The End of the *World as We Know It.* For a Postcolonial Investigation of the Meaning(s) of Environmental Catastrophe in Sci-Fi Films

O fim do mundo como o conhecemos. *Para uma investigação pós-colonial do significado(s) da catástrofe ambiental em filmes de ficção científica*

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THE END OF THE *WORLD AS WE KNOW IT*. FOR A POSTCOLONIAL INVESTIGATION OF THE
MEANING(S) OF ENVIRONMENTAL CATASTROPHE IN SCI-FI FILMS *

Abstract: This article explores fantasies behind ideas of disaster in terms of a regeneration of human society through or against a catastrophe generated by a non-human entity. I will investigate two products of mass visual culture, *Annihilation* by Alex Garland (2018), and *Arrival* by Denis Villeneuve (2016). My analysis will rely on a reading against the grain of Fernando Meirelles's *Blindness* (2008), M. Night Shyamalan's *The Happening* (2008), and Juan Antonio Bayona's *The Impossible* (2012), which I have examined in earlier studies (Giuliani, 2016a, 2017b). I will seek to compare and contrast these films, tracing how they developed out of a series of events and texts while also contextualising them in relation to contemporary conceptualisations of crisis, risk, catastrophe and disaster.

Keywords: disaster, postcolonial studies, posthuman communication, science fiction.

O FIM DO *MUNDO COMO O CONHECEMOS*. PARA UMA INVESTIGAÇÃO PÓS-COLONIAL DO
SIGNIFICADO(S) DA CATÁSTROFE AMBIENTAL EM FILMES DE FICÇÃO CIENTÍFICA

Resumo: Este artigo explora as fantasias subjacentes às ideias de desastre e de regeneração da sociedade humana através de ou contra uma catástrofe gerada por uma entidade não-humana. Irei investigar dois produtos da cultura visual de massas, *Annihilation* de Alex Garland (2018) e *Arrival* de Denis Villeneuve. A minha análise baseia-se numa leitura em contracorrente de *Blindness* de Fernando de Meirelles, *The Happening* de M. Night Shyamalan's (2008) e de *The Impossible*, de Juan Antonio Bayona (2012), que examinei em trabalhos recentes (Giuliani, 2016a, 2017b). Tentarei comparar e pôr em contraste estes filmes, reconstituindo como se desenvolvem a partir de uma série de eventos e textos, ao mesmo tempo que os contextualizarei face a conceções contemporâneas de crise, risco, catástrofe e desastre.

Palavras-chave: desastre, comunicação pós-humana, estudos pós-coloniais, ficção científica.

INTRODUCTION

This article explores fantasies behind ideas of disaster in terms of a regeneration of human society through or against a non-human entity. I will explore two products of mass visual culture, *Annihilation* by Alex Garland (2018), based on the first book of Jeff VanderMeer's (2014) *Southern Reach Trilogy*, and *Arrival* by Denis Villeneuve (2016). My analysis will rely on a reading against the grain of Fernando Meirelles's *Blindness* (2008), based on José Saramago's novel *Ensaio sobre a cegueira* (1995), M. Night Shyamalan's *The Happening* (2008), and Juan Antonio Bayona's *The Impossible* (2012), which I have analysed in earlier works (Giuliani, 2016a, 2017b). My analysis draws on cultural and postcolonial studies and socio-anthropological interpretations of the discourse on catastrophe and disaster, according to which catastrophe is a crisis that occurs in the West; that is to say, a moment of transition occurring where nature is considered as subjugated and mass destruction has been limited. Disaster instead is seen as an uncontrollable event located somewhere in the rest of the world (and, specifically, in places where it is assumed that local culture provides barren ground for developing risk-prediction technologies). I will seek to compare and contrast these films, tracing how they developed out of a series of events and texts while also contextualising them in relation to contemporary conceptualisations of crisis, risk, catastrophe and disaster. My aim is to reveal points of convergence and divergence between their definitions of "a better society", as well as their relation to current imaginaries of catastrophe. I see the imaginary of catastrophe as a "set of signifying practices and figures of the archive of white Western popular culture" (Demaria, 2016: 143; my translation) that connect culture and materiality as interacting systems which include memories of the past, fears of the present and imaginations of the future.[1]

The films I selected present an array of apocalyptic threats faced by subjects deemed worthy of survival. Such is the case of a multiracial community in both *Blindness* and *The Happening*, where solidarity is key to being spared death, or a white affluent family in *The Impossible*, whose bonds of love make a reunion possible in a Third World country gripped by disaster. The community in *Arrival* comprises two white American scientists who believe in the power of knowledge and transcultural (posthuman) communication as a means to cross-civilisation and peace, while the all-women team of scientist survivors in *Annihilation* fights with the intent of preserving their bodies' and the world's integrity.

