Ecofictions

An analysis of the cinematographic imaginary of possible eco-social futures and the alternatives proposed by speculative narratives

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Abstract
Decades of science fiction cinema have formed an archive of images of the possible futures that forge the collective imagination. In this text I present an analysis of the future ecosocial scenarios that are deemed possible from the Western socioeconomic model and that are reflected in mass cinema. I pay particular attention to the fictions and aporias of capitalist realism as revealed by cinema, the limits of our dichotomous paradigm that constrain the imaginary of the possible, and the cinematographic narratives for transgressing them. Finally, I present the Ecofictions workshop, a collective artistic practice for analysing the range of possibilities that mass cinema offers us, and transgress it through the creation of alternative imagery. One product of the workshop is the ecofictions catalogue, which responds to the apocalyptic future that the Western paradigm sketches for us by proposing multiple speculated realities that are far removed from anthropocentrism and the supremacism of our species.

Keywords
science fiction; future; cinema; capitalist realism; alternative imagery; ecofictions; speculative narratives; alternative paradigms.

1. The usefulness of science fiction for the study of ecological conflicts

The imaginary of the future has always reflected the conflicts and desires of the society in question. During the Cold War and the nuclear threat, science fiction was filled with grotesque beings that were born of nuclear accidents, like the giant ants in the film *Them!* (Gordon Douglas, 1954) or the monster in *Godzilla* (Ishiro Honda, 1954). The Space Race and the moon landing brought about a repertoire of imaginary futures away from Earth, like in *Silent Running* (Douglas Trumbull, 1972). Today, environmental catastrophes are very present in science fiction, to the extent that a specific term has been created for science fiction that talks about climate change: *climate fiction*.

The power of science fiction, as a tool for understanding present conflicts, resides in the fact that it offers an alienated view from the outside-in, allowing us to examine ourselves and our institutions from a different perspective (Canavan, 2014). Moreover, in these projected worlds, the conflicts of the societies of the moment are taken to the extreme in a kind of hyperbole of warning, which helps us see them more clearly. This is what happens in the series *Under the Dome* (Brian K. Vaughan, 2013-15), where a mysterious dome surrounds the village of Chester's Mill, turning the planet's limits into physical and palpable ones.

Imagining futures also works as a testing ground for possible solutions. Kubrick's ode to Velcro in *2001: A Space Odyssey* (1968) is ingenious and funny, proposing it as a solution to the problems of weightlessness inside a spaceship. On the other hand, imagining dystopian futures has the power to bring about changes in the present which unpick prediction itself, making it impossible (Žižek, 2009).[1] As happens with the protagonist in *Twelve Monkeys* (Terry Gilliam, 1995), the dystopian vision of the future impels us to return to a present-past with the aim of preventing the event that made the surface of the Earth uninhabitable. However, too many apocalyptic visions of the future can cause inaction due to ecofatigue[2] (Huertas and Corraliza, 2016) or pessimism, which leads to the acceptance of the current system and its fate as the only possible alternative (Demos, 2017; Žižek, 2008).

Science fiction is therefore a useful tool when analysing the interaction between society and the ecological environment in which it develops, since it highlights the frictions of the present, and it warns of the risks of the current dynamics by means of exaggeration and trying out possible solutions. But it is also useful insomuch it has the potential to modify the future, either through the reactions provoked by the dystopian projections, or through the forming of collective imaginaries of the possible.

2. Imaginaries of the future in mass science fiction cinema

In order to put together an idea about our collective imagination of the possible, I present below our socioeconomic model's most recurrent and characteristic future worlds as depicted in mass cinema, based on representative films in which the storyline addresses one or more ecological conflicts.

Worlds of climate change: Simplifying the complex

Figure 1: In *The Day After Tomorrow* (Roland Emmerlich, 2004), climate change is shown as a sudden and apocalyptic phenomenon, first in the form of large waves flooding New York City, and then with temperatures plummeting to extreme cold levels. In just a couple of days, the emblematic city becomes a desolate landscape where very few survive.

The Day After Tomorrow (Roland Emmerlich, 2004) shows a New York devastated by the abrupt arrival of a new ice age. In a matter of days, the planet's climate has flipped, turning icy due to the unleashing of the "great storm" which causes a drop of 100 degrees Fahrenheit per hour. Millions of people die in the subsequent storms and frosts. Included among the few survivors are, of course, the protagonist (a climatologist whose warnings have been ignored), his family, and the President of the United States of America, who makes the following speech at the end of the film:

> "For years, we operated under the belief that we could continue consuming our planet's natural resources, without consequence. We were wrong. I was wrong. The fact that my first address to you comes from a consulate on foreign soil is a testament to our changed reality. Not only Americans, but people all around the globe have become guests in the nations we once called 'the Third World'. In our time of need, they have taken us in and sheltered us, and I am deeply grateful for their hospitality."

