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## ***Culture Unbound, Extraction from Volume 7, 2015***

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## Introduction

### Cultures of Disasters

By Anders Ekström & Kyrre Kverndokk

Disasters and hazards are ubiquitous to contemporary societies. There are 1400 earthquakes rocking the globe every day. A new volcanic eruption is occurring every week. The floods and landslides are so numerous that they are impossible to keep track of (McGuire 2005: 9). About 240 million people were affected by major natural disasters in 2011. With the prospects of a warmer and wilder future, the number of people affected by climate-related hazards such as floods, storms, heat-waves and droughts is expected to increase. Despite the global scale of climate change, the suffering caused by such disasters remains unevenly distributed between different regions and groups of people.

But disasters are nevertheless increasingly taking on a connected nature, materially as well as discursively. The Great East Japan Earthquake in 2011 is a telling example. The earthquake triggered a series of interconnected events of different temporal duration and geographical reach: tsunami waves and flooding, the Fukushima nuclear explosion and fire, the slow and continuing catastrophe of radiation and environmental effects, financial and social crises. Disasters are not events but processes with unclear beginnings and no obvious endings.

In this and many other respects, contemporary disasters fundamentally challenge our understanding of global and cross-temporal relations as well as long-established distinctions between natural and technological disasters, human and non-human agency, culture and nature. The materially connected nature of disasters further reinforce a long-standing cultural impulse, triggered by the human quest for meaning, to metaphorically and discursively connect extreme events of different scale and character. An "emergency imaginary" (Calhoun 2010) frames the manner in which crises and cataclysms are told in news media and popular culture, and is encouraged by the cultural exchange between them. More or less stereotyped images of disaster also influence how extreme events are managed and remembered, in some cases with devastating results. This is why social norms and cultural metaphors make a crucial difference to the capacity of societies to cope with and come to terms with disruptive events (Tierney et al 2006).

To an influential line of critical thought, from Ulrich Beck (1992) to Giorgio Agamben (2005) and beyond, the emergency imaginary also works to normalize and legitimize an interventionist politics both on a global and a local scale (Fassin & Pandolfi, 2010). In this understanding, there is in the early 2000s a more general

and increasingly powerful tendency towards "catastrophization" (Ophir 2010) in the means by which modern societies are organized, managed and perceived. But catastrophes and extreme nature events were instrumental to the emergence of societal institutions, administrative tools and political concepts in the past as well. For example, recent historical scholarship reveals that early 20th century emergencies of nature such as the Great Kanto Earthquake in 1923 played an important role in the crafting of modern emergency language (Orihara & Clancey, 2012). So, as much as modern disasters are by definition connected in chains of disaster processes, they constantly connect the world in new and unexpected ways.

Natural disasters turn order into chaos, and threaten to overthrow social and economic structures. However, disasters also inhabit a liminal character, in the sense that they put our understanding of the world on trial. Fundamental norms and values are made visible when the world is tossed and turned, simply because they can no longer be taken for granted. Hence, disasters work as catalysts for negotiations of cultural meaning, norms and values, and the patterns of social organization. Studies of historical as well as recent catastrophes in different parts of the world give rich insights to the intense cultural and social improvisations that are triggered by disasters and that are keys to both immediate and long-term recovery work (Solnit 2009; Hastrup 2011).

Culture in the sense of narration and meaning making is thus a necessary resource in any post-disaster society. The work of interpretation is everywhere in disaster management, including the analysis of causes and the mapping of consequences. It is sometimes stated that catastrophes are beyond representation. But, in fact, the opposite is true. Extreme events are represented over and over again and anything else is unthinkable. Neither are disasters incomparable to other catastrophic events. To the contrary, meaning is transferred to disasters by analogy and comparisons. Such acts of representation links disasters of a different scale and location to each other, and depend on both prevalent discourses, for example on global warming and the war on terror, and on historically and aesthetically established patterns of interpretation (Ekström 2012).

Despite these and other cultural dimensions to the understanding and management of disasters, it is only recently that cultural research on disasters has begun to develop more broadly. This can in part be explained by the history of disaster research. Modern disaster research, dating back to the early 1920s, first developed as a branch of sociology. Early studies of human reactions to disaster drew on late nineteenth-century theories of crowd psychology, framing disaster management as an issue of protecting society from the irrational and dangerous behaviour of panicking victims. From the 1950s and onwards this approach was criticized by sociologists like Enrico Quarantelli who argued that the notion of anti-social behaviour as the dominant response to disaster was weakly supported by empirical research (Quarantelli 2001).

Contemporary disaster research has developed in the context of broader discussions on risk sociology, social vulnerability and societal resilience (see, for example, Alexander 2000; Lindell 2013; Tierney 2014). Much of this research share an overall focus on economic and institutional aspects, but also on communicative practices and political action in relation to emergencies. Signaling an important shift in policies, practices and perceptions of disaster, discourses on preparedness and mitigation, rather than avoidance, have been proliferating in the last decades (Amin 2012). An important contribution of anthropological, historical and cultural studies has been to investigate the systems of meaning that are activated in the management of disasters. Early work on disaster imaginaries cover a broad spectrum of approaches to the representation of catastrophes in art, literature and media and apocalyptic notions more generally (Kendrick 1956; Sontag 1965; Kermode 1967; Steinberg 2000).

It is only recently, however, that disasters have become an expanding humanistic and cross-disciplinary research field in its own right. Some scholars suggest that disaster research has taken a cultural turn (Webb 2007, Holm and Illner 2015). There are several reasons for this growing interest in the cultures of disaster, but most important is an increasing awareness of how cultural aspects affect the how societies manage crises and extreme events.

Humanistic research within this field also reflects and elaborates the discursively connected nature of disaster imaginaries. Disasters are incessantly foretold and re-told – in news broadcast, movies, novels, operas, computer games and amusement parks. Due to global media networks and communication technologies, audiences all over the world are able to follow the stories of floods, earthquakes and volcanic eruptions in real time and at long distances. The myriad of stories of cataclysm are structured around a limited number of narrative forms and motifs; for example, the theodicy, the apocalypse, the state of exception, and the trauma (Holm 2012) This repertoire of cultural patterns not only structure how we imagine disasters, they also structure how we handle them. A much discussed instance of this was the fatal consequences of the flawed disaster management after hurricane Katrina and how the action of authorities was affected by stereotyped reports of the event in certain news media (Tierney et al 2006, Dynes and Rodríguez 2007). Thus, stories of disasters may work as both models for and models of social practices.

\*

This thematic section of the journal *Culture Unbound* is one result of a joint initiative to bring together ongoing cultural research within the field of humanistic disaster studies, and to create a forum for exchange between scholars within the human and social sciences who work on the cultural analysis of disasters from different research traditions. With this objective in mind, we started the network project "Cultures of disasters" in 2012, funded by the Research Council of Norway, and

organized in collaboration between a group of researchers at the universities in Copenhagen, Oslo and Uppsala. In the autumn of 2012, the network organized two workshops inviting Scandinavian researchers in the field to present and discuss their ongoing work. A year later, in November 2013, the conference "Cultures of disasters" was organized in Oslo. The conference was attended by scholars from Europe, America, Asia and Australia, and with a focus on humanistic approaches to disaster research. Paper presentations, keynotes and panel discussions covered a wide range of topics including, for example, case studies of past and more recent catastrophic events; historical perspectives on cultures of risk, uncertainty and resilience; disasters fictions and apocalyptic imaginaries in popular culture.

After the workshops and the conference, participants were invited to contribute to two special journal issues on the theme of "Cultures of disasters". The first group of articles was published in the journal *Tidsskrift for kulturforskning* 2014:3. This issue of *Culture Unbound* contains the second collection of articles. It has been divided into three sections, tentatively entitled, respectively, "Disaster Narratives", "Catastrophizations", and "Contingency, Resilience and Culture".

The first section includes four papers on quite different types of narratives. The first three explores one of the most deeply rooted disaster imaginaries – the apocalypse. The papers discuss how societal and environmental issues are articulated as apocalyptic narratives. Gaia Giulliani is concerned with how the cultural fear of disasters has influenced Western self-representations. More specifically, her paper examines the racial stereotypes, "white fantasies", and gender hierarchies in a number of zombie movies and TV-series. Jacob Lillemose investigates the animal horror movie *Kingdom of the Spiders*, and argues that it articulates an environmental critique that is best described as a "speculative staging of apocalyptic processes in the 'deep ecology'". The title of Jerry Määttä's contribution is "Keeping Count of the End of the World", and that is exactly what the article does. Using quantitative methods from the sociology of literature, Määttä's paper traces the historiography and canonisation of Anglophone apocalypse and post-apocalyptic literature and films. The last article in the first section has a somewhat different focus. Katrin Pfeifer presents a close reading of two fairly unknown Dutch poems about a storm that ravaged the island of Texel in 1660. Early modern disaster poetry is a genre that most often frame disasters as an instance of divine punishment, but Pfeifer demonstrates how in this particular case a secular and spiritual understanding of the storm was combined.

The second section on "Catastrophizations" consists of two papers that share an analytical focus on how an optics of disaster, and political and cultural narratives of different types, in some cases translates into prolonged and even permanent states of emergencies in a much wider sense. It is from this perspective that John Ødermark, in his article "Avatar in the Amazon", examines the entanglement of popular culture, environmentalism, ethno-political and cultural theory in the framing of the Amazon as an ecological symbol. Peer Illner, on the other hand, turns to the history

of the Black Panther Party in the 1960s and 70s, and its modes of operation in mobilizing African Americans by proclaiming a continual emergency. From different vantage points, both Ødemark and Illner take issue with the notion of disasters as singular and disruptive events, focusing instead on the cultural work involved in processes of catastrophization.

The last section on "Contingency, resilience and culture" displays some of the variety of cultural approaches in contemporary disaster studies. The first three articles in this section investigate how mass mediation and practices of communication affect the political, social and cultural response to disasters. Sara Bonati inquires the relationship between the level of Western involvement in remote catastrophes and their mass mediation. By comparing the Western response to the Boxing Day tsunami in 2004 and the Tohoku tsunami in 2011, the paper discusses different forms of "Westernization" in relation to disasters in non-Western parts of the world. Hamish McLean and Jacqui Ewarts contribution to this section is focused on communication processes in the management of disasters, and especially the role of politicians in communicating disasters. Based on interviews with emergency agencies in Australia, Germany, Norway, and the UK, the article outlines a roadmap for how to involve political actors in disaster communication processes. In the third paper in this section, a research group led by Christian Webersik argues for an interdisciplinary approach both to disaster research and emergency management. They emphasize the importance of socio-cultural perspectives on how people imagine, prepare for, respond to and perceive disasters as an integrated part of emergency management. The last contribution to this thematic issue on "Cultures of disaster" takes an explicit theoretical approach to one of the key concepts in contemporary understandings of disaster, the concept of resilience. From an analysis of the role of this concept in disaster studies as well as disaster management, Rasmus Dahlberg argues for a merging of the concepts of resilience and complexity as a useful development for emergency management.

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## Fears of Disaster and (Post-)Human Raciologies in European Popular Culture (2001–2013)

By Gaia Giuliani

### Abstract

This article aims at mapping the impact of ‘fears of disasters and crisis’ on European self-representations in terms of racial stereotypes, ‘white fantasies’, gender hierarchies, and heteronormativities. Its methodology is a critical discourse analysis of texts – specifically television series such as the BBC’s *Dead Set* (2009) and the first season of BBC US and UK, *In the Flesh*, (2013) and movies such as *28 Days Later* (2002), *L’Horde* (2009), and *World War Z* (2013) – read through the lens of postcolonial theories, critical race and whiteness studies, the concepts of political philosophy and the theoretical insights of post-human feminism. This composite theoretical framework permits a grasp of gendered, racialised and classed fantasies behind the narratives of catastrophe and the visions of the post-apocalyptic world(s) the catastrophe is supposed to bring to life; it also allows an analysis of the meaning and articulations of catastrophe and post-world spatial constructions, and the latter’s relation to actual and imagined social hierarchies (gender, colour and class of the survivors). These are examined in order to understand whose eyes we are expected to imagine and experience the crisis/catastrophe through; the geographies of catastrophe and of post-world(s) (where in the world, and why); the relation between the undead and the living; life amongst the living before the undead threat; and the way protagonists look at the laws, rule, governmentalities, and use of violence in the past, present and future societies. These are a few of the themes that this article discusses in an attempt to uncover what fantasies of the present are hidden behind present memories of the future.

**Keywords:** Apocalypse, visual products, discourse analysis, postcolonial and cultural studies, critical whiteness studies

## Introduction

In order to grasp how and to what extent ‘fears of disaster’ engender European racist and (hetero)sexist self-representations, this article investigates the emotional coding of ‘sameness’ and ‘otherness’ in zombie narratives, primarily in the form of European television series and films from the past 15 years. These are popular and transnational cultural products, meant for the general public regardless of their location, and they will be discussed from the point of view of ‘fears of disaster and crisis’. The visual and literary texts this essay takes into consideration will be read in terms of European self-representations regarding racial stereotypes, ‘white fantasies’, gender hierarchies, and heteronormativities.

Since the end of the Cold War, Europe has been troubled by fears and an unprecedented sense of vulnerability related to a number of social, political, cultural, and economic phenomena that have transformed them from the ‘centres’ of modern empires to the post-modern ‘peripheries’ (Chakrabarty 2000) of new empires. These same phenomena have often been transfigured in contemporary horror visual productions (contagions, economic crises/natural catastrophes, genetic mutations, weapons of mass murder, etc.); in this essay the zombie narratives discussed will be read within a framework that links them to what I call the ‘return of the repressed colonial memory’: the return of the memory of invasion, expropriation, genocide, slavery, disaster, and death. They will thus be understood as if the memory of future catastrophe recalls the memory of past (colonial) violence; as if the undead stand for the limitless ‘strike back’ of their victims, whose return brings to light the previously unadmitted horror that so-called ‘civilised’ humanity perpetrated on the ‘uncivilised’.

This particular reading was introduced by British sci-fi writer H. G. Wells, who brilliantly stated in his introduction of the famous novel *War of the Worlds* (1897):

before we judge of them [the Martians invading the earth] too harshly we must remember what ruthless and utter destruction our own species has wrought, not only upon animals, such as the vanished bison and the dodo, but upon its inferior races. The Tasmanians, in spite of their human likeness, were entirely swept out of existence in a war of extermination waged by European immigrants, in the space of fifty years. Are we such apostles of mercy as to complain if the Martians warred in the same spirit? (Wells 1897: 7)

The purpose of seeing zombie visual and literary productions as authorial readings of an historically situated fear of the striking back of those who have been the victims of colonial violence – a fear outlined by Sven Lindqvist (1991) – derives from various similarities that those texts show with historical reconstructions and literary narratives from colonialism and slavery (1500s-1900s). The repressed, painful and troublesome colonial memories that I refer to are related, for example, to the physical elimination of natives and the expropriation of their lands and resources through settler colonialism – the Western rule of colonised people, their resources, and production – as well as the objectification and exploitation of men and women

through the slave trade. These memories refer to the emotional records of horrible regimes of segregation, sexual violence, forced reproduction, and death that involved both victims and perpetrators, but also to those who fought for freedom. Those are shared memories; they still produce fears, anxieties, repressions, internal fights, and a sense of guilt, rage, indignation, hatred and self-hatred.

This article's methodology is a critical discourse analysis of texts relating to the undead – more specifically, two television series: the BBC productions *Dead Set* (Brooker 2008) and the first season of *In the Flesh* (Mitchell 2013); and three films: *28 Days Later* (Boyle 2002), *The Horde* (Dahan & Rocher 2009), and *World War Z* (Forster 2013). To provide historic context, the work of director George Romero will also be discussed in some detail. These texts will be read through the lens of postcolonial theories, critical race and whiteness studies, the concepts of political philosophy and the theoretical insights of post-human feminism. This composite theoretical framework permits a grasp of gendered, racialised and classed fantasies behind the narratives of catastrophe and the visions of the post-apocalyptic world(s) the catastrophe is supposed to bring to life; it also allows an analysis of the meaning and articulations of catastrophe and post-world spatial constructions, and the latter's relation to actual and imagined social hierarchies (gender, colour and class of the survivors). These are examined in order to understand whose eyes we are expected to imagine and experience the crisis/catastrophe through; the geographies of catastrophe and of post-world(s) (where in the world, and why); the relation between the undead and the living; life amongst the living before the undead threat; and the way protagonists look at the laws, rule, governmentalities, and – finally – the use of violence in the past, present and future societies.

## **Zombies, Cannibals and Colonial Genocides**

Following the history of political ideas, cultural anthropology and semiotics, it could be stated that since the very beginning of human social life, monstrosity has always referred to the 'representation of the *finis mundi*', an embodiment of the end of the world. Monstrosity is the embodiment of the border between man on the one side and woman, non-human beings (animated and inanimated nature, and animals), and post-human entities on the other. Monstrosity was associated with Evil and the anti-Christ, and as such has been associated with the act of cannibalising flesh and souls of sinners and infidels:

With six eyes he was weeping and over three chins dripped tears and bloody foam. In each mouth he crushed a sinner with his teeth as with a heckle and thus he kept three of them in pain; to him in front the biting was nothing to the clawing, for sometimes the back was left all stripped of skin (Dante, *Inferno*, Canto XXIV, 1304-1321, 56-60, trans. in Warner 1998:161).

Bestialised in iconographies from Scholasticism to the mid-fourteenth century, evil monstrosity is assigned to natives in the travel memoirs of fifteenth-century sailors,

corsairs, and the men of science who rounded the Cape of Good Hope towards the Pacific. During the European Renaissance, the actual or alleged cannibalism of New World natives was considered evidence of their animality and proximity to Satan in a necessarily binary vision of creation and otherworldliness (Good and Evil). Africa, Caribbeans, Amazonia and the Pacific were places inhabited by Shakespeare's misshapen Caliban, a mutated being, a beast – “half man half fish” (Shakespeare 1610-1611: I.ii. 356-357; Vaughan and Mason Vaughan 1991) – of a dark colour (“son of the Devil and an Algerian woman”) who could be educated only to some degree, because the Caribbean/Calibans/Cannibals' “monstrosity and brutality” would never disappear (Schmigall 1981: 176-177).

Those areas were identified as the landscapes of both Heaven and Evil, a double feature that still animated early twentieth century images of the cannibals' land in Joseph Conrad's *Heart of Darkness* (1902) and – in the late twentieth century – the censored *Cannibal Holocaust* by Ruggero Deodato (1981), a proto-snuff movie dealing with an expedition of young American anthropologists in Amazonia to study cannibalism.

In early modern colonialist discourse, (cannibalistic) monstrosity featured as the last evil to fight in order to create overseas utopias, where the righteous could build the City of God. Monstrosity and utopia thus became inseparable terms of the same narrative consecrating colonialism (Said 1978, 1993), as well as enslaved (see Fredrickson 1971) and indentured labour (see Banivanua-Mar 2007 and 2005; Biber 2005; Berglund 2006), to a much higher – transcendent – *ratio*. This is testified earlier by late medieval heroic romances (*romans de geste*) describing the Crusades and literature accompanying the conquest of Americas, and is praised by English philosopher John Locke, author of the *Second Treatise on Government* (1690). Locke famously proclaimed America the chosen land to give birth to a new and more righteous society, grounded on a social contract amongst equals (male, white, Anglo-Saxons, proprietors, faithful to the Crown and its Church) (Locke 1962[1690]). The model of this society was Virginia, but the promise of equality was not extended to the slaves of the colony's plantations.

In order to expropriate the land on which to build utopias, the indigenous human beasts were eliminated or subjected to the rule of Christianity, its political formations, and more recently, to capitalism. *Hic sunt leones* ('here there are lions' – usually written on uncharted territories of old maps), and there *homo is homini lupus* ('man is wolf to man'), as Thomas Hobbes used to say (see Avramescu 2003), a condition to which even the monstrous Leviathan was preferable. In a very Marxian sense, the elimination of the beast was the only way to engender «primitive accumulation» (see Philipps 1998; Bartolovich 1998). In early sixteenth-century American colonialism this meant cannibalizing lands and replacing the natives – who were considered useless for labour – with a domesticated labour force from other colonised lands (Creed 1998; Hoorn 1998). From the seventeenth to the nineteenth centuries, new monstrosities – the black slave, the yellow peril, the brown coolie, the Mediterranean immigrant, and the feminine and queer monstrosities of

Georgian and Victorian times – were forged to serve the construction of differential regimes of exploitation that were gendered and racialised. This was strengthened through mythologies of the *noble savage* and the *unmasterable warrior* during Enlightenment, and later through bodily measurements, as positivism and eugenics hypostatized the perfect measurability of human behaviour.

The Enlightenment was a time when the ideas of humanity had legal, political, cultural, and religious borders, and these were very different from those at the core of early nineteenth-century anti-colonial and anti-slavery feelings; the denied humanity of enslaved and colonial Others brought no limits to the violence of word, rule, and sword.

It is within this framework that the repressed memory of past violence appears like a bad conscience, re-emerging through the rising of the undead, the one who was in the realm between life and death for centuries, waiting for revenge. S/he is the Caliban who has come back to revenge the stigma and persecutions, suffering and grief s/he experienced in life: it is as if Fanon's black consciousness (1952) has escaped from colonial amnesia, to be reincarnated as an entity that mortally wounds both his/her actual persecutors and their heirs.

### **The Rise of the Undead**

The etymology of the word *Zombie* (*nzumbe*) has been traced back to Bantu dialects. It arrived in the Americas through the Middle Passage – first Haiti, then other French and British Caribbean islands – and is a human state of being that results from voodoo rites and consists of the dead returning to life or a condition between life and death. In the twentieth century, the zombie begun its career on the screen. Cannibalism was absent in the few visual representations in US cinema of the 1920s through the 1940s such as *White Zombie* (Halperin 1932) with Bela Lugosi as the sorcerer who neutralises his rivals in love giving them a zombifying powder, *Ouanga* (Terwilliger 1936) which set itself in a Haitian plantation, *King of the Zombies* (Yarbrough 1941) – a spy story where Nazis are attacked by Black zombies – and the famous *I Walked with a Zombie* (Tourneur 1943) where the undead is the manifestation of a community's unbound mourning. All these movies deal, whether evidently or instrumentally, with the sense of guilt owing to the grief and pain suffered by enslaved Black people in the Caribbean and the unconquerable fear of their 'striking back' against Americas' slave and post-slave societies. In some cases, movies bring together Haitian voodooism with vampirism. These movies are all very conservative (see Rhodes 2006:15, 23) – the climax is followed by the restoration of the Good and the defeat of the Bad. The zombies' cannibalism – the idea that the dead want to devour the living as a payback for pains they suffered in life – is only first realised in 1968 by US film director George Romero.

The zombie is thus a figure made up of a number of connected cultural inheritances – transnational and transoceanic – that dominated, resisted, interpreted and appropriated each other. It cannot therefore be, as stated by Kyle W. Bishop

(2010), an ‘authentic American product’: as with all cultural constructs, it is un-authentic. As such it is instead an example of a very high synergy of symbolisms, among which the Protestant Gothic plays an important role (see Luckhurst 2012). As a figure, the zombie also draws many of its own features from a constellation of many different Others in sci-fi and fantasy (robots, cyborgs, aliens, clones, vampires, and werewolves) that have been seen over time as enemies and monsters, mirrors of ourselves (the “more human than human” trope, see Sobchack 2000: 138), companions and family members (the most famous example of which is Steven Spielberg’s *E.T.*), and revolutionary subjects revolting against corporate business, individualism, and commodification (see Grebowicz 2007). The zombie is also peculiar in itself for playing with both the familiar (the dead are community and family members), the uncanny (the living dead’s condition), and the colonial monstrosity and its memory. As I have argued elsewhere (forthcoming 2016), other cinematic figures are more respondent to other forms of Modern Otherness and to fears: vampires and aliens more often epitomize migrants in a quite radically different way; vampires also refer to the “the horrors of modernity and decadence in a conservative value system” (Browning & Picar 2009: xvi); cyborgs and clones generally represent human mutations and metamorphoses; and werewolves indicate the Nature/Culture, Civilised/Uncivilised double feature of the white Western *petit bourgeoisie* (see also Kirkup & al. 2000, Christie & Lauro 2011, Giuliani forthcoming 2016).