Mereilles' film is about an epidemic of blindness that starts in the city of São Paulo, Brazil. It belongs to the speculative fiction genre, since the story and its characters deal

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[1] This method has its roots in historical, literary and anthropological research carried out by Ann Laura Stoler (2002a, 2002b), Catherine Hall (2002), Catherine McClintock (1995) and Robert Young (1990).

with events and phenomena resulting from the likely extrapolation of actual natural or scientific processes, and with actions and reactions projected in a "what if" scenario that may constitute a new framework for human deeds (see Heinlein, 2017: 19; Merril, 2017: 22). *Blindness* and the coeval *The Happening*, also belonging to the speculative science fiction genre, will assist me in analysing *Annihilation*. Bayona's *The Impossible* is based on the tsunami that hit South Asia on Christmas Eve of 2004, and as such is not a fiction film. Both Villeneuve's *Arrival* and Garland's *Annihilation* belong to the sci-fi genre: the former is about the aliens' arrival on planet Earth and its consequences in terms of knowledge enhancement, the latter deals with the genetic mutations caused by such an event. Despite this heterogeneity in terms of genre, country of origin, and success,[2] my aim is first to compare the way in which they present or re-discuss the Western approach to crisis management and the social composition of survivor communities (in the United States and Europe, as São Paulo doesn't seem to represent any Latin American specificity). I will then turn to the role which communication/contamination play in the imagination and in the crafting of traditional or alternative crisis management plans.

Drawing on American anthropologist Kevin Rozario's work (2007) on the Western idea of catastrophe as a cause of moral, cultural and political renewal, I will argue that the contemporary fear of disaster is translated into pop-culture apocalyptic scenarios to envisage a reassuring, utopian, eugenic future, which also corresponds to a new "beginning" in the context of the growing imaginary of *crisis* (see also Hoad, 2013). Post-apocalyptic eugenic scenarios establish a connection with a not-so-distant past (e.g., the South Asian tsunami) and reformulate mechanisms of human selection and manipulation, or the direct culling of subjects who are considered less worthy, in order to ensure the survival or advancement of the (human) species by preserving its superior elements.

However, what they put forward is not a mere return to the tropes of "war of all against all" and "*mors tua, vita mea*" [your death, my life], iconised in popular culture by alien films like *The War of the Worlds* (Pal, 1953; Spielberg, 2005). Rather than conjuring up a total war mentality (e.g., the mindset that could conceive of using weapons of mass destruction against the Nazis and their allies during the Second World War, or against insurgent peoples in colonial wars), they propose alternatives

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[2] Unlike the other movies I have examined here, *Blindness* had many nominations and won many prizes at minor film festivals and had a nomination at Cannes Festival (2008), *The Impossible* won an Oscar and a Golden Globe (2013) and *Arrival* had many nominations and won many prizes at minor film festivals: it won two Davids at the Venice Film Festival (2016) and, in 2017, two Oscars at the Academy Awards, two Golden Globes, and one BAFTA. *Arrival*, *The Impossible* and *The Happening* had a cumulative worldwide gross (domestic and foreign) of 150-200 milion of dollars. *Blindness* only reached 20 million and *Annihilation* 32 milion (but being produced by Netflix it has been immediately available online).

based on transcultural/posthuman communication or a lasting (cultural as well as biological) contamination. Even in the film whose title – *Annihilation* – seems to evoke that trope, and where the crisis is considered overcome with the (apparent) extinction of the alien-generated environment ("the Shimmer", in which waves and DNA are refracted modifying all organic and inorganic elements), solidarity between the protagonist and her husband's genetically modified double brings into the *world as we knew it* the possibility of endless mutations. The only exception is that of Bayona's "descriptive" film: I read it as a continuation of the "real" (pessimistic) tradition of non-communication with the Other, as opposed to the fictional scenario in *Arrival*, where aliens and humans share a new language, a new conception of time, and a new epistemology. In *The Impossible*, the leading characters do not establish any meaningful communication with the locals and therefore, the creation of a transracial/transcultural/transclass community is an *impossibility*.

My resignification of the term *crisis* shifts its meaning from the material crisis that has hit the environmental, political and social spaces of Europe, the West (which encompasses Europe, North America, and Australia) and their global dimensions, to the crisis of self-representation of Europe and the West that is both engendered by and reproduces the material crisis. Following Stuart Hall, I conceive of the symbolic and the material as not merely interconnected and mutually interacting: "they actually produce each other within a complex camp of individual and super-individual forces" (Giuliani, 2017a: 68). By environmental, political, and social crisis, I mean the effects of the war on terror in terms of securitisation and border control practices (from tighter airport security controls to more restrictive migration policies in Europe and the United States), the effects of climate change in terms of modification of the environment and global migrations, and the consequences of human genome editing (in terms of both improvement and selection).

These crises have circular, semiotic as well as political relations with the fears they engender, which are reproduced by the media and in films. The circular relation between cultural constructions, fears and material crises has to do with the hyperreal fashion in which media representations and material data are inseparable. In the post-9/11 "global wars" (Galli, 2010), marked by the apocalyptic omens of the Anthropocene, the semiotic relation between representations, fears and material crises compels us to read visual products as historical texts. They help to shed light on the imaginary that serves as the scientific, political, cultural and social terrain where our conception of the present is forged. The Anthropocene has been defined as a new geological era marked by human-wrought changes, though there is a lack of unanimous consensus over its start date in the scientific community, where its origin

has been alternately traced to colonial expansion, the industrial revolution, and carbon extraction (Barbero and Leonardi, 2016). Lately, it has been ascribed to the anthropic exploitation of oil reserves and the impact of extraction on the environment. The definition is grounded in controversial Cartesian binaries – i.e., culture/nature, human/animal, human/non-human, organic/inorganic – which are somehow reflected in the films I discuss here, where the possibility of a supersession of the binary terms is a reason for panic. Material feminism and political ecology at large have taken issue with the notion of Anthropocene, urging the adoption of the terms Capitalocene or Chthulucene[3] (Haraway, 2015, 2016; Moore, 2017, 2018) to more accurately reflect the relation between capitalism, social inequalities, and environmental disasters. As I will argue, capitalism and its war *dispositif* lurk in the background of all these films in various guises. They can play the part of the monstrous threat (*Blindness*, *Arrival*, *Annihilation*) or represent a safe space to return to (*The Impossible*), although sometimes going back to a former space corresponds to the restoration of a regular life ridden with racial, class and gender inequalities and violence, as in *Blindness*. Alternatively, they assume the guise of a doomed condition that sooner or later will be superseded (in *Annihilation*, genetic mutations seem to make capitalist value extraction impossible and military control over its effects powerless).