This speech (unthinkable in the Trump era) takes place in the time of calm, after a catastrophe that is perceived as something that can be turned around. After the President's quasi-Catholic apology, and the implicit pledge of blind faith in science as the saviour, Western progress will make a triumphant return from that "Third World", where it is temporarily sheltered, being barely questioned at all. As Mark Fisher (2009, p. 18) argues, the environmental catastrophe appears in capitalist culture as a

kind of simulacrum, as a temporary glitch in the system, which is then rectified by capitalism itself.

The simplicity with which climate change is treated in this kind of mass-market film contrasts with the true complexity of the issue. It is precisely because of the magnitude and complexity of climate change that Timothy Morton describes it as a *hyperobject* (2016), that is, an object of such vast temporal and spatial dimensions that it is impossible to be directly pointed out or detected, something greater than the sum of its parts, the understanding of which requires systemic thinking. However, *The Day After Tomorrow* suggests a kind of climate change that hits suddenly, is detectable, and quickly rectifiable after correcting the political error (though it is unclear how), to get back on track to scientific progress. Films like this, with underdeveloped characters, predictable plots and simplified environmental messages, so explicitly revel in the spectacle of disaster that they lose any capacity to move the spectator and cause them to reflect on the issue (Ivakhiv, 2013, p. 276).

When analysing this film's reflection of society, the supremacy of the Western (i.e. the great power of the USA) male (the saviour protagonist) scientist (holder of knowledge and truth) cannot be overlooked. Such dominance eclipses another supremacy that, although evident and common in science fiction cinema, is relevant here: the speciesist one. If very little is shown about what happens in other countries, it goes without saying that there is no mention at all of what happens to the other species on the planet, not even the domesticated ones on which we depend. The only exception is a dog, a faithful companion of the protagonists which, far from providing another vision, merely serves to emphasise the human one. The point of view is, therefore, human, and not only that, but it is the point of view of the minority subgroup of the wealthy white American man.

Overpopulated worlds: The surplus of people

Figure 2: In the overpopulated New York of *Soylent Green* (Richard Fleischer, 1974), a vast majority live in crowded conditions in literally every corner of the city, while a small elite live comfortably and luxuriously. Pollution, poverty, hunger and corruption dominate the city.

The first minutes of the film *Soylent Green* (Richard Fleischer, 1974) magnificently show how the dystopia of overpopulation is reached. In the form of a photographic sequence, it shows the progression of the West's ever-expanding conquest, which gives rise to scarcity, pollution and the agglomerations of post-industrial society. Finally, a world in ruins appears, and we are in New York, 2022, which has a population of 40 million. The catastrophe has happened —the dystopian future has arrived.

This short sequence of photographs before the start of the film shows what Kenneth E. Boulding describes as the shift from the "cowboy economy" (in which reserves are considered as infinite, and consumption as on the increase) to the "spaceship economy" (defined by scarcity, containment and control) (Höhler, 2014). This change of vision, with obvious ecological consequences, is a result of the historic moment in the mid-20th century. The first photographs of Earth taken from the outside (*Earthrise*,[3] taken by Apollo 8 in 1968, and *Blue Marble*, by Apollo 17 in 1972) revealed something that was by no means new, but had never before been seen in the form of photographic proof: the finiteness of the Earth, and the need for coexistence as one species upon this *blue marble.* In addition, the report "The Limits to Growth" (Meadows, 1985), presented at the 1972 United Nations conference in Stockholm, helped propagate the idea that we humans are all in the same boat.

The combination of the proof of the limits of resources and the population explosion of the time (the "baby boom") quickly led to concerns about whether we would all be able to fit on Earth. Thus, at the end of the 1960s, population control movements emerged, and, in the 1970s, China began to implement its birth control policies (Höhler, 2014). Nevertheless, consumption per capita continued to rise. In this context, overpopulated dystopian futures, such as the aforementioned *Soylent Green*, flourished in the collective imagination.

The imaginary of overpopulation is still present in science fiction films, often triggering the search for other planets, as in *Elysium* (Neill Blomkamp, 2013). The fear of overpopulation is still active, as can be seen in the opinions of those contemporary authors who consider being born as the new original sin,[4] and in appeals to abstain from reproduction (from Donna Haraway's call to "make kin, not babies", to the Voluntary Human Extinction Movement).

As in so many other films, in *Soylent Green* the dystopian outcome is blamed on overpopulation rather than overconsumption by part of the population, so the solution is population control. The proposal to act on only one part of the equation is even more evident in *Downsizing* (Alexander Payne, 2017). In one scene from this film, the seller of the human-shrinking technology makes it clear that the aim is not to achieve ecological balance (because, at a smaller size, one would expect less consumption of resources and thus less corresponding pollution), but rather to enable practically unlimited consumption. Imaginaries like this help spread the belief that technology will always push up the limits of consumption, at any cost. In short, the idea of addressing consumption levels is conspicuous by its absence in this type of imaginary.