### **Zombies become cannibals: The Undead from Romero to post-9/11**

George Romero’s thirty-eight year career – from the *Night of the Living Dead* (1968) to *Land of the Dead* (2006) – thematises the return of American society’s wretched, subalterns, and outcasts as cannibal zombies. They are the only ones who are able to reveal the blood-thirstiness of modernity, the failures and violence of which reproduce today’s social division, wealth inequalities, individualism and selfishness – characteristics of late capitalism and its consumerist culture, the verticalisation of power, and the reproduction of marginality and exclusion. Movie by movie, Romero’s zombies are increasingly represented as a mass that becomes similar to what political philosophers Antonio Negri and Micheal Hardt (2002) described as a ‘revolutionary multitude’. More precisely, Romero’s zombie is the result of a restless oscillation between indistinction and self-differentiation, which Marx called modern ‘individuation’ – that is, the construction of men and women as individuals that possess an acknowledged juridical persona, property rights, inviolable bodies, and subjectivity.

In Romero’s last work, *The Land of the Dead* (2006), the multitude achieves its highest level of self-organising, internal self-differentiation (or individuation), and mutual empathy: the African-American man who was the last and most important victim of ‘white liberators’ in his first movie returns as Big Daddy, the living dead



leading a multitude, whose members are mourned when they are killed by the living. In this movie, the zombie subalterns embody the subjectivity of those who have nothing to lose and don't need to negotiate with any power: as the last scenes make evident, their goal is to subvert human laws. In the final scene, after attacking the City where the humans live, the zombies walk away together as a new community replacing the human community. While crossing a bridge, Big Daddy looks down to where the human survivors are hiding and the human leader prevents another survivor to shot him by saying: "they are just looking for a place to go, same with us". The zombies are thus presented as fighting for a new social foundation that gives birth to a society grounded on a set of values that consider Nature as a peer, and focuses on communion, mutual sympathy, support, and equality. There's no production, and hence no capitalist accumulation in this view; no social division or hierarchy, gender relation, sexual reproduction, or time-space boundary is envisioned.

In one sense, Romero's zombie is the inverted figure of the monstrous mob crossing modern cities at the end of the nineteenth century. As described by conservative philosophers across *fin de siècle* Europe, the mob was amorphous, instinctual, beastly; an overflowing river, easily manipulable by obscure agitators. In another sense, however, although Romero's multitudes contest the modernity, progress, individuality and selfishness ingrained in Enlightenment ideas of subjectivity, they do not deny them as such; they are proposing their own (post-human) version of them.

For the living, the result is the realisation of a permanent 'state of exception' (Agamben 2003). An unlikely (or hyper-real) zombie apocalypse is not figured as a state of war, but as a state of permanent survival for both humans and post-humans (Lillemose 2013). This image of catastrophe challenges the idea that a 'better' human society is possible in the aftermath of a crisis. This is clarified by the structural nature of the post-apocalyptic condition that progressively erases any human mark on earth: it abolishes the space-time dimension established by the living, because it is potentially global; it doesn't have brakes or artificial barriers; it is immortal. The sense viewers get is that in this condition of permanency, a convivial society able to welcome the living as well as the dead is the only chance for both to survive.

What distinguishes Romero's cinematography from more recent movies deeply marked by global wars on terror is that his zombies address a critical point regarding the contradictions, conflicts, and iniquities of globalised US capitalism. His critique of power in *Night of the Living Dead* (1968) and *Dawn of the Dead* (1978) questions authority – state, military and patriarchal (Towlson 2012). Today the figure of the zombie is more frequently engaged to highlight the enduring necessity of 'eliminating monstrosity' – which is not yet or not only the Cartesian exception, but rather the result of the mistakes and horrible deeds of the living. In contrast to Romero's work, the focus is neither on humanity's horrible deeds (lading to capitalism and State authority) nor on the living dead as the figure representing human mistakes,

but on the necessity of a new start. According to this viewpoint, the enemy that comes back from underworld, the new (she-) Caliban “who has a voice but no language” (Ashcroft 2008), who roars like an “animal”, needs to be eliminated through an ultimate war and the foundation of a new society – and a new ‘colony’ of superior (the fittest) human beings. This is the case of the zero-budget, award-winning Spanish movie *REC* (2007). Here the epidemic has a satanic origin, and the evil project of recalling the dead to life and transforming him/her to an infernal threat for the living becomes the opportunity for a new Leviathan. This is also the case in the first so-called ‘horror colossal’, *World War Z* (henceforth *WWZ*), which I will analyse in depth later in this article. Although there are many similarities with Romero’s poetics, the ‘state of war’ in *WWZ* aims at the restoration of an idea of Progress that definitely excludes the post-human, which is seen as the ultimate enemy. In all these cases, the enduring state of threat is not – as it is in the critical work of Romero – the ills of contemporary society including post-Fordist capitalism, military power, international politics, and conflict management. On the contrary, the post-apocalyptic society envisioned is based on a new eugenicist/warriorist idea of the fittest and the whites in which the hero is also heteronormative, sometimes bourgeois and elite, sometimes representative of the toughest and most virile of the working class.

In the case of *WWZ*, the mutation that characterizes the figure of the zombie after 9/11 has already occurred; in the next two sections I will analyse that mutation (from living dead to undead mutant), outlining how it makes the new zombie different from earlier versions. I will also discuss the sense in which the ‘imagined catastrophe’ of the contemporary zombie is an allegory for the more likely apocalypses of the present, and how some of the most recent productions in this genre embody a deeper critique of the ontology and normativity of unchallenged, inescapable, multi-layered and multi-located postcolonial global power (for an overview on ‘imagined catastrophe’ in sci-fi, horror cinema and Western culture at large, see Seed 2000).

In the last section I will focus on the idea on which the BBC series *In the Flesh* is grounded: that the living need to reconcile with the undead. These productions propose a shift from what Foucault calls “the state’s power to kill” to the governmental state’s power to ‘let live’ and then ‘rule over the *bios*’. Here the post-zombies are individualised and subjectivated. To a greater extent than in Romero’s films, they are medicated, made docile and unthreatening, their memories are recovered, and they are re-inserted into their former families. They become a governmental object, to use Michel Foucault’s expression – they need to live, in order to let the living reconcile themselves with the trauma induced from the rising. And at the same time they become naked (post-)life – a very particular *bios* if we follow Italian philosopher Roberto Esposito’s articulation (2004) – whose social and biological re-coding as ‘members of society’ depends on the chemicals doctors (and

then families) inject in their spine. The state rules over their biological-cortical constitution, and in so doing, allows people to rebuild their communities. Post-rabid quasi-humans are transformed from an overwhelming threat to the entire community into the living memory of an ineradicable mutation (from human to post-human) involving all contemporary societies.

### **Fear runs fast: zombie mutants in a neo-colonial post-world**

The zombie is now animalistic, charged, and feral, and instead of being predictable, it's now inscrutable and volatile.  
P. Dundle, *Zombie Movie Encyclopedia*, vol. 2, p. 7.

The French film *The Horde*, co-directed by Yannick Dahan and Benjamin Rocher (2009), opens with a funeral and a group of desperate friends and colleagues. They form a police squad made up of French and North Africans and set out to avenge their murdered colleague. Aurore, a white female soldier who is expecting a child fathered by the deceased, is part of the punitive mission. The objective is to exterminate the 'Nigerians' who killed their companion. At sunset, the executioners arrive at a dilapidated building in the Parisian *banlieue* – a suburb far from the centre – that is the base of a criminal gang made up of two Nigerians, a Pole, a Roma, and two white watchmen. (Here, the city is 'provincialized' and the suburbs, normally ignored by the city, are placed in the foreground.) Later, on the terrace of the building, the protagonists become aware that Paris is under attack by the living dead, and they see the city in flames from afar. This nearly abandoned building, a black hole isolated from the rest of the world, turns into a kind of black consciousness for contemporary France.

This sensation is confirmed when the group tries to get out of the building: the good and the bad team up, in line with a certain tradition of violent, urban films such as US cult director John Carpenter's *District 13* (1976). In trying to get out of the building, they encounter an Indochinese war veteran, a disgusting-looking old man that revisits colonialist gestures, language, and behaviours of war constructed for the domination/extermination of 'barbarians'. Symbolic of the old colonial mentality, which is still effective today, the old man shoots the arriving zombies with a machine gun calling them 'dirty gooks'. Faced with a good-looking zombie that he kills in the hallway, he suggests that his new comrades 'do her', leaving them puzzled and disgusted. The group splits up and is decimated, offering fleeting intimate and dramatic scenes. Adawale, one of the two Nigerians, is attacked by Bola, his brother – who after having mutinied and abandoned the group was infected and transformed into a zombie – and is forced to kill him. Quessem, an agent, faces the zombie horde in order to save Aurore and the baby in her womb.

Only she and Adawale will come out of the building unscathed, when the sun is already high. But the final message is clear: even if they likely are the only human beings left on the earth and of opposite sexes (which implies the possibility of a new post-colonial and mixed society), Aurore (the name now absolutely evocative) kills Adawale, to avenge her partner. She is the ultimate girl – a figure so important in horror movies (classic representations of this figure are Laurie Strode in *Halloween* 1978, but also Sally in *The Texas Chain Saw Massacre* 1974, and more Sydney Prescott in *Scream* 1996) – who dramatically expresses her hatred and suffering for the loss of her partner and, although pregnant, never withdraws from the fight. Even in the face of the extreme threat of disaster and the end of humanity, the fantasy of white supremacy does not make allowances. Despite the fact that the forgotten colonial past has re-emerged, requiring alliances between new victims and executioners of post-colonial France, the future is a white warrior and her baby.



1. Frame capture from *The Horde* 2009. The last survivor, Aurore when fighting inside the building.

In Danny Boyle's *28 Days Later* (2002) two people of opposite sexes and different colours survive, envisioning the creation of an unorthodox mixed-race family that offers hope for a new world 'purified' of racialised and gendered violence. The survivors are an Irish man called Jim, a young, black woman called Selena, and a white child, Hanna, whose father was infected and shot by the military before his mutation. In this film, the apocalyptic scenario is triggered by animal rights activists liberating monkeys infected with a virus that triggers murderous and cannibalistic instincts. The activists and the laboratory operators are all infected, initiating the epidemic.

The film starts with a simple incident: the protagonist, Jim is hit by a car and falls into a coma. Jim wakes up from his coma 28 days later, looking out onto a

London that is seemingly abandoned, only to discover that in fact it is far from dead but inhabited almost exclusively by infected people. Jim will be rescued by two survivors, including Selena, with whom he will travel through the rubble of a world that still offers hope for humanity and salvation. They eventually reach a fortified mansion, held by the military, but here they meet further violence as the military want to rape the two girls and show no mercy towards the zombies (represented here as subhumans, transformed by the infection into rabid animals).



2. Frame capture from *28 Days Later* 2002. The protagonist, Jim, enters the empty city center (Westminster) of London

*28 Days Later* introduces a new type of zombie that is not (only) the returning dead, but also represents a new and different kind of animalized humanity, governed only by the rules of the strongest in the pack. It is the result of an epidemic (rampant but potentially circumscribed or circumscribable) and embraces both the image of mutants and rabid animals. This image also inspires the zombies of *The Horde*. They do not stumble, like G.A. Romero's living dead, but run fast, implying a type of film direction that expertly blends action and war movies. A typical European product, these fast-running zombies evoke the idea that only young people can survive (and women particularly), especially suburban ones and, in any case, people who are familiar with weaponry (such as people in the military). The future hope of Europeans apparently builds on the abandoned people of its past of racial and gender discrimination: if we look closer we notice instead that these 'margins', in order to be successful in the struggle for survival, need to be reorganised in a traditionally gender hierarchy-based nuclear family that sees the black Selena reverted to women's traditional role of care-giver (she takes care of Hanna) and subaltern companion of their men, and a white man (Jim) that used to be defenceless and powerless (naked, with just the surgical green coat on) to



become the new warrior and defender of the two women (on the socially conservative fantasy behind the imagination of disaster, see Broderick 1993 in response to Sontag 1965).

There are some important contextual narrative differences between *28 Days Later* and *The Horde*. British insularity, at the centre of its national and imperial conception, allows us to imagine that outside, beyond the seas and oceans, the infection has not spread. In contrast, the Paris that we see engulfed in flames in *The Horde* refers to the no-longer-radial and potentially limitless relationship between postcolonial centres and peripheries, where there are no barriers to the spread of cannibalistic violence.

In its opening words, *28 Days Later* contains a criticism of humanity's unbridled sense of omnipotence over nature (reason/technique/language vs. feelings/nature). In *The Horde*, the origin of the resuscitation of the dead is not even hinted at, implying that the catastrophe could be one with apparently no meaning, origin or *telos* (aim). Human beings are faced with the end of humanity as we know it simply because they have been – and still are – bad to each other.

In these two films, the catastrophe is set in the urban space where the protagonists belong (the centre of London in *28 Days Later*) or from which they are partly outcast (the Paris of *The Horde*). The European metropole – the past centre of colonial power, a place that attacks immigrants and has become the testing ground for governmental practices in the present – is the stage for the action. In both movies, the urban mobilization/dislocation of bodies under the rules of biopolitical control and the collapse of the market occurs on the arrival of the cannibals whose frantic group does not admit barriers of class, race, and gender. It is a destructive and engulfing tide that cancels the spatial segregation and devices of capitalist production embodied in European cities.

### **No future (?)**

The rurality that is instead the focus of the critically acclaimed BBC mini-series *Dead Set*, directed by Charlye Brooker, serves to reflect isolation and the inability to defend and control territory – another great theme of globalised geopolitics and wars on terror. Rural territory is not geometrical; it hides monstrosity in its fronds, it cannot be brightened by artificial light, and it escapes actual military action. In European productions, the rural environment often refers to the construction of internal barbarism in conflict with 'civilized' urbanity. In the specific case of *Dead Set*, the critique of mass culture – and of Big Brother television in particular – uses the idea that the broadcast studios are immersed in the green countryside to strengthen the image of enclosed life, the one that is reproduced in the TV show, unaware of the monstrosity that lives outside it.

The mini-series begins during eviction night on *Big Brother*, when a zombie outbreak leads to rioting in several cities across the UK, with emergency services struggling to cope and the military being called in. A production runner travels to

the studio with the mother of one of the Big Brother housemates. As they reach the studio their driver, who was bitten by a zombie earlier, dies and reanimates, killing both women and biting a security guard. As eviction is announced, the guard stumbles into the crowd of fans, dies and reanimates and begins to infect others. The zombies invade the studio's interior and attack the production crew. In the morning, the housemates are wondering why Big Brother seems to be ignoring them, but they are later alerted to the situation by another production runner. Throughout the series the relationships among the runners, the surviving production crew, the producer and their lovers and friends who try to reach the House deteriorate as they need to support each other, find and share supplies, and collaborate on finding a way out of the situation. In this case, no hope is left for a human future: even the last survivor is infected. She finds herself in the last scene of the miniseries watching the TV screens with blank eyes, screens where her image is reflected as a zombie version of the 'stereotyped' audience of Big Brother's television format.



3. Frame capture from *Dead Set* 2008. The last survivor, Kelly Povell, sits in the 'confession room' of the Big Brother

As in *28 Days Later* and *The Horde*, in *Dead Set* the zombies can run, creating a strong contrast to the serenity of the rural context. Yet in a sense this is consistent with the speed of television shows – a speed that stuns the audience from the first scenes in the first episode. In this miniseries, humanity is described as devoid of love, empathy, respect and loyalty to people and relationships. It is implicitly presented as not worth saving. Here, as in *The Horde*, humanity comes to terms with itself, with its own vanity and fear, with the selfishness and hatred that distinguishes it. Spectators and fans literally 'eat' the set of Big Brother, the actors, operators and producers included. The metaphor is clear; in a certain sense, it fits the critique of



consumerism – in this case, of TV consumerism – in Romero's zombie movies. The main difference lies in the characterization of the zombies. They are not re-humanized figures (like in the latest movies of the American director) that hint at the emergence of a world inhabited by a new immortal post-human race. They are bearers of a catastrophe that leaves no-one alive.

What seems to emerge from our reading of *28 Days Later*, *The Horde* and *Dead Set* is the reversal of what Elias Canetti argued about the representation of death as 'liberating' the living spectator:

Fortunate and favoured, the survivor stands in the midst of the fallen. For him there is one tremendous fact: while countless others have died, many of them his comrades, he is still alive. The dead lie helpless; he stands upright amongst them, and it is as though the battle had been fought in order for him to survive it. Death has been deflected from him to those others. Not that he has avoided danger; he, with his friends, stood in the path of death. They fell; he stands exulting (Canetti 1960: 228)

The films discussed here seem to suggest that it is not the dead or the undead that are central to reassuring fantasies designed for the contemporary living human being; instead, the focus is on the effects of the catastrophe on the idea of the world and, consequently, the feasibility of a political project for the future. In these European mass productions, white fantasies and gendered regimes are reframed locally while the reach of the catastrophe is supposed to be global: this because the aim of their authors and directors seems to be that of giving back a highly emotional narrative (on the evocative power of sci-fi and horror literature, and movies in particular, see Sontag 1965) of what is not solved in the recent past of their national history in order to invite audience to rethink the monstrous in history rather than in fantasy. The nightmare has strong historical roots and is reproduced in the ways people look at, relate to, and consume Otherness.

### **The (Negative) Power of Progress**

The critique of the superpower of human technologies and their effect on the planet is the underlying theme in *WWZ* as well as in *28 Days Later*. In *WWZ*, the origin of the epidemic that the film addresses is not due to an apocalypse as transcendental event, but the work of nature in response to humanity's nefarious exploitation. It is no coincidence that the opening credits are accompanied by a series of voice-overs (TV and radio) that report the impact of man on the planet in terms of global warming, epidemics, pandemics, carcinogenic transformation of resources, etc. As in *28 Days Later*, *The Horde*, and *Dead Set*, which address the metamorphosis of the undead into infected mutants, the undead do not rise from the grave but arise from an infection that spreads through a bite, or biological contamination resulting from a misdirected experiment in genetically modifying the measles virus. In this post-apocalyptic zombie movie – where the epidemic starts in Pakistan and evolves in Western metropolises – the protagonist, former UN investigator Gerry Lane (Brad Pitt), is called back in service by international authorities in order to deal with an

emergency that is immediately compared to those he experienced in Liberia, Sudan, and Palestine. He left the United Nations because he wanted to be with his own family – his wife and two little girls – but now he needs to break his promise and again be a ‘hero of world peace’ and survival. His world tour in search of a solution to the epidemic (South Korea, Palestine, England, United States) is desperate, and he loses track of his family (first rescued by a US navy carrier in the middle of the Atlantic under the protection of Lane’s former colleague and friend UN Deputy Secretary-General Thierry Umuntoni, but then abandoned in an isolated refugee camp because of the carrier’s overpopulation). Lane’s desperate tour is driven against the revolt of both Fate and Nature against human beings.

Lane flies to Israel, because a CIA agent in South Korea told him that the Mossad knows something more about the epidemic. Observing the cannibal masses attacking humans, Lane notices that the zombies do not attack those who are sick, and theorizes that this is to avoid eating infected and corrupt beings. The narrative thus invites the audience to a new ideology of progress: surviving (strongest, fittest, and Western) humanity, once rescued from the disaster and made even bio-physically stronger through natural selection, will be able to definitely overcome the ultimate reaction of Nature against human despotism. Fleeing from a Jerusalem under attack by the infected coming from the ‘other side of the wall’ (thus presumably former Palestinians), he causes his plane to crash in order to kill zombies in the aircraft and, together with Israeli female soldier Selden, to land close to World Health Organisation headquarters in Cardiff. Here, Lane finds test tubes containing viruses and bacteria and is able to confirm his hypothesis regarding illness as a cure for the zombie epidemic. In most of its recent output, Hollywood reframes the final human catastrophe as something solvable by humans themselves. Here and there, mutation seems to be an allegory for the defeat of humanity in its ‘war of domination’ over Nature. But it is a very temporary defeat: *WWZ*’s apocalyptic scenario is reversed in a new progressive epic that finds a solution to what is meant to be the End of the World by inoculating survivors with a deadly virus, from and through which the world’s scientific and technological progress laid claim to saving ‘real humans’.

In *WWZ*, there is no mention of American social inequalities, the unbalanced power relation and racist segregation between Israel and Palestine, and the violence and genocide; the white, Western-centred fantasy of humanity overpowering Nature and its catastrophes is finally projected on the entire world. This is in contrast to the other texts discussed in this section, where there is no single hero, no solution to the crisis, no human revanchism against the catastrophe in these movies. The protagonists are finally overwhelmed by the post-human version of their removed past.

There is another feature the three visual productions discussed previously noticeably have in common when compared to *WWZ*. This concerns what Talal Asad, in talking about the “little (neo)colonial wars” of the twenty-first century (2007),

refers to as the differential space assigned to someone's mourning for those relatives who have become undead. This space changes according to the position of the subject of mourning within gendered, racialised and classed global hierarchies. The anonymity assigned to the mob is common to the genre and to the productions I have discussed here, but it is less evident or more gently managed in *The Horde* (especially in the relationship between the living Adawale and the undead Bola), in *28 Days Later* (in particular when the father of the little girl who joins the two protagonists notices that he has been infected and gives her his last farewell) and in *Dead Set* (when a black girl becomes infected and her best friend, the 'queer guy' of the House of Big Brother, looks after her until she 'rabidicizes').

This is absent from *WWZ*, where very few scenes address the emotional consequences of the transformation of 'loved' or 'known' people into cannibal persecutors. In their escape from a 'lost' Philadelphia under invasion, the Lanes are hosted by a Latino family who are later infected. Their child Tomas escapes, however, and joins the Lane family on the roof of the building, but is never seen mourning the transformation of his loved ones – not even in the scene where his father and mother are trying to tear him to pieces. Instead, the emotional and intimate tension deriving from the fear of loss (from mutation and thus death) is reserved exclusively for Gerry Lane's loved ones; only for his very white family. Indeed, the torment of his wife and daughters, left in the grips of the war economy and US Army 'refugee management' that isolates the survivors on a platform in the middle of the Atlantic, is the main theme of the entire movie. Unlike other innovative plots in which courage does not belong only to white heterosexual men and fathers, female roles are always ancillary to Lane's actions, as with the Israeli female soldier Selden whom Lane saves by cutting off her infected hand.

The emotional element is thereby so completely reduced to the protagonist (and to his family only by extension) that some of the scenes portraying survivors' joy risk becoming grotesque and significantly out of place. I refer to the songs sung by many Jews and very few Palestinians who managed to flee to Jerusalem, while outside the city their loved ones devour each other's relatives, former colleagues, neighbours, and friends. The existence of a common enemy allows a coalition to form between those who had hitherto hated each other. But those who remained beyond the wall, in that area normally known as Palestine, are primarily the Palestinians confined for decades in liminal areas afflicted by poverty and the lack of a means of defence – except for self-organized armies. Nevertheless, from a symbolic and dramatic point of view, the scenes of Lane's visit to Jerusalem are the most interesting of the film. There the walls built to divide the occupied territories and Palestine have been reinforced, multiplied and made even higher to defend against zombies. But the barriers built by men can do nothing against the fury of Nature. Director Marc Forster, who must have been influenced by Juan Antonio Bayona's *The Impossible* (2012) – which depicted admirably the devastating and unstoppable power of the 2004 tsunami – creates the effect of a tide of zombies that, by running

over each other, are able to build a pyramid of flesh that overcomes the protective wall, thus casting the cannibals onto fleeing humans. The images from above of an infected, bloodthirsty, and anonymous tide destroying everything greatly resembles the same shot from above of the violence and destructive speed of water. One might even compare these effects to aerial shots of fleeing civilian populations in war movies that made history and created a model script for films that followed, such as Francis F. Coppola's *Apocalypse Now* (1979) and Stanley Kubrick's *Full Metal Jacket* (1987).