Disaster may come from within our world or from another world. It may be caused by nature as an external enemy, or it may come in the guise of an alien presence from the unknown otherworld. Or, from alien intervention on human and non-human DNA. I argue that the diverse survivor communities are the mark of a specific conception of the present and future of human society and of the need to repair the wrongs of hypercapitalism (or Anthropocene), a system that regards nature only as a (endless and costless) resource for exploitation, humankind as the only historical subject, and the enemy as an entity to annihilate. This same mentality that I see as underpinning what Tala Asad has called the "small (colonial) wars" (2007: 35-36) is grounded on the idea that the enemy, human or non-human, comes from spaces and communities that are believed to pose a moral threat and, as such, has a lesser right to be treated as a peer. The enemy needs indeed to be destroyed and spaces and communities from where the threat comes can disappear without causing much distress. Such is the case in films like *The War of the Worlds* and *Annihilation*, although the latter seems to warn

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[3] Donna J. Haraway and Jason A. Moore have argued that capitalism rather than the mere presence of human hunters, gatherers and farmers has had a massive impact on the planet through CO_2 emissions, extractivism, inhuman exploitation, genocide, air and water pollution, and land devastation. Haraway uses the term Chthulucene to define the exceeding Life of the Planet that capitalism would never fully subjugate or annihilate.

about the fact that the alien presence may have been destroyed but is not extinct, having contaminated and structurally modified the *world as we knew it.*

This same mentality erases the possibility of the encounter as well as the history of cultural, social and economic exchanges between the protagonist(s) and the non-peer/expendable ones. This is particularly true in *The Impossible*. In the final scene, the family that survived the tsunami goes back to its previous life as if it were completely separated, both geographically and epistemically, from the spaces and lived experience of constant disaster (South Asia is periodically hit by *natural* disasters). Instead, where that geographical and epistemic divide has been erased (e.g., in both *The Impossible* and *Blindness*), the community of survivors reflects the positive values of a society *in embryo* that is supposed to be terror-free. Yet, the threat is not fully banished. In all these films, regardless of whether the community is multiracial or transclass, it is a white protagonist who has the technical or emotional skills to lead it out of disaster. The terror-free society that ushers in a new historical era is led by a white Western subject. But the white subject and Western society at large, leading and profiting from the capitalist system of exploitation and its knowledge/power devices, are believed to have caused the disaster, which makes it more likely that the threat will reappear in the future. This is especially true in *Annihilation*, where a self-destructive drive causes the annihilation of the team members who ventured into the Shimmer, lest they be vectors of contamination to the still safe "out there". In this case, what is offered is an apocalyptic/sci-fi version of the debate on the Anthropocene and its reverse promise of a threatening future. In fact, Lena, the only survivor from the all-scientist team, and her husband's double (a creature of the alien-generated environment and the only one who has managed to escape it and survive) are both agents and witnesses of a modification, physical as well as epistemological, that the world of Anthropocene needs to endorse.

This reverse promise echoes Rozario's society of "permanent disaster", drawing from and at the same time reverting Jean Jacques Rousseau's statement that "catastrophe is generated by modernity and as such generates Progress" (*apud* Rozario, 2007: 19). Rousseau also believed that catastrophe causes more victims among those who challenge the laws of nature (i.e., through exponential urbanisation) and, by wiping out the modern lifestyle, makes a new beginning possible (*ibidem*). He argued that a new beginning would foster either faster progress or, on the contrary, a return to the *homo homini lupus* [A man is a wolf to another man] condition. It is the loss of trust in progress as a linear process – whose costs are justified by its benefits and, in humanity, whose universal values of communion and solidarity are seemingly

reserved for the few – that makes room for the apparently absolute fear of boundless terror and cynicism about the "aftermath of the crisis".

The possibility that *monstrous* epidemics, invasions, genetic mutations, and extreme indiscriminate violence might hit the safe West and not be confined to the "out there" is what engenders terror. This is the reason why I decided to analyse *The Impossible* together with sci-fi films. It locates disaster "out there", in the former colonial world and current global South, unlike the other films that thematise catastrophe's border trespassing. *The Impossible* thematises the reassuring vision of a world where those responsible for the overexploitation of natural resources can indeed mitigate the effects of the Anthropocene in the West through knowledge and technology. Here, they have a safe place to go back to, while speculative and sci-fi films endorse the opposite vision, where those same effects are incontrollable, leading to a loss of the safe space and a new beginning that challenges all the conditions that used to define that space as such.