Barbaric worlds: No alternative

Figure 3: Scene from *Mad Max: Fury Road* (George Miller, 2015) in which the tyrant Joe opens the water fountain gates. Below, toothless, ragged masses rush to the longed-for resource with their rudimentary bowls and open mouths, trampling over each other.

"Do not, my friends, become addicted to water. It will take hold of you and you will resent its absence", says the tyrant Joe after slamming shut the water gates to the still-thirsty mass of toothless, ragged people. We witness the cruelty of totalitarianism in *Mad Max: Fury Road* (George Miller, 2015) from the comfort of our cinema seats —by contrast, our calm, capitalist world seems like paradise.

The *Mad Max* saga exemplifies Frederic Jameson's famous phrase that "it is easier to imagine the end of the world than the end of capitalism" (2005, p. 199). According to Jameson, in late capitalism there is a universal belief that, since historical alternatives to capitalism have proven to be unworkable and impossible, no other socioeconomic system is conceivable, let alone available in practical terms. This theory is endorsed by Fisher, who defines the current political system with the term "capitalist realism", i.e. "the widespread sense that not only is capitalism 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).

The cinematographic imaginary is full of dystopian scenarios that reinforce the capitalism/barbarism dichotomy and the idea that there is no alternative to capitalism. Many of these films are loaded with nostalgia for the good old consumerist times. Scenes such as enjoying a Coca-Cola in the devastated world of *The Road* (John Hillcoat, 2009) deeply inscribe capitalist realism into the collective imagination (Abu Ali, 2016). Furthermore, dystopian and apocalyptic stories spread fear, which is used to justify the loss of freedoms and the regression in human rights.[5] In this sense, the above sequence in *Mad Max: Fury Road* is a hyperbolic example of the use of fear to curtail the most basic rights of the population: from the terrifying appearance of Joe

and his entourage, to his speech, which instils a fear of something as basic as our dependence on water.

Similarly, in the series *Years and Years* (Simon Cellan Jones and Lisa Mulcahy, 2019), fear is used to confine citizens of the Manchester of the near future: they lose their freedom of movement in a run-down neighbourhood, one which is considered to be potentially dangerous. But note that in *Years and Years*, the gated communities, refugee camps, extermination policies, etc., all occur within a capitalist and democratic society. In contrast to the post-apocalyptic totalitarianism of *Mad Max: Fury Road*, imaginaries such as that of *Years and Years* present worlds in which ultra-authoritarianism and capital are not at all incompatible (Fisher, 2009, p. 2): concentration camps and home-deliveries coexist perfectly. It is not a matter of either capitalism or barbarism, but it is the barbarism of the current system that is exhibited, contradicting its own narrative. This exposing of the contradiction, the invocation of the real that underlies the reality presented to us by capitalism, is, according to Fisher, the only strategy that enables a serious questioning of the current capitalist system.

Finally, it should be noted that in *Years and Years* the catastrophe is not imminent, nor something that has already happened – instead, it is experienced while life just goes on, in a system that still looks very much like our own. The world slips into a slow, progressive cataclysm, which makes it an acceptable one. This is evidenced by the grandmother's speech in the final episode of the series, in which she blames us, as a society, for having all done our bit, little by little, to turn the world into what it is.

The conquest of other worlds: Life divided

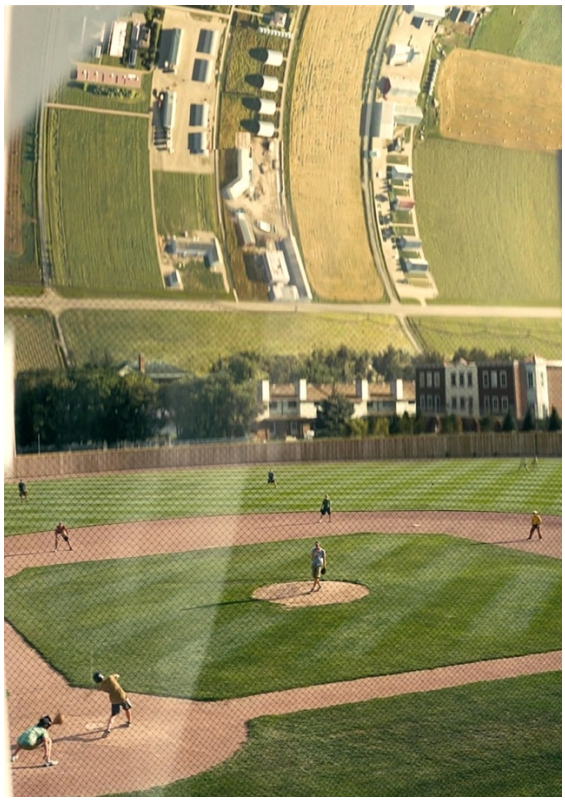

Figure 4: Nick Acosta's montage made from frames of the scene in *Interstellar* (Christopher Nolan, 2014) in which the protagonist discovers the Cooper Space Station. As can be seen in the image, the station has reproduced the environmental conditions of Earth, and even the "American way of life". This scene shows the kind of people who will be able to flee the planet in the event of a global catastrophe, and the lack of criticism of the model that has led to the devastation of the Earth (see scene at: https://thumbs.gfycat.com/InnocentGoodnaturedKangaroo-mobile.mp4).

