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Towards A Liberating Eschatology

**Imagining The End Of The World To
Survive The “Horrors Of The Anthropocene”**

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ABSTRACT

First examining how capitalist realism and capitalist sorcery are suppressing the ability to think new futures through the manufacturing of what Pignarre and Stengers call infernal alternatives and how the fear of such alternatives limit the influence of tools such as the IPCC reports and the media in acknowledging the need for capitalism to be challenged in regards of climate change, this essay is an attempt to help 'breaking the spell', the common thought that 'it is easier to imagine the end of the world than the end of capitalism'.

The narrative of the Anthropocene and the cult-like belief in progress both rooted in the myth of human exceptionalism, are shown to play a determining role in denying the role of capitalism in climate change. In this context, acknowledging Earth as a living organism – Gaia – is perceived as quasi-heretic and therefore, is systematically rejected.

Here I argue that Isabelle Stengers' concept of 'the intrusion of Gaia' presenting Gaia (Earth) as a form of transcendence to be reckon with, should be taken seriously and be seen as posing the most real infernal alternative of all: if we fail to find a way to live in a more symbiotic way with our environment, humanity will not survive the horrors of the Anthropocene.

Finally, I suggest that to avoid the end of The World, 'we', the moderns, need to accept, and imagine, the end of our world based on the old myth of human exceptionalism which has led us to alienate a large part of humanity. Only in doing so, will we be able to create a new people with the 'belief in the world' needed to acknowledge the 'intrusion of Gaia' and able to generate events that elude capitalist sorcery's control to survive the horrors of the Anthropocene.

KEYWORDS: Anthropocene, Capitalist Realism, Capitalist Sorcery, Terrans, Gaia, End of the World, Human Exceptionalism, Future, Infernal alternatives, Imagination, Climate Change.

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INTRODUCTION

The Future is dead! Long live the Future.

In George Romero's 2005 film *Land of the Dead*, even long after the dead have taken over the world, class struggles and capitalism are still very much alive: Dennis Hopper's character, Kaufman, with his 'board of directors' and 'membership committee', owns Fiddler's Green tower, a safe, upper-class high-rise condo building and imposes his law on the city around it.^{1,2} Military personnel protect the building from the zombies but are also seen arresting people who hold unconventional views or who commit crime. Some, outside the building, work to provide the necessary resources to maintain the luxurious way of life for Kaufman's property by scavenging around the city, fueled by the hope of, one day, being able to afford a place in Fiddler's Green tower. Most people in the city, however, are merely surviving and struggling even to find proper medication for their sick. After one of his henchmen goes rogue and becomes a threat to him, Kaufman decides to leave the place with only a selected few - the richer ones, the others being replaced by others as Kaufman puts it - to another site which has been chosen from a number of alternatives and prepared with the necessary support personnel for their families. When the morality of this choice is questioned by one of his associates, Kaufman says:

It was my ingenuity that took an old world and made it into something new. I put up the fences to make it safe. I hired the soldiers and paid for their training. I kept the people off the streets by giving them games and vices. Which cost me money. But I spent it because the responsibility is mine. Now, do you understand the meaning of the word responsibility? We have to do what we have to do.

Kaufman, while having no mandate for this, feels like the one in charge. He feels responsible for his 'flock', to which he provides shelter, protection but also 'games

¹ *Land of the Dead* is the fourth instance in Romero's exploration of 'zombie apocalypse' that started in 1968 with *Night of the Living Dead*.

² Kaufman is the German word for merchant.

and vices' to keep it busy enough to stay civilized. In this fashion, Kaufman is part of what Stengers (2015) calls our 'guardians' – the States, Scientists and industrialists who feel like shepherds themselves responsible for us, their flock, too uneducated to understand how difficult their task is and not to be trusted to act in a responsible way. But eventually, as I will show throughout this essay, our guardians are only taking care of themselves and are unable to react properly to the dramatic changes we are facing. Like Kaufman, when facing the end of the world, they will retreat in their fortress built on the work of those they are claiming to protect. In the end, "those who are responsible for us are not pastors because they are not guiding us toward anything at all" (Stengers, 2015 p118).

Land of the Dead is not only a story about haves and have-nots, with some living in a luxurious safe place while others are left in precarious conditions, but a depiction of how a privileged class depends on the systemic exploitation of a lower class to maintain the way of life they believe they are entitled to, and how such a lower class is seen as expendable if needs be. Everything has changed but nothing has changed. Business as usual. The film is a nihilistic criticism of society embracing the idea that even when facing a global catastrophe, capitalism and class system will still prevail over any kind of global collaborative system.

Land of the Dead is an almost literal illustration of the idea that "it is easier to imagine the end of the world than the end of capitalism", sometimes attributed to Fredric Jameson, sometimes to Slavoj Zizek. Mark Fisher attributes it to both and uses as his introductory chapter title in *Capitalist Realism* to illustrate his theory: that capitalism has become the "only viable political and economic system, but also that it is now impossible even to imagine a coherent alternative to it" (Fisher, 2009, p.2). This is not to say that there is no idea of a non-capitalist society nor that this concept is particularly new. Jameson's conception of postmodernism, theorized while capitalism still had to compete against socialist alternatives - which have arguably been defeated by the rise of Thatcherism and later with the collapse of the Soviet Union, already was a 'cultural logic of late capitalism', characterised by the

slow cancellation of the future through repetition, pastiche and revival (Fisher, 2009). However, if Fisher prefers the term 'capitalist realism' to Jameson's postmodernism, it is because when Jameson theorized his postmodernism in the 1980s,

there were still, in name at least, political alternative to capitalism. What we are dealing with now, however, is a deeper, far more pervasive, sense of exhaustion, of cultural and political sterility (2009, p7)

For Fisher we have entered a period during which capitalism does not have any political alternative anymore.

Moreover, criticisms of capitalism are often present in cultural products and yet do not appear to undermine its hegemony, and on the contrary, such representations appear to act as a sort of catharsis in performing our discontent (Ibid.).

So long as we believe (in our hearts) that capitalism is bad, we are free to continue to participate in capitalist exchange (Fisher, 2009, p.13).

This ironic stance is also performed through a more subtle mechanism of representation: more often than not - and since the modern era - stories perceived as holding anti-capitalist views are depicting an act of resistance, not against capitalism as an idea, but against an 'evil capitalist'.³ The moral being that issues in capitalism are not embedded in the ideology but instead come from 'bad individuals'.⁴ This is not to say that critiques of capitalism are useless or unjustified, simply, as Pignarre and Stengers put it "if capitalism were to be put in danger by denunciation, it would have collapsed a long time ago" (2011, p.11). Capitalism, or the world economy as we know it, has developed a strong resistance to change.

Hence, whenever the criticism of capitalism, or its mechanisms, happens to be more frontal, it rarely suggests any alternative, embracing instead the nihilistic idea that we need to destroy the system as a whole, enacting, at least symbolically,

³ Kaufman is of course a good example, but this also particularly true in Disney movies, like *Big Hero 6* (2014) or *Wreck-it Ralph* (2012) where greed, monopolies and big corporate misbehavior are denounced but not as a component of capitalist economy rather as the action of power-hungry individuals. The system in itself is never questioned, only what certain individuals make of it.

⁴ On this see Orwell's criticism of Charles Dickens portrayal as a 'proletarian writer' by other critics in Orwell and Packer (2009).

the end of the world. David Fincher's 1999 *Fight Club* which ends with the apocalyptic vision of financial buildings blowing up being an example of such narratives. Here, there are no 'evil capitalists' to fight, only an oppressive system which can only be opposed by destruction. One can only imagine the chaos that will follow such events.

Fisher (2009) also argues that this phenomenon has accelerated and worsened, and what was mostly speculative - and thus preventable - when Jameson problematised this cultural logic, has become "aggravated and chronic" (p.7). Capitalism is now perceived as natural and, consequently, inevitable (Fisher, 2009). Future without capitalism has thus indeed apparently been canceled since any alternative now appears, by opposition, 'unnatural'.

In the case of *Fight Club*, while the idea of blowing up bank buildings can appeal to the most radical anti-capitalists, it is unlikely to open a debate about the rationality of such alternatives to capitalism, resistance thus appearing unrealistic, even childish. If anything *Fight Club's* nihilism admits this incapacity to imagine a new world - and sets terrorist violence as the only way to escape capitalism hold - and consequently reinforces Capitalist Realism, that there is no coherent alternative to it which would be sustainable and would not create chaos. The idea is that even if sometimes unjust capitalism is the only way to maintain the modern (western) way of life. This is sadly true for almost any other criticism of capitalism: ask for better legislation to protect workers and you will be depicted as causing factories' closures and offshoring, which would be much worse for workers.

This is part of what Isabelle Stengers and Philippe Pignarre coin as 'infernal alternatives': on a political and social level, every time capitalism is put into question, we are shown how alternatives solution would apparently be even worse (Pignarre and Stengers, 2011). Whenever and however we put the emphasis on a need or a desire for change, to face climate change, stop exploitation of the global South or end massive global inequalities, we are told – or even taught – by our 'guardians', that we should stop dreaming. Politicians then adopt a pedagogical

stance to expose the only solution: submitting to the constraints of the market because doing anything else would be irresponsible and would make things worse (ibid.). They understand our griefs, they do not disagree with us on the fact that capitalism may not solve all the world's problems, but they are soberly realistic, and we are merely radical dreamers.

The power of such 'infernal alternatives', argue Stengers and Pignarre, have led us to "become used to considering the meritocratic ideal of 'equality of opportunities' as an end in itself" (2011, p.24). The idea that capitalism provides the means for everyone to thrive and that, if we fail to achieve our goals, it is surely not because of class or race struggles, disabilities or cultural and political reasons, but only because we did not make the most of our opportunities, or because we still have to learn how things work. In other words, the system as it is, albeit flawed, is the best, in a utilitarian sense, for everyone. We can see how, in this situation, it is impossible to formulate an alternative that would not only resolve current issues, but also would not have catastrophic consequences like... the end of the world.

Pignarre and Stengers (2011) compare this to a form of sorcery without sorcerers, we find ourselves bewitched, paralyzed and unable to do anything other than what we 'have to'. Infernal alternatives have become the most powerful tool for capitalist realists and our 'guardians' to make capitalism denunciation-proof and to hinder hope in the possibility of a change even reaching a point in which politics can be summarized to a need to pedagogically explain to people why there is no alternative to the current situation, how difficult it may seem.⁵ As Pignarre and Stengers explain,

⁵ See for example Boris Johnson's 'there is no alternative' interview for ITV on October 2021 in which the Prime Minister, while assuring that he understands how a lot of people are suffering at the moment, justifies policies that risk to fuel inflation and the rise of interests rate only because the aim of the government is to push people to take the jobs nobody wants by promoting higher wages instead of supporting the welfare system in a time of crisis post pandemic. He said "I would rather see people being paid more through good jobs and better paid jobs than... taking more money in tax from everyone and pushing it through the welfare system to subsidise low pay and it would be much better if pay increased" (ITV News, 2021) totally ignoring why people may find themselves in need of universal credit. The choice here is between risking increasing inflation or the 'infernal alternative' supporting 'lazy' people through the welfare system which would not create an incentive to take difficult jobs and thus would be bad for the economy and the position of the UK on the global market. Boris Johnson clearly tries to appeal to the market more than the public while at the same time taking the 'pedagogical stance' described by Pignarre and Stengers (2011).

They will have to explain pedagogically to voters the constraints to which 'we' must all submit owing to 'globalisation'. They will have to explain that nothing can be done against these constraints, because trying to oppose them would make the situation even worse. The unavoidable must therefore be accepted: adapt to the perpetual economic war that has become the only horizon. (p.24-25)

Donna Haraway has, in this respect, observed two different responses to the desire to imagine a different future. The first one is a kind of apathy towards the issues of capitalism - or as she puts it, the "horrors of the Anthropocene and the Capitalocene": things will get better thanks to the providential help of either technology or God - depending on one's beliefs (Haraway, 2016). A 'deus ex machina' scenario which Haraway qualifies as silly, but which could also prove useful: technology, after all, plays an important role in the construction of the future of both human and non-human kinds.

The second one, more concerning, is a 'bitter cynicism', a sense that it is too late. According to Haraway, even academics, "critical cultural theorists or political progressists", working specifically on imagining better worlds, appear to not trust the possibilities of a better future and may adopt

[a] game over attitude that can and does discourage others, including students, [which] is facilitated by various kinds of futurisms. One kind seems to imagine that only if things work do they matter [another kind is that] sometimes scientists and others who think, read, study, agitate and care know too much, and it is too heavy. Or, at least we think we know enough to the conclusion [...] that the apocalypse is really nigh (Haraway, 2016, p.3-4).

The November 1999 anti-capitalist protest in Seattle gave hope to Stengers and Pignarre that evidence of what poses as the only future was falling into the past. Since then, there have been many other anti-capitalist protests - from the Occupy Movement following the 2008 Subprime crisis to last year Black Lives Matter movement - reclaiming new futures, new paradigms. The last decade has actually

seen a rise in protests.⁶ But those protests are invariably met with ‘infernal alternatives’, and governments are actively fighting back, forcing us into a seemingly endless loop of ‘infernal alternatives’. Following the ‘Gilets Jaunes’ protests which have seen many incidents between protesters and police forces, the French government is considering adopting a ‘global security bill’, which could ban journalists from reporting police brutality and is trying to silence people who are peacefully protesting this bill (Amnesty International, 2021). At the time of writing, protests in the UK are asking to ‘kill’ the new Police, Crime, Sentencing and Courts bill which introduces major changes in England and Wales justice system, which includes increasing police powers against protests. This part of the bill is a response to Extinction Rebellion - a ‘do it together movement’ - and its disruptive but peaceful protesting methods in 2019 at the demand of the Metropolitan Police
Cressida Dick:

Ever since the first large-scale Extinction Rebellion protest in April last year I have been talking publicly and with the government about the potential for change to powers and to legislation that would enable the police to deal better with protests in general given that the act that we work to - the Public Order Act - is now very old, [dating to] 1986. [...] But specifically to deal with protests where people are not primarily violent or seriously disorderly but, as in this instance, had an avowed intent to bring policing to its knees and the city to a halt and were prepared to use the methods we all know they did to do that. (Home Office, 2021)

Once again, those new protests are generating violence - in many cases triggered by police forces - which are inevitably condemned (Blackall, 2021) and are likely to reinforce the narrative of the need for ‘more policing’. Protests are triggering new bills for more policing, which are triggering anger and new protests, which are triggering new bills for more policing... The loop is ‘infernal’. And it seems there is no alternative.

This essay is an attempt to break this loop, to outline the liberating role imagining the end of the world could play in opposing capitalist realism by safely exploring

⁶ at least in the UK. See Bailey, 2020.

new eschatologies that challenge infernal alternatives and help developing tools and beliefs in the world – as well as a people – to survive the ‘horrors of Anthropocene’. It develops in three main chapters.

The first one examines how capitalist realism and capitalist sorcery are suppressing the possibility to think new futures through the manufacturing of infernal alternatives and how the fear of such alternatives limit the influence of tools such as the IPCC reports or the media in acknowledging the need for capitalism to be challenged.

The second chapter defines the role the myth of human exceptionalism plays in modern society and how, as Deleuze says, the ‘world has been taken from us’ to the point that even when we try to re-connect with the world we ironically rely on creating new technologies and interface to do so. I also point out how technology has reached a God-like posture in modern society, Science being the moderns’ religion, whereas the idea of acknowledging Earth as a living organism is perceived as heretic and dangerous and therefore, systematically rejected.

Finally, by questioning what is ‘The End of the World’ (the end of which world and for whom?) the third chapter, attempts to analyze the risk of acknowledging what Stengers calls the ‘intrusion of Gaia’ and, drawing on Danowski and Viveiros de Castro’s analysis of Latour’s concept of humans and terrans (2017), outlines the building of a ‘new people’, a ‘we’ that escape capitalist sorcery and thus would be able to imagine new futures.

A SORCERY WITHOUT SORCERER

“The truth of the world is that it is chaotic.
The truth is that it is not the Jewish Banking Conspiracy,
or the 12 foot reptiloids from another dimension that is in control.
The truth is far more frightening -
Nobody is in control.
The world is rudderless.”

– **Alan Moore, the mindscape of Alan Moore**

Opening our eyes to the truth

The need to imagine a new world seems more and more urgent. Ecologist Eugene Crutzen and atmospheric chemist Paul Stoermer famously proposed that human effects on the environment have reached such levels that the naming of a new geological period, the ‘Anthropocene’, was needed and appropriate to describe them (2000). And the latest news about the Anthropocene is bad: if we, humans, do not react and change our behaviour, the future is bleak. It does not seem controversial to say that the end of the world is nigh. However, the idea that our, to paraphrase Jason Moore, ‘peculiar and absurd kind of civilization, capitalism’, is at the root of the upcoming catastrophe still appears difficult to acknowledge. Indeed, as we have seen in the introduction of this essay, it is actually popular – and accepted – to claim that “it is easier to imagine the end of the world than the end of capitalism”. Fredric Jameson claims that this result from a lack of imagination:

It seems to be easier for us today to imagine the thoroughgoing deterioration of the earth and of nature than the breakdown of late capitalism, perhaps that is due to some weakness of imagination (1994, xii)

In the same fashion, Mark Fisher (2009), coined the term ‘reflexive impotence’, which he attributes particularly to British students to explain their political disengagement, as stemming from the profound knowledge that despite being aware that things are bad, nothing can be done to change the situation. This leads student to “an inability to do anything else except pursue pleasure” (ibid. p.22)

which Fisher correlate with a form a depression. Certain that there is nothing that can be done, students have reach a point where they do not care anymore. This 'there is nothing can be done to change this' attitude, is one of the reasons capitalism appears 'denunciation-proof' as described by Pignarre and Stengers (2011) and Fisher (2009), thus contributing to Capitalist Realism by creating the feeling that there is no alternative, we just have to follow the rules and turn to things that will bring us pleasure instead of wasting energy in useless thinking. Capitalism Realism could be considered similar to the "hold" that Pignarre and Stengers (ibid.) ascribe to capitalism, to its "sorcery", that hinders the thought and thus the imagination. When we start thinking that there is nothing we can do, or more accurately when we understand that capitalism resists any change, the hold has started and from then we can only face infernal alternatives. "We know it is not perfect, but if we do not follow the rules, this could be worse". However, reflexive impotence is also a self-fulfilling prophecy: thinking we cannot do anything to initiate change inhibits us from even trying to do so and thus, change become impossible. This, adds Fisher, takes its toll on people's mental health, which impedes even more their ability to act and think.

