to make them. The relationship between science, politics, and art is not something I could thematize within the argument developed above, but the form it took on certainly poses new questions that are crucial to the ecological crises.

O man, take care!
What does the deep midnight declare?
"I was asleep—
From a deep dream I woke and swear:—
The world is deep,
Deeper than day had been aware.
Deep is its woe—
Joy—deeper yet than agony:
Woe implores: Go!
But all joy wants eternity—
Wants deep, wants deep eternity

BIBLIOGRAPHY

Acampora, R. R. (1994). Using and abusing nietzsche for environmental ethics. *Environmental Ethics, 16*(2)

Afeissa, H. S. (2009). Ecosophies la philosophie à l'épreuve de l'écologie. Paris: MF.

Alaimo, S. (2010). *Bodily natures science, environment, and the material self.* Bloomington: Indiana University Press.

Alaimo, S. (2008). Trans-corporeal feminisms and the ethical space of nature. In: *Material feminisms*. Bloomington: Indiana University Press.

Badinter, E. (2010). *Le Conflit-la femme et la mère*. Éditions Flammarion.

Bastian, M. (2009). Inventing nature: re-writing time and agency in a more-than-human world. *Australian Humanities Review Australian Humanities Review, 47*, 99-116.

Baubérot, A. (2013). Les naturiens libertaires ou le retour à l'anarchisme préhistorique. *MNC Mil Neuf Cent: Revue d'histoire Intellectuelle (Cahiers Georges Sorel), 31*(1), 117-136.

Baubérot, A. (2004). *Histoire du naturisme : Le mythe du retour à la nature*. Rennes: Presses universitaires de Rennes.

Beauvoir, S. (1953). *The second sex*. New York: Knopf.

Bennett, J. (2015). Systems and Things: On Vital Materialism and Object-Oriented Philosophy. In: Grusin, R (Ed.), *The Nonhuman Turn*. Minneapolis: University of Minnesota Press.

Bennett, J. (2010). *Vibrant matter : A political ecology of things*. Durham: Duke University Press.

Bennett, J. (1994). *Thoreau's nature : Ethics, politics, and the wild*. Thousand Oaks, Calif.: Sage Publications.

Besnier, J.M. (2013) "L'utopie d'un post-humain," in: Letonrurier E. (Ed.), *Les Utopies*. Paris: CNRS editions, 2013.

Biro, A. (2011). *Critical ecologies : The frankfurt school and contemporary environmental crises*. Toronto: University of Toronto Press.

Blu (2013), Walls: Untitled. Available at http://blublu.org/sito/walls/2013/001.html, retrieved May 31st, 2015.

Blu (2012), Walls: Untitled. Available at http://blublu.org/sito/walls/2012/003.html, retrieved May 31st, 2015.

Blu (2009), Walls: Untitled. Available at http://blublu.org/sito/walls/2009/007.html, retrieved May 31st, 2015.

Blu (2009), Walls: Untitled. Available at http://blublu.org/sito/walls/2009/002.html, retrieved May 31st, 2015.

Bookchin, M. (1982). *The ecology of freedom: The emergence and dissolution of hierarchy*. Palo Alto, CA: Cheshire Books.

Bookchin, M. (1980). *Toward an ecological society*. Montréal: Black Rose Books.

Booth, S., *Primitivism: An Illusion with No Future*, Green Anarchist, 2005. Booth, S. (2013). Primitivism: An illusion with no future. *Online at http://tal.bolo-bolo.co/en/s/sb/stephen-booth-primitivism-an-illusion-with-no-future.a4.pdf, accessed July 23rd 2015*.

Braidotti, R. (2013). *The posthuman*. Hoboken: John Wiley & Sons.

Braidotti, R. (2011). *Nomadic theory: the portable Rosi Braidotti*. New York: Columbia University Press.

Brassier, R. (2007). *Nihil unbound : Enlightenment and extinction*. Basingstoke: Palgrave Macmillan.

Braun, B., Whatmore, S. J., & Stengers, I. (2010). *Political matter: Technoscience, democracy, and public life*. Minneapolis: University of Minnesota Press.

Brussolo, S. (2006). *Cauchemars parallèles*. Paris: Omnibus.

Callenbach, E. (1975). *Ecotopia : The notebooks and reports of william weston*. Berkeley, CA: Banyan Tree Books: Distributed by Bookpeople.

Carlsson, C. (2008). *Nowtopia : How pirate programmers, outlaw bicyclists, and vacant-lot gardeners are inventing the future today*. Oakland, CA: AK Press.