"The end of Earth will not be the end of us", reads the poster for the film *Interstellar* (Christopher Nolan, 2014). The phrase reflects the structural fantasy of capitalist realism that Fisher (2009, p. 18) points out as one of its most obvious aporias: the assumption that resources are infinite. In *Interstellar*, the end of Earth will not be the end of us because, once the Earth's resources have run out, we will be able to continue exploiting those of other galaxies, and if the Earth becomes uninhabitable, we will transform and inhabit other places in the universe.

The colonising fantasy is not limited to sci-fi films. NASA and private projects such as Mars One have been working for decades on the possibilities of terraforming planets,[6] investing an enormous amount of time, capital and technological resources. To address terraforming as an alternative, let us consider the ending of *Interstellar*, when the protagonist wakes up in the Cooper Space Station and discovers the world recreated inside it: houses, vegetation, a group of people playing baseball... The existence of that whole world outside the Earth alludes to (without showing it) the reproduction of the biblical Genesis that has taken place in the

spaceship —for such a scene to exist, they must have brought in light so that plants can grow, air for the players to breathe, gravity so that the ball falls, and essentially all the physical-chemical and biological conditions and processes that make life possible. God is replaced by the human being in the act of creation, in such a way that, if in Christianity everything on Earth was created to serve the human being, then late capitalism extends this utilitarianism to the entire universe, which is there to be exploited by us.

However, considering that we have struggled to inhabit this place, i.e. this planet with its favourable conditions, then what makes us think that we will be able to inhabit an environment that is completely hostile to life? And, given that the recreation of the new world is being drawn up following the same current socioeconomic model, what is to prevent the same environmental problems we have caused on Earth from being repeated in outer space? Furthermore, fleeing from a devastated Earth, if possible, would be a solution accessible to only a few. The baseball scene in *Interstellar*, within the Cooper Space Station, hints at which nationality and which social class have benefited from this escape. Stuck on the devastated planet are the rest of humanity, those who had no option to save themselves, along with all the other species on Earth that were never contemplated in the escape plan.

There is another recurring form of escape in our imaginary: the transmigration of life into the virtual world. *The Matrix* (Lana Wachowski and Lilly Wachowski, 1999) and the aforementioned *Years and Years* are examples of this alternative, involving the emancipation from physical and temporal limits, including mortality. In these cases, it is no longer a question of "worldless humans",[7] like those in search of a planet to inhabit, but of "humans without a body" who become "world-humans" since, when there are no limits to contend with, everything will be human, or, as some might say, everything will be Californian (Danowski and Viveiros de Castro, 2017, p. 47). Again, the question arises of who will benefit from this solution, and who will be left out.

Returning to the world after the catastrophe: The repetition of history

Figure 5: The Axiom starship in *Wall-E* (Andrew Stanton, 2008). Many years after fleeing the planet, the large corporation BnL (responsible for the devastation of the Earth) directs and controls the society, which lives infantilised and immobilised, completely cut off from ecological systems and also from work.

Wall-E (Andrew Stanton, 2008) picks up where *Interstellar* left off, in terms of fleeing the planet. It begins with humanity living in a spaceship, because Earth had become uninhabitable due to the excesses of consumer capitalism and corporations. In both the Cooper Space Station (*Interstellar*) and the Axiom starship (*Wall-E*), human life goes on as normal, despite being disconnected from the Earth's ecological systems. It even seems to be running more smoothly, as the system is totally controlled, and both the population and capital are no longer at the mercy of "natural disasters".

Wall-E ends with the humans' return to Earth, after discovering signs of its recovery. However, the credits extend the story, and we see that the evolution of the returned humans coincides, step-by-step, with the Western narrative of the history of humanity: agriculture, engineering, urbanisation... The paradox that the Earth supposedly recovers by following the exact same process that led to its devastation can be interpreted as a confirmation of Fisher's theory about our inability to imagine a social system different to our own. On the other hand, the repetition of history and progress could also be interpreted as a deliberate action, resulting from the belief that our system is the best, and must therefore be reproduced. In any case, environmental catastrophe is again understood as a simulacrum in capitalist culture, a temporary blip after which everything returns to the normality of progress.