4. Frame capture from *World War Z* 2013: Zombies climb over the wall separating Jerusalem from Palestine

### **“Death walks with me”: the emotional link between the dead and the living**

In all the productions discussed in the previous section, the zombie is figured as an anonymized mob, like the colonized populations facing public space at the end of the nineteenth century. In *WWZ*, however, the mob is depicted as having no social connection with anyone, as being deprived of any emotionality or aspiration, like an aimless multitude of monsters. For these reasons, the zombie mob only deserves to be sacrificed in the name of humanity and civilisation (in the singular). In this respect, many similarities can be found with the mainstreamed figure of the dehumanised global terrorist that Talal Asad (2009) brilliantly deconstructed in his book, *On Suicide Bombings*. This figure is often depicted in military despatches, mainstream political debates, and international geopolitical agreements as moved by «uncontrollable anger» (rabid, indeed) – instead of embodying an “act of death dealing that reacts to injustice by transgressing the law” (Asad 2009: 47) – and for that irrationality deserving only to be killed:

The right to kill is the right to behave in violent ways toward other people – especially towards citizens of foreign states at war and toward the uncivilized, *whose very existence is a threat to civilized order* (Asad 2009: 60).

Compared with *WWZ*, the zombies in the European productions discussed above – as the ultimate terrorists on earth – appear less an external enemy, and more ‘one of us’, someone who used to belong (to family, to community, and to post-imperial nation).

In this section I will discuss this view of the zombie as ‘one of us’ in the BBC mini-series *In the Flesh* (2013), which focuses on reintegration of the undead into society and the latter’s reaction to this recovered proximity, sometimes seen as a gift, sometimes as something monstrous. *In the Flesh* tells the story of the return of the repressed memory of past violence in the figure of the zombie, whose rise is defeated by the living, but not through extermination. The undead do not disappear; instead, they are domesticated.

In this series, the plot is very intimate and private, dealing with family conflicts in a small Lancashire town, the fictional Roarton (evocatively named, hinting at the roar as the sound of the zombies). The series is set a few years after ‘the rising’, as the zombie apocalypse is called, when the government tries to rehabilitate the undead and reintegrate them into society. Kieren Walker returns, after being rehabilitated as a PDS (person affected by the Partially Deceased Syndrom), and is welcomed by his parents who consider his return as a gift, a second chance to correct parental mistakes made during the ‘first life’ of their son. Kieren had committed suicide after his lover Rick was killed fighting in Afganistan. (It was Kieren’s father who, after Kieren’s disappearance, found him in a cave – the same where Kieren used to meet his lover, as witnessed by the inscription «Rick + Kieren 4 ever» – with his wrists slashed.)



5. Frame capture from *In The Flesh* Season 1 2013.



When the zombies rose, Kieren found himself locked in his coffin and broke out of it. He then chose the local supermarket as his hunting ground for human flesh, together with another risen undead, Amy. The rehabilitation process restores his memories with chemicals that doctors – and later family members – inject into his spine through a little hole cut below his neck. These chemicals stimulate his memory of events before and during the rising, when he was a human and when he was a zombie. In one of these flash backs he sees himself attacking and eating Lisa, the best friend of his sister, Jem. At the time, Lisa and Jem were members of the HVF (Human Volunteers Force) – a paramilitary force was engaged in the extermination or conviction of the living dead. Jem was the one who discovered Kieren and Amy eating Lisa’s brain, but rather than killing him she consigned him to the army for rehabilitation. In contrast to the rest of the Walker family, Jem finds it difficult to accept PDS Kieren; as she gradually comes to love her brother again, she still struggles with memories of what he did to her friend.

The idea of transforming the undead into a new chance for love and redemption is here particularly successful. The undead is still conceived as a permanent threat – for many inhabitants of Roarton they are the living memory of the loss of their beloved, inclined to ‘go wild’ unexpectedly; the HVF is not dissolved and is willing to exterminate rabbits (the rabid undead) as well as PDS. It is formed by a dozen men and women led by Bill Macey, an ultraconservative man who sees himself as the last bulwark against a post-human conception of the world. He led a raid against an old woman PDS, who is dragged outside her house and killed with a bullet to the head in front of her desperate husband – very similar to what armed official and unofficial *militias* used and still use to do against subalterns and supposed terrorists. The clash between humans and post-humans stands as the metaphor of the struggle between the fit and the unfit, at the very core of Western positivism and its idea of the State and its settler colonialism in Europe and its empires. There, the virile male – proud, nationalist, straight and white – fights against the returned, who represent the emancipated girls in the village (Amy), homosexuals (Kieren and Rick) and infidels. In the name of these values, Bill Macey denies that his returned son Rick is a PDS; he is rather a human and a war hero (as if he could not have been a PDS and a war hero too). But when Rick cannot hide his nature any longer and shows up to his father with neither make up nor eye-lenses (prescribed to PDS by doctors to ‘become less monstrous and more acceptable to their communities’), Bill kills him. He believes that Rick is the result of an evil resurrection. There will be, the vicar Oddie said, a second resurrection, the one described by Saint John, and then the dead will come back to life as living beings rather than as undead rabbits. In killing his son, Bill is convinced that he is giving him the chance to resurrect again. But once he kills him, the community revolts against an idea of society based on a virile, white, working-class, non-affective, military idea of social boundaries. The man whose wife Bill shot kills him with a gun. Jem abandons the HVF to protect her PDS brother.

The series has many examples of the emotional ties between the living and the undead. Philip, the vicar's secretary, is in love with PDS Amy, while his mother helps other mothers in dealing emotionally with their PDS children and husbands. Two moments are particularly noticeable for bridging the three worlds of zombies, PDS, and humans into a shared 'emotional community'. First, the scene where Rick does not shoot the two «rotters» the HVF has found in the hood: Kieren opposes him when Rick aims his gun at them, after noticing that the old male rabid is just protecting the young rabid girl he is hiding in the cave (the same cave): he suggests a second chance for them through the rehab he and Rick enjoyed for themselves. Rick agrees, and, in disobeying his father's order to shoot, acknowledges his own PDS condition.

Secondly, the scene that deeply deals with familiar intergenerational conflicts and boundaries. When Kieren runs away from home after the second death of his lover, his mother finds him in the cave, confessing that she knew he was there because she and her husband always knew about Kieren and Rick. She then tells him the story of her near-suicide due to abandonment by her upper-class fiancé. At the pharmacy where she went to find the pills she needed to take her life, she found her future husband, who gently dissuaded her from committing suicide. She thus knows what impossible love means and how painful the loss of your beloved can be.

These scenes somehow explain the director's choice to use extreme horror (the living dead) and the uncanny situation of a community whose members are both human and post-human to talk deeply about marginality and suffering (for gender, racial, and homophobic discrimination) in rural Britain: the post-human and post-apocalyptic – as feminist scientists and post-human philosophers argue (Evelyn Fox Keller 1992; Donna Haraway 1991, 2003, 2007; Karen Barad 2007, 2010; the collection of essays edited by Stacey Alaimo and Susan Hekman 2008; and more recently Rosi Braidotti 2013) – thematizes feminist and queer critiques of male and white epistemologies, anthropocentrism, heteropatriarchy, and phallogentrism; that is, the privileging of the masculine in the construction of meaning (according to Derrida 1967). Enlightenment and Christian ideas of progress and the order of the State are questioned here via the unaggressive deeds and emotional engagement of a PDS queer quasi-person who fights to reclaim the love and forgiveness of his beloved.

Thus, as in the other visual productions I have discussed, Western modernity is here the locus of the crisis, the secularised construction that undergoes the catastrophe. Its crisis is precisely the event that opens the permanent state of exception which is the condition within and against which *The Horde*, *28 Days Later* – and particularly *In the Flesh* – imagine the building of new 'emotional communities'. This condition strongly recalls all the more recent UK and broadly Western rhetoric against global terror, especially focussed on national security after the attack on New York and Washington, DC in 2001, and the suicide bombings in Madrid in 2004 and London in 2005.



As with the enemy in the London suicide bombings, the enemy in *The Horde*, *28 Days Later*, and *In the Flesh* is no longer eradicable. Consequently, as has been shown by media, political, and academic debates around the London attacks, the State and its military forces have three options for dealing with the inheritance of fear, rage, grief and disaster engendered by the 'rising': an extreme *mors tua vita mea* (the wars in Afganistan since 2001, and Iraq in 2003, but also the Israeli bombing of Palestine, as in *WWZ*); a more feasible regime of segregation and totalitarian social control (something UK already experienced in Northern Ireland and in the colonies, which is reproduced in *28 Days Later*); or a project for a new 'affective community' grounded on a collective amendment of past and present violence and discrimination (as exemplified by *In the Flesh*).

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## At the Mercy of Gaia Deep Ecological Unrest and America's fall as Nature's Nation in *Kingdom of the Spiders*

By Jacob Lillemose & Karsten Wind Meyhoff

### Abstract

This paper looks at the animal horror genre as a way to discuss current notions of ecology in relation to a specific American idea of being "Nature's Nation". The central work for the discussion is the movie *Kingdom of the Spiders* (1977) by John Cardos, which depicts how a small Arizona town is taken over by a "swarm" of tarantulas. Without any obvious explanation the spiders slowly but steadily invade the town and start killing both other animals and humans until they have completely covered the town in their web. The paper connects the movie to a long tradition of fiction describing how nature turns on humans and reverses the power relation between man and nature that is fundamental to modernity. Moreover, the paper connects the movie to Maurice Maeterlinck's ideas of swarm communities as manifested by ants and termites to argue that these communities are ecologically superior to the communities of man-made civilisation. Finally, the paper discusses *Kingdom of the Spiders* and animal horror in general in relation to recent ideas of non-human ecologies and critiques of anthropocentrism and makes the point that these works of fiction serve as both dramatic and philosophical visions of a world without humans.

**Keywords:** Gaia, dark ecology, animal horror, Maurice Maeterlinck, nature's nation.

“Whatever it is, we have disturbed it.”

- Foreman Mike Carr, *Ants!*

## Introduction

The area is scattered with tarantula mounds. Like buildings in a large city, they spread out across the entire landscape. It is hard to tell the exact number. There are maybe 20, maybe 30, maybe more. Or perhaps the mounds are all connected, forming one big construction under the earth? Who knows? These strange configurations cover too vast an area in the dry and mountainous desert landscape of Verde Valley in Arizona to allow human perception an overview. The mounds vary in height and length and look like something ants or termites could have built. The tarantulas exit and enter the mounds through holes in the facades following some obscure plan. They inhabit the landscape like it was the most natural thing and form a kind of pattern whose logic escapes conventional notions of planning in modern civilisation. Yet, their strangeness is a source of undeniable fascination. Rather than expressing a state of exception and chaos they seem to be part of the highly planned infrastructure of an ancient civilisation. The tarantulas move around this infrastructure like individuals in an abstruse collectivity that humans cannot understand, let alone decipher. As such the mounds are also a source of a ground-shaking insecurity. A source of fear and of angst. Although the mounds are accessible to humans it is impossible to see and know, what is going on inside them. Facing them, humans can only speculate about the subterranean corridors and chambers that form their base. And the conclusion seems inevitable: It is a civilisation whose energy of life and logic of planning is beyond – perhaps even superior to – human civilisation. One thing is certain, the tarantulas do not recognise nor do they pay any attention to humans. They move around, doing what they are supposed to do according to an obscure million-year old masterplan. The masterplan does not include humans.

The scene described above unfolds in John Cardos' film *Kingdom of the Spiders* (1977). In the film neither the arachnologist Diane Ashley (Tiffany Bolling) nor the local veterinarian Robert Hansen (William Shatner) can explain the strange occurrence. What they do understand however is that they are facing something rather unusual and highly unsettling. The spider mounds cannot simply be ignored or removed by spraying the area with a strong dose of insecticide. That latter is nonetheless what the mayor suggests as a desperate measure to secure that the annual country fair will happen as planned and allow the city's businessmen to make an important profit. But the presence of the tarantulas is more than a question of pest animals. Much more.

The scene constitutes a turning point in the plot of the film. The relation of strength between human ability to control the forces of nature is turned upside down. The persons involved are overtaken by a fundamental fear of being the potential prey of a dark and dim nature that does not behave like itself. It operates



beyond ideological and political rhetoric and instead expresses a kind of ecological will power that manifest itself in an instinctual sense of hunting and territorialisation. It is indeed a frightening moment and when the humans in the film realise what is going on they panic. They follow an urge to act, notwithstanding that the actions are counterintuitive, discard the democratic procedures of society and ignore long-term considerations for the common good. The social coherence of the little town in Verde Valley comes undone in the encounter with this ungovernable and merciless force whose origin and objective is completely unknown to the inhabitants. It is the beginning of the end of human society in the hitherto peaceful area of Arizona's desert.

Far removed from the events in Verde Valley, the focus of the present article is to try to come to grasp with this strange force and its national as well as planetary implications through a number of speculative proposals.



Frame capture from *Kingdom of the Spiders* (1977). No one is safe when the spiders invade Verde Valley. In their brutal territorialisation of the peaceful little town, the spiders do not consider who they kill, they just kill.

## Animal Horror and the End of Humans

*Kingdom of the Spiders* belong to the so-called animal horror genre. It is a very prolific and diverse genre that is often stigmatised as pulp or exploitation. In this article, we will however argue that the genre in exemplary fashion articulates a serious challenge to human understandings of and engagements with nature. The challenge takes the form of a speculative staging of apocalyptic processes in the “deep ecology”.<sup>1</sup> The notion of deep ecology is based on an understanding of nature as an intricate network of relations between all the organic entities living on Earth. Animal horror takes on the widespread, yet also contested belief associated with the notion that the network is harmonious. On the one hand, the genre shows how human activities continuously interfere with the network and seems to cause some

kind of imbalance or aggressive reaction, on the other hand it suggests that the network never was harmonious in the first place but is constituted by chaotic and violent processes. In both cases the result is a fatal fight between man and animals. Moreover, a fight that man seems destined to lose as the result of some kind of cosmic reason or logic that predates civilisation. By way of the animals the deep ecology demonstrates powers of a scale that man cannot comprehend, control or trump, let alone exploit as a resource. Rather than a harmonious network or a natural resource that can be exploited to the fulfilment of human civilisation deep ecology is presented as a radical force that dethrones the belief that humans are the sovereign species on the planet.<sup>2</sup> It is the fundamentally incomprehensible and horrifying nature of this force that the films of the genre articulate with an extraordinary visual and conceptual wit.

The article looks at animal horror in general but will particularly focus on those films, like *Kingdom of the Spiders*, in which various kinds of spiders and insects “attack” human civilisation and impair its physical as well as intellectual infrastructure. This focus is motivated by the idea that spiders and insects to a greater extent than other kinds of animals represent something radically different from the human-centred perception of nature that civilisation is based upon. Spiders and insects embody a deep ecological consciousness and life form, developed over millions and millions of years inhabiting the planet and adapting to its ecology. This process has taken place independent of and without any consideration of humans. Spiders and insects were here long before mankind and will most likely survive us. They are the original and true inhabitants of the planet. The perspective they present us with is not simply pre-human but essentially non-human and point to the notion of man as a cosmic banality that is emphasised throughout this article.<sup>3</sup> In terms of notions of Being, spiders and insects open up towards a dizzying horizon, whose temporal extension exceeds the approximately two hundred thousand years that humans have walked the Earth. They are the only living beings compatible with the multiple transformations that the planet has gone through the past 4,5 billion of years.

Animal horror including *Kingdom of the Spiders* is predominantly a genre that is developed and thrives in the US film industry and film culture of independent movie makers. The article will take this circumstance as a cue to connect the deep ecological apocalypse of the genre with a particular American history and its associated notion of nature.<sup>4</sup> It is a history that originates with the birth of the new nation in the middle of the 18<sup>th</sup> century and extends all the way up to the social, economical and political crisis – including environmental issues and a massive energy problem – that the mature nation experienced in the 1970s.<sup>5</sup> Throughout those two hundred years it tells the story of how the United States of America fell from the dream world of being “Nature’s Nation” to the realization that it was rather the embodiment of a destructive control and exploitation of nature. As a self-conscious genre animal horror experiences a hay-day at the end of this history – in the 1970s – and a main point of the article is to argue that the genre articulates a unique and eminent



critique of this destructive society as well as of the historical perception of the US as a nation predestined to flourish in harmony with nature as the creation of the almighty God. Films like *Kingdom of the Spiders* inverses this romantic perception and draws the conclusion that Americans – as the pinnacle of modern Man – no longer or rather never did own a God given privilege to inhabit the vast amount of land on the North American Continent that stretches from the Atlantic Coast in the East to Pacific Coast in the West. In fact, the genre not only dismisses any hope of recreating a balanced and exceptional relation between Americans and the American landscape, it also points to the total extinction of humans – not just Americans – from the face of the planet.

### **The Birth and Mutation of Nature's Nation**

The US is a mythological nation and one of the foundational myths is the notion that it is destined to be “Nature's Nation”.<sup>6</sup> The notion has Christian religious roots and is based on the belief in an almighty God who has manifested his greatness by creating the extraordinary American nature, from Niagara Falls over the Great Plains to California. Already nourished by the nation's founding fathers in the 18<sup>th</sup> century, the notion expresses the conviction that this specific nature was created for a special nation of hitherto unseen if not in fact sublime greatness. However, to these early American citizens that came over from Europe it was not simply a question of nature reflecting the greatness of the nation but of nature as an unequivocal, almost self-evident proof of the destiny of the nation to be one under God, like no other nation before it.

The notion of Nature's Nation influenced not only American self-perception and identity but also its political make-up. The principles written down in The Constitution of the United States (1787/1788) were influenced by principles of nature, which meant that they essentially were written by God. Of these principles, democratic ideals of liberty and equality in the open wilderness of opportunities for the new American people were of the highest importance.<sup>7</sup> It was these principles that distinguished the political constitution of the new American nation from earlier empires such as ancient Greece and Rome and not least the British Empire with its social and economical hierarchies. The USA was conceived as a natural appearance, created by and for the landscape.

Moreover, according to this myth the nation was marked by a political innocence, in the sense that it existed beyond the time and space of political history.<sup>8</sup> If anything it existed in a kind of eternity guided by the will of God and as such the nation could do no wrong as long as it followed its destiny.<sup>9</sup>

As fascinating and pure as the notion of the USA as nature's nation was to those who believed in the myth behind it, the notion turns out to be a highly problematic one. Hence, throughout the 19<sup>th</sup> century it becomes increasingly clear that it is

haunted by a fundamental schism between a spiritual understanding of the notion and an understanding of the notion shaped by processes of civilisation.

Since the first frontier men began their journey westward in the beginning of the 19<sup>th</sup> century, the development of the American identity have been partly characterised by a spiritual quest.<sup>10</sup> It is a quest that finds its objective in nature. Beyond the religious institutions of the old world it freely explores what it means to be American and as such to be deeply connected to the Creator in all his incomprehensible and yet perfect greatness. The American nature contains a transcendental truth, which defies any conceptual formalisation. It needs to be experienced to be realised. A large number of Americans interprets this quite literally and starting at the end of the 18<sup>th</sup> century, they leave civilisation to live a life in absolute harmony with nature.<sup>11</sup> This life is both primitive and modern in its conception: Primitive because it appreciates the simple life and modern because it reflects an enlightened awareness of the progress of civilisation. One of the primary protagonists of this quest is Henry David Thoreau and his detailed and contemplative accounts of the lively nature around Walden Pond. In the passing of the seasons, the freezing lake and the melting of the ice, the rich and diverse subtlety of the fauna and the vitality of the wild-life, Thoreau finds a meaning that is greater and deeper than anything civilisation can ever create.

In parallel to the spiritual quest, more material and mercantile aspirations also emerged, even with the frontier movement. Like the spiritual quest, these aspirations had their source of inspiration in nature. However, they interpreted the notion of “Nature’s nation” quite differently. The American nation was chosen by God and destined to improve, cultivate and commodify nature. Accordingly, nature was not a completed creation, but “a land of opportunities” and to take advantage of these opportunities was the ultimate goal of the American people.<sup>12</sup> In essence, the aspirations amounted to a utilitarian quest that placed the white American frontier man, his interests and needs, at the centre or rather at the top of the order of nature.<sup>13</sup> The contrast to the spiritual quest was stark and in the case of Thoreau and other of his contemporaries led to the realization that nature and civilisation constituted two incompatible phenomena. Nature bred intuitive understanding, while civilisation promoted calculative profit thinking. The disparity revealed a schism that a hundred years later in the 20<sup>th</sup> century would prove to be the beginning of the fall of the notion of the US as nature’s nation.

The utilitarian quest was fulfilled in the decades following the Second World War. Industry and science made extraordinary advancements culminating with the landing on the moon – the conquest of another frontier and the territorialisation of outer space nature – in 1969. The US demonstrated its role as the leading civilisation in the modern world. However, it also became increasingly obvious that the progress of this great nation happened at the expense of the very same nature that constituted the origin and entitlement of the nation. Public protest rose as the media more and more frequently reported on civilisation’s disastrous engagements with

nature. The mythology surrounding the notion of nature's nation was in other words confronted with a reality that was far from ideal and the fear that Thoreau expressed a century ago seems all too real, in fact it was worse than he imagined. Nature's Nation appears to be a rather ambiguous notion. Success and sin, progress and destruction tragically turn out to be two sides of the same coin.

In the late 1960s and throughout the 1970s this tragedy generates a strong and wide-ranging environmental movement in the US. The means of the movement are both peaceful and militant but the goal is the same: To restore the nation's authentic pact with nature.

As mentioned earlier animal horror becomes highly popular at exactly this time and accordingly it seems obvious to read the genre as a disillusioned depiction of a nation caught in the act of destroying its privileged relationship with nature and furthermore its political *raison d'être*. However, contrary to the hippies and eco-activist Edward Abbey the genre advocates no romantic ideas of reconnecting with nature. Instead, it demonstrates how the deep ecology led by an army of animals seems determined to destroy the American nation in an indifferent chaos.

## The Rebellion of the Animals

Animal horror has existed at least since the 1950s and although its defining era is the 1970s it is a genre that has been continuously revisited up until today where it remains a popular formula among both filmmakers and audience. In addition to the numerous new animal horror films that have been produced in every decade since the 1950s, the *Jaws* series spans 12 years (1975–1987) while the *Piranha* series spans 34 years (1978–2012) and the on-going *The Planet of the Apes* series so far is into its 47<sup>th</sup> year (1968-).<sup>14</sup> As such, the genre constitutes a major narrative in modern American film that in terms of a continuous discussion of the significance of landscape – including animal life – in the shaping of a specific American identity and nation is comparable to the Western genre. But whereas most Western movies support the myth of Nature's Nation by emphasising a special relation between the landscape and the people who live there, animal horror disclosed the myth as myth by showing that the landscape in reality belongs to nobody but the animals.<sup>15</sup>

The notion of animal horror as it is defined in this article refers to films that are organized around animals – from insects to the large mammals – that in an intensified form becomes a threat to US citizens and society. It can be small creeps like the millions of worms that arise from the muddy grounds “supporting” the small town of Fly Creek in Jeff Lieberman's *Squirm* (1976) and the flying African cockroaches that invades the American East Coast in Ellroy Elkayem's *They Nest* (2000) but it can also be large killers such as the gigantic crocodile that haunts Chicago's sewerage in Lewis Teague's *Alligator* (1980). In any case, the genre shows how the USA – from rural areas over large cities to the entire nation – is challenged by animal forces that does not recognize nor care about the myth of Nature's Nation.