Chakrabarty, D. (2012). Postcolonial studies and the challenge of climate change. *NLH New Literary History: A Journal of Theory and Interpretation, 43*(1), 1-18.

Clowney, D., & Mosto, P. (2009). *Earthcare: An Anthology in Environmental Ethics*. Rowman & Littlefield.

Colebrook, C. (2014). *Essays on extinction*. vol. 1, vol. 1. Ann Arbor : Open Humanities Press with Michigan Publishing.

Colebrook, C. (2014). *Essays on extinction*. vol. 2, vol. 2. . Ann Arbor : Open Humanities Press with Michigan Publishing.

Connolly, W. E. (2013). The `New materialism' and the fragility of things. *Millennium - London- London School of Economics-, 41*(3), 399-412.

Connolly, W.E. (2013). *The fragility of things : Self-organizing processes, neoliberal fantasies, and democratic activism*. Durham : Duke University Press.

Connolly, W. E. (2008). *Capitalism and christianity, american style*. Durham: Duke University Press.

Coole, D. H., Frost, S. (2010). *New materialisms : Ontology, agency, and politics*. Durham [NC]; London: Duke University Press.

Crary, J. (2014). *24/7: Late capitalism and the ends of sleep.* London ; New York : Verso.

D'Alisa, G., Demaria, F., Kallis, G. (2015). *Degrowth : A vocabulary for a new era,* New York, NY : Routledge, 2015.

Daly, H. E. (1996). *Beyond growth : The economics of sustainable development*. Boston: Beacon Press.

Davis, M. (2001). *Late victorian holocausts : El niño famines and the making of the third world*. London; New York: Verso.

Deleuze, G. (2013) *Nietzsche*, Paris: Presses Universitaires de France.

Deleuze, G., Parnet, C. (2007). *Dialogues*. New York: Columbia University Press.

Deleuze, G. (2005) *Nietzsche et la philosophie*, Paris: Presses Universitaires de France.

Devall, B., Sessions, G. (1985). *Deep ecology*. Salt Lake City, Utah: G.M. Smith.

Dobson, A. (2007). *Green political thought*. London: Routledge.

Dobson, A. (2003) "Janus-Faced Utopianism: The Politics of Ecology," *in* Kassiola, J. J. (2003). Explorations in environmental political theory: Thinking about what we value. Armonk, N.Y: M.E. Sharpe.

Drenthen, M. (2005). Wildness as a critical border concept: Nietzsche and the debate on wilderness restoration. *Environmental Values, 14*(3), 317-337.

Edelman, Lee. (2004). *No future : Queer theory and the death drive*. Durham: Duke University Press.

Ehrlich, P. R. (1968). *The population bomb*. New York: Ballantine Books.

Escobar, A. (2005). El 'postdesarrollo'como concepto y práctica social. *Políticas de economía, ambiente y sociedad en tiempos de globalización*, 17-31.

Escobar, A. (2011). *Encountering development: The making and unmaking of the Third World*. Princeton University Press.

Fabian, J. (1983). *Time and the other : How anthropology makes its object*. New York: Columbia University Press.

Ferguson, J. (2005). Decomposing modernity: history and hierarchy after development. *Postcolonial studies and beyond*, 166-181.

Fernandez, J. (1996). Felix Guattari: Toward a queer chaosmosis. *Angelaki, 1*(1), 99-112.

Foster, J. B., York, R., & Clark, B. (2011). *The ecological rift: Capitalism's war on the earth*. New York: NYU Press.

Foster, J. B. (2000). *Marx's ecology : Materialism and nature*. New York: Monthly Review Press.

Foucault, M. (2014). *Les mots et les choses. Une archéologie des sciences humaines*. Gallimard.

Foucault, M., Defert, D. (2009). *Le corps utopique ; suivi de les hétérotopies*. Paris: Nouvelles éditions Lignes.

Foucault, M., & In Lotringer, S. (1996). Foucault live: (interviews, 1961-1984). New York: Semiotext(e.

Foucault, M. (1979). *Discipline and punish : The birth of the prison*. New York: Vintage Books.

Foucault, M. (1971). *The order of things : An archaeology of the human sciences*. New York: Pantheon Books.

Foucault, M. (1966). *Les mots et les choses; une archéologie des sciences humaines*. Paris: Gallimard.

Freeman, E. (2010). *Time binds queer temporalities, queer histories*. Durham [NC: Duke University Press.