After the end credits, the film hides a final surprise: the logo and jingle of BnL, i.e. the macrocorporation that devastated the Earth and subdued the humans in the Axiom ship. For context, let us remember that in *Wall-E* we are told a story in which the humans' sense of cooperation and social

responsibility ends up prevailing over the consumerist tyranny of the BnL macrocorporation, and the credits sequence reinforces this triumph. However, the final jingle gives an ironic twist to all of this by revealing that, in fact, this apparently anti-capitalist tale is sponsored by the very villain of the film. BnL's control and subjugation are still alive and are behind the film's message, which is now cast in a very different light. This is a clear example of *corporate anti-capitalism*, that is, an anti-capitalist discourse that has its origins in capitalism itself, and that disarticulates the authentic anti-capitalist movement (Fisher, 2009, p. 14).

The diffusion of a certain anti-capitalism is not uncommon in mass cinema, where, in numerous cases, the villain is a corporation (*Wall-E*, *Avatar*, *Moon*...). Rather than challenging capitalist realism, this gestural anti-capitalism actually reinforces it (Fisher, 2009 p. 14), since a certain dose of a mild and controlled anti-capitalism disarticulates authentic criticism. Thus, *Wall-E* parades our anti-capitalism in front of us, and this allows us to continue consuming with impunity (Fisher, 2009, p. 12). Those of us who reach the end of the film helplessly witness the revealing of the corporate origins of the anti-capitalist message that we have just enjoyed, in the form of the BnL jingle —the macrocorporation is the sponsor of the film that supposedly criticises it.

3. Breaking with the future: dismantling the paradigm of modernity, progress and capitalism

It seems, therefore, that we struggle to think of a future that is not apocalyptic. Even when we try, the future we see is either too close to being a repetition of history, inevitably leading thus to the same initial disaster, or it is one that can be confused with corporate anti-capitalism. But if, as interpreted from Jameson's text, our shortcomings when imagining possible scenarios are a product of the paradigm from which we think of them,[8] then dismantling the fiction of late capitalism, showing its contradictions and exposing capitalist realism,[9] deconstructing the notion of the dominant vision,[10] and ultimately crossing the boundaries of the established paradigm, may lead us to an opening up of possible scenarios.

In this journey towards new ways of thinking about the world, we find allies in cultures far removed from capitalism and Western modernity, cultures now reconsidered not as a remnant of the past, but as possible forms of subsistence in the future (Danowski and Viveiros de Castro, 2017, p. 123). The way of understanding the world in *Dersu Uzala* (Akira Kurosawa, 1975), for example, is devoid of the Western boundaries between nature/culture and self/other: Dersu is a person of the taiga, with an animistic cosmovision, for whom the tiger, fire and everything else in the world has

subjectivities on the same level as humans. This cosmovision resembles what Eduardo Viveiros de Castro[11] calls *Amerindian perspectivism*,[12] that in certain communities of the Amazon, the notion of "human" depends on the point of view. Thus, for example, humans see each other as human, while jaguars see different worlds, but also see each other as human (Viveiros de Castro, 2013). This perspective challenges not only the object/subject binomial, but also the human/non-human and the culture/nature binomial.