When capitalism becomes our only reality, the spell of capitalist sorcery is onto us. The only chance for change to occur is thus to wait for it to happen providentially, a liberation, a pair of revealing glass, or the birth of a hero who could lead us out of the hold. A narrative enforced in many stories.

Early in John Carpenter's 1988 film *They Live*, before Nada, the main character, uncovers the alien conspiracy, we are shown that Nada's friend and coworker, Franck, although he has no idea of such alien conspiracy, sees clearly into how the system works and 'willingly' participates. At this point, Nada still buys the idea of America's so-called meritocracy while Franck is more pragmatic, almost cynical.⁷ He says:

The whole deal is like some kind of crazy game. They put you at the starting line.

And the name of the game is to make it through life. Only, everyone's out for

⁷ "I believe in america. I follow the rules" says Nada despite having being unemployed and living in the streets. He appears naive, almost 'bewitched'.

themselves and looking to do you in at the same time. OK, man here we are. You do what you can, but remember, I'm going to do my best to blow your ass away. So how are you going to make it? (scene 18)

This scene looks like an early description of Deleuze's corporation which as replaced the factory in control society:

The factory constituted individuals as a single body to the double advantage of the boss who surveyed each element within the mass and the unions who mobilized a mass resistance; but the corporation constantly presents the brashest rivalry as a healthy form of emulation, an excellent motivational force that opposes individuals against one another and runs through each, dividing each within. (Deleuze, 1990)

By Carpenter's own admission, *They Live* is a very unapologetic and unsubtle critique of the Reagan era – and the rise of neoliberalism – during which the film was shot, a way to give 'the finger to Reagan when nobody would' says the director (in Clark, 2013). It is amusing that Carpenter reported that the only opposition he encountered to representing elites as alien was about their motive: that they were only seeking wealth looked unsubstantial, the production wanted the aliens to be 'cannibals or something' (Clark, 2013 and Boulenger, 2001).⁸ That the people at the head of neoliberal corporation may have been motivated by greed looked less realistic than them being cannibals – or even alien.

Furthermore, *They Live* is but one example of popular culture critical of neoliberalism and capitalism. For instance, the early 1980s have seen the birth of the Cyberpunk genre in which big corporations replace government, not to mention the musical Punk scene created in the late 1970s or the many social movements of the late twentieth century.⁹ All this suggests that the 'people' are conscious of the

⁸"There are 'free-entreprisers', the earth is just another developing planet. Their third world." says one member of the resistance describing the aliens.

⁹ There are many examples of cultural products depicting and targeting neoliberalism and capitalism, but Sidney Lumet's 1976 satiric film *Network*, of which I will not provide the full analysis it deserves here, comes to mind first. Especially the famous Arthur Jensen's – the network CEO played by Ned Beatty – monologue. "You are an old man who thinks in terms of nations and peoples. There are no nations. There are no peoples.[...]It is the international system of currency which determines the totality of life on this planet. That is the natural order of things today. That is the atomic and subatomic and galactic structure of things today!". The whole monologue would be too long to quote here. Suffice to say that Jensen

problems and thus do not need any kind of eye-opening event. What is needed instead is the hope that our actions can generate changes.

Infernal Alternatives: Manufacturing Denial

In *They Live*, Franck is a survivor, he knows the rules and he plays the game not because he endorses it or believe in it, but because he knows he has no choice, all he has is an 'infernal alternative'. Either he does what he does not want to do or things will be worse. There is nothing to do, no hope for change so Franck is better off ignoring any other alternatives. Capitalism's sorcery thus appears to not stem from a lack of imagination, but from the withdrawal of our ability to think via the systemic exploitation of denial: we know things are not working but we prefer to not think about it and prefer to rely on authority, which in turn has no interest in change.

However, *They Live* also brought us one of the most epic fight scenes ever seen on screen. After Nada has discovered the alien world – and shot people in a bank, kidnapped a woman and killed a couple of cops – he is running and hiding from the police. Frank meets him in a back alley and is intending, as a last friendly gesture, to give Nada a week's pay. But Nada refuses the money, he wants Frank to wear the sunglasses which reveal the alien conspiracy. For many, the following, almost six minute long, fight scene is exaggerated and useless, for John Carpenter, being a well-known fan of professional wrestling, it was just a dream come true to direct such a fight scene with pro wrestler Rodie Piper. There is however a possible alternative reading of this scene: this fight shows the resistance to facing inconvenient truths, but also questions the right to impose those truths on other.

Nada, the character played by Piper, has found sunglasses that reveal subliminal messages behind every media – TV, magazine, radio, advertisements. These messages encourage people to "obey", "consume" and "conform". Under the revealing glasses, bank notes bear the message "this is your god". This new way of viewing the world also reveals that most rich people, media anchors and politicians are in fact from an alien species. Cops, while most are human, are

strongly believes that this world he is describing is the solution for peace and happiness and thus strongly support what he calls the 'primal forces of nature', the market.

actively helping the aliens without knowing it: when tracking down resistance, they indeed believe that they simply are fighting 'commies'. Some humans also voluntarily join the aliens, attracted by the promise of wealth and the feeling that that is their best choice.¹⁰ Instead of over-thinking a system they cannot change, they may as well profit from it. They encourage 'reflexive impotence'. Pignarre and Stengers (2011) may call them 'petites mains' – or minions.

Minions are those who are not only part of the system – as we all are – but help to enforce, even to construct, it. Minions are very peculiar victims of the hold of capitalist sorcery (ibid.), embracing the hold, almost struck by Stockholm syndrome.

Certainly, those who we are now calling minions are subjected - everyone who is 'inside' is subjected, even bosses - but one must also say that minions, at all levels, from the boss to the secretary, work on the construction of this inside, that they do not limit themselves to applying or following rules, but take pains to apply the rules with loyalty, that is to say, with a certain inventiveness. (ibid. p32)

Minions act as the immune system of capitalism, they are the white blood cells that devour any threat without capitalism even noticing. The whole (western) world is under the hold of an alien capitalism, manipulating humans to do its bidding through minions, those who are not only part of the system but also watch over it, enforce it and in some ways worship it. Minions of capitalism even learn to distrust those who are suggesting that there are other ways and relentlessly oppose infernal alternative to such suggestions. Here lies what Stengers (2015) refers as stupidity. Stupidity is not a 'psychological weakness' but instead a state of enthrallment which generates a sense of duty.

Stupidity does not here refer to stupor, to paralysis, or to impotence. Stupidity is active, it feeds on its effects, on the manner in which it dismembers a concrete situation, in which it destroys the capacity for thinking and imagining of those who envisaged ways of doing things differently, leaving them stunned, a stupid

¹⁰ "Ain't no countries anymore. No good guys. They're running the whole show. They own everything, the whole planet. They can do whatever they want. So why no have it good for a change. They'll let us have it good if we help them. They'll leave us alone... let's make some money. You could have a taste of the good life too. I know you want it, hell everybody does. [...] we sell out everyday. Might as well be on the winning team." says one of the human who chose to join the aliens. (scene 108).

and nasty argument may well leave you stunned with the mute perplexity of a “he may be right but all the same,” or enraged, which confirms it in turn: you see, with these kinds of people, there’s always violence. (Ibid. p119)

Minions are spellbound and actively participate in the hold of capitalist sorcery and the impeding of thought, eventually making reflexive impotence and denial the best coping mechanisms for those who originally believe in the need – and possibility – for change in order to stay sane when facing the stupidity of infernal alternatives.

After discovering the glasses, Nada, the ‘hero of the story’, naturally wants his friend, Franck, to put them on: like a proper hero, he wants to open his friend’s eyes to the truth behind the lie of meritocracy. But when Franck refuses, Nada tries to force him, convinced that this is the only right thing to do and then the famous fight starts. In the middle of the epic brawl, Franck, taking advantage over Nada, says “I don’t want to be in”. Franck refuses to put the glasses on not because he does not want to know, but because, deep inside, he already knows that what he would see is a truth which is better off ignored.¹¹ What is seen cannot be unseen, and is thus more difficult to ignore. Franck is not naive, nor clueless. Franck is in denial.¹²

In his seminal study, Stanley Cohen defines denial as “The need to stay innocent of a trouble recognition” (2001, p25). Drawing on psychoanalyst John Steiner’s work, Cohen (*ibid.*, p34) then describes ‘two modes of denial’: First, ‘turning a blind eye’, which is the art of knowing without knowing, facts are voluntarily maintained ‘out of sight’. Like Franck refusing to put the glasses on. This stems from a fear of the truth, and is defined by Cohen as a ‘social motion’ to avoid knowledge that would make living difficult. We know it happens – or that it could happen – but it would be useless and crippling to focus on it. We cannot think about it all the time and it is better if we can ignore it altogether.

The second mode described by Cohen is the ‘retreat from truth to omnipotence’, closer to plain lie, denial is here used to avoid guilt by perpetrators.

¹¹ And indeed, those knowledge will lead to his death in the third act of the film.

¹² see for instance Neyrat, 2006.

In this form of denial the subject shows contempt for the evident truth or tends to blame others and thus denies guilt often posing as a victim of circumstances. As Cohen says

“This is surely the true voice in the ‘new barbarism’ of ethnic nationalist conflict, with its delusionary circuits of self-righteous omnipotence and self-vindication by blaming others.” (*ibid.*)

grimly reminding of very recent and ongoing events in the US in particular.¹³

Nevertheless, on a personal level, denial is first and foremost a coping mechanism against dysfunctional anxiety which often proves healthy for keeping moving on (Cohen, 2001 p278). When facing infernal alternatives against which there is nothing we can do, it is best to accept that, after all, “we have to”, and ignore the alternative or else it would become impossible for us to deal with our own contradictions. Consequently,

we now find these alternatives everywhere. To adapt, to 'reform' the welfare state has become an ardent obligation. Sacrifices are necessary, otherwise the financing of retirement will no longer be assured. Or social security payments will become a bottomless pit! Accepting has become an imperative. Europe has to accept GM foods, or it will lose its competitive edge in the global marketplace, and its researchers will disappear down the brain-drain! We must accept the need to keep illegal immigrants out by every means available - let's not be squeamish or there will be a social catastrophe, the collapse of our systems of social security, the rise of the extreme right! We could go on - everyone can add their own examples because the list is interminable. (Pignarre and Stengers, 2011 p24)

On a societal level, however, when it becomes collective, denial poses all sort of political and ethical difficulties (Cohen, 2001), and can lead to global catastrophes. For instance, when science denial intrudes in official policies the death toll can reach catastrophic levels as seen with the denial of the AIDS problem from several governments which cost thousands of lives (Cohen, 2001; Lewandowsky and Oberauer, 2021). Closer in time, former US president Donald Trump's policies – and his rhetoric largely based on the 'retreat from truth to

¹³ I would add that this mode can also be found in conspiracy theorists, after all what better way to deny an uncomfortable truth than to claim to know that the real truth is hidden?

omnipotence' mode of denial – not only exacerbated the Covid-19 pandemic but also impaired climate change mitigation (Tollefson, 2020).¹⁴ In such instances, it is easy to hope for some kind of technological devices like Nada's sunglasses which could help us see and show the unique, objective truth to those who refuse to acknowledge global issues such as Covid-19 or climate change. Unfortunately, such devices are unlikely to exist in the near future. Or ever. Furthermore one could argue that this also begs the question: is there some kind of truth that is being masked or screened off? I will let the question of hidden truth to political philosophers, or conspiracy theorists on social media. There are, however, denied truths that are not hidden – and even widely advertised. For instance well documented influence of capitalism on global climate change is constantly debated and denied by minions – fiercely defending capitalism and stubbornly creating infernal alternative, as we are going to see – even when facing the risk of nothing less than the disappearance of humanity and a large part of life on Earth. That unchecked capitalism is threatening the biota by generating climate change has been widely and unequivocally proved but it still remains impossible to reach a consensus on the actions to take to mitigate climate change since so many interests are vested by corporation and politicians – or even individuals – enmeshed in capitalist economy generating denial ranging from cynical critics in business magazines (Shellenberger, 2019) to full-blown conspiracy theories (Uscinski and Olivella, 2017) without even mentioning silly scientific theories to deny the role of human activities in climate change (Bairstow, 2017). All of which fighting to maintain the status quo and denying the need to limit our impact on the environment and posing as the protectors of 'our way of life'.

All of this, even in the presence of tools – largely created by our guardian – that should be unequivocally eye opening and which should help create a consensus to avoid the global catastrophes caused by unhealthy denial on a societal level. One of these tools is the Intergovernmental Panel on Climate Change, created in 1988 and

¹⁴ Donald Trump saying "I don't believe it" in reaction to a report by his own team stating that global warming was a threat to US economy, appears to be a perfect illustration of this mode of denial (see BBCNews, 2018).

counting nothing less than 195 countries members, which periodically publishes reports based on the work on thousands of scientists, on our knowledge on Climate Change that could be acting as a revealing pair of sunglasses on its drivers, impact and risk for the future. After all, if all we need is to 'open our eyes' to see what is hidden, such reports should be enough to reach a popular consensus and force politicians to stop delaying action. However, as we are going to see, the impact of such reports is undermined once again by the effect of long term denial, infernal alternatives and capitalist sorcery.

Code Red For Humanity.¹⁵

On 9 August 2021, the Intergovernmental Panel on Climate Change – now IPCC, the climate science body of the United Nations and the World Meteorological Organization – released its sixth report in which, for the first time, human activity is unequivocally described as the main cause for Climate Change. Greenhouse gases due to human activities account for 1.07°C of the 1.09°C total increase of Earth temperature, meaning that only 0.2°C comes from natural causes (Gergis et al, 2021).¹⁶ The warming is also said to have continually accelerated since the 1970s and is also to be affecting oceans too. These conclusions are alarming, however there appears to be still time to avoid some of the worst changes. The Conversation A news report by the authors of the IPCC report themselves in *The Conversation* concludes: “No physical or environmental impediments exist to hold warming to well below 2°C and limit it to around 1.5°C – the globally agreed goals of the Paris Agreement. Humanity, however, must choose to act.” (*ibid.*). Here, in a rather tedious call for action, it is Humanity as a whole that is framed as responsible as if everyone was equally responsible for Climate Change and the Anthropocene, as if all humans had equal responsibility. This is, as Moore points out:

the dominant Anthropocene presentation, the human species becomes a mighty, largely homogeneous, acting unit: the 'human enterprise'.(Could a more

¹⁵ 'Code red for humanity' is how the UN secretary general Antonio Guterres has described the last IPCC report. (see UN News, 2021)

¹⁶ see [ipcc.ch](https://www.ipcc.ch)(2021) for the full 3,900 pages report as well as the different version offered by the IPCC.

neoliberal turn of phrase be found?). Inequality, commodification, imperialism, patriarchy, racism and much more – all have been cleansed from ‘Humanity’, the Anthropocene’s point of departure. (Moore, 2017 p596-597)

As Moore (2013, 2016) argues, the ‘Anthropocene’ concept is better thought of as a useful metaphor, a communication tool to engage the conversation about the issues of greenhouse gas emission caused by ‘human activities’ and its impact on the planet and its ecosystem, but it does not help – nor ask – to think about social issues and naturalized inequalities within humanity (Moore, 2013). It is thus an ‘easy story to tell’ (ibid.) since it does not require us to think about which ‘human activities’ are causing Climate Change.

In other words, and to paraphrase Donna Haraway (2016) the idea of the Anthropocene hides the fact that this is not Humanity as a whole who decided to use nuclear power or fossil fuel, or to exploit resources without care. The Anthropocene narrative plays ‘a trick as old as modernity: the rich and powerful create problems for all of us, then tell us we’re all to blame.’ (Moore 2016 p.599).

Those narratives which avoid discussing explicitly unequivocal effects of capitalism over the climate, such as in the IPCC report, eventually only protect the interests of those whom Pignarre and Stengers refer to as ‘our guardians’ and leaves room to green capitalism lip service and other half-hearted measures. The term ‘Anthropocene’, in this way also contributes to the manufacturing of denial and the creation of infernal alternatives. Naming this era the Anthropocene indeed bears the underlying meaning that we are all, as a species, equally responsible and thus the true guilty can deny their responsibilities.

The motive force behind this epochal shift? In two words: coal and steam. The driving force behind coal and steam? Not class. Not capital. Not imperialism. Not even culture. But... you guessed it, the Anthropos. Humanity as an undifferentiated whole. (Moore, 2013)

Even worse, this idea of the Anthropocene may encourage a “Neo-Malthusian” approach to the issue of climate change: the problem being summarized as one of rising population sharing scarce resources (*ibid.*).¹⁷

In all fairness, it must be noted that we nevertheless find, scattered among this Behemoth of a document the IPCC report is, sufficient information to conclude that capitalism plays a major role in Climate Change: indeed the 3.900 pages long full report mentions combustion of ‘Fossil Fuels’ and land use from industrial activities clearly as the main cause for global warming and even mention economic activities.¹⁸ Here

The main human drivers of climate change are increases in the atmospheric concentrations of greenhouse gases and of aerosols from burning fossil fuels, land use and other sources. The greenhouse gases trap infrared radiation near the surface, warming the climate. Aerosols, like those produced naturally by volcanoes, on average cool the climate by increasing the reflection of sunlight. Multiple lines of evidence demonstrate that human drivers are the main cause of recent climate change. (on p825 of the full report (3-100) *FAQ 3.1: How do we Know Humans are Responsible for Climate Change?*)

and Here

There are two anthropogenic sources of CO₂: fossil emissions and net emissions (including removals) resulting from land use change and land management [...] Fossil CO₂ emissions include the combustion of the fossil fuels coal, oil and gas covering all sectors of the economy (electricity, transport, industrial, and buildings), fossil carbonates such as in cement manufacturing, and other

¹⁷ The Neo-Malthusian narrative is easy to fall into, even while contesting the idea of the Anthropocene, Donna Haraway (2016) is still advocating for a more careful population control “to address the Great Acceleration of human numbers” (p.6) and compares the fear of doing so to the fear that hold Christians to accept climate change because it is incompatible with their faith.