DISASTERS, CATASTROPHES AND CONTEMPORARY DYSTOPIAS

Disaster management and reconstruction programs are the primary site of production of a new Western and neocolonial discourse of *worthiness* or *deservedness*;[4] that is, the act of selecting who is "deserving" and "undeserving" of aid through the concept of humanitarian precedence. Think of the many disasters that have happened in the last 10 years, from the 2010 earthquake in Haiti that affected three million people and killed 230,000 to hurricane Idai, which hit Mozambique, Madagascar, Zimbabwe, Malawi and South Africa in March 2019, causing more than 1,000 victims and the destruction of several villages.[5] They have quickly faded from the news and from Western collective memory, as if their victims were less worthy of grieving and the suffering they had caused was to be blamed on a specific human ontology that – unable to deal with disaster due to insufficient technology and knowledge, and unequal valuation of human lives – is expected to somehow cohabit with disaster.

Besides, if we compare media coverage, public debate and financial aid in the Mozambique flooding, the fire at Notre Dame cathedral in Paris (in which no casualties occurred) and the disasters at sea caused by the border regime in the Mediterranean (with a death toll exceeding 20,000 in the years 2014-2018), we can see that the official meaning and international relevance of disaster are independent from the

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[4] See Butler (2009), in the frame of the war on terror.
[5] The list is impressive and also includes the typhoon Haiyan in the Philippines (2013), which caused 10,000 victims and involved four million people; the earthquake in Nepal (2015), which caused 11,500 victims and 3.5 million displaced people; and the seaquake in Sulawesi (2018), which caused 4,500 victims and over 200,000 displaced people. See http://ourworldindata.org.

underlying data. They depend on dominant conceptions, hegemonic imaginaries, and local and global power relations.

A binary rhetoric, locating forgettable "disasters" beyond the borders of the worthy "imagined community" (Anderson, 1983) on the other side of the gate separating visibility from invisibility, differentiates between "places of disaster" (where catastrophe can be controlled and therefore overcome) and "places *for* disaster"; that is, where disaster is part of people's daily lives. In colonial narratives, the discovered lands were a place *for* disaster where indigenous people were overwhelmed by natural and human-generated calamities that they were unable to master – as they did not have the necessary culture (Giuliani, 2017a: 76). Nowadays, disaster coincides with a number of phenomena, from wars to tsunamis, from epidemics to inhuman labour exploitation: in brief, global inequalities in their most extreme form.

On the other hand, the concept of worthiness or deservedness – and the distinction it operates – does not apply only to the "out there", the postcolonial elsewhere. "Places *for* disaster" can also be found (or built) within the global North, as Mike Davis (1990, 1998, 2002, 2005) has shown in his research on the effects on people and the environment of nuclear and chemical experiments, and the urbanisation and desertification in the United States (U.S.) since the aftermath of the Second World War. More recent examples are the Bhopal (1984)[6] and Chernobyl disasters (1986).[7] In Bhopal, the Indian government allowed Union Carbide, a U.S. pesticide manufacturer, to prioritise profit over safety, resulting in a gas leak that killed at least 8,000 people (Lapierre, 2002). In the case of Chernobyl, the cost of poor management by the USSR central government will be paid by generations of Ukrainians, as radioactive contamination is expected to last for 300 years (see Abbott, 2006). Similar incidents in Italy involved collusion between state institutions, polluting factories, and local governments in the industrial areas of Taranto, Marghera and Manfredonia, and their careless management of environmental and health disasters caused by chemical accidents and toxic waste (see, respectively, Barca and Leonardi, 2016; Zazzara, 2009; Malavasi, 2018).

The definition of disaster depends, then, on many local and global factors and layers of power relations. Generally, it is not provided by the disaster-struck community, which does not have a say in short- or long-term disaster management either. In most cases, disaster is defined by actors who are in the driver's seat but are not directly involved. Disaster is seemingly not seen in its complexity – the result of the

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[6] See https://www.bhopal.net/. Accessed on 12.06.2020.
[7] The event and its consequences inspired the film *Chernobyl Diaries* by American director Bradley Parker (2012) based on the novel *The Diary of Lawson Oxford* by Israeli Oren Peli, also author of the very successful horror film *Paranormal* Activity (Peli, 2007).

interaction between human, non-human, organic and inorganic agents. In this thoroughly other-directed meaning of disaster, what is lost is what post-human feminism calls multifactoriality and *intra-activity* of natural (physical and biological) phenomena (Barad, 1995, 2008); that is to say, the internal interactions of multiple factors that contribute to generating a given phenomenon. In *agentic materiality* (Barad, 1995), which is a material reality that views all the components and factors involved in creating phenomena as "agents", human beings are neither the sole or main agentive element nor the blameless victims. Not even Hurricane Katrina can be termed a natural phenomenon independent of human intervention, since humans are an integral part of the natural environment. They are "acted-on agents", who can influence and change the physical contexts in which they live while at the same time being influenced and changed by them. When viewed from this perspective, the narrative that explains the December 26, 2004 tsunami in Southeast Asia or the tidal wave that broke over Fukushima on March 11, 2011, as being caused exclusively by "natural factors" (neglecting to acknowledge the role played by global warming and the effects of human behaviour on the environment) is not particularly plausible. Rhetoric that casts humans as the only actors capable of solving things is unacceptable. Neither can we assume that the subjects involved in disaster would be unable to survive in harmony with (some of) the climate changes, developing new forms of life that diverge from the "logics" of disaster management and humanitarian intervention.