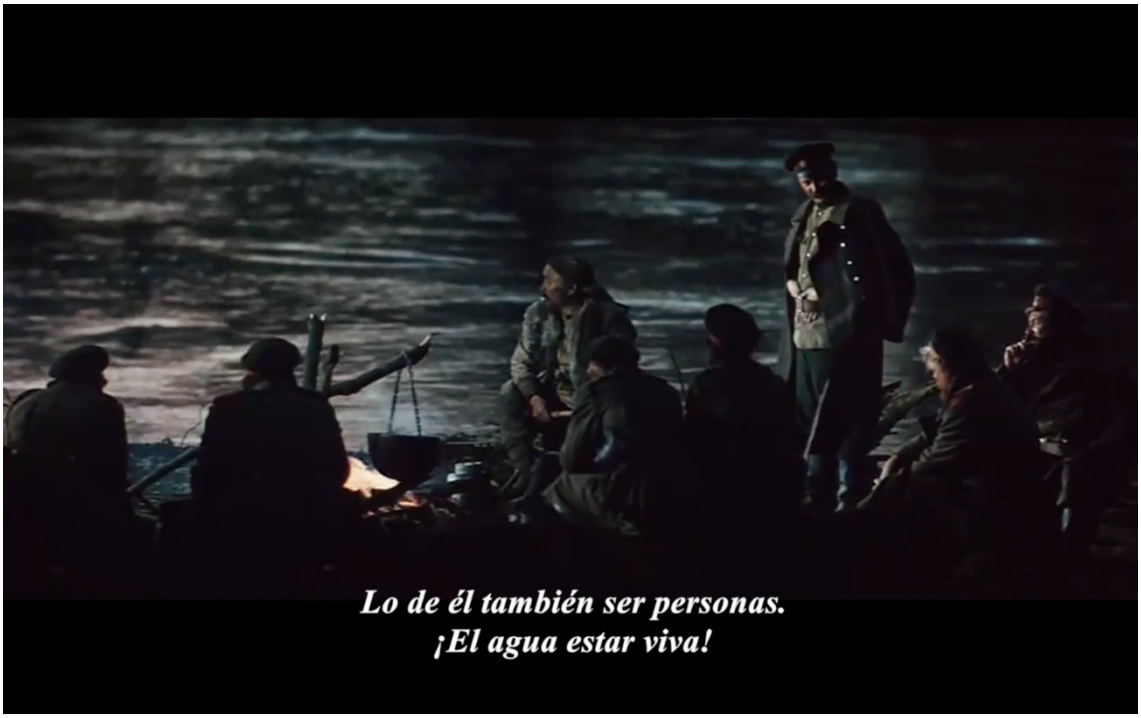

Figure 6: Scene from *Dersu Uzala* (Akira Kurosawa, 1975). As far as the hunter is concerned, the fire, the water, the sun, the tiger, everything is "people". His animist worldview, which contrasts sharply with supremacism and the Western anthropocentric hierarchy, provokes the laughter of all but Captain Vladimir, who admires and loves him despite the difference in their worlds.

It is also possible to destabilise worlds of thought by creating new ones (Gunkel et al., 2017, p. 14). This is what Apichatpong Weerasethakul does with his inventive, performative cinema that creates worlds in which the Western borders of the possible are naturally broken down (Marrero-Guillamón, 2018). Films such as *Uncle Boonmee Who Can Recall His Past Lives* (2010) are full of ghosts, people reincarnated as animals, different spirits inhabiting the same body, animals talking to humans... in short, a multitude of worlds in which immaterialities are materialised and perceived as real. The result is a sensory experience with great capacity for transformation, which presents new forms of entities, new subjectivities and new worlds of thought (Marrero-Guillamón, 2018).

Figure 7: Interspecies sex scene between a princess and a fish, in *Uncle Boonmee Who Can Recall His Past Lives* (Apichatpong Weerasethakul, 2010). The film naturally transgresses Western dichotomies, flowing between the living and the dead, the human and the non-human and the past and the present.

Elsewhere, the depiction of outsiders, queer people or rebels who do not quite fit into society is an interesting device, moving away from the figure of the Western hero. I am referring to the dreamer technocrat in *Brazil* (Terry Gilliam, 1985), the mutilated rebel in *Mad Max: Fury Road*, the mutant in *Waterworld* (Kevin Reynolds, 1995), or the weird infected bureaucrat in *District 9* (Neill Blomkamp, 2009). It is precisely their strangeness that gives them the special power to find the right tricks, cracks and escape routes to get them out of the catastrophe that society is heading for. Their leading roles, as the visionaries, mediators and facilitators of other possible worlds, is a critique of society and what it considers to be "normal" or mainstream, blaming society itself for the fall to disaster. Normality must be left behind if we want to visualise alternatives (Cuello, 2018). To do this, let's follow the weird ones, the mutants, or as Bruno Latour (2011) would put it, let's follow Frankenstein.

Or rather, let's follow Wilkus, the protagonist of *District 9*. He becomes infected with an alien substance and thus progressively turns into an alien, in a gradual transformation that is both physical and mental, since his way of understanding the world is affected by his new point of view. The mutant imagination is very powerful in two ways. On the one hand, the presentation of a hybrid between human and alien (the strangest of non-humans) destroys binary and hierarchical oppositions, threatening the anthropocentric and supremacist narrative that justifies humans being

above animals (Steenkamp, 2014, p. 151). On the other hand, the physical transformation into the non-human "other" forces the protagonist to put himself in the place of the outsider, where he manages to understand, love and deal with the strangest and most inaccessible otherness. In this sense, *District 9* embodies the premises of thinkers such as Guattari, Haraway, Latour or Morton, for all of whom it is necessary to come down from our exceptionalist and supremacist throne, and place ourselves in non-human points of view in order to understand the complexity of the ecosphere and to consider forms of ecological coexistence. Wilkus does this literally, but given our physical impossibility of becoming the other, speculative realism proposes using speculation as a way of transcending our natural limitations as humans to reach those other worlds beyond our own (Brassier et al., 2007).

Figure 8: The process of Wilkus' transformation into the alien in *District 9* is not only physical but also involves an understanding of otherness.

In this confrontation with otherness, the direction of the approach to the other is crucial. The first option is to bring the other closer to our world. This entails an anthropomorphisation of the alien, as in *E.T. the Extra-Terrestrial* (Steven Spielberg, 1982). The second option, much riskier and more interesting, consists of entering the world of the other. This involves embracing the incomprehensible, and accepting possible radical changes in our person, as in *Solaris* (Andrei Tarkovski, 1979). This includes a certain deanthropomorphisation of oneself (most radically depicted by Wilkus in *District 9*). In an even further step away from anthropocentrism, *Stalker* (Andrei Tarkovski, 1984) shows us that we must humbly accept the possibility that, in non-human worlds, we are not only not the protagonists, but we might also be completely irrelevant.