¹⁸*Disclaimer: The Summary for Policymakers (SPM) is the approved version from the 14th session of Working Group I and 54th Session of the Intergovernmental Panel on Climate Change and remains subject to final copy-editing and layout. The Technical Summary (TS), the full Report Chapters, the Annexes and the Supplementary Materials are the Final Government Distribution versions, and remain subject to revisions following the SPM approval, corrigenda, copy-editing, and layout. Although these documents still carry the note from the Final Government Distribution “Do Not Cite, Quote or Distribute” they may be freely published subject to the disclaimer above, as the report has now been approved and accepted.*

industrial processes such as the production of chemicals and fertilisers. (on p1171 of the full report (5-19) chapter 5.2.1.1 *Anthropogenic CO2 emissions*)

The ‘Summary for policy makers’ version of the report – which will be arguably the most read version of the report, however, does not mention ‘fossil-fuels’ or any industrial processes.¹⁹

Climate Change is there once again only attributed to ‘human influence’ or ‘human activities’ reenacting the ‘Anthropocene narrative’ that avoids questioning which ‘human activities’ are generating climate change and thus endangering humanity. As Donna Haraway puts it “because the word is already well entrenched and seems less controversial to many important players compared to the Capitalocene” (2016 p47) we will continue to need to use the denomination Anthropocene which holds the wrong idea that we are all, as a species, responsible. As Moore argues:

The popular Anthropocene is but the latest of a long series of environmental concepts that deny the multi-species violence and inequality of capitalism and assert that the devastation created by capital is the responsibility of all humans (2018 p.239)

If the Anthropocene puts the whole humanity at the center of the story of climate change, it is unclear what the call for action here is apart from a vaguely ‘being careful’. And we may thus need to use the euphemism ‘reducing human activities’ instead of ‘replacing capitalist system’ to avoid the ire of an army of minions with buckets of infernal alternatives.

Nonetheless, it takes one powerful and dangerous spell to hide the fact that this report proves the unsuitability of these ‘human activities’ and the main ordeal of this adventure may indeed be to get rid of such a spell. However, additionally to the narrative of the Anthropocene, there are many means through which what should become a consensus is undermined, our ability to think is hindered and resistance to change reinforced.

¹⁹ From the IPCC website: “The Summary for Policymakers (SPM) provides a high-level summary of the understanding of the current state of the climate, including how it is changing and the role of human influence, and the state of knowledge about possible climate futures, climate information relevant to regions and sectors, and limiting human-induced climate change”

The refusal of the call

Narratologists argue that in all stories, after a call for adventure, there is the refusal of the call, a moment of doubt, of denial, when the hero faces their greatest fear: fear of the unknown. “the hero has not yet fully committed to the journey and may still be thinking of turning back .” (Vogler, 2007 p11). Humanity has received – arguably many times – such a call for adventure, and clearly enough the last IPCC report is one of them. But the ‘Anthropos’ – or more accurately its guardians – seems reluctant to engage fully in the endeavour.

As Paterson (2021) analyses, the main hurdles for reducing Climate Change are not technological but political. The Fossil Fuels industry is still powerful enough to influence legislation in way that protects its profitability even in countries who have enforced strong climate policies (*ibid.*). In the United States, Conservative thinktanks who perceive policies to tackle climate change as a threat to US hegemony and ‘civilization as we know it’, have organized a counter-information movement that successfully impedes efforts to mitigate Climate Change and undermines the scientific consensus in public understanding of Climate Change (Jacques and Knox, 2016).

Organized climate change denial is an ideologically driven program that contests climate science through a political program supported by corporate vested interests aimed at obstructing recognition of, and social change related to, global environmental change (*ibid.* p.832)

Climate change and climate science are thus subject to constant public dispute and largely contested (Lewandowsky and Oberauer, 2021). Under the Trump administration, climate change denial has even been elevated to official government policy (Hodges, 2017).

The administration’s position represents a fundamental shift away from science toward the embrace of what Richard Hofstadter in 1964 termed the “Paranoid Style in American Politics.” Rife with “qualities of heated exaggeration, suspiciousness, and conspiratorial fantasy,” the paranoid style excels at spinning

alternative narratives to explain away the scientific consensus on climate change.
(Ibid.)

The media (mass and social) also play a crucial role in how climate change is perceived and how political response to it is shaped. The popularity of internet as a source of information, while bringing the obvious advantages of a larger diversity of opinion and source, has possibly make things worse by creating a fragmented public sphere. As the London based think tank InfluenceMap's 2021 investigation shows, Facebook despite commitments to fight Climate Change, still accepts millions of dollars from the oil and gas industry to spread fossil fuel propaganda and fails to honour its own public engagement to mitigate Climate Change (InfluenceMap, 2021).

Even a concept such as objectivity in journalism, believed to ensure quality of information, has become a tool for undermining inconvenient truths. Indeed, objectivity implies that journalists must relay the facts without value judgement while also keeping their opinions out of the equation (Muñoz-Torres, 2012). However, the mere fact of selecting what to report on is inherently hugely subjective and attached to previously established concepts and values (ibid.).²⁰

Furthermore, as Boykoff and Boykoff (2004) shows, so-called balanced reporting, focusing attention on both sides of the story, on issues which can hardly be seen as 'both-sided' such as climate change undermines scientific consensus – such as in the IPCC reports – on the urge to take action and allows smaller and otherwise isolated groups of climate change skeptics' views to be represented and amplified. This, in turn, by hindering the creation of a consensus, leaves room for governments and other decision makers to avoid responsibility and/or delay action and thus protect commercial interests, providing the argument for the need to reach 'popular consensus' to protect democracy before taking action.

²⁰Some of these values, are what Galtung and Ruge called 'news value' a set of criteria that determine the newsworthiness of a story and thus its priority among the thousand possible stories each day (see for instance, Harcup and O'Neill, 2001). These 'news values' and newsworthiness are thoroughly taught in journalism schools to this day.

Media also helps creating infernal alternatives by giving a voice to people with obvious vested interests in keeping harmful activities such as the fossil fuel industry alive and kicking. For instance, merely two weeks after reporting on the IPCC report 'code red for humanity' (McGrath, 2021), the BBC gave voice to oil tycoon Sir Ian Wood who believes that it would be "absolutely crazy" and "detrimental for the environment" to stop drilling for new oil (Keane, 2021).

Despite the general belief that journalists inspire and encourage social reform, evidence from both insiders and scholars show that media are mainly used to protect the status quo against those who challenge it (in Greenwald, 2015; Herman and Chomsky, 1997; Monbiot, 2011; Taibbi, 2019). As Deleuze explains in 1987 in a conference at the French school of cinema, la Femis, "information is the system of control". For Deleuze, information is an ensemble of watchwords, communication is therefore a way to tell us what we are supposed to believe (or to act like we believe). In other words, a collection of commands that shape how we perceive the world. In this context, anyone holding a radical stance or challenging the status quo, is either described as emotionally unstable (Greenwald, 2015) or simply ignored and facing denial (Monbiot, 2011). In the same fashion, Herman and Chomsky (1994) famously described the media as a propaganda machine, manufacturing consent and generating narratives that favour the status quo.

However, journalist Matt Taibbi (2019) states that there has been a twist – mainly reacting to commercial incentives – to this model. Whereas Herman and Chomsky's model was creating a narrowing debate to build unity, media now encourage the creation of a divided public sphere inside this controlled worldview.

The press "manufactured" public unity by making sure the population was only exposed to a narrow range of political ideas [...]. The difference now: we encourage full-fledged division on that strip. We've discovered we can sell hate, and the more vituperative the rhetoric, the better. (ibid. p42)²¹

²¹ Taibbi recognizes he knows this because he himself has created content that feeds 'people's hate reflexes'. Traditionally the media is meant to hold power accountable, to hold power accountable, but commercial incentive – the need to ensure revenues – media ownership and the need to maintain an healthy relationship with political elites to access

Similarly, Waisbord (2018) analyses that, during the last decades, radical changes in media – notably the advent of internet – have divided the public on many topics by facilitating the rise of diverse and often opposed epistemologies of truth. The quasi-propagandist system of information grounded in scientific principles during the Cold War – stemming from a “post-ideology ideology mindset” in reaction of ideologies at the root of WWII – has become less profitable – economically and politically – and is now challenged by the growth of the internet.

The popularity of the internet eroded the vertical structure of knowledge production and dissemination that was central to sustaining the myth of the post-ideological era. Its networked structure undermines core aspirations of a unifying, top-down post-ideological project for it offers a more flattened structure with multiple nodes of information and expression. (Waisbord, 2018 p1870)

Once again, the creation of separate public spheres is then observed, all of which holding different subjectivities, and therefore different and often confronting epistemologies of truth (ibid.). This is the ‘post-truth’ era. Of course, this is not to say that quasi-propaganda media system as during the cold war was preferable. The emergence of ‘post-truth’ simply signals the rejection of the promotion of the “scientific model as the only legitimate knowledge” to supersede ideological battles (ibid.). As Stengers notes:

What strikes me is that those who are enjoying ‘fake news’ or ‘alternative facts’ appear to be driven less by a blind credulity than by a dark will of not listening to anything, to take revenge on ‘those who know’ (2020, p22 translation my own)²²

At a time during which a consensus would be welcome, these new media landscapes encourage a large variety of communities – such as the conservatives think-tanks mentioned earlier – eagerly pushing scientific denialism (Waisbord,

information have proven many times to undermine this role. (see Davis, 2008, Greenwald 2015 also Wahl-Jorgensen et al, 2017, Moretti, 2014 and Street,2011)

²² This emergence of post-truth as a ‘revenge’ over an hegemonic epistemology of truth also reminds, in some ways Nietzsche’s creativity stemming from slave morality: after being restrained by their ‘master’, slaves develop a ‘ressentiment’ which “eventually turns creative, allowing the slaves to take revenge in the imagination on the masters whom they are too weak to harm physically”. (see Nietzsche, 2006 pXXI).

2018).²³ In these circumstances, balancing the divisive effect of both social and mass media – which generate such distinctive communities in the public sphere and as a consequence, different conceptions of ‘truth’ – in order to overcome science denial in regard to climate change, or even find a popular consensus on the topic – thus seems like a pipe dream.

Echoing Cohen’s (2001) perception of post-modernist and deconstructionist theory of truth, Waisbord explains:

Truth refers to social conditions in which arguments are developed, shared, and discussed—from the perceived credibility of sources to the political and social attitudes of publics. The rejection of the possibility of truth means the denial of the unity and commonality necessary to determine whether ideas or news are true or false. This is why truth is forever unstable, disputed, challenged. Journalism’s ambition to be the arbiter of truth clashes with the open-ended character of truth-telling. (2018, p1872)²⁴

Here we understand how the resistance to change can also emerge from a democratization of information which eventually – and counter-intuitively – helps to maintain the status quo. This allows, for instance, the endless questioning of scientific consensus about climate change. Consensus which do not weight much more than the belief of anyone who has overtly vested interest in denying them, of any minions eager to suggest infernal alternatives to any radical proposition perceiving as endangering their interests.

A Weakness of Imagination?

For Mark Fisher “a moral critique of capitalism, emphasizing the ways in which it leads to suffering,

²³ While many would probably disagree here I assert that facing Climate Change and taking responsibility for it is not an ideological question. The ‘Intrusion of Gaia’ as Stengers calls it is happening whether we agree or not as we will see later.

²⁴ Cohen considers these theories to be ‘harmless fun’ , as long as they remain in seminar room. “But when they circulate noisily in middle-brow and even mass culture, they begin to supplement the inventory of denials available to the powerful.” (p.280)

only reinforces capitalist realism. Poverty, famine and war can be presented as an inevitable part of reality, while the hope that these forms of suffering could be eliminated easily painted as naive utopianism” (2009 p.16)

Capitalism Realism thus can only be challenged by proofs of its unsuitability, its inconsistency (*ibid.*).

I would argue that the successive IPCC reports through the years have brought proofs – albeit careful – of such unsuitability. The reports have continuously denounced – again, carefully – activities linked to capitalism – such as the fossil fuel industry, deforestation and land exploitation – as the main drivers for climate change. But, and as Pignarre and Stengers say – and it is worth repeating, if denunciation was effective, capitalism would have disappeared a long time ago.

However, if capitalism may appear ‘denunciation proof’ and have developed a strong resistance to change, this is, in part, through the manufacturing of denial – or at least a constant undermining – of an uncomfortable yet unavoidable truth. This even by those how are supposed to deliver such truth: The IPCC report authors, the media who once upon a time pretended to be part of the system of truth-building but which are now thriving on the manufacture of discontent and politicians who avoid policies that would embarrass their financial support, constantly building infernal alternatives and hiding behind so-called democratic values.²⁵ Responsibilities are avoided. The responsibilities of those who Stengers (2015) calls our ‘guardians’ – the States, Scientists and industrialists who feel themselves responsible for us, their flock, too dumb to understand how difficult their task is– to act in a responsible way.

But those ‘guardians’, far from being able to bring changes in a system that desperately needs fixing, are actually petrified by their own infernal alternatives.

²⁵ For instance, current Home Secretary Priti Patel has been constant in accusing Extinction Rebellion of threatening democracy, free press and the British way of life (see Stone, 2020; Dodd, 2020 for instance) in order to undermine the message of the protests. As if climate change will respect the British way of life.

“But such a proposition would open the floodgates to...” they keep saying (*ibid.* p114) almost as if they were afraid to meddle with a force of nature.²⁶

Even when presenting with the unequivocal proof that capitalism is causing climate change which will soon make the Earth unfit for human life – and thus arguably the free development of capitalism – our guardians, petrified by the consequences that derive from the infernal alternatives they themselves created, are incapable of thinking new alternatives to our current reality.

Moreover, at the same time, they employ their imagination to discredit any proposition coming from other groups that could threaten their position. Here we can see how those vulnerable to the hold of stupidity – minions and guardians – are not made ‘stupid’, instead, as Stengers explains,

Those who are made stupid, or dumb, are rather those who are seen as threatening the public order. When one says of a remark that it is “stupid and nasty” one is characterizing something that is remarkably effective, but of a destructive efficacy, producing a paralysis in the thought of whoever it targets. To render the power of stupidity perceptible is thus not just about making perceptible the manner in which it anesthetizes those who it seizes hold of, prohibiting them from wondering, hesitating about the way a situation demands to be approached, felt, and thought. It is also about rendering perceptible the manner in which it commands them to invent the means to subject such situations to unilateral requirements that have the nasty power to dismember them. (*ibid.* p124-125)

The power of stupidity thus not only resides in how it limits the imagination and creativity of minions to think issues but how instead it redirect such creativity to find ways to discredit any alternatives propositions. Minions are not lacking imagination, they are only using it to create ways to maintain the status quo – often by finding ways to exploit critics as in green capitalism – to argue against legitimate critics and sensible suggestions and make them appear unrealistic, stupid or naive. This, indeed, requires creativity.

²⁶ Once again here, I would refer to Jensen’s monologue in *Network* and argue that our guardians actually believe they are dealing with the force of nature.

Consequently, while it is too early to evaluate the impact that the last IPCC report will have on the upcoming policies – realistically at least until the Glasgow COP 26 international summit in November 2021 – as Stengers pointed out, “The logic of capitalist functioning cannot do anything other than identify the intrusion of Gaia with the appearance of a new field of opportunity”(2015, p54) and one could speculate that the cautious rhetoric used in such an important document as the IPCC report – combined with a large representation of science denial in media – may be music to the ears of capitalist realists and leaves room to create – or reinforce – some infernal alternatives without too much effort. Most likely ‘Green capitalism’ may save the day. If we all participate. If we fail to reach net zero, it will be because of ‘us’, all of us. Because we did not recycle enough, because we did not restrain our consumption – which will still be encourage by ads and marketing.²⁷

Here we see the consequences of accepting the word ‘Anthropocene’ to describe our period which, as Stengers (2015) states, is now widely discussed both in the academic world and in the media. The ‘Anthropocene’ is supposed to represent the acknowledgement of Man’s activities as the main driver of climate change. Such acknowledgement should open new possibilities, but

Man here is a troubling abstraction. The moment when this Man will be called on to mobilize in order to “save the planet,” with all the technoscientific resources that will be “unhappily necessary,” is not far off. (ibid. p10)

The ‘Anthropocene’ is thus a very reassuring narrative for minions who can claim they are aware of the issues of climate change without being forced to act upon its real causes. The ‘solution’ it suggest still come from our political powers, often on the advice of industrials happy to produce such ‘green products’ and sometimes backed up by some techno-scientists, in short ‘our guardians’ who as Stengers states “ha[ve] just handed the rudder to capitalism and solemnly

²⁷ less than a week after the IPCC report, we can read in the press calls for sacking ministers who do not replace their diesel car by an electric one “pony up for a Tesla or go to the backbenches” (Frayne, 2021) as if it the issue was merely a question of choice of product not about rethinking globally our transport system and culture.

renounced any freedom of action” (2015 p.3) and thus cannot be trusted with our futures. For them it is business as usual.

Here I would then challenge Jameson’s idea of a ‘weakness of imagination’. Once again without further precision, this implies that the whole humanity is lacking the imagination needed to create a sustainable future. Once again, the argument of the Anthropocene is lurking in such an assumption. Art, technologies, civilization, stories and, as we have seen, even infernal alternatives, all stem from human creativity and imagination. And many suggestions – more or less compelling – for alternatives to capitalism have already been imagined (see for instance, among other projects, Gibson-Graham 2006; Srnicek and Williams, 2015; Mason, 2017; Monbiot, 2018). So, no, not being able to imagine alternatives to capitalism does not stem from a lack of imagination but instead from the loss of hope in the possibility for our ideas to trigger change and the loss of the ability – or motivation – to create, to even think, that comes with it. Hope, says Stengers,

is the difference between probability and possibility. If we follow probability there is no hope, just a calculated anticipation authorised by the world as it is. But to ‘think’ is to create possibility against probability. (Stengers and Zournazi, 2003 p.245).

Stengers defines possibility as what cannot be mathematically predicted inside a given system since it implies that this system need to change for such possibility to occur (*ibid.*). Possibility is what generates ‘events’ and, here, Stengers emphasizes a very specific understanding of the word event which can be useful in imagining new futures: an event creates a difference between the past which opened the possibilities for it to occur - but not the mathematical probabilities, and the future which will be eventually influenced by such event. In this sense an event is unpredictable, and a change in the course of time (*ibid.*).