Gagliano, G. (2010). *Il ritorno alla madre terra : L'utopia verde tra ecologia radicale ed ecoterrorismo*. Trento: UNI service.

George, R. (n.d). Join Me to Bring Back the Fish & Ocean Life Everywhere. http://russgeorge.net, retrieved June 22, 15

Gibson-Graham, J. K., Roelvink, G. (2010). An economic ethics for the anthropocene. *Antipode, 41*, 320-346.

Gibson-Graham, J. K. (2006). *A postcapitalist politics*. Minneapolis: University of Minnesota Press.

Gibson-Graham, J. K. (2006). *The end of capitalism (as we knew it) a feminist critique of political economy.* Minneapolis: University of Minnesota Press.

Giffney, N., Hird, M.J. (2008). *Queering the non/human.* Burlington, VT: Ashgate.

Global footprint network (last edited on August 20th 2013), "Earth Overshoot Day," retrieved from http://www.footprintnetwork.org/en/index.php/gfn/page/earth_overshoot_day/

Gore, A. (2013). *The future : Six drivers of global change*. New York: Random House.

Gorz, A.. (1980). *Ecology as politics*. Boston: South End Press.

Greenpeace "Angry Kid," http://www.greenpeace.org/international/en/multimedia/videos/Angry-Kid-/ retrieved June 2015.

Grosz, E. A. (2005). *Time travels: Feminism, nature, power*. Durham: Duke University Press.

Grosz, E. A. (2004). *The nick of time: Politics, evolution, and the untimely*. Durham: Duke University Press.

Grosz, E. A. (1999). *Becomings : Explorations in time, memory, and futures*. Ithaca: Cornell University Press.

Guattari, F. (1992). *Chaosmose*. Paris: Galilée.

Guattari, F. (1989). *Les trois écologies*. Paris: Editions Galilée.

Hache, É. (2011). *Ce à quoi nous tenons propositions pour une écologie pragmatique.* Paris: La Decouverte.

Halberstam, J. (2005). *In a queer time and place : Transgender bodies, subcultural lives*. New York: New York University Press.

Hallman, M. O. (1991). Nietzsche's environmental ethics. *Environmental Ethics, 13*(2).

Halsey, M. (2005). Ecology and machinic thought. *Angelaki, 10*(3), 33-55

Haraway, D. J. (1989). *Primate visions : Gender, race, and nature in the world of modern science*. New York: Routledge.

Haraway, D. J. (1991). *Simians, cyborgs, and women : The reinvention of nature*. New York: Routledge.

Hird, M. (2010). Naturally queer. In: Mortimer-Sandilands, Catriona.,Erickson, Bruce., (Eds.), *Queer ecologies sex, nature, politics, desire*, Bloomington, Ind. : Indiana University Press.

Hird, M., Roberts, C. (2011). Feminism theorises the nonhuman. *Feminist Theory, 12*(2), 109-117.

Honkanen, K. (2007). Aion, kronos and kairos: On Judith Butler's temporality. *Journal of Queer Studies in Finland, 1*, 3-13.

Hundertwasser, F., Restany, P. (1978). *Hundertwasser*. New York: Ballantine Books.

Illich, I., Brown, J. (2013). *Beyond economics and ecology: The radical thought of ivan illich* New York : Marion Boyars Publishers Ltd

Illich, I. (1982). *Gender*. New York: Pantheon Books.

Illich, I. (1973). *Tools for conviviality*. New York: Harper & Row.

IPCC. (2014): *Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.)]. Geneva, Switzerland: IPCC.

IPCC. (2014): *Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Edenhofer, O., R. Pichs-Madruga, Y. Sokona, E. Farahani, S. Kadner, K. Seyboth, A. Adler, I. Baum, S. Brunner, P. Eickemeier, B. Kriemann, J. Svolainen, S. Schlomer, C. von Stechow, T. Zwickel and J.C. Minx (eds.)]. Cambridge, United Kingdom: Cambridge University Press.

IPCC. (2013): *Climate Change 2013: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fifth Assessment Report of the*

Intergovernmental Panel on Climate Change [Field, C.B., V.R. Barros, D.J. Dokken, K.J. Mach, M.D. Mastrandrea,T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea, and L.L. White (eds.)]. Cambridge, United Kingdom: Cambridge University Press.

IPCC. (2013): *Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Assessment Report of the Intergovernmental Panel on Climate Change* [Stocker, T.F., D. Qin, G.-K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)]. Cambridge, United Kingdom: Cambridge University Press.