4. Ecofictions. Collective artistic practice for imagining realities in alternative paradigms

The Ecofictions workshop was born of my research into the imaginary of the possible. The challenge was to offer a catalogue of alternative imaginaries, unlike those that have pinned us down between capitalism and the end of the world. In order to create this catalogue of alternative imaginaries, three requirements had to be met.

Firstly, the experience had to be participatory in order to enrich the results with different points of view and come up with as many imaginaries as possible. Secondly, the experience had to be based on fiction as a two-sided instrument: on the one hand, it must expose the fiction which mass cinema instils in us, and which controls visions of the past, experience of the present and projections of the future. On the other hand, it must re-appropriate fiction to create disruptions or *counter-fictions* (Belsunces, 2018). Therefore, the guiding thread of the workshop is cinema, a common place that reflects the imaginary of the possible according to our paradigm, also acting as a lantern to shed light on the cracks in capitalist fiction, as well as a transforming experience towards new worlds of thought. Thirdly, in order to come up with other possibilities, it was necessary to leave behind the prevailing traditional paradigm and its model of binary and anthropocentric thinking. As such, the workshop participants constructed a framework for alternative thinking that would enable the imagining of other realities. This procedure is similar to the *destituent power* described by Agamben (2016), as it involves counteracting the scenarios proposed by capitalism, not through confrontation, but through their being unworkable.

In order to go beyond cinematographic analysis and actually put it into action, the workshop ends with the creation of *ecofictions*, speculations of the possible that are presented as an alternative to late capitalism's imaginary of the future. These are stories that escape the binomial paradigm, starring multi-species networks, hybrid beings, subject-objects... in short, not just human entities, on very diverse spatial and temporal scales. These ecofictions are created by the participants in the form of an animated stop-motion collage. This language is a response, on the one hand, to the coherence with the guiding thread of the workshop, i.e. cinema; and on the other hand, to the great potential of the reappropriation of images in the construction of new scenarios of possibilities. Because setting out new relationships between re-appropriated images allows us "to listen to the cancelled futures and, from there, try out images that encourage us to think about a mismatch with the institutionalised narrative of what is to come" (Cuello, 2018).

All the ecofictions created in the different editions of the workshop are being collected to form a catalogue of parallel realities. In contrast with the possible scenarios offered by late capitalism, in this *catalogue of ecofictions* neither capitalism nor barbarism make any sense, and the end of one world can be the start of another. The catalogue encourages the shift towards less anthropocentric and dichotomous subjectivities, so necessary to truly confront the ecological crisis (Guattari, 2000). This shift occurs directly in the workshop participants, through their experience of the journey towards the new paradigm and the discovery-creation of alternative realities. Indirectly, the catalogue offers its visitors a range of fictional realities from alternative paradigms, opening the imagination in that sense.

Thus, the collection of ecofictions is in tune with Haraway's (2016) proposed necessary abandonment of anthropocentrism and human exceptionalism, and it shares with this author the implementation of the imagining of ecocentric realities. Since reality comprises a multitude of human and non-human subjectivities, and given that the world cannot be explained from a single point of view (Harman, 2015), ecofictions come in the form of a potentially infinite catalogue; a multiplicity of speculated realities, as opposed to the one absolute reality of anthropocentric correlationism (Meillassoux, 2015).

Image 9: Stills from Marmutar (Marzia Matarese, Jordi Martínez Vilalta, Gabriela Dimaro, Albert García-Alzórriz, Adrianna Quena) and ST (Kàtia Llabata, Àlex López Noguera, Helen Torres, Sara Álvarez), two of the animations created during the Ecofictions workshop held in Hangar in February 2020 (all the ecofictions from this workshop are published on the website https://hangar.org/es/activitats-recerca-i-transferencia-de-coneixements/ecoficciones-animadas-imaginarios-resultado-del-taller-de-ecoficciones-a-cargo-de-paula-bruna/)

5. Conclusions

Cinema is a useful instrument for studying the eco-social scenarios that our society might be heading towards according to its current patterns, since it lays out before us the imaginary that stems from the fiction of capitalist realism in which we are immersed.

On the one hand, mass cinema represents the logics of thought, as well as its limitations and contradictions. From there, cinema shows us the worlds to come, worlds where a "hyper-object of the Anthropocene" like climate change is presented in an extremely simplified and incongruous way. We see overpopulated worlds where the other becomes a threat due to its mere existence; post-capitalist apocalyptic worlds inundated with messages that long for the good old days of consumerism; worlds outside our world and lives separated from the ecological systems that shelter us, even separated from our own bodies... Their storylines invariably tread common paths: they start with the current capitalist model as the best option, perhaps with certain excesses that lead to a temporary failure of the system, a failure that turns into a more or less sudden dystopia and that, in any case, can be reversed, thanks to the promise of technological solutions that will allow us to go back to the best possible system, i.e. the current one.