Without hope, it is *probable, predictable* that the World will soon come to an end. But if we break the spell of capitalist sorcery and regain the ability to hope, the event of the end of capitalism becomes a *possibility* and, with it, it becomes

possible to survive the horrors of the Anthropocene, to 'change the course of time'.

For Deleuze, what we need is a "belief in the world,

we totally lost the world, it has been taken from us. Believing in the world can be either creating events, albeit small, that elude control or creating new spaces-times, even limited in their surface or volumes. It is what you call *pietas*. It is through how hard you try that the ability to resist a form of control, or the submission to it, can be assessed. We need a both a creation *and* a people.(Deleuze, 2012. translation my own)

If it is through how hard they try that we can judge their ability to resist control, then the IPCC reports, the media and our guardians, are clearly submitted to it. The reports' careful rhetoric is unlikely to generate events that 'change the course of time'. The increasingly divisive action in the public sphere by the media since the advent of internet also reinforces the hold of capitalist sorcery. And our guardians, those 'who know better', have proven themselves to be paralyzed by the fear of their own infernal alternatives and unable – and unwilling since they have lost their ability to think – to imagine new possibilities.

Deleuze is right, we definitely need a creation and a new people. But first, as for any creation, we need tools. The next chapter builds on this idea and examine how to create what Latour calls 'the mental and emotional repertoire' necessary to understand events of such scale as climate change and to be able to respond to it that we, the moderns, lack. In doing so, I will also explore the role worldviews play in our interpretation of science and in our ability to 'believe in the world'.

CREATING A BELIEF IN THE WORLD

“When you light a candle, you also cast a shadow.”
— Ursula K. Le Guin

Understanding ‘the horrors of the Anthropocene?’

As we have established, a tool such as the IPCC report is not powerful enough to generate a universal and uncontroversial understanding of how – and which – ‘human activities’ are generating climate change. Facing the material inertia of contemporary politics, such report is unable to push our guardians to act responsibly.

This lack of impact, despite the efforts of thousands of scientists involved in the making of the report, can in part be attributed to its unassertive discourse and its equivocal representation in the media which let it open to interpretation enough to allow the constant denial of politicians and the global capitalist market whose interest lies in the maintaining of ‘human activities’ unchanged.

This may also be because the report is not necessarily aimed at raising awareness among the population but instead target ‘policy makers’ and thus does not make itself accessible to a lay audience, an underlying issue in climate science and its reporting.

In 2014, referring to an article in *Le Monde* warning about the impact of climate change, Bruno Latour asked “how are we supposed to react when faced with a piece of news like this?”(2014). The headline read: “the amount of CO₂ in the air is the highest it has been for more than 2.5 million years—the threshold of 400 ppm of CO₂, the main agent of global warming, is going to be crossed this year” and the article used a set of diagrams emerging from a vast panel of scientific disciplines – “from climatology to paleontology” to quote Latour – to illustrate the information. It is difficult to not be overwhelmed by such news.

Everyday, we are fed stories of upcoming doomsday, warning us about the effects of climate change and that it is already too late.²⁸ As we have seen in the last chapter, the horrors of the Anthropocene are upon us, and worse: we should all feel responsible for them but there is very little we can do to stop them.

Rockström et al (2009 cited in Danowski and Viveiros de Castro, 2017), who have determined the nine 'biophysical processes of the Earth System' for each of which they also established limits that should not be reached to avoid unbearable environmental alterations for many life forms, included ours, even tell us that we have already passed the point of no return in three of these processes and that it is almost too late for three others.²⁹ The transformation of our environment and our involvement in such transformation is of such a scale – both in range and time – that we simply cannot fathom the idea, let alone take action upon it, as Latour states:

I think that it is easy for us to agree that, in modernism, people are not equipped with the mental and emotional repertoire to deal with such a vast scale of events; that they have difficulty submitting to such a rapid acceleration for which, in addition, they are supposed to feel responsible while, in the meantime, this call for action has none of the traits of their older revolutionary dreams.

This 'mental and emotional repertoire' may be what Deleuze mean by a 'belief in the world'. This would imply a better connection with the world, through which a better understanding of how our environment can stays fit for life would then be possible, not for the purpose of knowledge only, but also for being able to act accordingly to maintain this balance. In other words, living in symbiosis with our surroundings.

But this understanding has been 'taken from us' and we are now disconnected from the world (Deleuze, 2012). Even, time itself – or, at least, the way we

²⁸ Every major media outlet online has its own 'Climate change' category updated daily (see for instance <https://www.theguardian.com/environment/climate-change> or <https://www.bbc.co.uk/news/topics/c4y3wxdx24nt/our-planet-now>)

²⁹ These nine processes are: climate change, biodiversity loss, interference with the nitrogen and phosphorus cycles, ocean acidification, stratospheric ozone depletion, global freshwater use, changes in land uses, chemical pollution and atmospheric aerosol loading. According to Rockström et al, the first three already have reached their critical limits (see Danowski and Viveiros de Castro, 2017 p9).

perceived it – appears to have changed. At first climate change seemed far away, but today, everything said about climate change is almost instantly anachronistic and anything that could be done is de facto “too little, too late” (Danowski and Viveiros de Castro, 2017 p8).

In June 2021, two months before the release of the last IPCC Report, Canada and the US North-West broke their heat record, previously established in 1937, three days in row. Still, ‘experts’ said that “linking any single event to global warming is complicated” (BBC News, 2021) in a form of objective denial which may not help understand the emergency and confirms that our guardians, too enmeshed in the hold of capitalist sorcery, are useless.³⁰

If we, the so-called ‘moderns’ who proudly have achieved so much, cannot even understand the scale of events the so-called Anthropocene is generating, how could we possibly react properly to such events? Is it possible to control, predict and at the same time feel for our environment? Is it possible to acquire the ‘mental and emotional repertoire’, this ‘belief in the world’, necessary to deal with Global Change in a – in the words of Donna Haraway (2016) – ‘response-able way’?

Science Literacy

The first tool that could help us understanding how human activities affect the Earth, may, one could think, be to become more ‘scientifically literate’. If everybody could learn more about how the Earth is functioning as a system, how each of its subsystems interacts with and influences one another, maybe we could find a more ‘response-able way’ to interact with our environment and thus limit the ‘horrors of the Anthropocene’.

Scientific education may thus be a solution. Indeed, to become properly ‘equipped with the mental and emotional repertoire’ needed to understand the many processes – and the influences and responsibilities Humans have over them – described by Rockström et al and implied in stories as described by Latour assumes

³⁰ For a detailed description of Canada’s heat record History see Abraham (2020)

an holistic view and understanding of the science attached to each sub-systems that compose the planet.

This is what Earth System Science – a complex and relatively new science based on the idea that the planet is the sum of both natural and social sub-systems transcending interdisciplinary boundaries and combining natural and social sciences (Lenton, 2016) – seeks to accomplish.

More precisely, the goal of Earth System Science is to

consider how a world in which humans could evolve was created, how as a species we are now reshaping that world, and what sustainable future for humanity within the earth system might look like (ibid. p.1)

The sum of scientific disciplines combined in Earth System Science can be dizzying even to the most enthusiastic of scholars: "ecology, economics, geography, geology, glaciology, meteorology, oceanography, climatology, paleontology, sociology and space science" (See Lenton, 2016; Finley, Nam and Oughton, 2011). Suggestions have thus been made that Earth System Science should be studied more as a unified discipline instead of each discipline being taught separately and independently (Finley, Nam and Oughton, 2011).

Earth System Science being assertively described as

essential as a school subject if the goal of science education is the development of a scientifically literate population, one cannot be considered scientifically literate without understanding our planet as a set of interacting natural and social systems. (ibid. p1069)

However one could question the efficiency of such education. For instance, on an individual level, science and climate change denial – the denial that climate change even exists in the first place – rationales have been proved to be political and ideological rather than based on a scientific understanding of science (Jacques and Knox, 2016, Lewandowsky and Oberauer, 2021).

As demonstrated by Lewandowsky and Oberauer (2021), reception of well-established scientific conclusions – such as on climate change and vaccination

– indeed stems from people’s worldviews – their “deeply-held beliefs about the world and about how society should be organized” (p.1), independently of their level of education or science literacy.

Concerned by the rejection of scientific propositions which as become widely accepted and unchallenged by the relevant scientific community, ideas such as the fact that climate change is caused by greenhouse gas emissions, Lewandowsky and Oberauer (2021) explain that when surveyed on such supposedly uncontroversial scientific conclusions, people with right wing and libertarian worldviews are likely to reject such conclusions – as well as to be susceptible to false information – while those holding left wing worldviews show highest level of trust in science (*ibid.*).³¹

While still needing further research these observations seem consistent not only in the US but in several other countries (*ibid.*). As suggested by Hornsey and Fielding (2018) it would be a mistake to assume that such motivated rejection of science is unconscious and stem only from successful brain washing propaganda, since worldviews are strongly rooted in one’s experience, needs and desires. They assert:

If people reject evolution because their family and communities overwhelmingly endorse creationism, on some level, they do so after a mindful weighing up of the costs and benefits associated with embracing the science. Similarly, if people reject climate science because they fear losing their jobs in the coal industry, it seems reasonable to presume that they are partially aware of their motivation.(2018 p.687)

Worldviews are indeed most likely to be forged on information based on sources – media, friends, family and other social networks – trusted and often chosen by an individual (Lewandowsky and Oberauer, 2021) one could thus believe that such ‘weighing up of the costs and benefits with embracing the science’ is clearly more influenced by the environment in which an individual live. For instance, the fear of losing one’s job at the coal mine if one accepts the conclusion on climate change, may stem from either a lack of confidence in the authority to provide the necessary

³¹ Here it must be stated that the understanding of right or left wing is based on US politics.

support or from the perception of working at the coal mine as a 'way of life' in which case, it would not only be a question of losing a job but of the disappearance of a way of life altogether. This being unrelated to the level of understanding of climate science or of the Earth System.

Lewandowsky and Oberauer (*ibid.*) also suggest that the 'norms of science' as described by sociologist Robert Merton, to the effect that science transcends differences and borders and its findings belong to humanity as whole – in other words, a 'communist and universalist' norm of science – challenge, by definition, conservative views and thus may be at the root of the systemic skepticism and the reliability on alternative information sources by people with right wing worldviews.

In other words, the rejection of science by the conservative right would be strongly influenced by the tension between a science perceived as pushing a progressive agenda and political views that seek to protect the status quo (*ibid.*).

This theory seems confirmed by Jacques and Knox (2016)'s study of climate science rejection discourses which shows that each rationale against climate science – that is opposition to renewable energy, taxation, and a fear of abuse of power – is based on the 'knowledge' – that is an assumption communicated with certitude – that climate change narratives aim to promote alternative politics and thus to destroy society as we know it.³²

The main purpose of science rejection is thus the preservation of the Western way of life, based on power and dominance through a 'neoliberal world order' (*ibid.*). This would explain why people with conservative views have difficulty acknowledging the emergency of climate change since they perceive it as propaganda pushing a political agenda opposed to their worldview while people on the left wing of the political divide are shown to accept more diligently scientific conclusion in general and climate science in particular.

³² As we will see later, this idea is not unfounded nor as paranoid that it may look. However, what the conservative right may overlook is that without any change, the 'society as know it' will also and more drastically disappear (see next chapter)

One could thus think that the solution to preventing the horrors of climate change would be to defend a political ecology that recognizes science as a trusted authority, or, according to the studies cited above, some kind of progressist left worldview. But, once again, not denying science may not always mean understanding what is happening or even having access to the truth. As Lewandowsky and Oberauer (2021) also assert the increased trust in scientific conclusions shown by people on the left does not appear to result from a higher understanding of science, but instead from the idea that the scientific model is the most legitimate knowledge system and thus needs to be trusted. However, in laboratory condition, when asked to process scientific data by themselves,

the propensity to engage in cognitive shortcuts – that is, responding on the basis of superficial association rather than deep reflection – is distributed evenly across the political divide. When participants are presented with synthetic data (e.g., hypothetical results of gun control laws) that are amenable to a quick – but inaccurate – interpretation, as well as to a competing complex – and accurate – interpretation, the quick but inaccurate interpretation is triggered when it is worldview congruent, irrespective of the person's beliefs . Conversely, the more complex and accurate reading of the data is recruited only when the quick interpretation challenges participants' worldview, and this effect also holds irrespective of a person's beliefs (ibid. p11)

This may suggest that people's trust in scientific conclusion is not related to a better understanding of how such scientific conclusions are reached. Ideology rather than education once again appear to fuel such decision. To paraphrase Stengers, fighting the absurdity of denying scientific conclusions altogether does not mean promoting science as an absolute truth.³³

At this point it seems important to make a distinction between science and Science, scientific mind and scientism.

The former is investigative scholarship for which any claim is open to question and reasonable answer; the latter is dogma about truth because it was generated by a scientist (Green, 2020 p38).

³³ "lutter contre une absurdite ne signifie pas promouvoir une verite" (fighting absurdity does not mean promoting truth) Stengers, 2020

Scientism is an unreasonable faith in the fact that knowledge produced by scientists are neutral and objective, natural and separate from society (*ibid.*). In other word, Science produce objective truth rid of any ideology – a vision close to the idea conveyed by US media during the cold war – and thus is the only legitimate knowledge to avoid ideological conception of the world.³⁴ An assertion which, as we have seen in the precedent chapter, triggered the emergence of ‘post-truth’ and what Isabelle Stengers calls a “dark will of not listening to anything” in order to take revenge on those who claim to know better and impose their knowledge on the people.

In short, the blind, almost religious, trust in and support of Science found in some, mostly leftist, modern worldviews may by itself generate science denial in other worldview merely in reaction to the real attempt to force a unified worldview – and erase opposing ideologies – hidden behind the illusion that trusting Science is objectively thinking against prejudices and standardization.³⁵

As Deleuze, characterised by Stengers, believes:

The left needs, in a vital manner, people to think, that is to say also to imagine, to feel, to formulate their own questions and their own demands, to determine the unknowns of their own situation. (2003, p47 in Stengers, 2015 p130)

A need, asserts Stengers, that can only be unsatisfied by the State. For instance, education – which lest we forget, is to a large extent, an institution of the State and thus under the supervision of our guardians – is only an apparatus of ‘control and verification’ (p.130) which aims at ensuring that whoever goes through this system is able to give the same answer to a given problem than anyone else. In other words, education is not meant to teach people to think for themselves but instead to learn to trust the elites who are curating knowledge to provide the answer for us.

³⁴ In many ways, Science is the “science sans conscience” Rabelais said in Pantagruel was “but the ruin of the soul”: a knowledge that has lost its awareness of being flawed and incomplete.

³⁵ Here I would like to underline the irony of such claims since the quasi-proganda model of the media during the cold war that pushed Science as the only epistemology of truth to reject the communist and socialist ideologies was mostly a product of right-wing politics afraid of the ‘left’.

We thus cannot expect education, in its current structure, to teach people to pose their own questions to be able to face the changes that are coming – or what Stengers calls “the intrusion of Gaia” which will be the focus of the next chapter, since education is merely a “passage from a supposed ignorance to a knowledge that is defined by its own conditions of verifiability” (Stengers, 2015 p130).

In other words education only brings ready-made responses to already well known problems while what we need now is to acquire the ability to think. In any case, science literacy appears to have very little to do with the acceptance or the denial of scientific conclusion on climate change. Moreover, science and education appear to find themselves in the middle of a political battle and have become, in many ways, apparatuses of control which generate infernal alternatives on each side of the political divide. In regards to such conclusions, the lack of belief in the world needs to be attributed not to a lack of education or a lack of knowledge, but once again to the impediment of thought due to opposing and limiting worldviews.³⁶ Maybe what we need to create a belief in the world is only to perceive the world differently, a new way of seeing it that creates the ‘mental and emotional repertoire’ we need.

An Inspiring Awe.

Like many of those who travelled in space before him, French astronaut Thomas Pesquet claims to have experienced, during his stay in the International Space Station, what is known as the ‘Overview Effect’³⁷: a cognitive shift produced by the observation first hand of Earth from space, generating a literal new worldview which sometimes creates a new sense of responsibility for the planet.³⁸ Seeing earth as a whole, frontiers suddenly disappear and lose their meanings. The planet then appears small, even fragile. As Pesquet says:

³⁶ We must also remember that ‘the horrors of the Anthropocene’ have been triggered by organisations widely ‘scientifically literate’ like the fossil fuel industry and the silicon valley.

³⁷ See Henley, 2018

³⁸ The term ‘overview effect’ has been first coined by writer Frank White in 1987 after interviewing several astronauts who experienced space travel.

“There are no borders. Even your own country – it’s impossible to make out where France ends, and Germany begins. You just realize, very strongly, how much we all share the same problems, how much we are, all of us, almost identical.”(Henley, 2018)

In the case of Pesquet the overview effect generated a reinforced ecological awareness. Since then the astronaut has become an advocate for human cooperation, the article continues:

“The Earth is actually just a big spaceship, with a very, very big crew,” he said. “It really has to travel sensibly, be maintained and looked after properly, or its voyage is going to come to an end. That’s how it felt to me. That was my experience.”(Ibid.)

Of course, the idea that Earth is a large spaceship flying through space predates Pesquet experience of the overview effect. In 1967, American architect and system theorist Richard Buckminster Fuller even wrote an ‘Operating Manual for Spaceship Earth’ in order to provide some advice on taking care of such a huge spaceship.³⁹ Fuller also developed a way to project Earth on a plane without distorting it (Sarkis, 2020). The idea was to replace the commonly used Mercator map created in 1569 – and which is true to scale only around the Equator – to provide a better understanding of our environment.

This is a map whose production heavily relies on political hierarchies and navigation purposes. It subdivides the planet into three oceans and depicts colonizing countries north “above” the rest of the world, in a size that substantially magnifies their dimension (ibid. p151)

As Moore (2018) emphasizes, the Mercator map was not only meant to represent space but was also “a tool for conquest”(p.262). Fuller’s Map (Fig. 1) was an attempt to break this narrative and represents the world as more unified, almost one continent. Fuller’s rationale was to “support a dynamic world citizenry” after the WWII – his first version was published in 1943 – in order to avoid the possibilities of isolationist politics and avoid future war (ibid.). In other words,

³⁹ The Wikipedia entry for Spaceship Earth – Wikipedia being, in Donna Haraway words a “flawed but remarkable tool” (2016, p173) to which I agree – also teach us that the concept can be found in many other instance even before Buckminster Fuller operating manual.