Specifically, negating the subjectivity of the people affected by disaster casts the non-West as a homogenous space that is "naturally defined" as the place where disasters occur, in line with the definition of "places *of* disaster" and "places *for* disaster" that I propose here. In this way, it could be argued that the "out there" is once again positioned as a "colonial object", in which disaster is a frame rather than an event (Giuliani, 2016a, 2017b: 229). As such, it must be subjected to strict military, political and governmental control through humanitarian intervention or, when it poses a security concern, through the "small wars" described by Asad (2007). When this spatially specific and reassuring dichotomisation between "places *of* disaster" and "places *for* disaster" is overturned, and disaster tips over the borders into the so-called global North, bringing with it the inequalities and "chaos" that reign over it, it will not be a regenerating catastrophe, a crisis limited by hope, but an absolute disaster, the end of the *world as we know it*.

The Impossibile evokes this scenario in its account of a nature that sows death, involving a family that, while holidaying in Thailand in 2004, falls victim to the tsunami on Christmas. The film's title conveys exactly what I seek to address here: white, Western, middle class, "respectable" individuals are not supposed to fall victim to

disaster. Both in the film and in real life, that fate is reserved for the Thai people, seen as a barbarous, homogeneous entity. The events depicted in the plot are impossible by their very nature, representing as they do the dystopian manifestation of a state of exception that involves even affluent people. This state of exception appears as such only by virtue of a vision that does not consider the binary through which the existence of "places *for* disaster" becomes structural, as it defines the "exception" only when disaster comes to affect those who belong to the "place *of* disaster". The state of exception is not exceptional at all for those who are seen as belonging to the place *for* disaster. Once again, it is when catastrophe trespasses into the safe space of civilisation that the "place *for* disaster" is defined as such, engendering the dystopian exception that could subvert and erase the *world as we know it*.

Lest the dystopian speculative effects of the Anthropocene become a reality, it is necessary to prevent natural incidents with precautionary boundaries designed to strengthen non-expendable subjects, guaranteeing them resources and a safe space where they can live untouched and avoid contamination. In speculative fiction, these boundaries are geographical and political as well as genetic. A good example is the dystopian film *Code 46* (Michael Winterbottom, 2003), where metropoles similar to Saskia Sassen's global cities (Sassen, 2001 [1991], 2011 [1994]) are inhabited by the few who have travel documents while the multitude is consigned to death and oblivion in the desert outside city gates.[8] There are genetic boundaries, too. *Code 46* is indeed a law that forbids sexual intercourse, marriage and procreation between individuals with genetic proximity – a likely occurrence, given that most of the global population in the film is the result of cloning.

As for what I have termed the "new eugenic scenarios", that is, a reassuring, utopian, eugenic "after" that also corresponds to a new "start" in the context of a growing imaginary of *crisis*, they play into this dichotomous vision pitting "citizens worth saving" against "expendable" victims who can be sacrificed. The idea that we might control the risk of individual or societal degenerative metamorphosis by actively "separating" and "improving" human ranks through social organisation and medical intervention has a long history. It has characterised modernity since Enlightenment thinkers first presumed to deterministically understand the nature-humankind relationship and, more markedly, since the emergence of the measurement-oriented

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[8] Underlying all the films I have analysed is the memory of the future, that is, the speculative projection of past and ongoing divides in a dystopian future. Along the same lines, a successful Brazilian web TV series, *3%* (created by Pedro Aguilera, ongoing broadcast since 2016, and distributed in 190 countries), deals with a spatially and socially divided society (the chosen few vs. the poor and hopeless inhabitants of the slums). Akin to a survival of the fittest, every year 3% of the poor who have reached the age of 18 have a chance to access the world of the chosen few, provided they demonstrate superior mental and physical abilities.

rationality culminating in eugenics that has fuelled Western culture from the rise of positivism to the present day.[9]

Emigration and containment in institutions were employed in the past as push-pull measures to rid of "inferior" subjects by sending them "elsewhere", to secluded sites far from the eyes of society. However, the moves to directly eliminate these populations through sterilisation carried out in Germany, Sweden and parts of the U.S. amounted to what Roberto Esposito (2004: xiv-xv, 146-157) has defined as a "surgical" approach to the "disposal" of inferior subjects and historical examples of "negative eugenics" (Esposito, 2004: xiv-xv, 146-157). This approach is based on the idea that there is a pathogenic socio-racial element with the power to corrupt the presumably racially homogenous social body, and that only by "surgically" eliminating it can we ensure the continued purity/racial supremacy of the nation. If we project this approach onto a global stage and consider it more broadly as the motivation behind moves to select among the so-called global North's socio-racial legacy, we can find its traces even today in racist diatribes against immigration, and likewise in humanitarian aid schemes targeting disaster victims. The films I analyse in this article provide clear examples of this. Given the impossibility of openly calling for a return to "negative eugenics" of the past (e.g., as a dystopian version of neo-Malthusianism; see Hardin, 1968 and Boulding, 1966), the dystopian device of natural disaster appears to offer an alternative means of selecting among "inferior" subjects. This selection is aimed at drawing more rigid "naturalised" boundaries between class, gender and race and "preserving" the sites of power. Such was the case when Hurricane Katrina hit with devastating effects the coasts of the Gulf of Mexico, Mississippi, Alabama and Louisiana in 2005, as well as destroying the historical centre of New Orleans.[10] The U.S. government's slow response to the disaster and the insufficient preventative measures, a consequence of the country's long history of discriminating between lives worthy/unworthy of saving along class and colour lines, were a source of national shame.[11]

In the case of Katrina, like in *The Impossible* as well as in *Blindness,* the official answer to catastrophe is: *homo homini lupus*. There is no society nor community taking care of its weakest members, nor any social obligations, only individuals and families

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[9] For insights into the international debate on eugenics, see the works of Claudio Pogliano (1984; 2005). For a genealogy of eugenics in the U.S., see the works of Edwin Black (2012), Jonathan Peter Spiro (2008), and Wendy Kline (2005). On eugenics in the British empire, Australia and United States, see the works of Diane Wyndham (2003), Nancy Stepan (1982), Philippa Levine and Alison Bashford (2010); on eugenics in Italy see Claudio Pogliano (1984; 2005) and Francesco Cassata (2006).