On the other hand, there is a kind of sci-fi cinema that looks beyond the limits of normal thought, and suggests that such visions are actually possible —this is stimulating and liberating, and is necessary if the aim is to delve into other kinds of thinking. These can be films that break with the linear temporality of capitalism, where hopes are not pinned on a technological future, but rather on an empathetic force that happens in an indeterminate temporal space. Stories that rewrite history, that show non-capitalist ways of living, and that propose alternative worlds of thought. Non-normative characters who cross the boundaries between human and non-human, who naturally coexist with subject-objects, who become present after death —ultimately, characters who offer us imaginaries that confront the capitalist fiction. This type of fiction manages to break open the full range of the possible.

This is why cinema is the guiding thread of the Ecofictions participatory experience. The workshop analyses the fiction that capitalism tells us is reality, and it opens the door to the expansion of the limits of the paradigm. Furthermore, and this is crucial in terms of the impact of the experience, the workshop sparks the creation of alternative fictions based on a new paradigm created by the participants. This experience contributes to the change in individual and collective subjectivity that Guattari (2000) deems necessary if the ecological crises are to be tackled.

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Notes

[1] "We should first perceive it [disaster] as our fate, as unavoidable, and then, projecting ourselves into it, adopting its standpoint, we should retroactively insert into its past (the past of the future) counterfactual possibilities ("if we had done this and that, the calamity we are now experiencing would not have occurred!") upon which we then act today. We have to accept that, at the level of possibilities, our future is doomed, that the catastrophe will take place, that it is our destiny; and then, against the background of this acceptance, mobilize ourselves to perform the act which will change our destiny itself and thereby insert a new possibility into the past. (Paradoxically, the only way to avoid disaster is to accept it as inevitable." (Žižek, 2009).

[2] Eco-fatigue is understood as "the tendency to refuse to assume the over-responsibility of the facts presented and, consequently, to disconnect from the information issued" (Huertas & Corraliza, 2016, p. 113).

[3] *Earthrise* has been considered, by *Life* magazine, as one of the 100 photographs that changed the world: "Captured on Christmas Eve, 1968, near the end of one of the most tumultuous years the U.S. had ever known, the Earthrise photograph inspired contemplation of our fragile existence and our place in the cosmos." (*Life*, 2003).

[4] The author of *The World Without Us* stated that "in the 20th century, when our population quadrupled, we got to the point where we redefined original sin: just by being born we are part of the problem" (Weisman, 2013).

[5] According to Mike Davis (1992), fear management in today's society is now a carte blanche for generating social consensus around discriminatory and authoritarian policies, which is translated into the urban space through new forms of urbanism and new social control technologies and methods.

[6] NASA have announced their forecast of sending humans to Mars in 2033 (Snow, 2019). Meanwhile, the international private project had planned to go before this date, and establish the first human colony on Mars in 2025 (Bracero, 2019).

[7] In their analysis of the different versions of the relationship between humans and the world, Danowski and Viveiros de Castro use the expression "worldless humans" to refer to "a belief in, and above all the desire for, a technological development that can lead us inexorably, though it can be bravely accelerated or cowardly retarded, toward an essential enhancement of Man", which will enable us to overcome our worldly condition (2017, pp. 46-7).

[8] "Even the wildest imaginings are all collages of experience, constructs made up of bits and pieces of the here and now" (Jameson, 2005, p.xiii)

[9] "The Real is an unrepresentable X, a traumatic void that can only be glimpsed in the fractures and inconsistencies in the field of apparent reality. So one strategy against capitalist realism could involve invoking the Real(s) underlying the reality that capitalism presents to us. Environmental catastrophe is one such Real." (Fisher, 2009, p. 18).

[10] This is a reference to the text "Abrir la vision" (i.e. "Opening the Vision") by Abu Ali (2016): "If the notion of vision that has become dominant in the global era is not deconstructed, as well as its mechanisms for occupying imaginaries, and its use of perceptual syntax... many of the critical attempts may end up unintentionally acting as bridgeheads for the colonisation of non-global imaginaries."

[11] Viveiros de Castro rejects the notion that the binary division between nature and culture is a universal paradigm of the human condition. The author maintains that this vision, which considers the human as an external factor to nature, is part of a particular ontology of the West and is not necessarily shared by all human groups (González Varela, 2015).

[12] Amerindian perspectivism "is the conception, common to many peoples of the continent, according to which the world is inhabited by different sorts of subjects or persons, human and non-human, which apprehend reality from different points of view" (Viveiros de Castro, 2001, p. 347, quoted in González Varela, 2015).