Fuller's map is an attempt to create the overview effect, to help us understand how 'tiny' our world is, way before any human has been able to experience it. The 'Dymaxion Air-Ocean' projection also aimed to encourage a one landmass, one sea, on atmosphere worldview (Sarkis, 2020) which later infused his *Operating Manual for Spaceship Earth* first published in 1969 the year Man set foot on the moon.⁴⁰

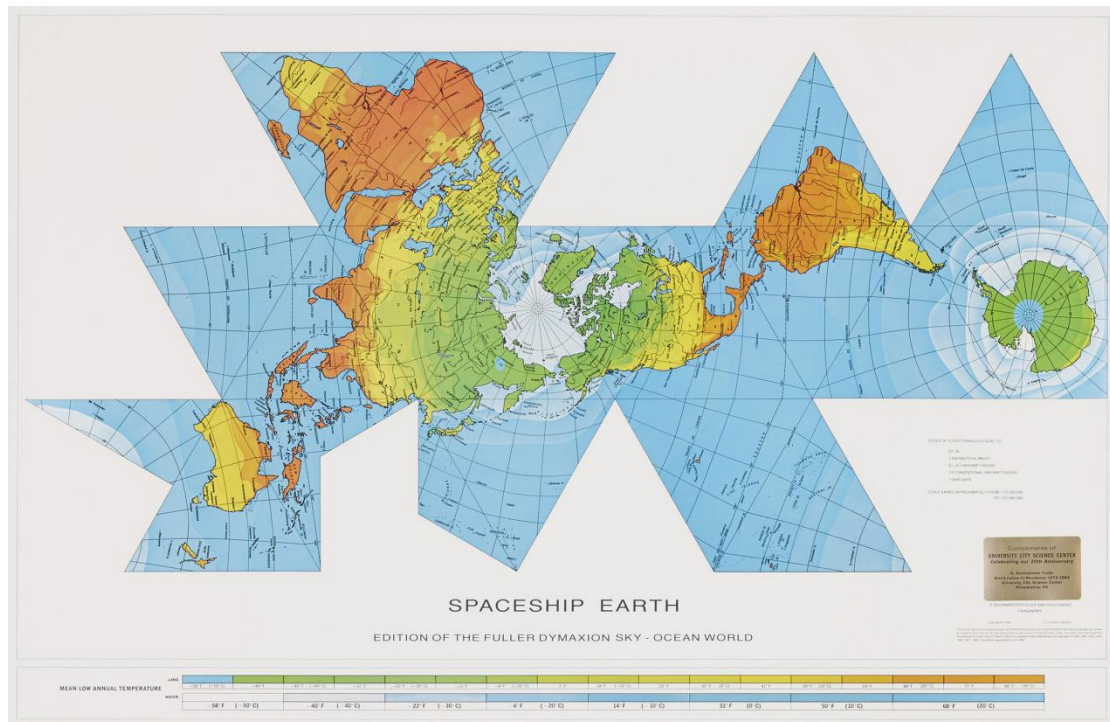


Figure 1 – Fuller's Airocean World Map later known as Dymaxion Map

When seeing the Earth from space, Pesquet appears to understand our role in the maintenance of this 'spaceship', that earth may not just be taken for granted but must instead be taken care of. However, if many astronauts experience the Overview Effect, their reaction, as shown by anthropologist Deana Weibel (2020), can range from a renewed ecological awareness to a strong faith in God and the urge to evangelize. Notwithstanding, all descriptions of the effect appear to have common characteristics with Pesquet's testimony such as the realization of the

⁴⁰ Fuller's vision for Spaceship Earth famously being "To make the world work for 100% of humanity in the shortest possible time through spontaneous cooperation without ecological offense or the disadvantage of anyone" which can be found as the epitaph of the 2017 version of his *Operating Manual For Spaceship Earth* (Buckminster Fuller and Snyder, 2017)

fragility of Earth nurturing a “feeling of interconnectedness of all life, and the concern and responsibility for our home planet and its inhabitants” (Stepanova, Quesnel and Riecke, 2019 p.10). From these testimonies, and drawing on Yaden et al. (2016) as well as on her own study, Weibel (2020) argues that such an experience of awe could help to generate social transformation by altering how we perceive events too spread in time and space to comprehend such as climate change or nuclear waste.⁴¹

Indeed, awe – as experienced in the Overview Effect – belongs to a class of ‘positive emotions’ which have been suggested to influence and shape perception and behaviour in a more permanent way than the mere enjoyable feeling in the moment.⁴² Weibel thus suggests that more scholarship should be done on such processes and the effect of experiencing awe, not only on those experiencing the Overview Effect firsthand by travelling into space but also among those who closely study large phenomena and “realities that seem, at least at first, to be unknowable” (2020 p14).

In other words, experiencing this ‘Overview Effect’, may help us grasp overwhelming news such as that presented by Latour in the introduction of this chapter more easily and such transformative potentials may prove themselves useful in order to face the ‘horrors of the Anthropocene’. Weibel cites astronaut Edgar Mitchel, the sixth man to walk on the moon who famously said:

You develop an instant global consciousness, a people orientation, an intense dissatisfaction with the state of the world, and a compulsion to do something about it. From out there on the moon, international politics look so petty. You want to grab a politician by the scruff of the neck and drag him a quarter of a

⁴¹ Timothy Morton (cited in Wiebel, 2020) calls such events ‘hyperobjects’ a word not without its critics. Here I will only use the word as defined by the Oxford dictionary of critical theory (Oxford reference, 2008) and to describe “An object or event whose dimensions in space and time are massive in relation to a human life, eg. a black hole, the Amazon forest, an oilfield, and especially climate.

⁴² Positive emotions are seen to influence us in different ways, as Yaden et al, 2016 suggest, the effect do not only affect people personal well-being but also their perception of their social environment “The “broaden and build” model of positive emotions emphasizes how positive emotions can result in a broadening of attention and a building of psychological and social resources (Fredrickson, 2001). Positive emotions have been suggested to improve cardio-vascular health (Fredrickson, Mancuso, Branigan, & Tugade, 2000), facilitate better collaboration in groups (Fredrickson, 2001), and even enhance creativity (Isen, Daubman, & Nowicki, 1987).” (p4)

million miles out and say, 'Look at that, you son of a bitch' (People Weekly 1974, p. 23 in Wiebel, 2020)

An inspirational quote that can easily be found used in several mainstream online magazine articles or internet memes – a simple Google search brings endless pictures of Earth from the Moon with Mitchell's words – and which Wiebel has extracted from the mainstream magazine *People*.⁴³ Wiebel concludes that, "If Mitchell was right, our willingness to confront hyperobjects and to recognize what little we know and how much we still have left to learn may encourage better collaboration, heightened creativity, and set us upon a more hopeful path" (2020 p15). So, in order for the words of the astronaut to become more than a witty quote to share on social media, perhaps we need to be exposed to the same 'awe' the man experienced on the moon?

This is why, ongoing research to simulate the Overview Effect and awe in larger population exist. For instance, Stepanova, Quesnel and Riecke (2019), suggests the creation of a "virtual reality experience of the overview effect".

"The OE is a fascinating, albeit extremely rare phenomenon that has been gaining more public and scientific attention in recent years. Making the OE more accessible to people can allow us to facilitate a restructuring of the value system in individuals and society. It could be an essential step in addressing major social and environmental issues that our world is facing, as well as individual psychological struggles." (p.18)

Maybe more surprisingly, Virtual Reality is also considered to simulate the more general feeling of awe in laboratory conditions. Awe in this instance does not require space travel and is thus easier to experience, for instance, observing natural phenomena or art are able to generate the feeling (Chirico et al., 2018). While it is easy to understand the interest of a simulated Overview Effect, since despite billionaires' dearest dreams of sending people into space, the Overview

⁴³ see for example (Gaines, 2015) in which Mitchell's words are said to be the journalist's favourite. The quote has also been used when reporting Mitchell's death (see Stewart, 2016) and figures in his biography page from the Museum of Space History (see New Mexico Museum of Space History, 2020)

Effect can only be experienced by a selected few, we might wonder why researchers feel the need to use VR to create awe – and why can't we simply try to establish a different connection to nature instead.⁴⁴

This over reliance on technology especially when realizing our disconnection with our environment, may look out of touch and revealing of the modern worldview – the systematic separation of human and nature, as we will discuss in the next chapter. But even without such consideration, those projects, however ambitious and bearer of hope they may be, may take years – if not decades – to be achieved and proved effective notwithstanding the resources needed. And if we believe Rockström et al, time is already what we lack most to overcome denial and understand the effect of what it has become common to call the 'Anthropocene' despite its proven abstraction.

If using positive emotions' transformative effect on people's perception of their social environment to help build a 'belief in the world', a worldview outside the control of our guardians, seems a good idea to help us think differently, we thus need find new 'tools'. Here again we need to 'think differently'.

Indeed we need to learn to get out of the idea that new technology is what will save us. Building a belief in the world needs to get out of what Haraway (2016) calls a "comic faith in techno-fixes" (p.3). As shown by the idea of 'simulating awe', even when the idea is to generate an emotion that could be experienced without any technology – by simply going to existing and well known awe-inspiring places for instance – we rely on technology to simulate these places and these feelings. The rational behind this faith is a quasi-religious belief that only a God-like technology will find a way to help us, its naive but gifted children (Ibid.).

It is understandable of course that not everyone has the means to visit such places, but why focusing only on technology, which will not be accessible to

⁴⁴ At the time of writing, the space race between private companies owned by billionaires is raging. Richard Branson –Virgin Galactic– flew, on Sunday 11 July 2021, to the edge of space just before Jeff Bezos – Blue Origin – send its own rocket, and Elon Musk – Space X– prepares his first flight for September 2021 (Bettancourt, 2021). Branson's ambition is to "Imagine a world where people of all ages and backgrounds, from anywhere, of any gender, of any ethnicity have equal access to space" (see Virgin.com, 2021). Ticket for upcoming flight can be bought for \$250,000.

everyone, or at least, not before a long time instead of looking for more simple solutions to re-connect with our environment?⁴⁵ Once again, it seems that we are unable to consider anything else that technological progress even when what is needed is to rebuild a bridge between humanity and nature. Can we imagine this bridge to be other than a technological interface?

As science fiction writer Ursula Le Guin puts it

It's easy to say we don't need more "high" technologies inescapably dependent on despoliation of the earth. It's easy to say we need recyclable, sustainable technologies, old and new— pottery making, bricklaying, sewing, weaving, carpentry, plumbing, solar power, farming, IT devices, whatever. But here, in the midst of our orgy of being lords of creation, texting as we drive, it's hard to put down the smartphone and stop looking for the next technofix. (2017, pM15)

Le Guin continues,

Skill in living, awareness of belonging in the world, delight in being part of the world, always tends to involve knowing our kinship as animals with animals. (ibid.)

This idea of belonging, of acknowledging 'our kinship as animals with animals' seems really close to developing a 'belief in the world' in a Deleuzian sense, but is still highly controversial in modern thought so heavily based on the separation of human and nature. A total shift in our way of seeing the world – and our position in it – may indeed be key to learn how to believe in the world. This, however, also involves a profound questioning of some of our most enmeshed beliefs which constantly infuse our decision. The main belief which explains our submission to technology and progress, and thus impedes our 'belief in the world', is the self-assured idea that we are the 'lords of creation': the idea of human exceptionalism.

⁴⁵ Here I am not even talking about the possible environmental cost of creating such technologies for a large population.

Human exceptionalism, rationalism and the belief in the world

Modern conception of humanity is based on human exceptionalism, an ontological state of exception based on the separation between Nature and Humanity, that places Man as the master of nature (Danowski and Viveiros de Castro, 2017).

Humans are thus believed to be exceptional and distinctive from all other life form on Earth, a belief which infuses, at least implicitly, Western philosophy and most science (Lewandowsky and Oberauer, 2021). In particular, social sciences that stem from this idea of human exceptionalism (Moore, 2017).

Seeing human relations as not only distinct from nature, but as effectively independent of the web of life, has shaped social thought for two centuries. (ibid. p.596)

As Moore (ibid.) asserts, there is no arguing that humans are distinctive, however, the question is then how we approach such distinctiveness. After all, being distinctive does not grant dominion over the planet. Lewandowsky and Oberauer (2021) attribute the origin of human exceptionalism in Judaeo-Christian thought in which man is made in God's image and encouraged to dominate the Earth. We can indeed find the idea no further than in the first chapter of Genesis:

Gen 1:26

And God said: 'Let us make man in our image, after our likeness; and let them have dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all the earth, and over every creeping thing that creepeth upon the earth.

Gen 1:28

Be fruitful, and multiply, and fill the earth, and subdue it; and have dominion over the fish of the sea, and over the fowl of the air, and over every living thing that creepeth upon the earth

However, if the Bible – and thus Judaeo-Christian thought – clearly pushes the narrative of human exceptionalism and encourages human to prosper and conquer, we also found its foundation, as demonstrated by Marchesini (2015) at least as far as back to Plato who asserts that non-human animals, sons of Epimetheus, are

merely responding to stimuli through predetermined automatism, whereas humans, sons of Prometheus, free from such incentives, are free to act.⁴⁶ This means that Humans are not animals, or, at the very least are a very different kind of animal, and are able to transcend their animality, this also means assuming a “speciesist view discriminating living beings as *minus habens*” (*ibid.*).

This dualism between human and animal, humanity and nature, is also, of course at the core of Cartesian thought, the foundation of rationalism and modern thought (*ibid.*). Descartes by pushing the idea as far as describing non-human animals as mere machine unable to think and at the disposition of Man, reinforced the idea of human as being above Nature.

While human exceptionalism draws heavily on diverse mythologies – and thus could be qualified as a mere belief despite being generally perceived as ‘natural’ – the idea has survived throughout the centuries and has largely influenced Cartesian rationalism and thus modernity, even though modern thought claims to be exempt from superstitious ideas and based solely on the scientific method.⁴⁷ As Latour explains:

The dominant, peculiar story of modernity is of humankind’s emancipation from Nature. Modernity is the thrusting-forward arrow of time — Progress — characterized by its juvenile enthusiasm, risk taking, frontier spirit, optimism, and indifference to the past. The spirit can be summarized in a single sentence:

“Tomorrow, we will be able to separate more accurately what the world is really like from the subjective illusions we used to entertain about it.” (2012)

⁴⁶ In Greek mythology, Prometheus –whose name means ‘forethought’– and Epimetheus – ‘afterthought’– are brothers and fully antithetic. Epimetheus is the “clumsy by excellence” (Grimal 2007, p397) whereas Prometheus is able to fool the gods. It must be said that Prometheus is sometimes credited as the creator of humans – as in Plato – but most often he is simply their protector (*Ibid.*). However Plato’s choice clearly imply that human and non-human a altogether different creation, ones from a gifted craftsman the others from a gullible and clumsy one. Epimetheus is even credited for bringing misfortune on humanity when, not able to follow his brother orders to not accept any of Zeus gifts, he could not resist when Zeus gave him the infamous Pandora box (Grimal 2007, p142).

⁴⁷ Here it is also noteworthy – though I won’t develop this idea further, that Descartes’ science may find its foundation in dreams seen by Descartes as ‘coming from above’ (see Keevak (1992) and in which “the human mind had played no part”. In other words, Descartes’ method may have been ‘revealed’ to him through irrational dreams instead of deducted, which, since it has become the “founding of modern rationalism”, would be, at the very least, interesting to discuss. (see also Browne, 1972)

Progress has become the symbol and the driven force of human exceptionalism, the tool that allows humans to shape the world as they so desire, having both the ability and the right – some would say the duty, to do so without fearing the consequences (Stengers, 2015).

Cartesian rationalism, by separating knowledge and belief in modernist thought, has helped science to evade the authority of the Church by focusing on matter and what is observable, while Church focused on spiritual matters (Green, 2020). At the time that Descartes was writing this made possible for new knowledge – such as those developed by Copernicus and later Galileo – to emerge despite the objection of the Church (*ibid.*). But in the process we may have alienated ourselves from the world to a point from which it is now almost impossible to have what Le Guin calls an ‘awareness of belonging to the world’.⁴⁸

Consequently and as Latour (2012) asserts:

To succeed, an ecological politics must manage to be at least as powerful as the modernizing story of emancipation without imagining that we are emancipating ourselves from Nature.

For Latour the modernist Cartesian frame of thought, in which action can be nothing but rational and which put human as master of Nature, has defined master as requiring ‘total dominance’ so much so that it ended isolating the ‘master’ from any care or worry about Nature. It created a disembodied human, disconnected from its environment. “This is the myth about mastery that was used to describe the technical, scientific, and economic dominion of Man over Nature.” says Latour (*ibid.*). The emancipation built on such a fantasy excluding non-humans thus inevitably turned to an irrational nightmare due to an unrealistic reliance on what progress can provide, a “total absurd notion of what creation, innovation, and mastery could provide” (*ibid.*).

⁴⁸ Here I need to emphasize that in this context, ‘We’ of course means, ‘Us, the (western) moderns’, mostly white, whose culture is based on Cartesian rationalism and who believe in progress. As in the Anthropocene narrative, ‘we’ tend to see humanity as an homogenous group, it is important to establish that not all culture accept or think in terms of modernity and progress or even subscribe to the idea of human exceptionalism. This will be further developed in the next chapter.

Ironically, we can find this disconnection from our environment resulting from human exceptionalism, and now reinforced through the infernal alternatives a 'belief in the world' would bring, even in the aforementioned Earth System Science.

Indeed, Lenton situates the origin of Earth System Science around the 1960s and early 1970s when scientist James Lovelock and microbiologist Lynn Margulis came up with the Gaia Hypothesis: the theory that living and non-living organisms on Earth contribute to the regulation of its atmosphere and climate to allow the planet to be a fit environment for life (Lenton, 2016 pp4-5). However, Lovelock and Margulis' explanation of Earth's atmosphere's regulation as both "by and for the biota", has often been interpreted, Lenton argues, as teleological. While this view has been strongly refuted by Lovelock (1990), it has often been used to qualify considering Gaia as an organism, as dangerous, unscientific and myth-making.⁴⁹ From a modernist point of view, Considering Gaia as a life form and considering Nature as important as Human in the maintaining of life on Earth would open the gates to all sort of superstition, a religion even!