[10] See Spike Lee's documentary on Katrina produced by HBO USA, *When the Levees Broke. Requiem in Four Act* (2006); the last chapter in Kevin Rozario's *Culture of Disaster*; and the debate on the website "Understanding Katrina. Perspectives from the social sciences" – https://items.ssrc.org/category/understanding-katrina/, accessed on 12.06.2020.

[11] Cf. https://items.ssrc.org/category/understanding-katrina/, accessed on 12.06.2020.

that form part of a network of power relations projected onto a transnational and global level. In *Blindness* – as well as in other films I have recently analysed like *The Road* (2009)[12] – these networks of relations generate affective communities capable of resisting the effects of the threat, creating solidarity and overcoming social differences. But this only lasts until the return to normalcy restores differentiation among people (*Blindness*). Transclass (but not transracial) emotional communities of survivors (like in *The Impossible*), as they might be termed, thus appear as mere means of survival and are inherently temporary, lasting only until the reunited upper-middle-class white, family flies home to take back its rightful place in the Western world.

ON DISASTERS, CATASTROPHES, MUTATIONS AND POST-APOCALYPTIC AFFECTIVE COMMUNITIES

Both *The Happening* and *Blindness*, which I have discussed at length in two of my recent publications (Giuliani, 2016a, 2017b), deal with deadly events of which, apparently, human beings are not guilty. Nature revolts against humans, be it in the form of plant spores that cause people to commit suicide or a virus that causes blindness. Although blindness not only causes accidents and death but is also a metaphor for the "eclipse of enlightenment" (Von Koppenfels, 2004: 156),[13] it does not bring about the end of the world. Rather, it is a scenario for experiencing the end of the *world as we know it* (driven by and organised according to the time and space of capitalism). Unlike *The Happening* but similarly to *Annihilation*, in *Blindness* there is no trust in the state, its institutions or its military forces: the blind are forcefully removed from their homes and confined to an abandoned mental hospital where neither medical or psychological assistance nor basic necessities such as linens and soap are provided. The facility is patrolled by the army, who have received orders to kill anyone attempting to leave the grounds. The forced co-habitation of people who have different experiences of disaster triggers the abuse, rape and murder of the most vulnerable and unfamiliar with the "state of exception". When the soldiers also become infected, everyone is free to flee the facility. The protagonist (played by Julianne Moore), who is immune to the disease but pretends to be blind, leads her new affective community out of the hospital and into the chaotic city, where the dead and the living blind are left in a "state of nature" characterised by a war of all against all for the limited resources

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[12] *The Road* (2009) is a successful film by John Hillcoat, starring Viggo Mortensen and based on Cormac McCarthy's novel (2006). It envisions a post-nuclear world where the only two options for survival are eating other humans or finding stored canned food. The leading characters are a father and his little boy in search of shelter, food and repair against the cannibals.
[13] Von Koppenfels refers here to José Saramago's novel, written after the writer had witnessed the early 1990s civil war in the Balkans.

available. Back at her luxury apartment (which she shares with her now-blind dentist husband), the members of the small community enjoy a moment of peace and the morning after, the "patient zero" of the epidemic regains his sight. This is a new beginning in their lives, marked by awareness of the wrongs of *the world we knew*.

In *Annihilation*, such a "return" is complicated by genetic modification. The two survivors have the opportunity to start anew on the basis of social codes and organisations suspended by the catastrophe, but with the added awareness of the extreme vulnerability of human condition. Not only can aliens come back, but (genetic) vulnerability in humans undermines the capacity to endure the Anthropocene. In fact, the Shimmer, the alien-generated environment, is ever expanding and "will grow until it encompasses everything", as the expedition's chief scientist, Dr. Ventress (Jennifer Jason Leigh), predicts just before dying. By randomly refracting and recombining radio waves and DNA, the Shimmer makes human identity less distinct, zeroing out the humans' capacity to master nature, control their behaviour, exploit resources, and (re)produce. DNA recombination does not have to be only monstrous: as Lena observes, it creates forms of life of extraordinary beauty. The physicist Josie Radek (Tessa Thompson) – the only one who decides to stay in the Shimmer – argues that rather than knowing or fighting it, one should submit to it and let it bring about change.

Interestingly enough, the expedition team that Dr. Ventress, a psychologist serving in the army, put together is composed of five women, four of whom are scientists. Lena (Natalie Portman) is a biologist, Cass Sheppard (Tuva Novotny) is a geomorphologist, and Anya Thorensen (Gina Rodriguez) is a paramedic. All of them have "a past": Lena has lost her husband and Sheppard a daughter who died of leukaemia, Thorensen is a recovering alcoholic, and Radek used to self-harm. Ventress' story is apparently a mystery, but Lena suspects she has terminal cancer. Except for Lena, who initially volunteers out of love for her husband Kane (Oscar Isaac), the affective community that Ventress has created is bound together by a self-destructive drive. Lena's husband is not dead, in fact he has just returned from a year-long mission to the Shimmer. Apparently, he is the only survivor from a previous army expedition whose destiny will become clear to Lena and the others when, in the soldiers' headquarters, they find a memory card with a video of the genetic mutations they underwent. While Shepperd and Thorensen are torn to pieces by a mutated bear, Radek, who is herself undergoing a visible mutation, decides to stay in the Shimmer. Ventress is the first to arrive to the lighthouse – that is where it all started, with an alien meteor crashing into the lighthouse in the opening scene. There, Lena discovers that the real Kane, unable to accept his mutation and duplication, has set himself on fire with a phosphorus grenade after asking his double to go find her. Kane's double, who