In this context animal horror does not cover movies based on imaginary monsters like the ones featured in invasion movies that derive from the tradition from H.G. Wells' classic *War of the Worlds* (1897) and Jack Finney's equally famed novel *The Body Snatchers* (1955). In these movies monsters come to Earth from outer space in order to execute a hostile takeover of humanity. Neither does the notion include mythical, yet earthly creatures from forgotten regions of the World, such as Skull Island in Edgar Wallace's *King Kong* (1933) or Odo Island, where Ishiro Honda's *kaiju* roams in *Godzilla* (1955). What the notion of animal horror refers to in this article are essentially creatures from *Kingdom Animalia*, animals that are at once strangely familiar and frighteningly strange. These animals have been mastered and domesticated through stories and cultural products, yet they remain wild at heart and at close encounter they are as bestial as ever. The genre stages and dramatizes this untamed nature of the animals and casts them as the protagonists in a violent rise of the deep ecology.

Animal horror primarily unfolds in US movies and the genre is essentially a sub-genre of the disaster movie where an increasingly severe state of emergency is taking place and human life, as we know it becomes a fight for survival. In animal horror movies the state of emergency is characterised by the fact that humans are confronted with an uncanny enemy that they thought they had domesticated as part of the progression of civilisation. In that sense the movies of the genre expose a classic narrative inversion, where humans as the controlling agent in the world falls from their position at the top in the food chain only to suddenly find themselves becoming prey to the animals that they normally control. The infrastructure that humans have created as a shield of protection is coming undone and they are now exposed and vulnerable creatures with minimal chances for survival.<sup>16</sup>

With this inversion of Darwinian logic and the history of civilisation, the genre fosters some of the most frightening visions of the presence of humans on the planet and their place in the greater cosmos. The visions are based on a sensibility for everything alive and a conception of humans as an accidental and passing feature in the process of creation.

In that sense, animal horror is driven by a critical awareness of ignorant and arrogant interaction with deep ecology by humans. The agenda of the genre is to dramatically accentuate the consequences of this lack of respect for the deep ecology, whether it is the pollution from industrial complexes, modern society's composition in general or the authorities' lack of action when it comes to sustainable solutions that considers the vulnerability of this ecological system. It is an agenda that is often articulated as an explicit part of the narrative, as in William Girdler's *Day of the Animals* (1977), where the disappearance of the ozone layer heats up the habitat of the animals in a wild-life park in Northern California and causes eagles, bears, pumas, wolves and deer to attack the visitors in a last act of desperation before they eventually die from the climate changes. What was meant to be a romantic hike into a piece of "authentic" US nature for the little group of people in the film

is tainted by the effects of the consumerist lives they live outside the park and turns into a bloody nightmare of raging animals seemingly led by the same bald headed eagle featured on dollar bills and the seal of the American President. The movie shows that going “back to nature” is no longer a possibility for Americans as their civilisation has left its corrosive mark on the landscape. The romantic scenery of Walden Pond has been distorted and Americans are no longer welcome let alone safe in the nature that they once thought was made for them.

Typically, the critique of human interaction with the deep ecology of the planet is delivered without meditating facts or empirical detail. Rather, the critique is presented in images and stories that in a deeply disquieting manner dramatize the state of emergency and destruction of the human life world. As such, animal horror presents a catalogue of nightmarish visions and scenes from an on-going process of transformation in the deep ecology, which manifests itself on many fronts and which the genre describes at various specific moments, actual as well as virtual.

Even though many animal horror movies can rightly be characterised as pure exploitation films, they still articulate a moving and challenging awareness of the deep ecology. The movies often draw on scientific facts and ethical-philosophic analyses, but their critique is a lot more radical. Their speculative visions of the apocalypse do not depict the deep ecology simply as a victim, but feature it as an entity with vigour, will and capabilities for “revenge”. In that sense the ecological uncanniness in the movies is disquieting in two ways. They describe how human civilisation has a destructive effect on the deep ecology as well as how this destruction calls forward forces of the deep ecology that with no hesitation annihilates humans. These are forces that cannot be cultivated by the processes of civilization or fought with ordinary means of defence at hand. Ancient forces originating in a time many millenniums before the modern project of enlightenment began to violate and exploit nature. Forces superior to man. Forces that in a sovereign demonstration of power both revenge nature and redeem the animals as the true inhabitants of the American land as part of the deep ecology of the planet.

## **Freak Creature Horror**

Animal horror can be divided into two subgenres, *freak creature horror* and *deep eco horror*. Generally, freak creature horror focuses on the problematic aspects of scientific experiments with nature, while deep eco horror stages a deep ecological drama in which the main protagonist is the immanent forces and intelligences of nature. While the animals in freak creature horror are mostly of a supernatural size, the animals in deep eco horror are predominantly small. Yet, in terms of thematics and animal species there is an overlap between the two subgenres. The most characteristic distinction between the two subgenres is that freak creature horror focuses on how humans deal with and overcome (man-made) events in nature, deep eco

horror as the name indicates sees the cause and unfolding of events from the perspective of deep ecology that reduces humans to extras. Or put in other words, while freak creature horror is based on a human conception of nature, deep eco horror takes its point of departure in deep ecology as a frightening and obscure system beyond human understanding.

Freak creature horror is introduced with Gordon Douglas' *Them!* (1954) and Jacob Arnold's *Tarantula* (1955). Both films deal with the angst that modern science generates. They speculate about how its processes can easily mutate, run amok and turn against mankind, for instance by involuntarily creating freakishly threatening natural phenomena. The bogey is the first and foremost nuclear science. After the bombings of Japan to end the Second World War and numerous tests on American soil, this new science comes to occupy the collective imagination of the US population. Not as a lighthouse of progress but as a discipline with potentially unlimited destructive risks whose ultimate end point was global Armageddon. This point was furthermore enforced by the aggressive rhetorical propaganda intended to produce fear that characterised the arms race of the Cold War. Hence, the films depict the nuclear science as a discipline that in uncontrollable and disastrous ways tangles with Creation, with the work of God, and as such compromises the self-image of the USA as nature's nation.

The bad guy in freak creature horror is thus the irresponsible experiments done by government scientists in the pursuit of political power through nuclear power. As extreme metaphors the abnormal scale and behaviour of the animals reflect the risks and dangers of modern science playing God and read as the nemesis of a nation that has betrayed its exceptional relation to nature by exploiting it in the name of progress.

After the success of the first freak creature horror films a large number of movies are made elaborating on the freakish appearance of the animals and how they kill humans. In the 1970s the subgenre receives a strong dose of exploitation in the form of close-ups of animals in rage and gory images of mutilated human bodies. Among the most memorable ones are Bert I. Gordon's *The Food of the Gods* (1976) and *Empire of the Ants* (1977) that are both loosely based on H. G. Wells novels. Also John McCauley's creepy claustrophobic *Rattlers* (1976), Joe Dante's baffling horrific *Piranha* (1978), Harry Kerwin and Wayne David Crawfords underrated underwater scare *Barracuda* (1978) and Hernan Cardena's *Island Claws* with its stylistic homage to 1950s sci-fi needs to be mentioned.

The collective imaginary of the Cold War is still in effect today and many of the film in the subgenre stages scenarios that resemble those of *Them!* and *Tarantula*. However, it is no longer so much nuclear science as it is genetic and brain science that is fraught with the end of civilisation. Guided by deeply dubious motifs and the warped self-image of being the ultimate Creator, these new sciences – like nuclear science before them – ignore both risks and precautions and end up creating something unwanted and destructive. The list includes Lorenzo Doumani's *Bug Buster*



(1998), Fred Olen Ray's *Venomous* (2001), David Jackson's *Locusts: Day of Destruction* (2005), *Glass Trap* (2005) and Jeffrey Scott Lando's *Insecticidal* (2005).

Despite a number of artistic successes, the quality of freak creature horror is generally decreasing by indulging in fictional universes in which the political discourse is trivialised – if at all present – in favour of a grand scale freak show featuring ever more supernatural, baroque and monstrous creatures. From the 1950s when the subgenre was introduced to today, the latter track has become dominant and the critical expressiveness and potency diluted. Nevertheless, the notion of the discussion of the USA as nature's nation remains an implicit frame of reference for these movies.

### Deep eco horror

The subgenre of deep eco horror, to which *Kingdom of the Spiders* belongs, can be traced back to Alfred Hitchcock's *The Birds* (1963). Hitchcock's seminal work outlines a new direction for working with dangerous animals as "characters" in films. It proposes a highly original interpretation of the genre with a strong focus on the intelligence of animals as setting an apocalyptic agenda for human civilisation. First of all the animals in the movie are not depicted as gigantic mutants. On the contrary, they are simply animals with a reality of their own. No more, no less. Moreover, the birds in the movie are ordinary birds. Seagulls. Crows. In this sense, *The Birds* is fundamentally characterised by a straightforward and recognisable realism and this goes for most – and certainly the best – movies of the genre. What is abnormal is not the animals, but their behaviour and organisation. Hence, the horror of these movies mirrors the Freudian idea of "the Uncanny", i.e. the known showing itself to be something different than you thought.<sup>17</sup> The domesticated turns alien and hostile and humans are left with a shaken perception of reality.

More than anything, Hitchcock's intuition introduces a new and defining narrative element that is developed further in exemplary fashion by *Kingdom of the Spiders*, namely the swarm as the main character. In the classic freak creature film it is typically one or a few mutated individuals that take on the role as the slashers of nature and the challenge facing human civilisation is the elimination of the monstrous animal(s). It is humans against animals and the fight is characterised by both symmetry and transparency. With the introduction of the swarm, the symmetry and transparency disappears. It is no longer possible to identify the enemy as a large overgrown super shark like the one in Steven Spielberg's iconographic *Jaws* (1975) or the 18 feet giant bear in William Girdlers *grind house* hit *Grizzly* (1977). In deep eco horror the animal enemy is way more intangible and can no longer be clearly identified in terms of size and outline. How large are the flock of birds in *The Birds* and the swarm of killer bees in Irwin Allen's *The Swarm* (1978)? How many tarantulas have come together in Verde Valley in *Kingdom of the Spiders*? And exactly

how large a territory do they cover? The films do not give many, if any clues, making it impossible to answer these questions. Hence, much of the horror in deep eco horror films originates in the blurring of the contours of the threat, which in that sense makes the threat potentially ubiquitous and all encompassing. A part of this horror is also a lacking understanding of the qualities and order of the swarm, its intentions and intelligence. What is it that the birds want in *The Birds* or the bees in *The Swarm*? It is impossible to say. With their mum presence, the animals articulate something beyond our comprehension and so annul the political-discursive room for negotiation that the power structures of Modern civilisation are based on. They cannot be negotiated with. Arguments, political will or weapons are of no use. The traditional instruments of power have no effect on the changes in the deep ecology. They are unstoppable and leave humans without any escape routes. That is the plain message that the darkest works in the genre delivers to the audience.



Frame capture from *The Birds* (1963). Ordinary birds suddenly become aggressive and humans have no answer to cope with this ecological reversal. Instead humans become prey.

The narrative in deep eco horror is not, as in freak creature horror, related to science. The motives for the violent behaviour of the animals are rarely explained in detail and the narratives in the films follow a relatively loose structure. In *The Birds* the attacks of the birds seems unmotivated by direct actions. Certainly, the inhabitants on the small town are unaware of why the animals suddenly turn aggressive and become determined to kill every human that come into sight. More and more birds gather and the situation develops from a few accidental attacks to a massive and seemingly well-organised attack orchestrated by the birds themselves

based on unknown and opaque motives. *Kingdom of the Spiders* and *The Swarm* have exactly the same narrative structure. The animals attack without giving any reasonable explanation and for humans to try to figure out why they are attacking seems only to weaken their chances of survival.

As already indicated deep eco horror experienced a golden age in the 1970s with a lot of original films such as Walon Green and Ed Spiegel's Oscar-winning mockumentary *The Hellstrom Chronicle* (1971), George McCowan's progressive "sound-piece" *Frogs* (1972), Jeff Lieberman's muddy nightmare *Squirm* (1976), Robert Scheerer's unforgettable critique of land exploitation and the recreational conception of nature in *Ants!* (1977) as well as Saul Bass' psychedelic space vision *Phase IV* (1974). Despite being produced with minimal budgets the films develop the genre by way of aesthetic experiments that fully compare with and in many ways trump more respected contemporary art films and large productions from Hollywood. Later contributions to deep eco horror typically tend, exactly as in the sub-genre of freak creature horror, towards exploitation and gore. That is evident when one watches films such as Juan Piquer Simón's campy blood feast *Slugs* (1988), Frank Marschall's humorous neo-classic *Arachnophobia* (1990), Ellory Elkayem's earlier mentioned *They Nest* (2000) or David DeCoteau's legendary homo-gore ballad *Leeches* (2003). Yet, the fundamental horror caused by an animal threat that cannot be clearly identified and therefore impossible to avoid or overcome remains intact.

Like freak creature horror movies, deep eco horror movies are often set in small American towns such as Verde Valley or Bodega Bay and it is also life in a well-ordered American society that is at stake and being threatened by a faceless enemy. In deep eco horror however it is not possible to overcome the threat and return to the life of yesterday. As the endings of both *The Birds* and *Kingdom of the Spiders* make evident, with the birds completely taking over the village and potentially the world and the tarantulas have enshrouded the town and the surrounding area into a giant cobweb, the animal take-over is definitive.

In Evan Hunter's original manuscript to *The Birds* there is a final scene with the Golden Gate Bridge in San Francisco completely covered with birds. The image was supposed to illustrate that not only Bodega Bay, but also large American cities had been taken over. Similarly, there is a never used end scene to *Kingdom of the Spiders*, where it is the whole world and not only Verde Valley that is covered by cobweb. The alternative end scenes indicate in both cases a deep ecological apocalypse of omnipotent extent. That is if you are human. For the animals and the planet it is just another phase in the transition towards a new era in the deep ecology.

## **Territorial anarchy**

A general motive in deep eco horror is that the animals transgress the borders of a given territory, be that a private home, recreational areas or whole cities. The point,

nonetheless, is that this is not really a transgression, but a manifestation of the fact that these territories were not delimited in the first place. Since life originated on the planet the landscape have been connected to the deep ecology, which as a planetary network recognises no borders, certainly not man-made ones. As such the deep ecology challenges the territorial discourse and the institutions that promoted it that were foundational for the American pioneer movement and the westward expansion of American civilisation.

In *Kingdom of the Spiders*, before discovering the disquieting number of mounds the people of Verde Valley involved in the situation believe the problem is isolated to the Colby farm where a dozen calves have been found bitten to death and covered by spiders. One mound has been burned down in order to find a quick solution to the problem, but as the days goes by more and more inexplicable episodes occurs in other areas and places in the little town. The body count grows exponentially and people are found dead in strange cocoons. Soon the entire valley is covered in a gigantic cobweb. Valley Verde is no longer a human territory.

Even if America understands itself as nature's nation, it nonetheless begins to map the land onto what the historian Andro Linklater (2002?) has described as "the perfect grid" and starts selling it as small defined parcels as early as the end of the 17<sup>th</sup> century. The proprietary understanding of the land was thought of as a democratic initiative that enabled even less well-off Americans to own and cultivate land, but it also lead to a widespread speculation that directly countered the political ideas and created new social hierarchies. Beyond the political sphere, the parcellation of the American land introduces another challenging schism for the notion of the USA as nature's nation, namely a schism between owning and being in nature. It is obvious to ask, how one can own something that is God's creation? Certainly, the capitalist enterprises that benefitted from the proprietary transformation of the land saw no schism. If the land was given to the American people by God in order to prosper, it it was only natural that they also owned it and made it a business.

Deep eco horror on the other hand ridicules the idea of owing land as a naïve and highly fragile construction. From the perspective of the deep ecology the question is not just, if humans have the right to own the American landscape, but if they are capable of defending it like animals do in nature. Deep eco horror answers "No" to both questions. In the confrontation with the animals human ownership of the land means nothing. Animals do not care about certificates, let alone read them. All they care about is the territory and what they have to do to take it over.

*Kingdom of the Spiders* contains a number of minor, yet significant scenes, which emphasise the territorial challenge that the deep ecology represents to human society. In one of the movie's classic scenes the arachnologist, Diane Ashley, is finally alone in her hotel room after a long day of work and while she – with a nod to Hitchcock – takes a bath, the camera shows a tarantula crawling on her desk. When she returns to the room with a towel around her body, the audience is getting

ready for an attack, but she gently takes the tarantula up in her hand and puts it out in nature where it belongs.

The scene is discrete but points to the territorial schism that repeatedly is articulated in the genre. As natural science has documented, life on planet Earth was antagonistic until a territorial order was established and a hierarchy between God's creations was put in place, including a food chain. A defining moment for humans was the step away from the daily direct contact with the animals to the new isolated life in cities and houses where the dealings with the natural surroundings had been minimized. In an act of territorial sovereignty humans distanced themselves from animals and their natural habitat both in order to protect themselves against potential dangers that animals present and in order to be able to focus on other things than the battle for survival. A silent covenant is decided for the animals, namely that they can live and master all other areas than those areas – from houses to cities – where humans live. If animals transgress the border to these areas and disturb human life they will be destroyed by humans with extreme prejudice. In nature – in the fields and in the gardens – on the other hand the animals have territorial sovereignty and can establish their own order without human interference.

In *Kingdom of the Spiders* is it exactly that order that no longer can be sustained and isolated to the outside of human society. Instead the territory of the tarantulas expands into human society, causing its infrastructural order to break down. The spiders intrude garages, cars, planes and not least houses where they hunt humans out of their "kingdom". The radical state of the situation is evident in the end scene. The state of emergency is already in full effect. Verde Valley is struck by panic and the tarantulas are attacking humans, young and old, and taking over the city. Just as in classic horror movies such as George Romero's *Night of the Living Dead* (1968) and Hitchcock's *The Birds* (1963) a little group of people, amongst them the arachnologist and the veterinary has taken shelter in a house to survive the attack. The group runs from room to room and tries to keep the tarantulas out by putting up boards in front of the windows and doors, etc., but to no avail. Moreover, the ensuing fight between humans and animals is uneven, because even if the little group of people succeeds in keeping some of the spiders out, other spiders keep coming in without any concern about the life of the single spider. The spiders seem to accept or almost expect the death of a few individuals in the fight for the success of the species.

After a night of fighting and deep frustration, fear and sadness, the people in the house wake up to a new territorial order. Outside it is strangely quiet. On the radio the situation in Verde Valley is ignored and a very frustrated Rock Hansen removes a couple of boards from the windows and he can only turn to his creator by saying, "Dear God" when he sees the world outside. The camera changes perspective and zooms out from the city and the whole area is covered in one humongous cobweb. It is only a question of time before the little group will have to give in and become



prey to the new master race in the kingdom of the tarantulas – the horrifying manifestation of the deep ecology annihilating the human race and reterritorialising the land.

## The New Collectivity

The apocalyptic vision in *Kingdom of the Spiders* is a bone-chilling nightmare from the darkest regions of the human subconscious. To witness tarantulas turn an entire valley – or the entire globe depending on what ending of the film you watch – into a giant cocoon-like food storage will produce a strange uncanniness in any audience with just a little respect for animal life. But what is it that we are actually witnessing in the film? The disaster is cataclysmic, yet it is not generated by the unstoppable and uncontrollable forces that we know from earthquakes, tsunamis and tornados and have come to acknowledge as some sort of cosmic necessity that occasionally hit us with relentless power and then disappear again. We know we have little means to avoid these large-scale disasters and have learned to prepare for and handle them as an unavoidable evil. The evil in *Kingdom of the Spiders* is of a whole other kind. The inhabitants of Verde Valley are facing the violent force of something that humans until now has been able to live with and to a large extent also been able to control. The tarantulas are animals that apart from a poisonous bite when attacked have lived quietly outside human civilisation minding their own business. Until now. Like the apes in the *Planet of the Apes* series and the ants in *Phase IV*, the spiders develop a new sense of collectivity or rather they reorganise and remobilise their existing collectivity and turn it into a force that the collective of human society is not prepared for and has no defence against.



Frame capture from *The Rise of the Planet of the Apes* (2011). When the apes decide to turn against the human civilisation there is no stopping them. While crossing the Golden Gate even the military is defeated.



This vision of the development of a new tarantula collectivity in *Kingdom of the Spiders* can be approached with the Belgian writer and Nobel Prize winner Maurice Maeterlinck's (1862-1949) philosophy on nature. His philosophy is based on observations of bees, termites and ants and is articulated in the three books *The Life of the Bee* (1901), *The Life of Termites* (1926) and *The Life of the Ant* (1930). The insects fascinate Maeterlinck because they much like humans live in advanced collectives and are organised in large societies with millions of individuals. They are equipped with a social instinct and their centre of attention is the extended family of these collectives, which are systematically organised in order to maintain self-sustainability. In Maeterlinck's opinion the collectives of the insects is a herald.

Maeterlinck describes a number of characteristics in the social life of insects that resembles features found in the best animal horror films. Firstly, Maeterlinck is highly fascinated by the ability of insects to build functional and complex edifices, e.g. the enormous dwelling of the termites: "Nothing is more bewildering, more fantastic, than the architecture of these dwellings... With their needles, their crest of spires, their flying buttresses, their multiple counterforts, their overhanging terraces of cement, they recall age-worn cathedrals... like skeleton pyramids or obelisks fretted and scarred by centuries more devastating than in the Egypt of the Pharaohs" (Maeterlinck 1926: 25-27). In addition to being impressed by the sheer architectural genius of these insect dwellings, Maeterlinck focuses on how these "republics of the insects", where millions of individuals live in peace and harmony in gigantic collectives, are very successful examples of "nature's experiments" in terms of creating intelligent forms of existence. As he writes, "the bee, the ant and the termite alone, among all the living creatures we know of, present the spectacle of an intelligent life, of a political and economic organisation" (Maeterlinck 1926: 185-186). In another part of his analysis, Maeterlinck points out that the design of the dwellings of the termites besides from enforcing a strict social order also includes advanced ecological systems for ventilation, water management and nutrition as well as complex physiological mechanisms and technologies. Hence, he concludes that, "the termites are chemists and biologists from whom we might have much to learn" (Maeterlinck 1926: 49).

Maeterlinck is in other words fascinated by the intelligent design that the life of the insects exposes. What we need to acknowledge according to Maeterlinck is, "to mistrust the intentions of the universe towards ourselves" (Maeterlinck 1926: 186). From an evolutionary perspective, the societies of the insects have been here millions of years before humans arrived on the planet, let alone began to build societies. Moreover, the societies of the insects will most likely be here a long time after humans have disappeared from the planet. As species humans arrived later than any other species and even if we claim to be superior compared to animals when it comes to intelligence and inventiveness, our ability to adapt to the surroundings is clearly not sustainable and inferior to the insect societies, which have survived ice

ages, tectonic shifts and meteor impacts. That is the dark, yet honest point of both Maeterlinck's studies and animal horror.

While spiders like insect are from the arthropod phylum – by far the largest in the animal kingdom – they are not insects but arthropods with distinctive characteristics such as eight legs instead of six, no antennas and no ability to fly. Yet, this biological difference aside, Maeterlinck's thesis on the social life of insects and not least the brutal force of this life serves as a relevant prism for an analysis of *Kingdom of the Spiders*.