Consequently, Lenton, Dutreuil and Latour (2020) argue that, when Earth Systems Scientists consider Earth System and Gaia to be synonymous, they tend to study Earth as the system which humanity inhabits, still separating human and Nature thus missing "the theoretical and philosophical challenges raised by the centrality of Life in Gaia" (p.19). This, once again, reinforces the view that humans are a life form separated from the others and thus separated from nature.⁵⁰ Lenton, Dutreuil and Latour go as far as saying that

the teleological dimension of Gaia must be confronted directly, rather than being avoided to please biologists; [and Earth System Science] though influenced by Gaia in many ways, has lost sight of the central position of Life" and thus its constitution – stemming from the Gaia hypothesis – should not be seen as a satisfying achievement (ibid.).

⁴⁹ most often by biologist (see Lovelock, 1990 and Lenton, Dutreuil and Latour ,2020)

⁵⁰ I develop the issue of such separation in the next chapter.

While this may be why the discipline seems attractive for education (as well as for our guardians), the apparent anthropocentrism of Earth System Science keeps humans in control but forgets that all life forms (Life) are not only altering their environment but also creating world and that Life is also possible only through multispecies cooperation.⁵¹ As Anna Lowenhaupt Tsing (2015) points out :

Making worlds is not limited to humans. We know that beavers re-shape streams as they make dams, canals, and lodges; in fact, all organisms make ecological living places, altering earth, air, and water. Without the ability to make workable living arrangements, species would die out. In the process, each organism changes everyone's world. Bacteria made our oxygen atmosphere, and plants help maintain it. Plants live on land because fungi made soil by digesting rocks. As these examples suggest, world-making projects can overlap, allowing room for more than one species. Humans, too, have always been involved in multispecies world making. Fire was a tool for early humans not just to cook but also to burn the landscape, encouraging edible bulbs and grasses that attracted animals for hunting. Humans shape multispecies worlds when our living arrangements make room for other species. (p22)

Life on Earth must thus not be seen as the mere result of the interaction between life forms and their inert environment but instead as an intricate and subtle collaboration between every element that compose such environment, whether – seen as – alive or not (*ibid.*). Without this kind of realization it is easy to believe that one life form may be separated from the other and thus able, even allowed, to 'not pay attention' while putting itself above all the rest.⁵²

Could buying into the narrative of human exceptionalism for centuries be how, to paraphrase Deleuze, the world has been taken from us? Whenever we try to

⁵¹ This idea of control may sprout directly from system thinking as Donella Meadows (2001) asserts "People who are raised in the industrial world and who get enthused about systems thinking are likely to make a terrible mistake. They are likely to assume that here, in systems analysis, in interconnection and complication, in the power of the computer, here at last, is the key to prediction and control. This mistake is likely because the mindset of the industrial world assumes that there is a key to prediction and control."

⁵² Here I consciously use the phrase "to not paying attention" found in Stengers (2015) as a reference to how humans tend to forget to pay attention when it is a matter of progress and thus to separate themselves from 'nature'.

imagine new tools to face the upcoming of the Anthropocene we find ourselves ironically and almost exclusively relying on new technologies, on progress, instead of learning to slow down and re-connect with our environment without interface.

Finally, we lost the world only because we are unable – or too stubborn – to imagine a way to be part of it. Believing in the world thus maybe implies that we should start by rejecting the unfunded tale of human exceptionalism – a tale which has failed to bring us the autonomy we believed we were entitled to since we are now facing the consequence of such belief – and start accepting the idea that we are part of a living organism bigger than ourselves and which does not need us as much as we need it. Maybe having a ‘belief in the world’ starts by stepping back and start listening to this transcendent organism, for our own good?

Gaia may, after all, have more to say to us.

The next chapter will focus on what Stengers names ‘the intrusion of Gaia’, the need for us to learn to pay attention to the ‘old goddess’ and to embrace the idea of Gaia as a form of transcendence, in our future decision if we do not want to overstay our welcome on Earth.

GAIA AND THE END OF THE WORLD

“People often didn't stop to think.
They thought as they went along.
Sometimes it was a good idea.
Just to stop moving, in case you moved the wrong way.”
– **Terry Pratchett - I shall wear midnight**

Thinking Symbiosis

In system analyst and writer Nicky Drayden's duology *Escaping Exodus*, the remnants of humanity have long left the Earth after an unspecified global catastrophe and have colonized space whales the size of a small moon to survive, terraforming them and mining their resources to the point of depletion for a decade or two before jumping on another beast.

The story begins right after such a jump, and follows people from different classes in the new society that has been built through generations of living in space beasts. Here, what happened on earth has no importance, and the books instead focus on a totally different organization of human society after centuries of adaptation to a new environment. Class struggle, work and exploitation, religions and inequalities still exist but, maybe most importantly, while knowingly living on a living beast, humans still consider their environment as Nature which is theirs to exploit and exhaust.

This soon becomes a major plot in the books since the new Zenzee – the name that is revealed space beasts call themselves – is declining considerably faster than usual, and the herd of Zenzees population is decreasing drastically. The rate of decline is such that there will be no Zenzee left in a few years and humanity will once again have to find a new 'place' to survive.

Seske and Doka, the main characters prematurely finding themselves as leader of their people, are the first to actually realize that the Zenzee despite her size is feeling their presence, that they act as a virus that is killing the beast conversely to other live forms present in each Zenzee who live in symbiosis with their

environment. This new awareness of course causes political struggles, but Seske and Doka manage to convince their people they should learn to take care of the beast.

By the beginning of the second and last book, humans have repaired most of the damage they have done to the organs, bones and overall body of the Zenzee, and scientists are confident they managed to reverse the effect they had on the beast by diminishing their impact and through a more careful way of life, some perceiving it as austerity and sacrifice, which of course is not without causing major issues in the society.

Pushed in their last retrenchment by political opposition preparing a coup, Seske and Doka are forced to ask the Zenzee itself for help through Seske's long arch enemy, her sister, who, through a process which as little interest here as merged with the Zenzee. However, through Seske's sister, the Zenzee starts to take over, and is trying to contaminate humans with a spores that allow the beast to pseudo mind control people to ensure communication with them, finally achieving a true symbiosis. Indeed, Doka realize that before that and all the efforts made to diminish – to use a well known phrase – human footprint on the Zenzee, they never fully let go their control on the beast:

« We didn't want to truly live in symbiosis with our Zenzee. We'd worked so hard to mend her broken bones but had left the control nodes in her brain. We'd reintroduced vital native species but kept them from performing their intended functions. We'd embraced peaceful living but had left the cannons we'd mounted through her hide to protect ourselves, just in case. »

In short, even the best intentioned denizens of the Zenzee never let go of human exceptionalism and the idea that they are allowed to master their environment resulting, as we have seen, in a total disconnection from it.

But once Doka welcome the Zenzee's spores, he start feeling connected.

« I hear the voice, like an echo, but not. It is in the bug song, in the rustle of leaves, in the creak of ancient bone. It is in my own breathing. It is a voice that's always been there, but we've refused to listen. I'm listening now, though. Humans and the Zenzee are no longer two separate things. We are all parts of a whole. »

The main reason which prevented Doka accepting to connect with the Zenzee was the fear of losing his freedom, to be controlled by the beast and lose agency. The fear of 'letting go'. The same fear can be found in those who refuse to acknowledge Gaia as a life form, listening to Gaia and acknowledging her importance is in direct contradiction with human exceptionalism and the illusion of control it provides. Accepting such a form of transcendence comes into direct conflict with everything human have thought since Plato. The question which should be considered, however, is what do we have to lose exactly if we accept to listen to Gaia?

In Nicky Drayden's novels, people start acknowledging the need to be more careful with their environment once they discover that the beasts have names, that they are individuals. Naming Earth, Gaia, may be frowned upon and contribute to dismissing Gaia theory as unscientific or 'myth-making'. Indeed, Gaia was the first ancient Greek goddess emerging from Chaos, the void. At first perceived as an elemental God, and having engendered the Titans, the pre-Olympian gods, Gaia was from a time predating humans. Only when Hellenistic religion started to give its gods more anthropocentric attributes did Gaia became a more maternal/caring figure, often incarnated in other goddesses – such as Demeter for instance.⁵³

Naming Gaia may thus appear as an attempt to revive – or perhaps to rework – old myths, myths we are supposed – and proud – to have gotten rid of with modernity.⁵⁴ However, challenging the rejection of any form of transcendence by modernity may exactly be why it is important to name Gaia, in the same way that the Doka's people who learned the names of their Zenzee have been led to accept the need to pay attention to their living spaceship.

⁵³ See Grimal, 2007 for a description of the mythological Gaia.

⁵⁴ An assertion which, as we have seen, is not perfectly true since modernity and human exceptionalism are also a continuity of old, unproven and sometimes proved wrong, beliefs such as the idea that the world as been built for human to dispose of or that animals are not sentient creatures. On this, see also Latour (2009) ideas of what he calls factish gods. But also Kaufman and Sturtevant (2020)'s accounts of myths on middle ages on which modern thought is often based.

Before science became the main framework in the West/ global North/ for “the moderns”, the understanding of Earth and its movement were controlled by religious authorities and the idea that Earth could be merely a rock spinning in an heliocentric system was blasphemous (Latour, 2014). Today, the new authorities – inquisition “now economic rather than religious” says Latour, though I would add Scientific too – struggle with the idea of acknowledging that Earth, or Gaia, may in fact be more than that and might even has agency, making Gaia a figure, closer to the old beliefs, that we need to take into account in our actions. As a result and according to Latour many people (scientists and politicians) are “now ridiculing the new – also very old – agitated and sensitive Earth, to the point of being in denial about this large body of science”(ibid) only to be able to blindly continue the tale of human exceptionalism.

Notwithstanding, Gaia has taken a large place in philosophy and culture. “In both lay and professional quarters, the idea of Gaia has enjoyed a liberal emancipation from the precincts of scientific cultivation to enter into cultural free association” and the figure particularly infuse the works of both Isabelle Stengers and Bruno Latour (Clarke, 2016, p4). Fully embracing Gaia most teleological and transcendental approaches Latour (2014) is keen on attributing Gaia agency and Stengers is not only undaunted by the figure of the ancient goddess but even argues that:

Gaia is [...] more than well named, because if she was honored in the past it was as the fearsome one, as she who was addressed by peasants, who knew that humans depend on something much greater than them , something that tolerates them, but with a tolerance that is not to be abused (Stengers 2015, p45)

In other words, in ancient time, Gaia was the reminder of human non-exceptionalism we so desperately need now. Furthermore, seeing Gaia as an organism, a living entity, close to the old goddess, is harmless and does not contribute to create new superstitions – nor new infernal alternatives despite what minions would argue – but instead, as for the inhabitants of the Zensee, to start

building the necessary empathy to start listening and acknowledging what Gaia has to say.

Furthermore, considering Gaia as a living entity does not even go against science. After all, as French philosopher Edouard Machery (2010) points out, while many disciplines constantly tried – and continue to try – to define life, no consensus has ever been reached on what is alive or not. For Machery, defining life may be possible but pointless since each discipline concerned with defining life is most likely to reach a different conclusion than the others since their criteria are specific and divergent constantly leading to contradictory definition which often do not resist to specific cases (2010). Furthermore we keep finding intelligent life in the most surprising places.⁵⁵

Whether or not we follow Machery's advice to discard life definitionism, we can argue, since no universal definition of life exists, that seeing Gaia as a living organism should not be so controversial. Even more so since, eventually, this may help us avoiding being 'rejected' by Gaia and thus is in our utmost interest as a living form inhabiting another living organism and that we, as the other species, may have a role in maintaining this organism. Like in Nicky Drayden's books, we can chose to live in symbiosis or to become, in the words of Agent Smith in *The Matrix*, a virus.⁵⁶

More importantly, naming Gaia does not mean that humanity needs to lose its agency. For Stengers, Gaia is not a Nature that needs to be protected nor a vengeful goddess that needs to be appeased. She does not want – nor does she need – anything from humans not even their submission. As Stengers puts it:

And acknowledging Gaia Stengers puts it

⁵⁵ see for example Evans (2021) account of Suzanne Simard's 1997 research on how forest can be seen as a living "intelligent system, perceptive and responsive" resulting of the sum of lives entwined in them.

⁵⁶ Talking to Morpheus, Agent Smith says: "every mammal on this planet instinctively develops a natural equilibrium with the surrounding environment, but you humans do not. You move to an are and multiply until every natural resource is consumed, and the only way you can survive is to spread to another area. There is another organism on this planet that follows the same pattern. [...] a virus." while we need to be careful with the possible Malthusian argument here, this comparison appears to be rather accurate even more now, twenty years later.

Ticklish Gaia, such as I have named her here, cannot be associated with either prayer, which is addressed to divinities able to hear us, or with the submissiveness that this other blind divinity, honored under the name “the laws of the market,” demands. (*Ibid.* p151)

Gaia does not care, her existence is not threatened by humanity activities but rather humanity itself and manifold other life forms are. Learning to pay attention to Gaia does not mean worshiping her, merely building an equilibrium that allows us to stay a little longer. This does not even mean abandoning our distinctiveness even though, at the moment, what makes us distinctive from other life forms appears to be our abusing of Gaia’s tolerance. Since, as Stengers explains, abusing there is to the point that humanity is now considered as a geological force, a force that transforms Gaia. And this transformation pushes Gaia to intrude, forcing her to play a very different role in human history. The Anthropocene sees Gaia inevitably becoming part of society. As Danowski and Viveiros de Castro asserts,

The transformation of humans into a geological force, that is, into an “objective” phenomenon or “natural” object, is paid back by the intrusion of Gaia in the human world, giving the Earth System the menacing form of a historical subject, a political agent, a moral person (2017 p14)

Letting Gaia Intrude

In an ironic ‘plot twist’ argues Danowski and Viveiros de Castro, Gaia, the one that has been ‘tamed’ by humans becomes the one which will force its self-proclaimed masters to adapt to her will to survive (*ibid.*). And Gaia’s response may be disproportionate since merely an uncontrolled reflex, a ticklish response but not a conscious reaction (Stengers, 2015).⁵⁷ Maybe Gaia is offended by the mere fact of being forced to notice human presence, not unlike the way in which one may shiver when feeling the tickling presence of an ant on their skin. But Stengers adds that Gaia knows no justice, and thus the consequences of human’s offense will hit

⁵⁷ Stengers insists on the need to not see Gaia as vindictive but merely annoyed since Gaia is not able of holding grudge or intentionally act. This is an important characteristic of how Stengers perceives Gaia as a being and also explains why Gaia is not concerned by justice.

blindly, probably even starting with the poorest regions of the world as well as the more fragile species which are the less responsible for the tickling (*ibid.* p46). Gaia will not target fossil fuels companies largely responsible for climate change nor will she punish politicians who keep pushing policies that profit their sponsors, instead humanity as a whole will experience the ‘horrors of the anthropocene’, floodings, wildfires, heatwaves and so on, and the poorest regions, those who the most exploited by our guardians, as well the manifold lifeforms which have nothing to do with our abusing, may suffer the most. To paraphrase Stengers (2015), this may be why the global North remains so indifferent on its part on the upcoming catastrophe. It feels safe, cut off from the rest of the world safely retreated behind the myth of progress.

However, while it is true the poorest region of the globe may greatly suffer from climate change, the global North and its richest parts, notably coastal urban environments, are highly exposed and poorly protected by the ‘business as usual’ attitude from decision makers.

In his investigation on the impact of climate change, Ashley Dawson argues that cities are at the forefront of the climate crisis due to their location and/or their infrastructure (2019). In Miami, for instance, despite well-known and widely reported risks of flooding – due to the city’s elevation of only three feet above the sea level as well as the porous composition of its underlying ground – very little seems to be being done to protect the population from upcoming catastrophe (p17-9).

The main reason which appears to impede decision making despite warnings, says Dawson, is the incentive of trying not to scare population and investors as well as an inability to think far enough in time. The same scenario unfolds in New York where “planning for climate disaster is not the path our politicians are currently following” (p31). Manhattan, which has been proven to be at high risk especially after hurricanes Irene in 2011 and Sandy in 2012, continues to attract real estate investment and development especially encouraged by the city as a sign of

resilience after the 9/11 attacks. Since the attacks, the population of the island has even doubled says Dawson (*ibid.*).

Wildfires have also increasingly indiscriminately damaged forests in both global South and North. This year has indeed been a particularly devastating one due to record breaking heat that caused drought in Italy, Greece, Germany and many other European countries (Center for Disaster Philanthropy, 2021 and for a full list of 2021 wildfire Wikipedia Contributors (2021) do a good job at gathering information in one place).

There is, however, an interesting point to be made about wildfires. If it is true that climate change has made recent wildfires more devastating, record heatwaves are not the only reason why wildfires have become stronger and more dangerous in the recent past.

Indeed fire suppression appears to be one of the main issue in regards to forest fire (Trouet, 2020; Murphy, Yocom and Belmont, 2018). For instance, before the 20th century, wildfires in the US were far more frequent than today (Murphy, Yocom and Belmont, 2018). Those fires were sparked either naturally or intentionally by indigenous people to periodically remove the fuels – grass, wood, moss – accumulated during the year and thus was easier to control and less dangerous since the higher frequency of those fires prevent the larger accumulation of combustible under-story material (Trouet, 2020). There were simply not enough material to burn to spark a fire that would destroy an entire forest. But the emergence of new infrastructure – rail-roads, forest road and urban interface – as well as the need of space for livestock, saw a drastic decrease in the use of such needful fires (Murphy, Yocom and Belmont, 2018) resulting in an alarming accumulation of fuels on the forest ground (Trouet, 2020).

Through a century of fire suppression, we have turned our California forests into a tinderbox, a fire accident waiting to happen. To compound this fire danger, we have heated up our climate, making the hot California summers even hotter, the

seasonally dry Californian forests even drier, and the long fire season even longer. (ibid.)

Furthermore the reduction of fire during the early 20th Century has allowed people to settle near the forests, near those “tinderboxes” waiting to burn and cause damage to human infrastructure (Murphy, Yocom and Belmont, 2018). Increase in population in those area then encouraged yet even more fire suppression and thus generated more accumulation of combustible on the ground until a catastrophe becomes impossible to prevent.

One again by trying to master Nature, to model it to its liking merely for commercial purpose – more exploitation, more livestock and so on – humanity has put itself in direct danger, even – and maybe even more – in the global North.