IPCC. (2007) *Climate change 2007: Synthesis Report. Contributions of Working Groups I, II, and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* [Core Writing Team, Metz, B., Davidson, O., Bosch, P., Dave, R., Meyer, L. (eds.)]. Cambridge: Cambridge University Press.

Jonas, H. (1984). *The imperative of responsibility : In search of an ethics for the technological age*. Chicago: University of Chicago Press.

Kallis, G., Kerschner, C., Martinez-Alier, J., The Economics of Degrowth,. (2012). The economics of degrowth. *Ecological Economics, 84*, 172-180.

Kennedy, J. F. September 12th 1962 "Rice Stadium Moon Speech," http://er.jsc.nasa.gov/seh/ricetalk.htm, retrieved on May 10th 2015.

Latouche, S. (2009). *Farewell to growth*. Cambridge; Malden, MA: Polity.

Latouche, S. (1993). *In the wake of the affluent society : An exploration of post-development*. London; Atlantic Highlands, N.J.: Zed Books.

Latour, B. (2004). *Politics of nature : How to bring the sciences into democracy*. Cambridge, Mass.: Harvard University Press.

Latour, B. (1993). *We have never been modern*. Cambridge, Mass.: Harvard University Press.

Leopold, A. (1992). *The River of the Mother of God: and other Essays by Aldo Leopold*. University of Wisconsin Press.

Leopold, A., Schwartz, C. W. (1966). *A sand county almanac. with other essays on conservation from round river.* New York: Oxford University Press.

Lepesant, M. (2013). *Politique(s) de la décroissance propositions pour penser et faire la transition*. Paris (30 rue Amelot, 75011): Utopia.

Lipscomb, M. (2011). Adorno's historical and temporal consciousness: Towards a critical theoretical environmental imagination. In A. Biro (Ed.), *Critical ecologies : The frankfurt school and contemporary environmental crises*. Toronto: University of Toronto Press.

Lukacs, M. (2012). World's biggest geoengineering experiment 'violates' UN rules. *The Guardian*, *15*.

Luke, T. W. (2002). Deep ecology: Living as if nature mattered: Devall and sessions on defending the earth. *Organization & Environment, 15*(2), 178-186.

McCallum, E. L., Tuhkanen, M. (2011). Becoming Unbecoming: Untimely Meditations. In: McCallum, E. L., Tuhkanen, M. (Eds.) *Queer times, queer becomings*. Albany : State University of New York Press.

Meadows, D. H., & Club of Rome. (1972). *The Limits to growth: A report for the Club of Rome's project on the predicament of mankind*. New York: Universe Books.

Meillassoux, Q. (2008). *After finitude : An essay on the necessity of contingency*. New York: Continuum.

Mitchell, T. (2011). *Carbon democracy : Political power in the age of oil*. London; New York: Verso.

Morrow, O., Brault, C. (2015). More-than-capitalist landscapes of communist becoming. *Rethinking Marxism, 27*(3), 371-374.

Morton, T. (2013). *Hyperobjects : Philosophy and ecology after the end of the world*

Morton, T. (2010). *The ecological thought*. Boston: Harvard University Press.

Mouvement Utopia. (2012). *Manifeste utopia,* Paris: Editions Utopia.

Muñoz, J. E. (2009). *Cruising utopia: the then and there of queer futurity*. New York: NYU Press.

Næss, A., Drengson, Alan R., Devall, B. (2008). *Ecology of wisdom: writings by Arne Naess*. Berkeley, CA: Counterpoint.

Næss, A. Drengson, Alan R. (2005). *The selected works of Arne Naess*. Dordrecht : Springer.

Nietzsche, F. W., Del Caro, A., Pippin, R. B. (2006). *Thus spoke Zarathustra : A book for all and none*. Cambridge; New York: Cambrige University Press.

Nietzsche, F. W., Ridley, A., & Norman, J. (2005). *Nietzsche: The Anti-Christ, Ecce Homo, Twilight of the Idols: And Other Writings*. Cambridge University Press.

Nietzsche, F., Duvoy, L., & Serreau, M. (2003). *Fragments posthumes sur l'éternel retour, 1880-1888.* Paris: Éd. Allia.

Nietzsche, F. W., Faber, M. (1998). Beyond good and evil prelude to a philosophy of the future.

Nietzsche, F. W., Ansell-Pearson, K., Diethe, C. (1994). *On the genealogy of morality*. New York: Cambridge University Press.