has reached Lena's home in the opening scenes, is on his death bed at the army base with multiple organ failure. After setting the lighthouse on fire and destroying the Shimmer, Lena returns to that same base, the only survivor from her expedition team. After being interrogated, she is put in isolation. In the meanwhile, Kane's double is out of danger and the last scene sees Lena and him hugging after confessing to each other that somehow both are products of the Shimmer.

The film's title – *Annihilation* – refers to the destruction of the *world as we know it:* "our bodies and our minds will be fragmented into their smallest parts until not one part remains… Annihilation", says Ventress just before disintegrating into a shimmering cloud. Towards the end of the film, Lena tells the officer who's interrogating her:

> [Lena] "I don't think it wanted anything"
>
> [Officer] "He came here for a reason, it was mutating our environment and destroying everything"
>
> [Lena] "It wasn't destroying. It was changing everything. It was making something new"
>
> [Officer] "Making what?"
>
> [Lena] "I don't know"

I see *Annihilation* and *Arrival*, both about an invasion that engenders endless and unpredictable mutations, as metaphors for the encounter with the unknown "out there", violating the binary border between catastrophe and disaster, human and less human, human and alien. Both films make an effort to imagine the encounter and its consequences as a "change" to which we, the humans, need to resign (*Annihilation*) or as a "change" that will increase human understanding (*Arrival*). While communication (through DNA modification) in the former is against humans' will, acceptance from some wise humans in the latter allows the whole community to benefit from the exchange.

Subsequently, I will discuss *Arrival* against the grain of *The Impossible* for two reasons. Firstly, both revolve around a natural/alien disaster, seemingly independent of the life and actions of the people involved. Secondly, the issues of communication/lack of communication and possible/impossible cooperation (between locals and tourists or humans and aliens) are resolved in opposite ways. *The Impossible* is based on the true story of a Spanish family that lived through the 2004 disaster while on holiday at a Thai resort, although the film changes the family from Spanish to British. Naomi Watts plays "Maria", and Ewan McGregor is "Henry". Three young (and very white) actors are cast as their children. *Arrival* does not deal with natural disasters. It tells of the arrival of

alien spaceships on Earth – an event that is unrelated to the people involved in the story. The egg-shaped, aerial totem-like ships (called shells) are 500-metres tall: every 18 hours a hatch opens to let the scientists in. What is extremely interesting and quite unique for an alien invasion plot is that the protagonist avoids a "war of the worlds" and complete destruction thanks to transcultural (posthuman) communication. Communication here is the way out of a *Weltanshaaung* based on *homo homini lupus*, an option that is completely neglected by the protagonists of *The Impossible*.

After being injured in the tsunami waves, Maria is finally rescued by local Thai villagers who provide her with a first aid and take her and her son to the nearest camp hospital, where they can finally reunite with the rest of their family. "Thank you" is her only utterance and the only word the audience can understand, since the director has decided not to offer subtitles for the conversation among the Thai rescuers. She does not ask if that community had losses. The local community is not seen as suffering in the same way, nor is it entitled to the same attention. The film deals with a real tragedy, a disaster that takes place "elsewhere", but, because it involves westerners, it is made into a turning point with the power to re-establish the superiority of the "First World". The fictional tragedy, on the other hand, brings the end of the world within the boundaries of the West (northern Europe) and therefore, I would argue, conceives of it as a final eugenic catharsis that absolves the West of its sins.

Arrival, in this sense, represents an important challenge: the invasion by the Other is meant to endure and signals the impossible return to a divided world where the safe space of the human is guaranteed by solid epistemic, physical, linguistic, geographic and political boundaries. Just as in *Annihilation*, the alien presence cannot be erased: as in a reverse colonial invasion, the physical (or epistemic) presence of the colonisers will gradually mutate and then put an end to (*Annihilation*) or improve (*Arrival*) the status quo. Annihilation and mutation lie at the very foundation of colonial and postcolonial imagination: the fear of becoming a settler colony just like the ones the West created elsewhere belongs to a transnational Western "colonial archive", that is, "a repository of codified beliefs" (Stoler, 2002b: 97), at once local and transnational, providing the symbolic material that legitimises colonial expansion, extermination and the civilising mission (Giuliani, 2016b; Hage, 2016; Arata, 1996).[14]

Unlike in *The Impossible*, where the safe West materialises in the guise of Henry's father's reassuring voice on a borrowed cell phone, in *Arrival* the main character is sceptical of the state institutions and army and their way of dealing with the crisis. 48

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[14] Critical analysis of the topos of the colonised land as a body to be penetrated, fertilised and mutated to make it fit for the newcomers is well-known. See, among many, the seminal work of Anne McClintock (1995), Anja Loomba (2005), Leela Ghandi (2006), and Ann Laura Stoler (2002a).