A future without wildfire is not an option in the western United States. Fires have burned in this region for millennia, and now, the climate is warmer and drier, snowpack is lower, fire seasons are longer, and in some ecosystems, fuels have accumulated for over a century. The public must let go of an antiquated [...] perspective of the West, when fire activity was at a minimum and water storage was at a maximum. The climate and landscapes have fundamentally changed since the mid-twentieth century, and the notion of near complete fire suppression is unrealistic. The current and future increases in wildfire activity are due to the combination of twentieth century land management policies and climate change. Understanding the historical magnitudes and accepting the future potential of wildfire in this landscape is pivotal if we hope to change human behaviors, ensure the implementation of realistic solutions, and find a way to coexist with fire.(Murphy, Yocom and Belmont, 2018 p1495)

To achieve this, Murphy, Yocom and Belmont (ibid) emphasize the need for the scientific community to help realign public perspectives thanks to clearer and less ‘sensational’ publication and press releases which focus on a better understanding of the history of wildfire and their importance in the ecosystem instead of focusing on the latest results that give the false idea that we are reaching never seen before level of wildfires and allow the media to build false narrative.

These examples of the intrusion of Gaia localized and as a direct consequence to human activity does not make Gaia more just or her intrusion less blind, this only confirms – and reinforces– Stengers’ statement on the failure of what she calls ‘our guardians’ to act properly and in time, on their ‘stupidity’, and how they have “given up all of the means that would have allowed them to grasp their responsibilities and have given the globalized free market control of the future of the planet.”(2015 p29).

This also shows how, even though they pretend to understand what is at stake and the need to act, they are more concerned in not creating panic and are paralyzed by the fear of losing their control.⁵⁸ As Stengers puts it,

“They dread the moment when the rudder will be lost, when people will obstinately pose them questions that they cannot answer, when they will feel that the old refrains no longer work, that people judge them on their answers, that what they thought was stable is slipping away.” (*ibid.* p.30)

There is thus definitely nothing better to be expected from ‘our guardians’ not even so called ‘green capitalism’ which at best is lip service and at worse a new form of colonialism as described by Lesley Green (2020), white people endorsing the role of saviors of African nature from Africans.⁵⁹ Furthermore, as previously established, the logic of capitalism is also to keep on generating ‘infernal alternatives’ to avoid facing the difficult issues but also to exploit and promote the new opportunities climate change can provide: either we abide with new ‘green products’ or we are part of the problem (Stengers, 2015).

Notwithstanding, Gaia, the one who intrudes, whether we like the idea or not – or prefer to ignore it – does not care and is here to stay, she is not threatened by our

⁵⁸ Because information on Climate Change and its risks are finally reaching out even though faintly, such ‘panic’ are nevertheless inevitably starting to rise, one of the effect being the creation of different classes: those who can escape and those who do not, even in the global north as explained by Peter Gleick (2021), which may not help ‘our guardians’ to engage in more sensible behaviour.

⁵⁹ Green also explains that some NGO such as VETPAW send US veteran engaging in the ‘war to protect biodiversity’ to protect endangered species against local poachers (Green, 2020 p11).

actions nor by our policies, but we are – alongside several species, most of them, as we have seen, essential to the survival of the human species.⁶⁰ Gaia does not have neither the ability nor the interest of paying attention to us – or even to other life forms – we will not be able to negotiate with her, instead this is our whole way of thinking that must change (Haraway, 2016). We are the one that need to pay attention and to learn to adapt to Gaia's intrusion. In short, if we want to be able to face the 'horrors of the Anthropocene', we need to be careful about how we think the 'Earth System' and to stop believing that we are the 'lords of creation' and can control it, shape it to our will.

As environmental Scientist Donella Meadows, drawing on her experience of studying systems explains:

self-organizing, nonlinear, feedback systems are inherently unpredictable. They are not controllable. They are understandable only in the most general way. The goal of foreseeing the future exactly and preparing for it perfectly is unrealizable. The idea of making a complex system do just what you want it to do can be achieved only temporarily, at best. We can never fully understand our world, not in the way our reductionistic science has led us to expect. Our science itself, from quantum theory to the mathematics of chaos, leads us into irreducible uncertainty. For any objective other than the most trivial, we can't optimize; we don't even know what to optimize. We can't keep track of everything. We can't find a proper, sustainable relationship to nature, each other, or the institutions we create, if we try to do it from the role of omniscient conqueror (2001, pp58-59).

Instead of trying to control an environment we cannot fully understand we need to let it intrude into our way of thinking everything (Stengers 2015). We need, as suggests Stengers to see Gaia as a form of transcendence with which we will now always have to reckon with. Gone are the days when we had the luxury – If we ever had it – to overlook to Gaia's ticklishness. Since systems are unpredictable and

⁶⁰ see also for example Pershouse (2020) on other species as essential workers: "They are the myriad species with whom we share our landscapes: plants, fungi, insects, animals, and microbes. If they all went on strike, we would have no oxygen to breathe and no food to eat. Most rainfall would cease. Dead animals and plants would pile up, miles high, with no easy way to break back down into raw materials for continued life. Temperature regulation on Earth would deteriorate to the point that it would become uninhabitable. Meanwhile, our own human brains and bodies would cease to function"

uncontrollable, we may also need, as Meadows invites us to do, and as Doka and his people with their moon sized Zenzee, to start listening to what they have to tell us, and learn how we can work together “to bring forth something much better than could ever be produced by our will alone”. Once again it is not a matter of submitting to a kind of fatalism against which Stengers (2015) warns us, instead, we need to embrace learning how to think and react to what happens in order to evolve as a species.

We can, as Meadows (2001) asserts, learn to dance with the systems that surround us.

In many ways, acknowledging the intrusion of Gaia tacitly implies that human separation from nature is but a belief and would force modernists to recognize the failure of their worldview and possibly trigger the fear of a regression (Stengers, 2015; Le Guin, 1989). Indeed, modernist thought is founded both on Cartesian dualism, the fundamental split between belief and knowledge (Green, 2020) and on Descartes’s view that human emancipation from nature is an indisputable reality (Moore, 2017).

As Stengers invites us to do, we need to detoxify the

narratives that have made us forget that the Earth was not ours, in the service of our history, narratives that are everywhere, in the heads of all those who in one manner or another feel themselves responsible, the bearers of compass, the representatives of a direction that must be maintained. (2015 p.152)

Accepting that human emancipation is an unfounded belief, may put into question the whole idea of rationalism and the fundamental principles of modern society. For many, by first and foremost for our guardians, this would be the end of the world. However detoxifying the narratives of modern society may also help us understand that this end of the world does not mean the end of humanity.

Indeed, by challenging the idea of human exceptionalism and of modernity as the best way of life, we may soon realize that ‘we’ are but a small part not only of the many lifeforms sharing Gaia with us, but also of humanity itself. Maybe we can

build another 'we' and 'we' than can learn to dance with Gaia instead of desperately clinging to the destructive myths of modernity.

Aliens and Terrans. The constitution of a 'we' in the modern world

The start of the Anthropocene is often situated around the early 1800s, when human activity started to have a significant impact on the environment with the dawn of the industrial era (Moore, 2017).⁶¹ This stems from the idea of the separation between human and nature which infuses what Moore calls 'green arithmetic'. In 'green arithmetic', environmental studies result from the sum of society and nature without taking into consideration mutually constitutive action both have on each other. However, this, asserts Moore, makes sense only up to a point:

Not only does human activity produce biospheric change, but relations between humans are themselves produced in and through the web of life. Nature operates not only outside and inside our bodies (from global climate to the micro-biome) but also through our bodies, including our embodied minds. Humans produce intra-species differentiation which are ontologically fundamental to our species-being: inequalities of class especially, inflected by all manner of gendered and radicalized cosmologies. (Moore 2017, p603)

The narrative of the Anthropocene that situates the origins of climate change at the beginning of the British-led industrial revolution also highlights a lack of historical thinking (*Ibid.*). The same can be said about the dualism society versus nature, born in the sixteenth century, which Moore asserts are not analytical problems but real-abstraction:

Treated as real by capitalists and empires, they are implicated in modernity's violence, and in planetary crisis today. That's not an argument for purity - we all use these concepts. It's an argument for awareness. It's an argument for ongoing reflexivity. (*ibid.* p604)

Thinking in terms of the Anthropocene as the impact of Society upon Nature which starts with the emergence of fossil fuels led capitalism does not show any of

⁶¹ The IPCC report also uses the beginning of the industrial era as the main comparison to assess the evolution of evolution of human activities impact on climate change.

this awareness and thus is inefficient to help understand our current crisis. Worse the Anthropocene is enmeshed in the narratives that led to this crisis in the first place (ibid.). The narratives we should seek to detoxify.

Here, I would like to go back to John Carpenter's *They Live*.

It is interesting that Carpenter chose aliens – albeit not cannibals – to represent capitalists. Since he decided not to give them any kind of strange power or any other motivation than to exploit the planet for profit, there was no apparent need to represent the ruling class as other than human.⁶² French philosopher Frederic Neyrat (2006) argues that 'They' are alien because they belong to another reality, we do not want to see them but they are among us, and at the same time they are not. This avoidance, once again brings up denial and witchery. Carpenter creates an invisible force behind the perceived reality to reveal the hold of capitalist sorcery.

When Nada put the sunglasses on, he sees the world in black and white, and the aliens are revealed. This is reality. Conversely, the world filmed in colour, says Neyrat (ibid.) is but a fairy tale, the world that does not exist, that is hidden.⁶³ Here Carpenter tells the story of other invisible people: the poor, the rejected, the alienated. They are part of another reality, the real world refuses to see them.

Modern society is made of these separate realities, the separation not only of Human from Nature but also of many humans from humanity:

The whole thrust of capitalist civilization develops the premise that we inhabit something called Society, and act upon something called Nature. This is the problem of alienation, shaping everything from the structures of work to the structures of feeling (e.g. Marx 1977; Braverman 1974; Williams 1977). Society and Nature are, in this sense, not only expressions of alienation but instruments of it. The violence inscribed in Nature/Humanity was there from the beginning.

One moment was the expulsion of many humans from their homes during the rise

⁶² The only 'power' the alien have their apparently advanced technology that helps creating a kind of glamour to hide their presence to the naked eye.

⁶³ like in the 1939 adaptation of Wizard of Oz – in which the real world is in black and white and only when Dorothy arrives in Oz does the film starts to be in colour. Carpenter talks about the similarity between the wizard of oz and *They Live* in *Mythes et Masques : les fantômes de John Carpenter* (L. Lagier et J.-B. Thoret, 1998) cited in Neyrat (2006)

of capitalism (and many times thereafter). This provided a material condition for seeing nature as external (as Nature). Another was the expulsion of many humans – probably the majority within the orbit of early capitalist power – from Humanity. Most women, most peoples of color, and virtually all Amerindian peoples were excluded from full, often even partial, membership in Humanity. (Moore, 2017 p600)

This separation of what is worthy of being deemed human and what is not and which therefore is merely part of a Nature that can be exploited – or ‘act[ed] upon’ – becomes at the very root of ideologies such as biological essentialism, social dominance orientation or of the more extreme social darwinism: the idea that the fittest members of society are meant to rise to the top and policies that help the weaker are threatening the natural order (Rudman and Saud, 2020).

These kinds of ideology have been proved to provide rationale for social inequality without feeling being prejudiced (*ibid.*): if it is natural for some people to have more power, there is nothing to do to prevent this. And more importantly attempts to improve the life of the weaker, less worthy ones are a threat to this natural order. Thus fighting such policies – and claiming that those who are defending them only aim at the destruction of the natural order – is not only justified, but a matter of survival. Here we find the same narrative than conservative think tank pushing climate denial.

This feeling of defending a way of life endangered by a fantasized Other – generally minorities – is what, in the US, Michael Kimmel (2019) calls ‘aggrieved entitlement’.

that sense that “we,” the rightful heirs of America’s bounty, have had what is “rightfully ours” taken away from us by “them,” faceless, feckless government bureaucrats, and given to “them,” undeserving minorities, immigrants, women, gays, and their ilk. If your despair can be massaged into this Manichean struggle between Us and Them, you, too, can be mobilized into the army of Angry White Men. (p.44)

For Aph Ko (2019) the systemic alienation of people of colour also leads to what she names 'White supremacy zoological witchcraft' a practice in which minorities – in particular black and brown people – are “physically and conceptually consumed” (p.54). White supremacy being in itself a form of witchcraft based on “colonialism, Christianity, plunder and consumption” (p.56). In short

White supremacy's sorcery is the ability to define the entire world from white people's standpoint and to affect the internal psyches of other living beings (p.57)

This sorcery captures the thoughts of minorities by creating a split consciousness which leads oppressed minorities to see the world through the eyes of their oppressor and thus to see themselves as naturally inferior, unworthy to be human (*ibid.*). This, states Ko (*ibid.*) is how white people “hijack” black people's mind to make them accept white supremacy as the natural way of thinking.

Lesley Green also gives an account of Achille Mbembe similar description of whiteness as an operation of imagination in which :

Only the White race possessed a will and a capacity to construct life within history. The black race in particular had neither life, nor will, nor energy of its own... It was nothing but inert matter, waiting to be molded [by] a superior race (in Green, 2020 p111)

Oddly enough, to help us understand how the Maya have perceived the invasion of european Danowski and Viveiros de Castro suggest us to imagine being in a Sci-Fi B-Movie

in which Earth is taken over by an alien race pretending to be humans, whose goal is to dominate the planet and to extract all its resources, after having used up their own home planet. Usually, the aliens in such films feed on humans themselves: their blood, mental energy and so forth. And now let the reader imagine that this has already happened, and that the alien race is in fact, “we ourselves”. We were taken over by a species disguised as human and they have won: we are they. Or are there in fact two different species of human, an indigenous and an alien one? (2017 p108)

In a Cartesian frame of thought, in which the goal is “to make ourselves as it were the masters and possessors of nature” (Descartes, 2006 p51 in Moore 2017 p605), this operation of alienation allows Capitalism to work by creating what Moore (2017) calls Cheap Nature, a Nature that is there to be exploited.

For Moore (*ibid.*; also 2018), the creation of capitalism is linked to the creation of the concept of Nature which becomes a force of production and of which many humans are regarded as being part of and thus treated as tools to be put to work for free or low-cost. Capitalism needs and creates these separation to survive. In many ways, the idea of the Anthropocene also enforces this.

Indeed even though the time line for the Anthropocene is still up for debate it is very rarely seen as started with the apparition of human as a species, but often relate to the rise of modern capitalism (Lowenhaupt Tsing, 2017; also Moore 2017). This makes us think human as human only since the rise of capitalism and

entangles us with ideas of progress and with the spread of techniques of alienation that turn both humans and other beings into resources. Such techniques have segregated humans and policed identities, obscuring collaborative survival (Lowenhaupt Tsing, 2017 p19).

This allows a ‘certain mode of Western presence in the world’(Green, 2020 p111):

Notwithstanding the dependence of consumers and tourists on an extractive economy grounded in excessive ecological and structural violence [...] it is, in the unbearable whiteness of many greens, the poacher who becomes the guilty party for destroying the animal kingdom. (*ibid.*)

In short, far from being less oppressive, green becomes the new white, and green capitalism a new tool of domination – of ‘white supremacist witchcraft’— putting white europeano-centered people on top of the hierarchy.

This is what thinking in terms of Anthropocene in the public discourse instead of, for instance the Capitalocene as suggested by Moore (2013, 2017, 2018, see also Green, 2020; Haraway, 2016) fails to acknowledge by attributing climate change to humanity as a whole. The Anthropocene contributes to the tale of the strong

separation between Nature and Society with no consideration of what is part of Society, and no consideration of who is the 'Anthropos' responsible for Climate Change.

This limits its effectiveness to explain how the present crisis is unfolding, for a basic reason: it is captive to the very thought-structures that created the present crisis. At their core, these structures find their taproot in Cartesian dualism, a mode of thought taking shape in early modern Europe. (Moore 2017, p604)

As Green (2020) asserts, choosing between the Anthropocene or the Capitalocene to define the period is not only a matter of semantics, but also of defining precisely a problem to which we seek solutions which, in turn, will lead to policies. If the problem is ill-defined we may end up trying to fix what is not broken but at the same time failing to see what needs to change.

Conversely, the story of the Capitalocene focuses on the handful of corporation responsible for climate change and highlights the fact that *not* all humanity is (*ibid.*). Moreover the Capitalocene narrative shows, as Deborah Danowski and Eduardo Viveiros de Castro (2017) point out, that the problem we are facing – The 'Gaia War' as they call it – is not a tale of Humans versus Earth – Culture versus Nature – but Human versus Terrans – Masters vs Exploited.

Terrans being all life forms which are not seen as part of Humanity, including, as we have seen, many human beings. Defining who the Terrans are and against which Humans they are finding themselves may prove difficult. For Latour, the later is generically associated with the 'Moderns', "that is, all those agents, from corporations to countries and individuals, which are implicated in some ways or another in the implacable advance of the modernization front" (*ibid.* p102). Terrans would then be all the non-humans species and the – large – part of the human species which has been considered as part of Nature since the beginning of the modern period.

Of course, here it is not the case of promoting another theory of alienation in which people seems unable to be aware of their situation and need to be saved as described by Pignarre and Stengers (2011). It is not a matter of defending victims of oppression, but instead to think our own role in the hold of capitalist sorcery and to trace the origin of the spell, and to eventually maybe become able to chose to join the Terrans. Here, it is a matter of finding a 'people' able to create events that would evade control and generate a 'change in the course of time'. For 'We', the 'Moderns', have been de facto enrolled, through the hypnosis of capitalist sorcery, and the hold of infernal alternatives, but also through the exploitation of our desire, in this war for Gaia against the Terrans. As Fisher (2009) remind us

To reclaim a real political agency means first of all accepting our insertion at the level of desire in the remorseless meat-grinder of Capital. What is being disavowed in the abjection of evil and ignorance onto fantasmatic Others is our own complicity in planetary networks of oppression. What needs to be kept in mind is both that capitalism is a hyper-abstract impersonal structure and that it would be nothing without our co-operation.(p.15)

Breaking the spell

To learn how to dance with Gaia is to learn – or learn again – to pay attention. It is a matter of regaining agency, not of losing it and eventually this renewed agency may be getting off the hold of capitalist sorcery. Modernity has learnt us to not pay attention whenever it is a question of progress as progress is always presented with ability to compensate for the damage it may imply (Stengers, 2015).