In a basic sense the movie speeds up the above-mentioned evolutionary process and gives it a dramatic twist by presenting a vision in which a new collective of tarantulas systematically and with determined intelligence annihilates a competing species, humans, from the face of the planet. It is a vision that shows that animal life can operate as a well-regulated collective. However, its intentions remain a mystery to humans. In the film, Diane Ashley and Robert Hansen, the scientist and the local veterinarian with knowledge of the area, do not understand the events since it do not correspond to anything they have seen before. The collective behaviour of the tarantulas exceeds the knowledge that the two have acquired as professionals. Science – the pride of human progress – is rendered inadequate when faced with this ancient civilisation and the lesson learned by Ashley and Hansen as well as the other inhabitants of Verde Valley is that it is too late to try to recognise it and take measures.

Like the majority of disaster films, *Kingdom of the Spiders* emphasises how humans cannot agree on a strategy to deal with the current challenges. Political and economic agendas are opposed to scientific and ecological arguments, and even when the survival of the town (read: the species) is at stake, it is not possible to reach a common approach to the challenge. That is a disturbing portrait of an impotent human society, split by egoism and special interests. Seen from Maeterlinck's perspective, the insect society of the other hand embodies a radical collectivity. All spider individuals have assigned roles and functions in the great totality that is sustained as the sole purpose of life. It is a totalitarian order characterised by an extreme work ethic and energy, manifested in the collective structures of the mound, the nest and the swarm.

Maeterlinck is especially fascinated by the insects' will to sacrifice everything in order to support the greater good as an ultimate goal that exceeds the individual. In the insect society the dwelling or the nest is larger than the individual, and the survival of the collective and the reproduction is the purpose of all activities. This collectivity is in Maeterlinck's eyes a form of absolute communism, where all individuals are anchored in a higher purpose and lives for the execution of this goal without questioning the current organization. The ego is non-existent and every insect is completely focused on working for the common good.

For Maeterlinck the greatness of the insect collectives is the,

absolute devotion to the public good, their incredible renouncement of any individual existence or personal advantage or anything that remotely resembles selfishness; to their complete abnegation, their ceaseless self-sacrifice to the safety of the state. In our community they would be regarded as heroes or saints (Maeterlinck 1926: 150).

In a modern America that built its self-image in opposition to Communism this is both an unattractive and scary thought, but *Kingdom of the Spiders* shows that it is nevertheless a powerful alternative to a society based on individuality. Moreover, the movie shows that individuality can be a weakness for the survival of societies.

## The Spider Intelligence

If we dig further into Maeterlinck's thinking we discover an additional aspect that helps explain the fundamental fear we experience when facing the collective of spiders in *Kingdom of the Spiders*. Maeterlinck articulates it quite simply as the wonder you experience when you are confronted with the dwelling of the termite or the mound of the ant: "What is it that governs here? What is it that issues orders, foresees the future, elaborates plans and preserves equilibrium, administers, and condemns to death?" (Maeterlinck 1926: 150) Humans are used to see the world as a gathering of individuals, but what if the way the tarantulas organise should not be conceived as a gathering of individuals but rather as one multifaceted individual? Then one would be forced to see the dwelling and the mound, "as a single individual, with its parts scattered abroad; a single living creature, that had not yet become, or that had ceased to be, combined or consolidated; an entity whose different organs, composed of thousands of cells, remain always subject to the same central law, although outside it and apparently individually independent" (Maeterlinck 1926: 150). The question that both Maeterlinck and *Kingdom of the Spiders* raise is if humans are ready to cope with such a conceptual turn.

Maeterlinck compares the organisation of the insects with the human body, where our own physiological systems are working completely independent of our consciousness and based on principles that normal people have limited knowledge of. As such, the vision of the tarantulas in *Kingdom of the Spiders* is the development of a body with swarm-like characteristics, regulated by an irreducible intelligence that gives the scattered body parts direction, purpose and a deep necessity in every single movement. This is an intelligence that humans have consciously ignored since it turned to modern science as the exclusive model for explaining the world and as *Kingdom of the Spiders* makes clear humans are therefore not able to respond to the manifestations of this intelligence with sufficient sensibility. Modern science has put humans out of sync with the way animals think and act, and it is this ignorance that comes back to haunt the inhabitants of Verde Valley and the people in animal horror in general. They are totally unprepared – mentally as well as practically – when confronted with this ancient intelligence of animals inherent

to the planet that has no sentimental concerns when it comes to the survival of humans.

Maeterlinck is repeatedly trying to describe this intelligence, because it gives him a sense of understanding the different experiments and options of life that nature has brought forward as cosmic experiments competing for dominance in the earthly kingdom. In a central passage in *The life of the Termite* the intelligence is described as,

“an intelligence dispersed throughout the Cosmos; to the impersonal mind of the universe; to the genius of nature; to the Anima Mundi ... the vital force, the force of things, the “Will” of Schopenhauer, the “Morphological Plan,” the “directing Idea” of Claude Bernard; to Providence, to God, to the first Mover, to the Causeless-Cause-of-all-Causes, or even to blind chance; these answers are one as good as the other, for they all confess more or less frankly that we know nothing, that we understand nothing, and that the origin, the meaning and the end of all the manifestations of life will escape us a long time yet and perhaps for ever” (Maeterlinck 1926:155-156).

In the grand cosmic scheme that deep eco horror outlines humans are just one amongst other intelligent life forms and have a very limited understanding of the vital energies that characterise the scheme. Instead our knowledge and intelligence tend to place humans at the centre of the scheme. Hence, when we describe and interpret other modes of being, other forms of life, we typically do so from an anthropocentric perspective. We attribute motifs and intentions that we know from ourselves to these non-human species. This “method” is indeed ignorant and as deep eco horror demonstrates it is furthermore fatal. *Kingdom of the Spiders* and deep eco horror shows that to underestimate the intelligence of small creatures such as ants, termites and tarantulas in comparison with human intelligence is a death trap of hubris. Because the behaviour and intelligence of the tarantulas do not conform to human models of explanation neither science nor society have any answers to the appearance and later attack of the spiders. Thousands of years of progress are rendered useless in a matter of a few days by the intelligence of a collective of small hairy creatures and reminds us that our accumulation of knowledge is fundamentally inadequate in terms of dealing with the forces of the deep ecology.

*Kingdom of the Spiders* is in other words a speculative attempt to articulate images and visions of non-human intelligences as a historical and cosmological perspective beyond human intelligence. Even though it is now more than forty years since the film premiered, art has still only scratched the surface in terms of giving form to and reflect on these perspective. As such *Kingdom of the Spiders* is still current and fresh. It might seem more like a gloomy myth from the Jungian depths of the collective subconsciousness than anything else, yet as a cinematic vision it feels surprisingly concrete, horrifying real.

## A Planet without Nations and Nature

Deep eco horror connects with existing discussions of a possible environmental apocalypse in the near-future. In this context, the genre seems to express an ethical challenge to the inconsiderate and egoistical behaviour of humans. It responds critically to pollution, manipulation and straight-forward destruction of the environment in the name of civilisation. This critique is well-known and concerns the inability of humans to handle their sovereignty on planet Earth with respect for its ecological systems. As such the genre points beyond the specific American perspective to a global situation, where every nation is falling from grace when it comes to its relationship with nature.

Extrapolating this critique, deep eco horror also introduces a critique of the inability of humans to handle their role on the planet to their own best. Not only do they disturb the deep ecology, they also naively continue to ruin their own habitat. As the example of *Kingdom of the Spiders* shows it is not the deep ecology but the humans who are the true victims of the environmental changes. It is the humans who die “at the mercy of Gaia”, while the spiders live on as if nothing happened in their newly won territory. Moreover, the deep ecology seems to have absolutely no problem with the disappearance of mankind. It never had any use for humans in the first place. Covered in the silk threads of the tarantulas Verde Valley looks as peaceful as ever.

Although the alternative ending of *Kingdom of the Spiders* in which the entire planet was covered by spider thread was dropped, the article wants to conclude by connecting the film and the genre in general to the radical vision of a planet without humans. The vision is presented by a number of current products of fiction. In the remake of *War of the Worlds* (2008) and the TV series *Falling Skies* (2011-) aliens invade Earth and the surviving humans are destined to fight against total extermination. The environment is not the issue in either *War of the Worlds* or *Falling Skies*. They tap into the Cold War narrative of outside enemies. Disastrous environmental changes are on the other hand the main frame of reference in films like *After Earth* (2012), *Oblivion* (2012), *Elysium* (2013) and *Interstellar* (2014) as well as in TV series like *Terra Nova* in which mankind has left the planet due to pollution, overpopulation and nuclear war and is now living on space stations and other planets.<sup>18</sup> However, the heroic human individual still thrives in these stories, if not on Earth, then in space, and secures the anthropocentric perspective on the situation. It is exactly this perspective that deep eco horror closes off. The ending of *Kingdom of the Spiders* emphasises this perhaps clearer than any film in the genre by a shift in point of view from the people inside the house looking out through the barricaded windows to a look down on the covered Verde Valley from “somewhere” above the town. The alternative ending shows the entire covered Earth from a distance, hanging in space. In both cases, the point of view exceeds human perception and serves to connect the events to a planetary perspective.

Compared to these movies and TV series, a more consequent and thought provoking version of the vision is developed by Alan Weisman in his book *The World without Us* (2007) and the related TV series *Life After People* (2008-2010). Both the book and the TV series speculate about the development of Earth without humans and they do so without speculating about the reason why humans have disappeared. They are just gone. No more. From one day to the next.<sup>19</sup> What remains are the products of civilisation and the marks that civilisation has put on nature. Yet, they also disappear as time goes on and after hundreds of years they come to resemble prehistoric objects.<sup>20</sup> It is a view into the near and far future, where nature liberated from the interference of humans can create its own ecological system. One of Weisman's main examples are the island of Manhattan and he describes how the New York City borough in time will change as part of a process where nature will grow back to a state from before humans began to settle there.

In essence, Weisman's vision is a romantic one, in the sense that he nurtures a mythology of a pure, true and harmonious nature. Like deep eco horror films, his point of view is post-human but as he writes in the preface to his latest book *Countdown: Our Last Best Hope for a Life on Earth* (2014) he nevertheless still dreams of a life on earth. His books are written as encouragements to develop new forms of life that makes this dream possible.<sup>21</sup> Deep eco horror has no such dreams. Its point of view is a cosmological point of no return. The deep ecology has begun a new different process that does not consider nor include humans.

This difference between *The World Without US* and deep eco horror connects with Timothy Morton's notion of "ecology with nature." Morton belongs to the group of contemporary thinkers that attacks anthropocentrism and challenges the phenomenology of subjectivity in favour of an object-oriented understanding of the world according to which humans are no longer privileged but just one object among many. As he writes in *Hyperobjects. Philosophy and Ecology after the End of the World* (2013), "true planetary awareness is the creeping realization not that "We Are the World" but that we aren't" (Morton 2013: 99). According to Morton, Earth never belonged to humans in the first place and nature is just a concept that humans have invented to comprehend, frame, control and exploit this fundamentally alien phenomena. Nature as such does not exist, he argues. What does exist is an ecological hyperobject whose spatial and temporal scale exceeds the horizon of human perception.<sup>22</sup> Its qualities, network of connections and dynamics are basically imperceptible to humans and for Morton the challenge humans are facing is to develop a philosophy that can cope with this nature of the hyperobject. Only thereby can humans also develop an adequate – in the sense of respectful and sustainable – ecological awareness and behaviour.

Deep eco horror expresses a similar understanding of the ecological hyperobject as something that is fundamentally alien to humans and at the same time fundamentally connected to human life. However, contrary to Morton who sees this as a philosophical problem the genre uses the schism as the point of departure for dystopic



speculations about how humans are confronted with a superior intelligence and force. As Nils Hellstrom – the main character of the film *The Hellstrom Chronicle* – points out, insects have a 300 million years head start on humans when it comes to life on Earth. Moreover, unlike humans, the insects have succeeded in creating the perfect society, including an effective army of soldiers that sacrifice themselves for the survival of the society as a whole. “The insects will endure, where man will fail,” as Hellstrom laconically expresses it.<sup>23</sup> As such deep eco horror can be seen as a potentialization of Maeterlinck’s thesis combined with an exposure of the weaknesses in human society. The conclusion is critical and absolutely without sentimentality: The spiders and insects will trump and the American nation as well as the global civilisation will come to an end. Humans may have been able to land on the Moon and collect data from the far regions of outer space but its planetary intelligence is too limited and narrow-minded to enable them to outlive, let alone crush those little creatures that have gathered and processed data on planet Earth for many millions of years.

To use the word of the author J. G. Ballard, the visions of deep eco horror are indeed “extreme metaphors”. The truth-value of these metaphors cannot be confirmed nor can they be refuted. Maybe they are real and not simply metaphors. We humans cannot know that and that is perhaps the most frightening and fascinating aspect of the films. They introduce us to the limit of our perception and control and leave us with the realisation that we are mere subordinate organisms in the ever changeable and super violent planetary narrative that constitutes the deep ecology.

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## Notes

<sup>1</sup> See Næss 1973.

<sup>2</sup> As such the genre connects with the critique of anthropocentrism that has been launched by the recent branch of environmental studies that focuses on "keeping the wild" and argues that not only humans but also animal can "inhabit" the Earth. (See Crist 2014) However, the vision that animal horror presents is less concerned with the ethical question of animals as "inhabitants" as with the mythological fear of animals as sovereign force.

<sup>3</sup> As such the perspective of animal horror – and of the article – differs from the recent "animal turn" in environmental discourse, which argues for the recognition of animals as equals to humans in the integrated bio system of the planet Earth. Animal horror is not concerned with such an extension of civil rights as it shows how animals without ethical or institutional support eventually will "rise" and prove that human sovereignty is a myth. See Weil 2010 and Crist 2013.

<sup>4</sup> Of course, the apocalypse is not limited to the US context but for the sake of argument the article will focus on the significance of the apocalypse in that specific geopolitical context.

<sup>5</sup> See Thrower 2007.

<sup>6</sup> See Miller 1967 and Hughes 2003.

<sup>7</sup> The frontier movement is of course not the first settlers on the North American continent. Recent discoveries shows that the first humans arrived from Asian on the coast of what is today California as early as 13.000 years ago. When the frontier movement began its travels westward to explore the "untouched land" the descendants of these first settlers, the Native Americans, already inhabited the land. Furthermore, the democratic ideals were to a considerable extent inferred with by an aggressively expanding capitalism and its inherent power structures.

<sup>8</sup> Of course, the mythology ignores that the USA was indeed founded on a political struggle, namely The American Revolution (1765-1783), the fight for independence from the British Empire and the wars with Mexico and Native Americans.

<sup>9</sup> This claim of innocence has ironically – and tragically – accompanied military interventions and wars in foreign countries in the 20th century by the USA. Also, since he was elected President Barack Obama has continuously referred to the USA's "manifest destiny" as the reason behind the nation's active and leading role in the global politics. That the USA is a nation driven by higher principles than simple politics is in other words a myth created to justify and disguise the liability of its political actions.

<sup>10</sup> See Schmidt 2005.

<sup>11</sup> See Ron Sakolsky and James Koenhline (1993). As it is well-documented in the literature on the frontier movement realising the dream of the peaceful life in nature was no easy task. The conditions were tough and included a great deal of violence both internally between the settlers and in confrontations with Native Americans.

<sup>12</sup> As an illustration of this see J. Hector St. John De Crevecoeur's classic text *Letters from An American Farmer* (1872), which is instrumental to the idea of cultivating the American soil.

<sup>13</sup> As it is often pointed out in the critique of Fred Jackson Turner's seminal essay "The Significance of the Frontier in American History" (1893) large parts of the frontier movement also justified genocide on the Native American population in the name of the progress of civilisation and capitalism. The Native Americans were considered to be a disturbing – "savage" – part of nature and thus were to be exterminated for the landscape to be claimed by the frontier movement. An obvious example of this dark and horrible side of the utilitarian quest is the construction of the first transcontinental railroad, which to save time and money went straight through several Native American territories and left blood in its track.

<sup>14</sup> To get an idea of how widespread the genre is see the list of 389 "Killer Animals/Insects and Giant Monsters (Horror) Movies" at <http://www.imdb.com/list/ls050510252/>.

<sup>15</sup> It needs to be mentioned that by "the people" the Western genre almost exclusively means the white settlers of the frontier movement. The Native Americans' "right" to the land is either ignored or suppressed by racist politics.

<sup>16</sup> A US specific perspective on this point would be to see the genre as a "reenactment" of the exposure and vulnerability experienced in the wild nature by the settlers of the frontier movement.

<sup>17</sup> See Freud: *The Uncanny*.

<sup>18</sup> See Lillemose 2013.

<sup>19</sup> For the sake of argument Weisman does mention two possible causes: A virus or aliens.

<sup>20</sup> This vision points to the recent notion of the anthropocene, which claims that the material presence of humans on Earth has reached such a massive state that it constitutes a geological layer in itself.

<sup>21</sup> Whereas *The World Without Us* is a speculation *Countdown* is a description of actual situations. The main argument of the book is that Earth's and man's biggest problem is overpopulation.

<sup>22</sup> Morton does not subscribe to James Lovelock's Gaia theory. He criticises the theory for its misleading understanding of the current environmental crisis. He argues that Lovelock on the one hand encourages a kind of ecological defeatism thinking that Gaia will replace man as a dysfunctional component, and on the other hand is simply an alibi not to do anything.

<sup>23</sup> The Nils Hellstrom character is further developed by Frank Herbert in his novel *Hellstrom's Hive* (1978). In the novel Hellstrom leads a secret underground experiment intended to create a society based on the life of insects and take over the world.

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# Keeping Count of the End of the World A Statistical Analysis of the Historiography, Canonisation, and Historical Fluctuations of Anglophone Apocalyptic and Post-Apocalyptic Disaster Narratives

By Jerry Määttä

## Abstract

Over the past decade, apocalyptic and post-apocalyptic disaster narratives seem to have become more popular than ever before. Since its inception in secular form in the first decades of the nineteenth century, however, the genre has experienced a number of fluctuations in popularity, especially in the twentieth century. Inspired by Franco Moretti's influential *Graphs, Maps, Trees* (2005), the aim of this study is to analyse the historiography, canonisation, and historical fluctuations of Anglophone apocalyptic and post-apocalyptic disaster narratives in literature and film through an elementary statistical analysis of previous surveys of the field. While the small database on which the study is based essentially consists of a meta-study of historiography and canonisation within the genre, disclosing which works have been considered to be the most important, the data is also used to assess the periods in which the most influential, innovative, and/or popular works were published or released. As an attempt is also made to explain some of the fluctuations in the popularity of the genre – with an eye to historical, cultural, medial, social, and political contexts – perhaps the study might help us understand why it is that we as a society seem to need these stories ever so often.

**Keywords:** Historiography, Canonisation, Science Fiction, Apocalypse, Post-Apocalypse, Popular Fiction, Sociology of Literature, Bibliometrics

## Introduction

Whether a reflection of widespread fears of terrorism, financial crises, impending climate change, uncontrolled mass immigration, the potential aggressiveness of the working classes, uninhibited and brainless mass consumption, or something else entirely, apocalyptic and post-apocalyptic disaster narratives seem to be more popular than ever before. Over the past decade or so, stories about the end of the world as we know it have appeared in a number of genres and forms of media, from depictions of zombie apocalypses in films such as *28 Days Later* (2002), novels such as Max Brooks's *World War Z: An Oral History of the Zombie War* (2006), or multi-media franchises such as *Resident Evil* and *The Walking Dead* – spawning a number of video games, graphic novels, novels, films, and/or television series – to works of literary fiction such as Margaret Atwood's *Oryx and Crake* (2003) and Cormac McCarthy's *The Road* (2006). Despite its pervading presence in both popular and literary culture, however, this extraordinary interest in the end times is only the latest in a number of waves that have struck the shores of public imagination since the inception of the secular apocalyptic and post-apocalyptic disaster narrative in the first decades of the nineteenth century, with works such as Mary Shelley's *The Last Man* (1826). Regardless if one sees it as a genre of its own or a subgenre of science fiction, however, the apocalyptic and post-apocalyptic disaster story is mainly a product of the late nineteenth and the twentieth centuries, and has produced a large number of both popular and influential works of fiction and film.<sup>1</sup> But what does it look like in a historical perspective, is there any consensus as to what works constitute its (minor) classics, and is there any accounting for the intriguing fluctuations in its popularity?

The aim of this study is to analyse the historiography, canonisation, and historical fluctuations of Anglophone apocalyptic and post-apocalyptic disaster narratives in literature and film through an elementary statistical analysis of previous surveys of the field. Methodically, the study is inspired by the first part of Franco Moretti's *Graphs, Maps, Trees: Abstract Models for Literary History* (2005), but also by related studies within the Swedish tradition of sociology of literature (for instance Williams 1997 and Nordlund 2005), and by bibliometrics and the digital humanities. While the small database on which the study is based essentially consists of a meta-study of historiography and canonisation within the genre, with clear indicators of not only which works have been considered to be the most important, but also the periods (stretching from the 1820s to ca. 2010) in which they were published, the data can, I believe, also be used to assess some other factors, such as the fluctuating popularity of the genre through the years, in different countries and in various media – all differences that beg for explanations with an eye to the historical, cultural, medial, social, and political contexts. As such a contextualisation will to some extent be attempted, perhaps the study might even help us understand why it is that we as a society seem to have a need for these kinds of stories ever so often.

## **The Database: Construction, Selection, and Demarcation**

In order to analyse the historiography and canonisation of apocalyptic and post-apocalyptic disaster narratives, one first needs to find a reliable selection of texts on which to base the analysis. As there are dozens of monographs and anthologies dealing with British and American apocalyptic and post-apocalyptic disaster stories (cf. Wagar 1982, Rabkin et al. 1983, Seed 2000, and Curtis 2010), pinpointing and weighing the classics against one another from book-length studies would both take a long time and some ingenious ways of determining which are the most important works (such as a bibliometric analysis of the number of times they are mentioned or referred to, or the number of whole chapters or articles that are devoted to them or their authors). A much more convenient way, especially as some of the critics and scholars are recurring ones from the longer studies, is to look for shorter surveys of the genre, often seen as a subgenre of, or theme within, science fiction and thus frequently treated in separate chapters, articles or sections in handbooks, encyclopedias, and introductions to science fiction. With a length restriction of only a few pages, one can be fairly confident that the scholars or critics mention and discuss what they think are the most important and influential (either widely read or serving as inspiration for other writers) works in the field, with only a minimum of idiosyncratic choices added for flavour.<sup>2</sup> Furthermore, by using texts mainly in handbooks and encyclopedias, one is also certain to base the analysis on the opinions of some of the main authorities on the subject.

The database used in this study is based on the thirteen relatively brief surveys I could find, written by critics and scholars recognised within the field of Anglophone science fiction (most of them interestingly male British scholars specialising in literature).<sup>3</sup> They stretch from the mid 1970s to the early 2010s, although with a predominance of surveys written in or after the 1990s, and deal with either parts of or the whole apocalyptic and post-apocalyptic genre, usually in both literature and film. The works mentioned are primarily British and American, but there are also examples of other Anglophone titles, and even a few non-English titles that have been considered important for the field of Anglophone apocalyptic and post-apocalyptic disaster narratives.

The database itself consists of a spreadsheet in SPSS, with different columns for title of the work, name of the author or director, his or her gender and nationality, year of publication, medium, genre, or format of the work, and lastly separate columns for indicating in which of the thirteen surveys the work is mentioned. In all, the database contains 490 unique entries, i.e. titles which have been mentioned (or occasionally referred to, usually through their series) in one or more of the surveys. The only exclusions are a small number of works, often of non-fiction, mentioned in the surveys for contextual purposes.