Nietzsche, F. W., Kaufmann, W.A. (1974). *The gay science : With a prelude in rhymes and an appendix of songs*. New York: Vintage Books.

Nietzsche, F. W., Kaufmann, W. A., Hollingdale, R.J. (1967). *The will to power.* New York: Random House.

Nietzsche, F. W. (Autumn 1881). Posthumous Notes (11 [157]) (my translation). From "Nietzsche Source: Digital Critical Edition," available at http://www.nietzschesource.org/#eKGWB/NF-1881,11[157]

Nietzsche, F. W. (Autumn 1881). Posthumous Notes (11 [148]) (my translation). From "Nietzsche Source: Digital Critical Edition," available at http://www.nietzschesource.org/#eKGWB/NF-1881,11[148]

Parkes, G. (2005). Nietzsche's environmental philosophy. *Environmental Ethics, 27*(1), 77-91.

Pasolini, P. (1964). *Poesia in forma di rosa*, Garzanti.

Pina Bausch (2006), *Vollmond*, filmed by Wim Wenders for Arte channel, http://www.arte.tv/guide/fr/042460-000/pina-bausch-vollmond, retrieved June 2015.

Pina. Bausch, Pina., Wenders, Wim., Tanztheater (Wuppertal, Germany), Artificial Eye (Firm), HanWay (Firm), Neue Road Movies (Firm), (Director). (2011).[Video/DVD] [London]: Artificial Eye.

Plumwood, V. (1993). *Feminism and the mastery of nature*. London; New York: Routledge.

Rahnema, M., & Bawtree, V. (1997). *The post-development reader*. Zed Books.

Ray Brassier, *Nihil Unbound: Enlightenment and Extinction*, Basingstoke: Palgrave 2007

Reed, P., & Rothenberg, D. (1993). *Wisdom in the open air: The Norwegian roots of deep ecology*. Minneapolis: University of Minnesota Press.

Robinson, K. S. (2012) *2312*. New York : Orbit

Sagan, D. (2013). *Cosmic apprentice : Dispatches from the edges of science*. Minneapolis: University of Minnesota Press.

Salomé, L. (2004). Nietzsche, trans. *S. Mandel* Redding Ridge, CT: Black Swan Books

Schneider, F., Martinez-Alier, J., Kallis, G. (2011). Sustainable degrowth. *Journal of Industrial Ecology, 15*(5), 654-656.

Sheldon, R. (2015). Form / Matter / Chora: Object-Oriented Ontology and Feminist New Materialism In: Grusin, R (Ed.), *The Nonhuman Turn*. Minneapolis: University of Minnesota Press.

Smith, J. E. (1969). Time, times, and the 'Right time'; chronos and kairos. *The Monist, 53*(1), 1-13.

Stengers, I., (2010). "Including Nonhumans in Political Theory: Opening Pandora's Box?" In: Whatmore, S. J. (Ed.). *Political Matter: Technoscience, Democracy, and Public Life* (pp. 89-118). University of Minnesota Press.

Stengers, I. (2009). *Au temps des catastrophes résister à la barbarie qui vient*. Paris: La Découverte : Les Empêcheurs de penser en rond.

Stengers, I. (2005). The cosmopolitical proposal. In: Latour, B., & Weibel, P. *Making things public: Atmospheres of democracy*. Boston: MIT Press.

Stiegler, B. (2010). *Ce qui fait que la vie vaut la peine d'être vécue : De la pharmacologie*. Paris: Flammarion.

Thoreau, H. D., Rossi, W. J. (2008). *Walden, civil disobedience, and other writings : Authoritative texts, journal, reviews and posthumous assessments, criticism*. New York: W.W. Norton.

Turner, G., & CSIRO (Australia). Sustainable Ecosystems. (2008). *A comparison of the limits to growth with thirty years of reality*. Canberra: CSIRO Sustainable Ecosystems.

UN WomenWatch, "Women, Gender Equality and Climate Change," retrieved from http://www.un.org/womenwatch/feature/climate_change/on 02/12/15.

Warren, K. (2015). "Feminist Environmental Philosophy." In: Stanford Encyclopedia of Philosophy, http://plato.stanford.edu/ retrieved June 16th, 2015.

World Commission on Environment and Development. (1987). Our common future. Oxford: Oxford University Press.

Zerzan, J. (2008). Twilight of the machines. Port Townsend, WA: Feral House. Žižek, S.,. (2010). *Living in the end times*. London; New York: Verso.