Progress is seen as a necessary evil, one that will bring, if we do not limit it, the most happiness in the world, even if, in the process a few lives are segregated, endangered or destroyed. Even though we now have the tools to clearly evaluate the full extend of the damage caused by progress, we are told to 'turn a blind eye' (ibid.). We are asked not to think to much about the consequences and trust our guardians, and understand the difficulties of their task. They are taking care of us as long as we do not think too much.

In this surrender of thinking lays the “banality of evil” – which makes us de facto agent of the Gaia War – as described by Hannah Arendt in *Eichmann in Jerusalem*.

Far from minimizing the evil, [Arendt] warns that unimaginable evil can result from a constellation of ordinary human qualities: not fully realizing the immorality of what you are doing; being as normal as all your peers doing the same things; having motives that are dull, unimaginative and commonplace (going along with others, professional ambition, job security) and retaining long afterwards the facade of pseudo-stupidity, not grasping what the fuss was about (Cohen 2001,p100)

Cohen (*ibid.*) description is quite vividly reminiscent of Pignarre and Stengers’ minions mentality which represents the hold of capitalist sorcery, a vindication of paralysis of the thought. “Minions are dumbstruck by a prohibition of thinking what they are working for” (2011 p34). After all, if it is true that we are not all minions, we all are in danger of becoming one through our own infernal alternatives (*ibid. p42*) and our own surrender of the thought, but also when we present ourselves as ‘those we think’, as “representing the ‘brains of humanity’.

Every time that we forget that the very plausibility of our judgments is a translation of the destruction of other ways of thinking and doing. In other words, ‘minions’ should above all not be opposed to those who ‘think’. Certainly the minion makes thinking the enemy, but that doesn’t mean that those who aren’t minions resisted becoming so because they ‘think’. Instead it calls for a diagnosis of what paralyzes and poisons thinking and renders us vulnerable to capture. (p.42)

We thus must be careful as to not separate minions from ‘those who think’, to not reproduce any form of capture of the thought which limit the possibilities. Alienation manufactures several realities which do not communicate with each others and thus impede collaboration. To paraphrase Pignarre and Stengers (2011) we are not blind, being blind implies the possibility to see, but what has been seized is the mere ability to see.

When Nada finally destroy the transmitter that allows the aliens to hide from humanity, he is bringing back the ability for people to see. He is breaking the spell. Some may be curious to see what follows, how humanity is reacting to the destitution of the spell, but this would be similar to asking to be saved. Here it is not a question to replace our guardians by better, smarter ones, but to regain the ability to see and collaborate with Terrans.

Naming Gaia as the one who intrudes, says Stengers

“signifies that there is no afterwards. It is a matter of learning to respond now, and notably of creating cooperative practices and relays with those whom Gaia’s intrusion has already made think, imagine and act.” (2015 p.57).

For this we need to be able to pay attention and connect with one another outside the main frame of legitimacy, since by definition, those who think, imagine and act with Gaia’s intrusion, are not part of legitimate authority – sometimes not even part of ‘humanity’ (*ibid.*).

However, Stengers adds that we must not accept the intrusion of Gaia only because ‘we have to’, this would be falling into another objectivity, another sorcery which would hinder our ability to pay attention. Instead we need to acknowledge that what we are forced to do is to learn to think differently and embrace a constant reevaluation of our actions. And to achieve this we may have to abandon what Stengers calls the ‘epic version of materialism’

a version that tends to substitute the tale of a conquest of nature by human labor for the fable of Man “created to have dominion over the earth.” It is a seductive conceptual trick but one that bets on an earth available for this dominion or conquest. Naming Gaia is therefore to abandon the link between emancipation and epic conquest, indeed even between emancipation and most of the significations that, since the nineteenth century, have been attached to what was baptized “progress.” Struggle there must be, but it doesn’t have, can no longer have, the advent of a humanity finally liberated from all transcendence as its aim. We will always have to reckon with Gaia, to learn, like peoples of old, not to offend her (*ibid.* p58)

When Deleuze called for 'a belief in the world' he also claimed that we needed "a creation and a people" (Deleuze, 2012. Translation my own). It is now clear the people who are able to create a belief in the world are the Terrans, and the creation we need may be simply the 'end of the world'. The end of the moderns' world, as Danowski and Viveiros de Castro claim :

It has been disclosed to us that things are changing fast and not for the good of human life "as we know it". Finally and most crucially, we have no idea what to do about it. The Anthropocene is the Apocalypse, in both the etymological and eschatological senses. Interesting times indeed.(2017 p22)

This idea may appear dramatic to say the least but to paraphrase Danowski and Viveiros de Castro (2017), not having the opportunity to mourn that which is already dead, by denying its death, can be dangerous. We already know that we are living in a quickly declining world and that we will be forced more and more to live in scarcity (*ibid.*). After all, even our guardians seems to acknowledge this when they claim that it should be a collective effort to reduce the effect of the Anthropocene.

Nonetheless, "Reducing the scale of our feats and ambitions will in all likelihood not just be a matter of choice" (*ibid.* p120). However, this does not mean that The World is ending, only ours, but "there are many worlds in The World" (*ibid.*). And amongst these worlds live many people who, after having been conquered, repressed, alienated, exploited as part of Nature by the moderns, have survived the end of their world and have learned to live in an "impoverished world which is not even their own anymore" (*ibid.*)

Those are the Terrans who can teach us how to dance with Gaia if only we are willing to get rid of our old power fantasies. After all the idea that it is easier to imagine the end of the world than the end of capitalism, is but another infernal alternative. One we may learn to embrace by telling the story of how this world, the world of capitalism, the world of the moderns, ends. This would certainly trigger other infernal alternatives, most likely about the idea of regression, of being

brought back to the stone age since any idea that suggests a deceleration, a slowing down or even a mere limitation of human activities, anything that suggests that the world is enough, is

immediately accused of naive localism, primitivism, irrationalism, bad conscience, guilt or even just fascistic tendencies, period (Danowski and Viveiros de Castro, 2017 p121)

Here I would then argue that, like Doka and his people in the Zenzee, learning to compromise, to think with Gaia, is a long overdue step out of the slump, a step forward, toward understanding how to live in symbiosis with all the Terrans and to benefit greatly from this symbiosis while improving our chance to stay a little longer. The alternative being extinction, the choice should appear easy to make. But we still need to find tools to tell these stories of the end of the world, stories that would replace our old tales about human exceptionalism and power fantasies.

In her preface to Lesley Green's book *Rock | Water | Life*, Isabelle Stengers talks about how African 'dilemma tales' stage :

situations as multi-authored truths, gathering human and non-human protagonists, experiencing them with their own perspective, and participating in them in their own ways. Against the blind and brutal shortcuts proposed by the gods of reason, such tales demand from those who claim to care for a situation – teachers and researchers, for instance – the capacity to cultivate thinking and imagination that would not be about what this situation should conform to, but that enable them to stay alongside as it unfolds. (2020, pXV)

Neil Gaiman explains that stories and myths, in addition to teach us how the world is put together and conveying important information, teach us empathy with real people through made-up people (Longnow.org, 2021). If stories help us look through others' eyes, they also have the power to project us in alternate realities, exploring possibilities (and consequences) without having to experiment them firsthand while avoiding judgement from 'realists'. And stories, like magic, can – and do – also cause change. They can help us face uncomfortable truths before the

effect of our denial become irreversible. After all, writer and self proclaimed (mad) magician, Alan Moore even believes that art is magic:

I believe that magic is art and that art, whether it be writing, music, sculpture, or any other form is literally magic. Art is, like magic, the science of manipulating symbols, words, or images, to achieve changes in consciousness. (The Mindscape of Alan Moore, 2006)

Maybe stories are the magic we need to fight Capitalist Sorcery. And if it has been made easier to imagine the end of the world than the end of capitalism, then maybe we, the moderns, need to build a new eschatology, a liberating one, which tells us the story of the world after the end of capitalism, after 'the end of the world' inspired by the stories of the other Terran human and non-humans.

CONCLUSION

Imagining the end of the world

In the animated series adapted from the eponymous video game series, Castlevania, Hector and Isaac, two 'forgemasters' provide, for the main antagonist, Dracula, countless 'night creatures' which 'have to' obey and constitute a large part of the famous vampire's army. Those night creatures are the result of the two 'forgemasters' necromancy: they emerge from dead bodies and they have no agency in this world, there are like the labourer on which "the vampire will not lose its hold [...] so long as there a muscle, a nerve, a drop of blood to be exploited" (Marx and Engels, 2013 p.206). In the series, Hector and Isaac are, in Stengers and Pignarre (2011) terms, Dracula's minions.

That is until Isaac realizes things could be different. After their master has been killed, Isaac and Hector follow different paths, but both are looking for a way to avenge Dracula, and possibly bring him back from the dead so he could restore their world. However during his journey, Isaac encounters people and sees things which make him think. And thinking leads him to understand that, after a life of submission, he now has agency. When the two 'forgemasters' reunite in episode six of the fourth and last season of the series, Hector has already ignited plans to bring back Dracula. However, when Isaac asks him, Hector has actually no desire to do so, instead his wish is simply to be left alone. Bringing back his master only feels like what he has to do, but Isaac has already decided to reclaim agency in this world, He says:

I have recently begun to consider the future, which has been a novelty for me, because I never really thought I had one. This how they get us Hector. They convince us there is no future. There's only an eternal now, and the best we can do is survive until dawn and then do it all again. That's no way to live. And I've discovered to some surprise that I'm interested in living. I am interested in building a way to live.

Here Isaac explains how the lack of future, forced him to 'go with the flow' – to act as a minion – helping Dracula's project because it seems that there were no better options. While they clearly hate humanity – mostly because of their own personal experience, Hector and Isaac are never presented as cruel, they are sad, traumatized, and misled. Hypnotized by Dracula charisma and knowledge. They are under the spell of the vampire, stuck in an 'eternal now'. Like ours, their future has been canceled.

Only, imagining – even accepting – the end of their world gives them hope for a future, hope for getting out of the eternal repetition they have been brought to believe was the only way to live. The World does not end here, their world is not even destroyed, only Dracula's. Isaac and Hector's world is merely finally starting.

As we have seen in this essay, Capitalist sorcery, the sorcery without sorcerer as Pignarre and Stengers (2011) define it, limits the possibilities for new futures by generating infernal alternatives. According to Fisher (2009) capitalism has not got any worthy opponent since the end of the cold war which saw the victory of the capitalist west over the communist URSS. However, we have now reach a point, as demonstrated by the IPCC report, when the consequences of unchallenged capitalism is threatening not only the 'western way of life' as an antagonizing political project – like communism and socialism – would, but humanity as a whole.

Our guardians – those who present themselves as the most qualified to face such menaces – have employed their imagination only in creating infernal alternatives for so long, that they now find themselves absolutely unable to use it to react to the inevitable consequences of their own inaction regarding the 'horrors of the Anthropocene'.

Their thought is paralyzed by their own infernal alternatives but at the same time, they continue, out of habit, believing this is the only way to live, to reject any emergent solution coming from the people who are advocating for change to face climate change. In other words, or more precisely, in the words of Gilles Deleuze:

the world has been taken from us. We, the moderns – and this include our guardians – tricked ourselves to believe that nothing can be done.

As I have tried to show here capitalism realism and capitalist sorcery which are impeding our ability to think stem from the very old idea of human exceptionalism and the separation of human from nature bringing the idea that humanity is master of its fate, independent and free from any form of transcendence. This is the ‘epic fable of progress’ as Stengers (2015) puts it,

in its multiple and apparently discordant versions, all of which nevertheless converge in blind judgments about other peoples (to be liberated, modernized, educated, etc.). If there must be emancipation, it will have to be carried out against what has allowed us to believe we can define a heading that would provide a direction for the progress of the entirety of humanity, that is to say, against the hold of the clandestine form of transcendence that has seized us. (p.59)

The clandestine form of transcendence that is progress leads to an over reliance on new technology and Science to the point that whenever we accept something must be done to better understanding our environment we find ourselves ironically – and almost exclusively – searching for new technologies instead of thinking a way to re-connect with our environment without any man made interface. We have lost the world only because we are refusing to be part of it. And whoever advocate another way of proceeding is instantly facing infernal alternatives about regression or being a traitor to society by wanting to bring chaos in a – believed to be – neatly ordered society. The mere thought of slowing down is an heresy.

This fear of disorder is not new. Interestingly enough – since Pignarre and Stengers talk about sorcery – we find it at the root of the Inquisition, most precisely in the *Malleus Malleficarum*, the hammer of the witches, the infamous treatise on witchcraft used by the Inquisition first published in 1486.

In his introductory and analytic essay for the French version, translator Amand Danet explains how much humanity's contingency and the lack of control is unbearable for the inquisitor

If he works to safeguard, maintain and reinforce society, it is because society is the mandatory secure place for him to live. This man viscerally wants to live in closed and steady society rather than in an open and progressive one. (2014 p.47. Translation my own)

In a similar way, our guardians, and their captured minions, leave in the fear of chaos any fundamental change in society would/could bring. They fear their own infernal alternatives, their own tales of chaos, in the same way the inquisitor sees the Devil and the rise of anarchy in every potential witch.

In the same fashion that, in the mind of the inquisitor, people needed protection from the corrupted witches, we, the foolish flock, now, in the mind of our guardians, need protection from the idea that we should let environmental consideration interfere with the God-like free market.

Acting once again, like the Inquisition which proclaimed they were the ones who knew, our guardian justify their actions by taking a pedagogical, reasonable stance. As Danet, still, it must be reminded, speaking of Inquisition, tells us:

A large gap lies between an infallible hierarchy and its subjects. From now on, there are those who know and those who do not, a knowing culture which imposes itself in the name of God's order and a popular culture which sinks into the silence and the night (2014 p.59. Translation my own)

Both inquisitors and our modern guardians, however, are merely driven by fear of seeing their way of life disappear more than anything else.

This is why our modern inquisitors rejects the idea of the intrusion of Gaia or even naming Gaia. In their frame of mind, as for their predecessors, naming Gaia and considering her as a living organism 'open the floodgates' to worshipping the wrong God. Nature instead of Progress and Reason.

Accepting there are limit in humanity's emancipation from nature is, for a most moderns, an heretic thought. This would bring chaos and precipitate the end of the world.

This essay has changed direction many times during its writing, proving, if it was needed, the complexity of the issue. Many traps are to be avoided in the process and I could not pretend to have avoided half of them.⁶⁴ I have also had to make, sometimes difficult, choices as to what include. For instance, a deeper analysis of Stengers's work, notably on the need to rebuild a 'common sense', would have probably been helpful. Viveiros de Castro's theories on perspectivism and his studies of indigenous culture from south America and their relation to the end of the world could also have brought an invaluable insight in this discussion.

These would certainly infuse further research. However, eventually, this essay, as incomplete and needing more research it can be, has merely tried to suggest that believing in the world and rejecting human exceptionalism should not be described as a mere ideological stance anymore. It is not only – not anymore – a matter of organizing society in a less exploitative, more responsible way or even taking a mere anti-capitalist stance, but a matter of survival.

In many ways, the intrusion of Gaia present the only real infernal alternative that should be clearly stated – and that our guardian should fear: if we do not renounce our power fantasies and find a way to live in a more symbiotic way with our surrounding, humanity will not survive the horrors of the Anthropocene.

Furthermore, as Danowski and Viveiros de Castro (2017) has explained, our modern western world, the world as we know it, is already strongly declining and this decline is accelerating. It is not really a matter of imagining the end of our world, but merely to accept it and learn to live with it. Ironically, conservatives fears of losing their world are legitimate. However, nobody is trying to take it from them, they never had it in the first place, they – we – are, like Dracula's forgemaster, Isaac and Hector, merely under the spell of capitalist sorcery, too busy fighting to protect

⁶⁴ The most difficult trap to avoid is the one Pignarre and Stengers warn us about: to never pretend, or appear to pretend, to represent the 'brains of humanity' and pretend that we know better than those under the spell of capitalist sorcery.

it to notice that it is already dead. And when we realise it is already dead, we will very likely fight to bring it back.

The Covid-19 crisis – or even the 2008 subprime economic crisis – have been events – in the sense Stengers (2003) use the word: an unpredictable change in the course of time, even though the predictability of both crisis could be discussed – that could have put us on a different direction. They both could – should – have signified the end of our world. However, as we know, both have seen a strong popular desire for ‘a return to normal’. This should remind us the incredible potency of capitalist sorcery and that it is never to be underestimated.

Building a new belief in the world as Deleuze calls it, is nothing close to a regression. There is nothing regressive in finding ways to free ourselves from the submissiveness, the ‘laws of the market’ demand. Instead I would present this as a tremendous progress, an evolution or, maybe more accurately as reaching a form of maturity. Like Doka finally finding symbiosis with the Zenzees and saving his people, we should learn to let go our childish fantasies of control.

Further research is needed to find ways of opening new alternatives for the future without falling in our old habits of alienation by creating a hierarchy of knowledge or of value. This is why I would like, before closing this discussion, to expand on the idea of fiction as a tool to avoid infernal alternatives. For many writers stories are the most potent magic. After all, human exceptionalism has been reinforced by the story of Man created by God – in His image – and for whom Nature as been created to fulfill his needs and desires. And we have seen here the tremendous power of such a tale.

A new eschatology, a new tale of how our world ended and how we built something new after learning from our past errors may thus help us getting out of capitalism realism. But more importantly As Danowski and Viveiros de Castro put it:

To speak of the end of the world is to speak of the need to imagine, rather than a new world to replace our present one, a new people, the people that is missing. A

people who believes in the world that it will have to create with what ever world we will have left them. (2017, p.123)

Imagining the end of this world we, moderns, have built, is not advocating for a return to nature, for a regression. It is creating a people and possibilities for new futures by evading the submissive hold of capitalism. It is a matter of choosing with which tales – and with whom – we want to think the future and of not being stuck in old beliefs or enrolled in wars we did not chose. It is also understanding, for all those, inquisitors, guardians, minions who fear of losing control, that life needs contingency. As Aldous Huxley once wrote “Consistency is contrary to nature, contrary to life. The only completely consistent people are the dead.”. But this also means that there is no guarantee that things will get better. It is not a matter of replacing blind denial by naive optimism. This is a matter of replacing the panicked impotence of a spellbound civilization by the hope of a people.

To borrow the word of Danowski and Viveiros de Castro, interesting times indeed.

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