Doing a selective meta-study such as this is no exact science, but even though some of the surveys only cover a certain subtype of story, or a shorter period (such



as just a few decades), the overall total of mentions nevertheless gives a relatively clear picture of the canon of apocalyptic and post-apocalyptic stories, seen from the perspective of Anglophone science-fiction scholarship. There is, however, always the problem, hinted at above and commented on by David Ketterer, that when writing a survey, “[t]he very best and the very worst examples are the ones that immediately suggest themselves” (Ketterer 1974: 124), which means that some of the often mentioned works might in theory have become minor classics within the genre as much for being notoriously inadequate as for being outstanding or original, even if chances are that these are restricted to the idiosyncratic mentions by individual scholars.

Furthermore, one must keep in mind that surveys in handbooks and encyclopedia entries are often influenced by earlier surveys, either directly, as writers of new surveys often cast a glance at older ones and rely, in varying degrees, on earlier judgements of aesthetic quality and historical importance rather than making individual assessments of every work they mention (which also explains, to some extent, why the works mentioned, out of hundreds or even thousands, are so often the same ones) – or indirectly, as the surveys are in many ways both manifestations of and influences on the critical and scholarly consensus of the time in which they were written, and these change only gradually. In this way, an idiosyncratic inclusion of a work may in time generate further inclusions, and some works may even be handed down as canonical even if they might not be that widely read or appreciated (even by writers of surveys).

Before diving into the database and its results, a short reminder of what the figures stand for might be necessary. Based as they are on surveys written by scholars and critics, the entries in the database do not represent the number of stories written, shot, distributed, read or viewed in the genre, and they are not necessarily an indicator of the popularity of the genre – even if I believe that that does come into it (more of which below) – but a listing of important, interesting or otherwise memorable stories published or released in the genre according to a handful of scholars and critics. Everything else is, by necessity, speculation, albeit with varying degrees of plausibility.

## The Apocalyptic Canon

One of the most interesting results to be found in the database concerns the works that are mentioned in the most number of surveys, forming an apocalyptic and post-apocalyptic canon of works consecrated within the field of science-fiction scholarship.<sup>4</sup> In fact, only 133 of the 490 entries (or 27.1 percent) are mentioned in two or more of the surveys, and of these only 55 (or 11.2 percent of the total) are mentioned in three or more (interestingly, *The Epic of Gilgamesh* falls outside the three mentions while Cormac McCarthy’s *The Road* makes it). Conveniently, there are 35 works which are mentioned in four or more of the surveys, marking out a relatively

clear statistical consensus regarding which works in the genre are considered to be the most important, irrespective of the no doubt various criteria – such as perceived quality, originality, contemporary impact, and survival value – used by the individual critics and scholars (Table 1, next page). Among these works are Jean-Baptiste Cousin de Grainville’s posthumous book-length prose poem *Le Dernier Homme* (1805), “the first tale of the future to consider the death of all human beings and the destruction of the earth” (Clarke & Clarke 2002: xviii), but also what is arguably the first secular apocalyptic novel, Mary Shelley’s *The Last Man* (1826), three novels by H. G. Wells, a few often adapted novels by John Wyndham and Richard Matheson, a handful of works of literary fiction by authors such as Aldous Huxley and Angela Carter, three early novels by J. G. Ballard, and five films, among them the three original *Mad Max* films (1979–1985). Interestingly, three of the top five titles are depictions of nuclear war published in the late 1950s, by Walter M. Miller, Jr., Mordecai Roshwald, and Nevil Shute.

When it comes to the crises or disasters depicted in all the 35 canonical works of apocalyptic and post-apocalyptic fiction and film, nuclear wars and pandemics are the most common scenarios, with nuclear wars and their aftermath accounting for sixteen, or almost half (45.7 percent), of the cases, and with pandemics (viruses, plagues, etc.) coming second with five entries (14.3 percent), although diseases (and famines) often figure as secondary calamities in many more, especially in the stories dealing with nuclear war. The disasters in the remaining classics consist of celestial phenomena, alien invasions, floods, and freak occurrences (if they are not unknown).

Besides Mary Shelley’s and Angela Carter’s novels, there are two other novels by female authors (Judith Merril and Leigh Brackett), which might seem little (11.4 percent of the canon), but is in fact slightly more than the proportion of entries with female authors or directors in the whole database (see below). As for nationality, there is an almost equal split between the US and the UK, with 16 entries for the former, and 15 for the latter, and with the Australian *Mad Max* films behind most of the remaining.

Although the 35 canonical works (as suggested by the database) range from the nineteenth century to the mid 1980s, as many as twelve are from the 1950s, and no fewer than eight from the late 1950s (which can be compared to only five entries from the 1960s, four from the 1980s, and even fewer from the other decades). Apart from James Morrow’s novel *This is the Way the World Ends*, there are also just four works published or released since the 1960s – three of which are the *Mad Max* films, and the fourth Russell Hoban’s experimental novel *Riddley Walker* – but chances are that a future study of a similar kind would include a few more, especially Cormac McCarthy’s *The Road* and Margaret Atwood’s *Oryx and Crake*, but perhaps also Max Brooks’s *World War Z* and Suzanne Collins’s *The Hunger Games*, which are likely candidates for canonisation not, perhaps, solely on grounds of originality, but on their historical and contextual interest.

Title	Author/Director	Gender	Nationality	Year	Medium etc.	Total
<i>A Canticle for Leibowitz</i>	Walter M. Miller, Jr.	Male	US	1959	Novel	10
<i>The Last Man</i>	Mary Shelley	Female	UK	1826	Novel	9
<i>Level 7</i>	Mordecai Roshwald	Male	US	1959	Novel	9
<i>Earth Abides</i>	George R. Stewart	Male	US	1949	Novel	8
<i>On the Beach</i>	Nevil Shute	Male	UK	1957	Novel	8
<i>Le Dernier Homme (The Last Man)</i>	Jean-Baptiste Cousin de Grainville	Male	Non-English	1805	Poetry	7
<i>The Purple Cloud</i>	M. P. Shiel	Male	UK	1901	Novel	7
<i>When Worlds Collide</i>	Edwin Balmer & Philip Wylie	Male	US	1933	Novel	7
<i>The Day of the Triffids (Revolt of the Triffids)</i>	John Wyndham	Male	UK	1951	Novel	7
<i>The Drowned World</i>	J. G. Ballard	Male	UK	1962	Novel	7
<i>Riddley Walker</i>	Russell Hoban	Male	US	1980	Novel	7
<i>The Crystal World</i>	J. G. Ballard	Male	UK	1966	Novel	6
<i>The Scarlet Plague</i>	Jack London	Male	US	1912	Novel	5
<i>The World Set Free (The Last War)</i>	H. G. Wells	Male	UK	1914	Novel	5
<i>Shadow on the Hearth</i>	Judith Merrill	Female	US	1950	Novel	5
<i>The Long Tomorrow</i>	Leigh Brackett	Female	US	1955	Novel	5
<i>The Death of Grass (No Blade of Grass)</i>	John Christopher	Male	UK	1956	Novel	5
<i>Alas, Babylon</i>	Pat Frank	Male	US	1959	Novel	5
<i>On the Beach</i>	Stanley Kramer	Male	US	1959	Film	5
<i>Heroes and Villains</i>	Angela Carter	Female	UK	1969	Novel	5
<i>After London; Or, Wild England</i>	Richard Jefferies	Male	UK	1885	Novel	4
<i>The Time Machine</i>	H. G. Wells	Male	UK	1895	Novel	4
<i>The War of the Worlds</i>	H. G. Wells	Male	UK	1898	Novel	4
<i>The Second Deluge</i>	Garrett P. Serviss	Male	US	1912	Novel	4
<i>Deluge</i>	S. Fowler Wright	Male	UK	1928	Novel	4
<i>Ape and Essence</i>	Aldous Huxley	Male	UK	1948	Novel	4
<i>The Long Loud Silence</i>	Wilson Tucker	Male	US	1952	Novel	4
<i>I Am Legend</i>	Richard Matheson	Male	US	1954	Novel	4
<i>The Chrysalids (Re-Birth)</i>	John Wyndham	Male	US	1955	Novel	4
<i>The Burning World (The Drought)</i>	J. G. Ballard	Male	UK	1964	Novel	4
<i>Dr. Strangelove, or, How I Learned to Stop Worrying and Love the Bomb</i>	Stanley Kubrick	Male	US	1964	Film	4
<i>Mad Max</i>	George Miller	Male	Australia	1979	Film	4
<i>The Road Warrior (Mad Max 2)</i>	George Miller	Male	Australia	1981	Film	4
<i>Mad Max Beyond Thunderdome</i>	George Miller & George Ogilvie	Male	Australia	1985	Film	4
<i>This is the Way the World Ends</i>	James Morrow	Male	US	1986	Novel	4

Table 1. The 35 apocalyptic and post-apocalyptic novels or films mentioned in four or more surveys.

## Medium, Gender, and Nationality

Besides canonisation, the database as a whole also yields a number of interesting results when it comes to describing the apocalyptic and post-apocalyptic genre in

general. Starting with medium, genre, and format, the entries consist of (in descending order, and with percentages in brackets) novels (53.3), short stories (20.4), film (18.4), poetry (2.2), children's and YA fiction (1.6), other print (1.4), TV series (1.4), short-story collections (0.6), and drama (0.2), demonstrating perhaps not only the interests of scholars and critics specialised in literature, but also that the genre is predominantly one of novels, short stories, and film, even though the large number of apocalyptic and post-apocalyptic TV series and YA books from recent years will probably have an impact on comparable surveys in future.<sup>5</sup>

As already hinted at above, the male dominance in the database is absolutely massive, with female authors and directors standing for less than 10 percent of the entries (or 9.2 percent, to be precise). Naturally, this reflects not only that both science fiction and the film industry have long been male-dominated, but perhaps also that the types of fantasies represented in apocalyptic and post-apocalyptic stories – with widespread disasters leading to chaos and barbarism, survival of the fittest, etc. – are probably more popular with both male writers/directors and readers/viewers. There is, however, a slight difference when it comes to media and genre, as female writers stand for 12.3 percent of the novels, while only 4.4 percent of the films are directed by female directors, and only 4.0 percent of the short stories are written by female writers.<sup>6</sup> Of course, 12.3 percent is still a very small number, but 32 apocalyptic and post-apocalyptic novels by female writers does at least amount to a whole shelf in a bookcase, and they contain some of the most interesting work in the genre, often by female writers who have decided to write against its traditionally male values and perspectives.

As my main interest is Anglophone fiction and film, the database doesn't differentiate between the relatively small number of non-English authors and directors. It does so, however, when it comes to the different countries in the English-speaking world. In all, US authors and directors stand for more than half (55.5 percent) of the entries in the database, followed by UK authors and directors, who stand for almost a third (29.8 percent). The non-English category (mostly European authors and directors, even if some of the latter worked in Hollywood) makes up 8.4 percent of the entries, and the rest of the English-speaking world is represented by less than 4 percent, although some of the most well-known works are actually from these countries, such as the Australian *Mad Max* films, the New Zealand film *The Quiet Earth* (1985), or Canadian writer Margaret Atwood's novels.

Looking at nationality by medium, a few interesting differences emerge, as UK authors stand for as much as 39.5 percent of the novels in the database, whereas US authors stand for 52.1 percent (compared to 29.8 percent and 55.5 percent respectively for all media, genres, and formats). Furthermore, while films by US directors make up 54.4 percent of all films in the database, the films by non-English directors stand for as much as 18.9 percent, which is roughly 5 percentages more than the ones by UK directors (13.3 percent). It is also notable that US authors stand for as much as 78 percent (or even more) of all mentioned short stories, with UK authors

standing for most of the remaining. The apocalyptic or post-apocalyptic short story is thus a very American form, probably as the science-fiction magazines, and the tradition of publishing science-fiction short stories, have largely been an American twentieth-century phenomenon; if the British excel at one form of apocalyptic or post-apocalyptic narrative, it is the novel rather than film (of all UK contributions in the database, 70.5 percent are novels, compared to 50.0 percent for the US contributions).

## Periodising Apocalypse

The entries in the database stretch from the Sumerian *Epic of Gilgamesh*, written a millennium or two B.C., over the *Book of Revelations*, the *Völuspá*, the Romantic poets, the British fin-de-siècle writers of scientific romances (such as H. G. Wells), early twentieth-century American pulp fiction, post-war Hollywood disaster and World War III films, and all the way to science fiction and consecrated literary fiction from the last decade, not to mention the various recent zombie films.

Even if there are many potential factors of error involved – such as the fact that the database is based on thirteen more or less subjective surveys written by a small number of people, and that the total number of entries (despite being almost 500) is only a sampling of all the thousands of apocalyptic and post-apocalyptic narratives published or released in the last century or two – the database can be used to estimate the periods in which the most number of stories considered to be memorable were published or released, results which can then be compared with not only the changing historical, cultural, medial, social, and political contexts of the last two centuries, but also with some of what has been written on the periodic popularity of apocalyptic and post-apocalyptic narratives.

In contrast to the regular field of cultural production, where there is an almost inherent contradiction between perceived aesthetic qualities and popularity – and thus the opinions of critics and scholars rarely reflect the popularity or even the wider cultural impact of individual films or works of literature – in a field of so-called genre fiction such as science fiction, there is probably a sufficient overlap between the tastes of critics, scholars, and a majority of the readers and viewers to permit making at least some assumptions about the popularity of the genre based on its historiography.<sup>7</sup> Add to this that the historiography of a genre often consists of not only the works which have been judged to achieve certain aesthetic standards, but also works which have, in one way or another, been seen as important in the sense of having influenced other writers, directors, or even public opinion (often through both popularity and publicity) – and that many science fiction films and novels have been included in the surveys at least partially due to their popularity – and it would seem that this method could be a feasible shortcut to assess the fluctuating popularity of the genre in different periods, lacking the time and resources to find not only the total number of apocalyptic and post-apocalyptic titles published

or released each year (and in different countries and media), but also the exact figures for the total number of books, cinema tickets, magazines, etc. sold, which would not only be tremendously time-consuming, but often outright impossible.

To further complicate the already complex relationship between consecration, historiography, and popularity, it could be argued that the presence of important or memorable works from certain periods often reflects both the popularity of the specific titles and a widespread interest in the subject matter, and that a few consecrated works might be seen as the tip of an iceberg – that it is statistically likely that a period with many memorable works saw an unusually large number of other works in the genre as well, most of which are today forgotten. On the other hand, it could also be argued that it is often during periods (and in social, political, historical contexts) when there is an increased need for these kinds of stories that authors and directors produce them in unusually large numbers, or even that it is only during these periods and their specific *Zeitgeist* that certain works manage to make lasting impressions and become minor classics (sometimes almost regardless of perceived aesthetic qualities), both of which would seem to suggest that examining the contexts of the consecrated and memorable works of the genre might in fact be seen as at least partially representative for the popularity and impact of the whole genre.

Breaking down all the 490 entries in the database by five-year-periods, starting in 1800, several interesting things emerge (Figure 1, next page).<sup>8</sup> First, and perhaps most important, is the fact that even if most of the surveys were written since 1990, only four of them are completely from the 2000s, which means that the figures for the 1990s and especially the 2000s are probably on the low side. Preceding the 1990s, however, are four decades – the 1950 to the 1980s – with what seems to be a relatively steady output of interesting and memorable stories in the genre, bringing to mind I. F. and M. Clarke’s words that, “after Hiroshima, the greatest flood of apocalyptic fiction would begin; and, throughout the ensuing four decades, a seemingly endless succession of books and films would describe the End of the World as the last act in a chain of human follies” (Clarke & Clarke 2002: xviii). As we shall soon see, however, this neat conformance with the threat of nuclear war isn’t entirely true.



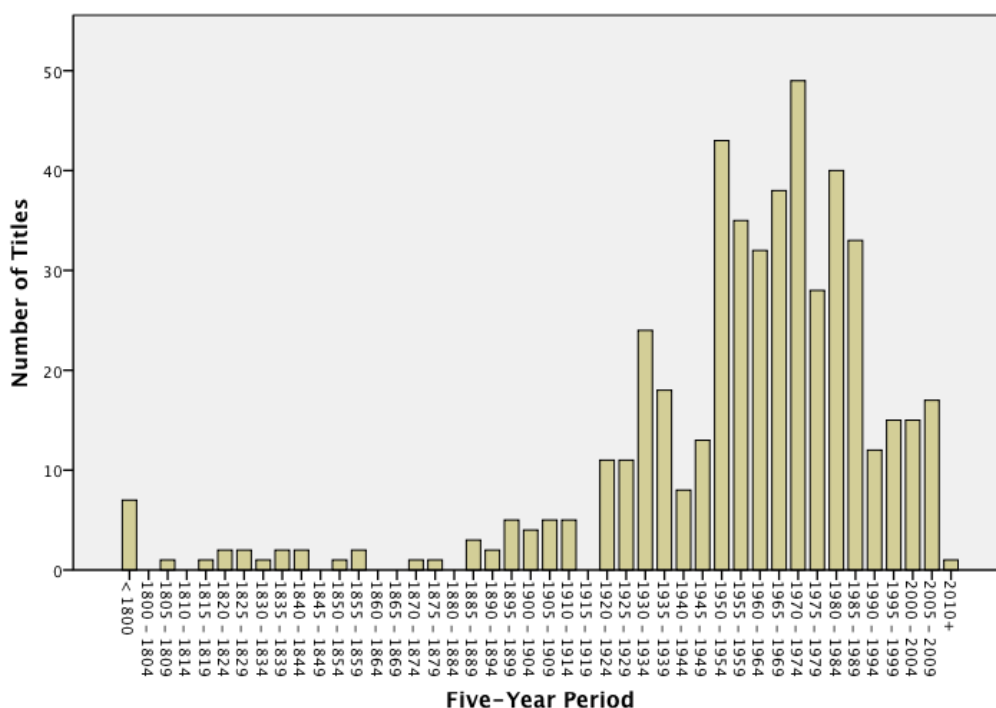


Figure 1. The total number of apocalyptic and post-apocalyptic disaster narratives in the database published or released after 1800, by five-year period.

The most surprising element in the breakdown is probably the declines in memorable stories in the genre from the late 1910s and, perhaps even more striking, the early 1940s, coinciding with both world wars. This might be explained by the writers and filmmakers being busy doing military or civil service, or surviving harsh living conditions (such as the Blitz), by paper rationing (which would, however, perhaps affect the number of magazines and books printed rather than the innovations of the authors), or simply by the fact that reality at the time was far too bleak and grim for writing, shooting, publishing, or releasing any memorable fantasies of worldwide destruction.<sup>9</sup> Furthermore, it is intriguing that the interwar period of 1920–1939 – and especially the Depression years of the early 1930s – produced quite a few noteworthy apocalyptic and post-apocalyptic stories, with steep rises comparable only to the ones in the early 1950s, the early 1970s, and the early 1980s. Also notable is a relatively continuous output of memorable works from the nineteenth century, starting with British Romantic poems depicting end times and last men, such as Lord Byron’s “Darkness” (1816) and Thomas Campbell’s “The Last Man” (1823). As with Mary Shelley’s *The Last Man* (1826), these were inspired by the uncredited and anonymous English translation of Grainville’s *Le Dernier Homme* as *The Last Man; or, Omegarus and Syderia: A Romance in Futurity* (1806) (Paley 1989, Clarke 2002, Clarke & Clarke 2002, and Ransom 2014).

In future, a similar study would likely show a sharp rise in interesting apocalyptic and post-apocalyptic disaster stories from the years 2000–2015, following a decade of slightly less important work in the genre. (Contrary to popular belief, the years preceding the millennium don't seem to have seen any sharp rise in popularity for this particular genre, although apocalyptic themes did figure prominently in public discourse at the time.) As for the notable decline in the early 1990s, it might not be entirely related to the fact that the decade is too recent for these historical surveys – it is possible that at least part of it can be explained by the fall of the Berlin Wall, the democratisation of Eastern Europe, the end of the Soviet Union, and the *détente* in international tensions after years of *perestroika* and nuclear disarmament treaties; or, simply by the fact that audiences were tired of apocalyptic and post-apocalyptic narratives after a decade infused with such scenarios, and instead turned to fantasy novels, romance, and comedy. Remarkably, in 2002, I. F. Clarke attributed this lack of interest specifically to the disarmament treaty of 1990 and asserted that “the tale of the last days of Earth no longer had any power to attract readers. Nowadays, it seems, the Last Man belongs to an almost extinct species.” (Clarke 2002: xli) Of course, the pendulum swung again in the early 2000s, with a new wave of post-apocalyptic and zombie narratives starting in precisely 2002, with, among others, Danny Boyle's and Alex Garland's *28 Days Later* (2002), and, after the events of September 2001, a changed international context in which they were received. An important factor in the expansion of the 2000s is unquestionably also the breakthrough for computer-generated imagery in the 1990s, which has given new possibilities for depicting especially large-scale or even global disasters (Sanders 2009: 15–16).

As it is difficult to know for sure how reliably the most memorable titles reflect popularity, the results should be compared to previous assessments of the popularity of this and related genres in film and literature, which might also offer explanations for the fluctuations. In an essay condemning the latest wave of horror films in the late 1950s, for instance, Derek Hill observed a connection between horror films and troubled times, claiming that “[e]very horror film cycle has coincided with economic depression and war”, and that the late 1950s with their escalating nuclear arms race experienced “the biggest, ugliest threat of them all, and a bigger, uglier horror boom than ever before” (Hill 1958: 7). What is particularly interesting about Hill's observations is that he tries to trace the cycles back a few decades, and that he touches upon the subject of national economy:

Until the coming of sound, Germany dominated the horror field – a country suffering from post-war depression and the *malaise* of defeat. The first American cycle ran throughout the 'thirties – the depression years – but the films became less popular as the economy gained strength. By the time America entered the war, virtually no horror films were being made. In 1943 a new boom began; and then, after the war, there was another recession.

Horror literature, it has often been noted, becomes increasingly popular when a society is undergoing outward stress. The cinema, which provides a more accurate reflection of a nation's mood, confirms this. (Hill 1958: 7)

Even though Hill's essay deals with horror film, and that his observations concerning the Second World War do not conform with the results of the present study, it is nevertheless interesting to note a few similar conclusions in an essay on a related (and to some extent overlapping) genre. In fact, analogous, recurrent patterns have also been noted regarding pre-Hiroshima apocalyptic films, for instance by Mick Broderick: "Examining the historical clusters of these films prior to 1945, it appears that many reflect popular fears of devastating calamities in times of perceived global crisis, such as the approach of the World Wars, the 1917 communist revolution, and the Great Depression." (Broderick 1993: 364) Unfortunately, this can neither be corroborated nor disproved with the database, as it contains only one pre-WWII film, *Deluge* (1933).

A comparison of the major media of novels and film in the database does, however, show both interesting differences and similarities (Figure 2, next page). Apart from the fact that memorable apocalyptic and post-apocalyptic films – which, with all their special effects, were long expensive to make – are clearly a post-war phenomenon, the early 1980s seem to have been an exceptionally good period for film in this genre, especially compared to the late 1980s and the early 1990s, which saw a dramatic drop.<sup>10</sup> (When it comes to novels, a comparable rise can be seen from the late 1970s to the early 1980s, but lasting a few years longer, before the probable drop in the 1990s.<sup>11</sup>)

The early 1980s are, of course, an especially interesting period, as it saw a new stage in the Cold War, often called "the Second Cold War", with the Soviet invasion of Afghanistan, heightened international tensions, and especially a renewed and widespread fear of nuclear war. The escalating nuclear arms race is not only reflected in many of the memorable films from this period – such as *WarGames* (1983), *The Day After* (1983), and *Threads* (1984) – but also in the large number of low-budget imitators of the highly successful *Mad Max* films. Although Mick Broderick has listed no fewer than 80 post-nuclear war films from the 1980s – most of them action-oriented and with titles such as *Exterminators of the Year 3000* (1983), *Warrior of the Lost World* (1983), and *Land of Doom* (1986) – very few of these were memorable enough to make it into the surveys (and they were often made in Italy, Spain, Israel, and the Philippines) (Broderick 1993: 366, 376).<sup>12</sup> Notably, they seem to have tied in well with the prevalent ideology of their time (Thatcherism and Reaganism), as Broderick argues that, with their hero mythology, these

cinematic renderings of long-term post-nuclear survival appear highly reactionary, and seemingly advocate reinforcing the symbolic order of the status quo via the maintenance of conservative social regimes of patriarchal law (and lore). In so doing, they articulate a desire for (if not celebrate) the fantasy of nuclear Armageddon as the anticipated war which will annihilate the oppressive burdens of (post)modern life and

usher in the nostalgically yearned-for less complex existence of agrarian toil and social harmony through ascetic spiritual endeavors (Broderick 1993: 362).<sup>13</sup>

Add to this that the depicted wastelands of the genre are often characterised by an absence of a strong state and by anarchic conditions where might is right, and it is easy to see the similarities not only with libertarian ideology, but also with the punk movement of the mid- and late 1970s (which also influenced the films aesthetically).