hours after the arrival of 12 alien spaceships, the U.S. professor of linguistics Louise Banks (Amy Adams) is contacted by Colonel GT Weber (Forest Whitaker) because of her previous work translating Iranian insurgents' videos from Farsi. Although disappointed at the U.S. intelligence's means and aims, she agrees to helping and after reaching an army base in Montana, she and Ian Donnelly (Jeremy Renner), a physicist, are taken inside the spaceship to decipher the aliens' language and ask questions. Quotes from classic alien iconography – specifically from H. G. Wells' *The War of the Worlds* and its film adaptations (1953 and 2005) – are seemingly a mark of Villeneuve's interpretation of the trans-worldly encounter. Here too, as in the 1953 version of *The War of the World* and in Spielberg's, aliens resemble giant squids with multiple tentacles (tripods in the former two, heptapods in Villeneuve's). Yet, rather than being vertically kidnapped by alien spacecrafts (Spielberg), scientists and soldiers have to voluntarily climb up a vertical tunnel where gravity is reduced.

Louise and Ian begin researching the written language of complicated circular symbols. As Louise studies the language, she starts to have visions of a child who seems to be her own, a daughter named Hannah who died of a terminal illness in her adolescence. When Louise is able to establish sufficient shared vocabulary to ask why the aliens have come, they answer: "Offer weapon". However, China translates this as "Use weapon" and promptly breaks off communications. China, as Louise discovers, uses mah-jong tiles to interact with the aliens, transforming every conversation in a matter of winning or losing. Other nations follow China's lead, and soldiers plant a bomb in the spaceship that has landed in Montana. Unaware, Louise and Ian re-enter the alien vessel, and the aliens give them an extremely complex message. Just before the bomb explodes, one of the aliens ejects Ian and Louise, who are left unconscious. When they reawaken, the military are preparing to evacuate, and the spaceship has moved out of reach. Ian discovers that the symbol for time is present throughout the message, and that the writing occupies exactly one-twelfth of the space in which it is projected. Louise suggests that the full message is split among the twelve vessels, and the aliens want all the nations to share what they learned.

China's General Shang issues an ultimatum to the aliens, demanding that they leave within 24 hours. Russia, Pakistan, and Sudan follow suit. Louise goes alone to the spaceship, and a shuttle is sent down to transport her inside. One of the aliens explains that they have come to help humanity, for in 3,000 years they will need humanity's help in return. Louise returns to the camp as it is being evacuated and tells Weber that the alien language is the "weapon", the "tool", the "gift" they are offering: learning someone else's language helps people change their way of thinking, adopting a new identity and, in particular, a different conception of time. The aliens' conception

of time is not linear: they will share this gift with humans, allowing them to experience "memories" of events that have yet to happen. The very fact that Louise is learning the alien language explains her capacity to see her future with Hannah. She has visions of a United Nations gala, where China's General Shang thanks her for persuading him to call off the attack by reaching him on his private number and reciting his wife's dying words: "In war there are no winners, only widows". Shang will know, once the whole humanity shares the "gift", that she needed to make that phone call. In the present, Louise steals a satellite phone, calls Shang and recites the words. Immediately after, the news announces that the Chinese will stand down. The other countries follow suit, and the twelve spaceships vanish. During the evacuation of the camp, Ian expresses his feelings for Louise. She will agree to have a child with him despite knowing their fate: that Hannah will die and Ian will leave them, unable to cope with the revelation that she knew all along. But as she tells Hannah in the final scenes, as images of their family life with Ian appear on the screen: "This is where your story begins, the day they departed. Despite knowing the journey and where it leads, I embrace it. And I welcome every moment of it".

CONCLUSIONS

The "interpretative" potential offered by the analysis of different films belonging to descriptive and speculative genres lies in the opportunity they provide to explore the dystopian imagination of the future based on present imaginaries and memories of recent and distant pasts. In all of them, surviving the events that could erase the *world as we knew it* is linked to the Anthropocene and its reverse conception of the future (no longer a promise but a threat). *Annihilation* and *Arrival* deal with fear of the future, speculating about the inevitability and desirability of biological and cultural communication with the agent of change for humanity. Disaster always occurs where available technology and knowledge cannot master nature, and its trespassing Western borders is viewed as a catastrophe. In both films, the aliens' arrival does not bring extinction but a renewal of human life. *Blindness* deals with the impossibility of going back to the way things were before, and whether it may be desirable for the upper class to recover a "safe space" that was ridden of violence and despair. Compared to these films, *The Impossible* seems to offer an alternative "reassuring reality" to the threat of irreversible mutation, to a dreaded permanent co-habitation with a more civilised, stronger and overwhelming alien society, or to the unwelcome realization that our privileged life may hide more violence than we normally associate with "places *for* disaster". If that were the case, the lesson to be drawn would be that what the future holds is a sort of neocolonial and utopian tragedy, in which the happy

ending is reserved for the West and those among its citizens who are considered worthy of survival. Untouched, unmutated, identical, they would go back to a traditional patriarchal way of life that is just as utopian – void of suffering, violence and death. Watching these films, we have imagined a world that is under the threat of annihilation; we have imagined a catastrophe. We did not know whether we would survive and reunite with our loved ones. We made it; we caught a plane and went back home, where order was never upset and keeps sorting between "here" and "elsewhere", predictability and risk, life and death, catastrophe and disaster, peace and violence, love and hate, happiness and suffering in two irreconcilably distinct geographic, human and semantic terrains.

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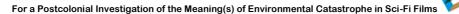Contact: gaiagiuliani@ces.uc.pt

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