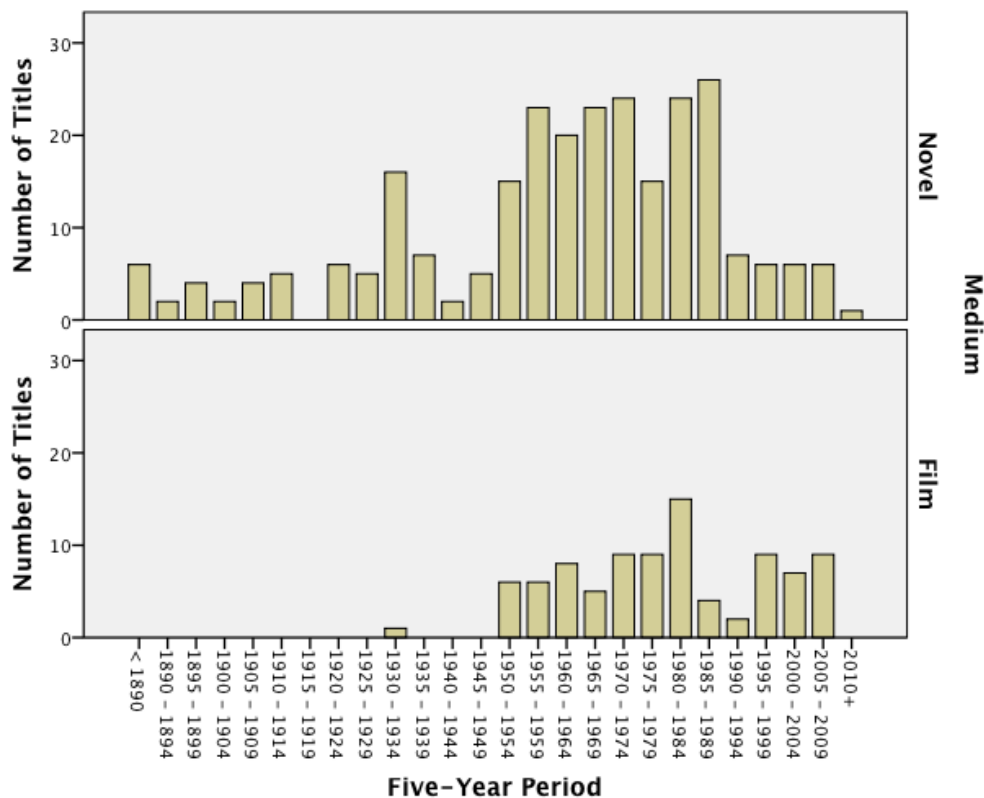


Figure 2. The total number of apocalyptic and post-apocalyptic disaster narratives in the major media of novels and film in the database, by five-year period.

Apart from the fluctuations in 1980–1994, however, the output of memorable apocalyptic and post-apocalyptic films has been relatively constant since the early 1950s. Compared to the novels, it is also striking that many of the memorable films are from the 2000s, perhaps indicating a rise in interesting work done, but it might also have to do with the fact that it is easier to determine the classics of a young medium such as film.

When it comes to the novels, the late 1970s show a curious, if only relative slump (Figure 2), which begs explanation. In fact, looking only at novels from the two most important countries, one finds one of the biggest and most important differences in the entire database (Figure 3, next page). Whereas many of the classic British apocalyptic and post-apocalyptic novels were written in the late nineteenth

century and up until the First World War, in the inter-war years and the first three post-war decades, a clear majority of the US classics of the genre were written between 1950 and 1989, with a noticeable peak in the 1980s. The most striking difference between British and American novels, however, is in the fifteen-year period 1975–1989, when it seems interest and innovation abated in the UK while it peaked in the US. This difference is likely connected to the post-war US supersession of the UK as the dominant Western superpower, which seems to have affected the genre fully a generation after WWII.

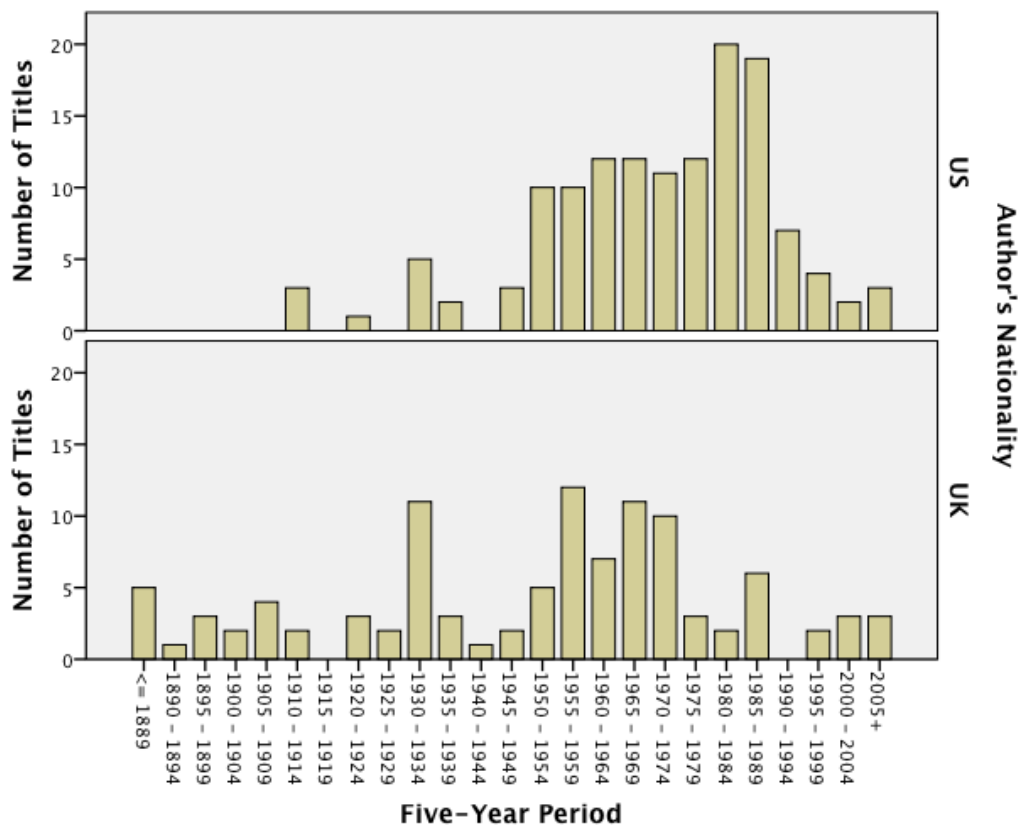


Figure 3. The total number of British and American apocalyptic and post-apocalyptic disaster novels in the database, by five-year period.

Interestingly, the preceding 25–30-year period coincides neatly with the heyday of what has sometimes been called the cosy catastrophe, a specifically British type of disaster novel by writers such as John Wyndham, John Christopher, Susan Cooper, Keith Roberts, John Brunner, and Richard Cowper (most of whom are also represented in the database). According to Jo Walton, these stories, with often quirky disasters killing off almost all but a small number of middle-class survivors who are left to rebuild civilisation from scratch, dealt with "middle-class resentment towards the newly empowered working class" in post-war Britain (with reforms

such as free public education and the National Health Service). They were "immensely popular" between 1951 and 1977, but then disappeared, perhaps because "the zeitgeist had changed and they had served their purpose. By the time they died away, the social world had completely changed, a whole generation had grown up with the post-war reforms and Thatcherism was on the horizon." (Walton 2005: 38)<sup>14</sup> Indeed, the crowning achievement of the subgenre might well have been the highly successful TV series *Survivors* (1975–1977), which also tapped into the prevalent rural nostalgia of the 1970s.

It has also been suggested that the lingering popularity of especially John Wyndham's 1950s disaster novels (with their obvious fears of invasion and supersession) may be related not only to the gruelling experience of WWII, but also to the dismantling of the British Empire and the loss of Britain's status as a superpower.<sup>15</sup> As Roger Luckhurst has pointed out, there is almost something monomaniacal about these stories: "What cultural work does this British 'imagination of disaster' perform for its audience? The repetitive plots invite a reading of the genre that sees it as a compulsion to return to some traumatic event, in order to master its devastating effects." (Luckhurst 2005a: 130) In this instance, the narratives seem to work as a form of symbolic national trauma treatment, not unlike the Japanese monster films following the bombings of Hiroshima and Nagasaki (see Sontag 1966: 218).

In an essay on British science fiction in the 1970s, Luckhurst discusses what he terms the "post-imperial melancholy" of the decade, with its economic and ideological crises, loss of national identity and sense of belonging, and rural nostalgia. Besides deliberating on it as "a crucial decade in reorganising the symbolic capital of Empire" (Luckhurst 2005b: 79), he also sketches (with a reference to Baucom 1999) the historical development of disaster narratives, observing how

the renewal of the English catastrophe novel in the early 1970s was a response to a newly intensive phase of crisis around nationhood – allegorical, or not so allegorical explorations of that 'cult of ruin', as Baucom calls it. The English genre of catastrophe has been intrinsically linked to critical phases of Empire at least since the invasion fantasies and future wars of the late nineteenth-century, flaring again at the waves of decolonisation in the 1940s and 1950s. (Luckhurst 2005b: 84)

Perhaps there is here at least a kernel of an explanation for the striking shift taking place in the 1970s, as in the UK, WWII and the British Empire were more than a generation away, whereas in the post-Vietnam US of the late 1970s and early 1980s, international tensions and threats towards national security were once again on the rise – possibly also making the US novels more forward-looking than the British. Stephen King, author of the popular apocalyptic novel *The Stand* (1978), has described the period in which he wrote it as an unusually turbulent time in US history, following the oil crisis, the Watergate scandal, and the end of the Vietnam War:

There was a feeling – I must admit it – that I was doing a fast, happy tapdance on the grave of the whole world. Its writing came during a troubled period for the world in general and America in particular; we were suffering from our first gas pains in history, we had just witnessed the sorry end of the Nixon administration and the first



presidential resignation in history, we had been resoundingly defeated in Southeast Asia, and we were grappling with a host of domestic problems, from the troubling question of abortion-on-demand to an inflation rate that was beginning to spiral upward in a positively scary way (King 1981/2012: 447–448).

While the 1970s did see a steep rise in localised disaster films in the wake of the highly successful *Airport* (1970), these – which might or might not have been expressions of a sublimated fear of nuclear war – had exhausted themselves come the 1980s (Broderick 1991: 36, Sanders 2009: 14). Early in the new decade, Noel Carroll observed that horror and science fiction film (some of which was, of course, apocalyptic and post-apocalyptic) were “the reigning popular forms of the late seventies and early eighties”, and that this popularity had much to do with the social and political context:

The present cycle, like the horror cycle of the thirties and the science fiction cycle of the fifties, comes at a particular kind of moment in American history – one where feelings of paralysis, helplessness, and vulnerability (hallmarks of the nightmare) prevail. If the Western and the crime film worked well as open forums for the debate about our values and our history during the years of the Vietnam war, the horror and science fiction film poignantly expresses the sense of powerlessness and anxiety that correlates with times of depression, recession, Cold War strife, galloping inflation, and national confusion. (Carroll 1981: 16)<sup>16</sup>

Looking at the fluctuations in the database as a whole, this observation seems to have some validity also for the apocalyptic and post-apocalyptic disaster narratives, as it is relatively clear that many of the works considered to be important in the genre are from periods of anxiety, economic recession, and social and political unrest. Disregarding all the potential factors of error, and allowing for some degree of speculation, one possible explanation for these fluctuations is that apocalyptic and post-apocalyptic stories have little appeal for, or at least have little impact on, readers and viewers at times of both real crisis and calm – such as the world wars or the 1990s – and that the large number of memorable works in the genre produced in the 1930s, the 1950s, and the 1980s reflect a surging interest in these stories among both producers and consumers during the build-up to an anticipated crisis, such as the Second World War, The Space Race and the Cuban Missile Crisis, the so-called Second Cold War of the early 1980s – and in the 2000s, perhaps, terrorism, climate change, and financial collapse.

## Conclusion

The aim of this study is to analyse the historiography, canonisation, and historical fluctuations of Anglophone apocalyptic and post-apocalyptic disaster narratives in literature and film through an elementary statistical analysis of previous surveys of the field. Even though there are many uncertainties involved and one should be wary of drawing too far-reaching conclusions from the thirteen surveys used, it is still possible to discern some interesting patterns in the resulting database. Besides

basic facts such as more than half of the database consisting of novels, that female writers and directors stand for less than a tenth of the entries, that more than half of all the stories were written or directed by US authors and directors (and less than a third by British), that almost half of the 35 most mentioned works were about nuclear war, and that many of them were published or released in the 1950s, there are also some intriguing fluctuations, probably having to do with the historical, cultural, medial, social, and political contexts of the stories.

Looking at the database as a whole, it is in fact possible to discern four distinct periods or high points for Anglophone apocalyptic and post-apocalyptic narratives. These are the early 1800s, when an anonymous translation of Jean-Baptiste Cousin de Grainville's *Le Dernier Homme* (1805) was published in English, and inspired not only a number of British Romantics to write about the last men on earth and the end of the world, but also Mary Shelley's much more secular novel *The Last Man* (1826); the inter-war UK, especially the Depression years of the early 1930s, which saw an unusually large number of memorable apocalyptic and post-apocalyptic novels; the post-war UK in ca. 1950–1975, coinciding both with the heyday of the so-called cosy catastrophe, a subgenre instigated by John Wyndham, and the dismantling of the British Empire; and, finally, the post-war US, with a steady output from the early 1950s on, but culminating during the so-called Second Cold War of the early 1980s, with a large number of memorable novels and films. To these can be added a fifth, the post-9/11 wave of ca. 2000–2015, much of which consists of zombie narratives in various media, but also of dystopic YA and literary fiction. (Notable periods of general decline were both world wars, and most probably the 1990s, although there were also a few country- and media-specific slumps.)

Through the years, a number of different explanations have been suggested for the attraction of stories about cataclysmic events. They range from Susan Sontag's remark in her classic essay "The Imagination of Disaster" (1965), that in apocalyptic films "one can participate in the fantasy of living through one's own death and more, the death of cities, the destruction of humanity itself", and that they are "concerned with the aesthetics of destruction, with the peculiar beauties to be found in wreaking havoc, making a mess" (Sontag 1966: 212–213), and J. G. Ballard's existential assertion that they represent "an attempt to confront the terrifying void of a patently meaningless universe by challenging it at its own game" (Ballard 1977: 130), to Jo Walton's suggestion about the so-called cosy catastrophes, that "their enduring appeal is to the adolescent, who [...] just naturally wants to see the adult world go up in flames and build it again, better" (Walton 2005: 38). Combined with the fact that many elements in apocalyptic and post-apocalyptic narratives in general – such as depictions of hostile environments, adult dishonesty, strong emotional content (love, loss, fear, and hatred), and questions of loyalty, friendship, rivalry, and chosenness – would seem to cater to the adolescent mind, this might explain their enormous popularity among teenagers over the last decade. Besides there arguably being something almost inherently narcissistic about stories about the end

of the world (focusing as they often do on the chosenness of a certain individual, group, or at least generation), there is no denying that many apocalyptic and post-apocalyptic narratives deal with subject matter that is related to some of our deepest emotions, anxieties, and fears – of death, powerlessness, separation, and abandonment – but also to fantasies of belongingness, fellowship, and survival, or even sadistic desires and feelings of guilt (Sontag 1966: 223, Wagar 1982: 66–85). As most of these stories include some form of recovery, reconstruction, safe haven, or even utopia, there is also the often exhilarating fantasy of a fresh start, a release from the responsibilities and chores of modern life, and of having the whole world for oneself (Sontag 1966: 215, Wagar 1982: 71–75, Nicholls et al. 2012a, 2012b, Pringle et al. 2013).

While these stories often seem to serve a cathartic function, a purging of emotions neutralising tensions and assuaging fears (Sontag 1966: 225), it would be advisable to distinguish between different types of apocalyptic and post-apocalyptic narratives when discussing their lure; even if some forms of attraction can be pinpointed in specific texts, and perhaps even analysed in relation to a particular audience, the range and variation in the narratives dealt with in this study is so wide that speculations about the appeal of the whole corpus risk arriving at blunt generalisations. Different scenarios and threats address different fears (directly or symbolically), and there are also major differences in style, tropes, and reader interest between stories of post-apocalyptic survivors rebuilding a society long after plagues or nuclear wars have run their course, and stories where the protagonists experience virus outbreaks, alien invasions, or zombie apocalypses. In fact, the latter is probably one of the most aberrant types, as it often focuses on gruesome bodily injuries and the dissolution of the individual subject in “the horrifying and disintegrative process of massification” (Luckhurst 2012: 78). Nevertheless, zombie narratives have become one of the most widespread types in recent years, perhaps, as Jeffrey Jerome Cohen has suggested, because they are an “incarnation of collective anxieties” (Cohen 2012: 401) that challenges both our sense of belonging and of staying in control (as a society, an individual, or a species, even). Besides offering “a permissible groupthinking of the other” and serving as legitimate outlets for aggressions and reminders of our own mortality and the frailty of our bodies, they are, like all monsters, “metaphors for that which disquiets their generative times”, and over the past decade these fears have ranged from terrorism and immigration to financial crisis and climate change (Cohen 2012: 402–405).

Whether or not there is any clear connection between the proliferation of important and memorable disaster narratives and a widespread need for these kinds of stories, it would seem that their lure is far from constant, at least when it comes to novels and films original and/or popular enough to make a lasting impression in the minds of the critics and scholars of the genre. To conclude, then, if the frequency of memorable works or even classics in the genre is somehow indicative of the popularity of or the need for these stories in a society (which isn’t necessarily the

case), we seem to need these stories primarily in anticipation of and preparation for conflicts rather than during actual wars or emergencies, and occasionally as symbolic trauma treatment in the first years following a national or cultural crisis. They seem to function best as pressure valves during periods of build-up to expected conflicts or crises, for letting off emotional steam, and perhaps as a way of mentally preparing for an even bleaker reality which many fear will soon be imminent.

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### Notes

<sup>1</sup> It could well be argued that these stories make up a genre of their own; as I. F. Clarke has emphasised, “[t]hese histories of the catastrophe-to-come are quite distinct in mood and intention from all other accounts of coming things. They have their own dedicated roles and separate evolutionary patterns within the tale of the future [...]” (Clarke 2002: xx). The main difference between the apocalyptic and the post-apocalyptic disaster story would seem to be that the former depicts an ongoing scenario (such as a viral outbreak or a zombie apocalypse) while the latter focuses on the aftermath of a widespread catastrophe, such as a nuclear war. Confusion is rife, however, and the lines are frequently blurred, which often makes it both difficult and unnecessary to make any strict distinctions between the two types.

<sup>2</sup> As the surveys are all relatively brief, however, it has not been possible to make distinctions on the importance assigned to individual works based on relative space given in the surveys (as in Williams 1997 and Nordlund 2005).

<sup>3</sup> The thirteen surveys are Ketterer 1974: 133–148; Ash 1977; James 1994: 89–92; Clute 1995: 70–71; Clarke 2000; Booker & Thomas 2009: 53–64; Mousoutzanis 2009; Bould & Vint 2011: 29–31, 90–94, 152–154; Seed 2011: 105–110, 113–116; Nicholls et al. 2012a; Nicholls et al. 2012b; Stableford 2012; Pringle et al. 2013. The last four are the most relevant entries in *The Encyclopedia of Science Fiction*, and are lightly revised versions of the entries in the 1993 print version (Clute & Nicholls 1993). As most of them are written by slightly different constellations of critics and scholars, they have been regarded as separate surveys.

<sup>4</sup> For an introduction to the term consecration, see Bourdieu 1996.

<sup>5</sup> The other print category contains epics and religious texts (which weren’t literally printed at the time they were conceived), but also things like graphic novels.

<sup>6</sup> The figures when it comes to YA fiction are really too small for any accurate statistics, but it could be mentioned that half (4 out of 8) of the children’s and YA writers are female, which I suspect does reflect a larger number of female writers in that part of the genre, especially in recent years.

<sup>7</sup> This is perhaps especially the case with the opinions and tastes of the most active readers of the genre (often so called *fans*, loosely organised in a *fandom*), although with the added complication that a substantial part of the reading audience doesn't necessarily share the ideals and convictions of the most active readers, sometimes resulting in bestsellers and blockbusters perceived as emanating from outside the field being frowned upon within the community.

<sup>8</sup> It should be noted that the statistics are not normalised to accommodate for the fact that the surveys are from the period 1974–2013 (although eleven of the thirteen surveys were written or revised in the 2000s), nor for the fact that the number of books published and films released grew significantly over the course of the twentieth century. Such normalisation might well be possible to achieve, but would ultimately be of relatively little use as my main interest is in the sudden variations between the five-year periods rather than the relative growth of the genre over time.

<sup>9</sup> It is possible that publishers or studios refrained from publishing or releasing these kinds of stories, as well. The BBFC, for instance, banned the import of horror films to the UK in 1942–1945 (Hill 1958: 9), and very few horror films were made in the UK during WWII.

<sup>10</sup> Interestingly, the only memorable pre-WWII film, *Deluge*, was from 1933, in the same five-year period which saw the largest number of memorable pre-WWII novels.

<sup>11</sup> One explanation for the large number of novels from the 1980s is the fact that there were many memorable apocalyptic and post-apocalyptic book series published, which skews the figures slightly.

<sup>12</sup> Although more than half of the 80 films are from the latter part of the decade, almost all the memorable ones – such as *The Road Warrior (Mad Max 2)* (1981), *Le Dernier Combat* (1983), *The Terminator* (1984), and *Mad Max Beyond Thunderdome* (1985) – are from the first half, perhaps lending some weight to the argument made above that the memorable titles are often the ones most in tune with the fears and desires of their time.

<sup>13</sup> Broderick also connects these films to the politics of their time, and concludes his study by stating (in the early 1990s) that "it is difficult to expect films exploiting survivalism to proliferate with the apocalyptic vigor of the neo-cold war '80s" (Broderick 1993: 379).

<sup>14</sup> The term 'cosy catastrophe' was coined by Brian Aldiss in *Billion Year Spree: The History of Science Fiction* (1973).

<sup>15</sup> On Wyndham and the British Empire, see for instance Aldiss 1973: 294; Priest 1979: 195, and Luckhurst 2005a: 130–131.

<sup>16</sup> Interestingly, Carroll's introductory claim that "the Western and the crime film were the dominant genres of the late sixties and early seventies" suggests that analyses like the one attempted in this study should ideally be made on several genres simultaneously (Carroll 1981: 16).

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## On the Representation of an Early Modern Dutch Storm in Two Poems

By Katrin Pfeifer

### Abstract

On 19th December 1660, a severe storm raged over the Dutch isle of Texel, causing severe damage. It proceeded to destroy parts of the city of Amsterdam. Both the sailor and merchant Gerrit Jansz Kooch and the priest Joannes Vollenhove wrote a poem about this natural disaster, presumably independently of each other. The poets perceived the storm differently: Kooch, an eyewitness of the storm, matter-of-factly portrays the calamity and details a feud between his son-in-law and a colleague to commemorate the day of the disaster. In contrast, Vollenhove personifies the winter storm and struggles to understand it. Their poems are valuable sources for a cultural historical analysis. After a brief review of historical severe storm research, I will analyse these poems from a cultural historical point of view. I will shed light on how this severe storm was represented poetically in the Early Modern Period.

**Keywords:** Environmental history, cultural history, the Netherlands, Early Modern Period, natural disaster, storm, perception, poetry

## Introduction

This article presents two recently rediscovered poems about the severe storm of 1660, which raged over Northern Holland. The poems were written by the sailor and merchant Gerrit Jansz Kooch and by the priest Joannes Vollenhove. Vollenhove and Kooch had contrasting agendas, and comparison of their poems indicates that these two men used the calamity as an excuse to draw attention to their own social and political ends. Material presented by Kooch and Vollenhove in their poems portrays events that they considered to be significant enough to put into verses. I will compare the two poems on different levels, addressing the following research questions: Which events during the storm are mentioned? What are the underlying motives of the authors and functions of the poems? How do the poetics of the two poems differ, specifically with respect to the use of symbols as rhetorical figures? This article contains the first English translation of the poems.

Although historical research on natural hazards is becoming increasingly popular (see, e.g., Mauch & Pfister 2009; Pfeifer & Pfeifer 2013a; Steinberg 2006), research on historical severe overland storms is still in the early stages of development. This research gap stands in stark contrast to historical storm floods (e.g., Gottschalk 1977; Jakubowski-Tiessen 1992; de Kraker 2013) and storms over sea (e.g., Wheeler 2003, 2005), as both types of disaster have been investigated thoroughly. The meteorologist Jan Buisman (2006), for example, has been writing an extensive history of weather in the Netherlands, including severe overland storms. However, storms in the Netherlands are explored principally by the *Koninklijk Nederlands Meteorologisch Instituut* (KNMI; e.g., van Engelen, Buisman & IJnsen 2001). Pfister et al. (2010) investigated the impact of the storms *Marcellus* and *Prisca*, which raged through Switzerland in the year 1739. Storms were and are primarily investigated by natural scientists, and such debates are centred upon climate and weather conditions. The ways in which affected persons dealt with natural disasters and their aftermaths has been more or less ignored. This aspect is, however, essential for the present article. Storms that raged in Austria are surveyed by the *Zentralanstalt für Meteorologie und Geodynamik* (ZAMG; e.g., Matulla et al. 2008; for Austria see also Pfeifer 2014; Hauer & Pfeifer 2011). In the rest of Europe storms are researched, for example, in the wider area of Great Britain by Hubert Horace Lamb (1991; see also Pfeifer & Pfeifer 2013b), in the Czech Republic by the geographer Rudolf Brázdil and his group (University of Brno; e.g., 2005, 2010), and in Spain by the meteorologist Miquel Gaya (2011). The atmospheric physicist Nikolai Dotzek (Dotzek et al. 2000; Dotzek 2001), who died before his time, did pioneering work—notably in European tornado research—in Germany (*Deutsches Zentrum für Luft- und Raumfahrt*, Oberpfaffenhofen). Moreover, he initiated the *European Severe Storms Laboratory* in 2002 with the goal to advance research on severe storms and extreme weather events on a European level (see Dotzek et al. 2009).

So far, the severe storm of 1660 and the two poems have remained more or less absent from storm literature in general and in works on Dutch history in particular.

### **Storm poetry by Kooch and Vollenhove**

The sailor and merchant Gerrit Jansz Kooch presumably started writing poetry in 1655 at the age of 57 when his beloved daughter Stijntgen succumbed—most probably—to pestilence (van Eeghen 1966a: 37; van Eeghen 1966b: 2-3). Kooch did not need to make extra money and we have no evidence that he ever worked on commission. Rather than complying with restraints on poetic content imposed by a financier, Kooch instead wrote poetry when he was inspired to do so. Thus, it can be assumed that his literary work was neither influenced nor warped by backers, and does not display typical attributes of financed art, such as exaggerations and understatements. Kooch was interested in natural phenomena in general. He wrote about natural disasters: the storms of 1660 (see Appendix) and 1674 (see Pfeifer 2014), and the floods of 1625, 1633-1634, and 1675. He wrote in retrospect about the first two floods and noted events that had remained indelibly etched in his memory (van Eeghen 1966c: 79).

Joannes Vollenhove's father worked as a lawyer, and made sure that his son received a good education (Dibbets 2007: 24). Thus, Joannes Vollenhove attended a Latin school in Kampen before studying law, history and philosophy as a preparation for his theological studies at the University of Utrecht (Dibbets 2007: 28-32). Later he studied theology at the University of Groningen (Dibbets 2007: 38). Vollenhove then dedicated his life to God, working as a priest. From 1655 to 1665—the time during which the events in question occurred—Vollenhove lived and worked in Zwolle (Dibbets 2007: 47). Like Kooch, he wrote poetry, not on commission, but was in a position to choose the moment when he was inspired to compose his texts.

I will now focus on two poems about the storm of 1660 written by Kooch and Vollenhove.

### **A storm and two poems about it**

In the night from 18th to 19th December 1660, a severe storm raged over the Dutch isle of Texel. Both the sailor and merchant Gerrit Jansz Kooch and the priest Joannis Vollenhove wrote a poem about this natural disaster (the complete Dutch originals and their translations are given in the Appendix). There is no evidence of any influence between both authors, so both poems were most likely written independently of each other.

Kooch and Vollenhove described the storm damage on the island Texel—houses were destroyed or demolished. Some families lost all their belongings and were made homeless. Ships were cut loose of their anchors and floated into the sea. In

addition to this, houses, churches, and trees in the city of Amsterdam were affected by the storm. Given the divergent backgrounds of the authors, it is obvious that both perceived the natural disaster differently. Kooch's poem is very special as it consists of three coherently written pieces: Firstly, Kooch describes not only the aftermath of the storm but also a feud between his son-in-law Gerrit Steemann with one of Steeman's colleagues, the notary Joris de Wisje. Secondly, this notary—Joris de Wisje—wrote some verses, in which he makes fun of Steeman. Kooch incorporated them into his account and, thirdly, wrote a paragraph in his son-in-law's defence. In contrast, Vollenhove's poem is more of a sermonising lamentation. His poem is clearly theologically motivated and written in a spiritual manner. Furthermore, he works excessively with the stylistic device of personalization. The personalization of the winter storm can be interpreted as a mental coping strategy.

We do not know when the poems were written. Kooch signed his poem twice with "G I Kooch" but did not date it. Despite intense archival research, the handwritten original of Vollenhove's poem could not be found; it is likely that it no longer exists (Pfeifer 2014: 66). Kooch suggests in the first lines of his poem that he wrote it during the storm. However, he could only have completed it after the storm, as he chronicles the aftermath of the disaster. Vollenhove, on the contrary, does not indicate when he wrote the poem.

### **Gerrit Jansz Kooch's view**

Gerrit Jansz Kooch's poem "The great storm of 1660" has the subheading "About the cock's flight and the cross' fall from the Jan Roodepoorts-Tower onto the notary's house." The rhyme scheme of the first part of the text starts with an alternate rhyme, continues with two consecutive couplets, and concludes with six alternate rhymes. At the end of his text, Kooch included a tail-rhyme stanza on the damage inflicted to Gerrit Steeman's house, who was his son-in-law. Kooch had lived together with his daughter Aeltje and her second husband, the notary Gerrit Steemann, in a house on the north side of Jan Roodepoortssteeg since 1657. They lived in an alley next to the Singel or Rounaanse Kai. Today their house has the address Torensteeg 8 in Amsterdam (van Eeghen 1966b: 3).

The family experienced the storm of 1660 together. They were not only eyewitnesses of the natural disaster that had occurred in the morning of 19th December 1660, but were also its victims: their house was damaged. Kooch begins to describe vividly the storm's severity in the first lines of his poem:

When water and air came  
to battle the earth and to ensure  
that about 100 great ships drifted onto  
the sand and banks of stream Texel  
and sank down to the bottom of the sea  
and a number of people died

the thunderstorm partly damaged our house  
I composed these verses to commemorate this day;  
the severest wind was early in the morning,  
before the day broke.

Kooch points out that he intended to write the poem “to commemorate this day” and he notes that the “severest wind” raged before the day broke. This means the storm began early in the morning but before dawn when it was still dark. Not only the noise of the strong wind, but also the fact that the storm occurred during darkness, must have been particularly frightening.

In the following lines Kooch depicts the horror the storm caused. People were scared, houses were robbed of their roofs, and ships were capsized. Damage to the isle Texel was extreme: “many houses were flattened to the ground” and “trees were blown down.” Kooch was in Amsterdam when the storm raged. He witnessed the natural disaster and describes the occurrence as follows: “It seemed as if air and earth became one.” Even the Ropoorts-Tower “had to bow the wind”: the cock was blown away and the cross fell on Steeman’s house. It broke the roof into pieces, the gable-chimney fell down with a crash and Kooch explains that he and his family were happy that no-one had to suffer “a worse trial.” Humorously, he explains that he was sitting together with his family under the cross (which was lying on the remaining roof) and he “[t]hought if the cross had to torment us, it was better on the house than in the house.” Steeman was married, Roman Catholic, and had no children. His circle of friends and acquaintances wondered and speculated about why such a devout and yet well-off man was childless. Would it not have been in his own interest to bequeath his name and possessions to his offspring? The reason for his childlessness remains unclear. During the storm the cross from the Ropoorts Tower—not the cock—fell directly onto Steeman’s house. Because of that, Joris de Wijse, who likewise was a notary, quickly composed the following verse:

The cross from Ropoorts Tower fell exactly onto Steeman’s house. Why? There are reasons for that. Because he [Steeman] loves the cross very much! But why wasn’t the cock blown there too? The cock did not want that because his [Steeman’s] cock did not want to crow.

There are two points of irony in these verses. On the one hand, the cross, which symbolises Christian belief and Steeman’s religious devoutness, is itself the object which damages his house. On the other hand, de Wijse comments on the cock, a symbol of fertility. The cock did not want to fall on Steeman’s house because “his [Steeman’s] cock did not want to crow.” This can be read such that de Wijse believed Steeman to be impotent. In what relation Steeman and de Wijse stood remains unclear. It is possible that they were involved in a legal battle or that they were rivals. However, we can trace back that de Wijse worked as Lodewijk van Alteren’s (1608-1657) bailiff and was involved in van Alteren’s immoral relationships. Although bailiffs were moral authorities and seen as role models, both



men were—independently of each other—in a sexual relationship with Clara de Graeu, a married woman (see Wagenaar 2011: 735).

De Wijse's verse spread immediately among high-class circles, and they teased Steeman a little. Kooch composed the following verses to stop them:

Don't scold because the cross  
fell on Steeman's house  
and the cock did not want to rest there;  
the cock does not accept his own kind,  
he shuns Steeman's house,  
because he flies away to other shores;  
although the cross broke the roof tiles  
while the cross rests upon the roof  
people live happily in the house.

Still, it seems Kooch and his family coped well. Kooch points out that only the roof—not the interior of the house—was damaged and that he and his kinsmen quickly returned to everyday life.

The cross fell down because it was very heavy. The cock flew away, no one knows where to. He stood loosely on the cross but was not tied to it. The cock flew away and was never found.

Kooch's explanations that the "cross fell down because it was very heavy", and that the cock did not "fl[y] away" because it "stood loosely on the cross but was not tied to it", are rational. Kooch offers neither religious nor allegoric interpretations. He might have done this to refute de Wijse's saucy symbolic interpretations. It remains unclear where the cock flew.

### **Joannis Vollenhove's view**

Joannis Vollenhove's poem about the severe storm of 1660 is entitled "About the terrible night storm [which occurred] in the winter month of the year 1660" and written in rhyming couplets. He starts his poem with a quote from the first book of Virgil's *Aeneid*: "Moved by the winds the waves drove the ships apart and destroyed them." In this quote, Vollenhove refers to a storm that Juno sent with the help of the wind god Aeolus to Aeneas, when he headed in the direction of Italy with the Trojan fleet. The fleet drifted apart because of the winds; only seven ships made it to Carthage's shore. Virgil highlights the destructive potential of strong winds. Choosing Virgil's *Aeneid* as an epigraph to his storm poem, reflects Vollenhove's classical education. Moreover, the epigraph is consistent with the poem, as both texts embrace common themes including divine intervention, *pietas* (meaning "duty", "religiosity", or "devotion"), and destructive forces of nature.

Vollenhove personified the winter storm ("Terrible night power, oh wind! How could you rage so terribly?"). Natural disasters—respectively nature in general—

were often personified in the Early Modern Period (see also a poem about the rockfall of the Salzburgian Mönchsberg in 1669 described by Hauer (2009: 78-79)). The personification of the winter storm can be conceived as a first step towards coming to terms with the calamity because it transforms the unintelligible calamity into something concrete. The latter enhances psychological processing of the events.

A fundamental issue of environmental history is how nature—through time—enters the picture of historical development. Is nature presented in a passive way or as a participating agent? Do we have to ascribe nature “agency?” In historical contexts “agency”—the ability to act—is mostly assigned only to humans (see Winiwarter and Knoll 2007: 131). I do not deal with the ontological question of whether nature “acts” in this paper. Nevertheless, it is interesting, from a cultural historical point of view, that Vollenhove seems to ascribe the storm agency because he asks the storm directly the indicting question “how could you rage so terribly?” Intentions are usually the basis of actions. Vollenhove not only asks the storm which intentions underlie his action, but also why he raged so terribly: “Why have you increased so furiously?” And also:

What incited your displeasure so wretchedly,  
that you seemed to stir up all your gusts to our ruin;  
that you sank a ton of gold into the sea;  
with keels drilled into the bottom [of the sea],  
that you plundered and ruined the stock market?

It seems that Vollenhove cannot understand why the wind, which he describes as “a friend of our country’s commerce,” could transform into a violent storm and by doing so into an opponent. The Netherlands of the 17th century were a nation of sailors and tradesmen, and therefore dependent on favourable wind. Vollenhove notes:

In all the corners of this world  
where our ships buy the world and sell it again.  
From coast to coast, where Holland’s flag  
sails past the sun and the day  
to fatten our sea-lion  
with the earnings from so many regions.

Here, “sea-lion” refers symbolically to the Netherlands and the Dutch economy. The national symbol of the Netherlands is a lion. The “sea” refers here to seafaring; the “lion” is regarded as the king of animals and represents energy, power, and strength. Vollenhove attributes these qualities to the Netherlands. He seems to view the storm as a national attack. The poet describes a two-sided relationship between the Netherlands and the wind, consisting of a positive side (trade) and a negative one (devastation).

Vollenhove seems to personify the event to illustrate the extent and impact of the calamity. He also states:

This all shattered the merchant's hopes.  
Which guarantor, which maritime insurance  
will cover the damage?

Vollenhove is unsure about how the storm can be dealt with. Maritime insurance was quite common in 1660. Claims could be asserted in seafaring, but damages over land were not normally reimbursed (see Go 2009).

The isle Texel usually acted as a buffer against water and wind; it shielded the rest of the country. However, the isle could not stop the storm of 1660. Vollenhove describes this as follows: “[The isle] Texel now can't fend off threads: the country's throat is open.” An “open throat” prompts a picture which metaphorically associates the form of the Netherlands with the sagittal section of a scull: The Zuiderzee represents the throat. Such a metaphor might have easily been drawn from anatomical works as by Andreas Vesalius.

Vollenhove personifies the three most economically important rivers of the Netherlands: Maas, Waal, and IJssel. He also considers them to be victims. The storm shook them out of their dream and the poet accusingly asks:

Where can you house all the water, shy rivers,  
since you are used to pouring softly your network of streams  
from your full water pitcher  
into the swollen ocean's belly?  
This plague of the sea comes to torment your streams,  
to conquer them and to chase them from their beds.

Vollenhove presumably decided to work with the rhetorical device of personification to show that the storm not only brought misery to men, but also to nature itself. This rhetorical device serves to mentally cope with the impact of the storm. They now had a scapegoat. The damage the storm had caused was enormous: parts of the country were flooded and the transport networks via rivers were made impassable. Dams and pile works could not prevent this. Whole dikes were “wiped away,” ships sank:

The North and South Sea was full of wrecks,  
masts snapped off, crates and packages,  
and money and property were hurled around,  
and washed ashore along the lifeless coasts  
together with their owners  
who had remained at that place. [...]  
The sea rages and goes its way. [...]  
Yes, the sea [...]  
it howls, and foams, and consumes, and rapes.

Vollenhove asks:

Are wind and weather possessed by hate,  
bitterly furious with our conceit?  
And the wild power of the sea rages  
to avenge itself, it knows how to gain ground,  
in its passage and in its roaring. [...]  
Does the sea seek to repay the Dutch for the  
harm they did by altering the laws of nature without shame?

The poet refers here to dike building. Dikes were used to protect low-lying areas from inundation. Moreover, the Dutch tried to reclaim more and more land. They had altered the borders between land and sea. Vollenhove felt that the Dutch people had lost all respect for nature: his rhetorical questions suggest that he believed this to be the cause of the storm. Vollenhove works with the stylistic device of exaggeration to show the extent of the catastrophe:

In the same way the golf boils among the Indians,  
from the raging of the fierce hurricanes:  
the roaring of the sea, which chases every single ship  
onto banks and cliffs.  
Thus plunged the storm from the clouds,  
so that Latium, with its stones, buildings and peoples,  
and all Sicily were torn apart,  
embattled by the power of two seas.

Neither “the golf among the Indians” nor Sicily were hit by the storm of 1660. To this day Sicily was not “torn apart” by a natural disaster. Vollenhove most likely wants to show with the help of exaggerations that throughout the world storms can destroy countries or tracts of land and their people. He asks: “Whose hair is not bristling in mounds, when the thunderstorm is blowing in?” And he explains that stones were “shattered to dust by the wind,” buildings were torn down and trees uprooted. Furthermore, he explains

“The sun went up more slowly as it became day  
on its trembling wagon  
became very pale in its face.”

These lines show that not only the sun’s but also the Dutch people’s self-assurance was shattered, also with respect to the destruction the storm had caused. Vollenhove notes “the sun took fright and was shy in the light” and then focuses on the storm’s aftermath:

the hand-wringing, fishing for people,  
bellowing of the voiceless cattle,  
the villages submerged in a stormy sea  
drowned pasture by pasture,  
as if the world had sunk away.

The storm victims were weakened (by hunger), soaked to the skin, and stiff from the cold. In order to save their skin they had fled up trees and onto roofs.

Vollenhove addresses the night directly:

Oh night, which grants no beds  
their night's rest, too woeful and anxious,  
we will remember you many a year.

Normally, the night is as a period of rest from the exertions of the day. This night was an exception and full of horrors. That is why, as Vollenhove explains, it will be remembered for a long time.

Singular natural disasters were often interpreted in a symbolic-theological manner in the Early Modern Period, e.g. as God's punishment. Concerning the cause of the storm of 1660, however, Vollenhove, leaves it open who or what—he thinks—initiated the storm. God is only mentioned in the last stanzas when the poet addresses the grassland and free region, symbols standing for the Netherlands:

Blessed grasslands, free region,  
do not be too proud now of walls or fortresses  
or of houses built high up in the sky;  
even if gold is pouring onto your lap,  
even if all seas and waters  
cheer your fleets, so that they ring with laughter,  
even if you—who is well versed with each stream and canal—look in others' maps;  
and fear neither water curse nor robbers,  
a wind, God's breath, is stronger than you.

Vollenhove directs his last lines towards the Dutch. He warns them not to be too proud and points out that they are successful, good with their hands, affluent, and fearless. God, however, is stronger than they are. These lines can also be read as a preventive management strategy. Vollenhove seems to assume that a change in behaviour can avoid further damage and minimise the risk of future catastrophes. In previous lines he refers to the Dutch's arrogance, their plan to subdue the nature and to claim more and more land. It seems that Vollenhove intends to encourage the Dutch nation with his poem to think over their interaction with nature.

### **Concluding remarks**

Comparing the two poems, we see that Vollenhove seems to ascribe the storm a personality he does not understand, whereas Kooch describes the storm in a rather matter-of-fact and demystified way. Vollenhove perceives the storm as an acting agent and tries to conceive it and its severity. As a theologian and priest he knows how to hint at the classics and incorporated spiritual aspects in his poem by including various personifications in his poetics. Vollenhove's poem can be seen as a reminder to people to live a pious life, and by doing so, to attempt to prevent future calamities.

By contrast, the seaman and merchant Kooch describes the storm damages and the feud between his son-in-law and the notary Joris de Wijse, in which he comes to his son-in-law's defence. Construction of his son-in-law's defence, as well as coming to terms with the storm, were important motivations for writing the poem. Moreover, these motives explain the main functions of the poem: defending his son-in-law and coping with the severe storm. Unlike Vollenhove's, Kooch's view is not spiritual but rather secular.

Both Vollenhove and Kooch describe the storm damages. Their description of the storm damages makes it possible to classify the storm with the help of a modern meteorological wind scale, the Fujita scale. It ranges from F0 to F5, which corresponds to 64–116km/h and 419–512km/h, respectively. This scale was designed for classifying tornadoes, but it is also used in standard meteorological procedures to estimate wind speed. According to the damage indicators of the 1660 storm, the wind speed was most likely in the upper F1 range, around 180km/h (Pfeifer 2014: 65).

Finally, it should be mentioned that December 1660 had been a stormy month outside the Netherlands. Johann Conrad Knauth (1722), for example, describes a severe storm in the *Alt Zellischen Chroniken*. It raged in Roßwein near Nossen (administrative district Meißen, Germany) on the second Sunday of Advent and damaged churches, houses, and barns. Moreover, it destroyed gardens and uprooted trees. Knauth states that he had heard that other parts of Germany had also been affected by that storm in December 1660. Christian Lehmann (1747) reports on a severe storm which had raged in several places in Saxony also on the second Sunday of Advent in this year. Churches, houses, barns, and stables were destroyed, more than 100 sheep were battered to death, and approximately 2,000 trees were uprooted. Kooch and Vollenhove do not refer to these calamities.

Apart from their repositories of memory, the severe storm of 1660 has not entered into the cultural memory of the Dutch people. Until now, Torensteg 8 in Amsterdam boasts no commemorative plaque to Kooch and/or the storm damages.

The storm of 1660 was not the most severe in Dutch history. In 1674, for example, a severe storm raged over the Netherlands, which tore down parts of the city of Utrecht, including the nave of the cathedral. With the help of storm damage descriptions in the source material, we can now say that the storm of 1674 most likely obtained a level of F2 or F3, involving wind-speeds ranging from 184–256km/h to 256–335km/h, respectively (Pfeifer 2014: 122). It was thus more severe than the storm of 1660. The cathedral's nave has never been rebuilt. Gerrit Jansz Kooch, who was 76 years old at that time, wrote a poem consisting of 139 stanzas about this storm. Interestingly, Kooch refers to the storm of 1660 in the seventh stanza (my translation):

When Ropoorts-Tower's weather cock—driven by the wind—had begun to fly and  
the strong winds threw the cross from above onto our house, it seemed that we  
would lose our lives.



The fact that Kooch refers again to the weather cock, the damage done to his house, and to the experienced fear of dying indicates that these were most significant aspects of the storm of 1660 for him. They had been etched on his memory.

Both poems by Kooch and Vollenhove demonstrate impressively how they perceived the severe storm of 1660. Consistent with their different backgrounds, the authors produced secular and spiritual disaster narratives, respectively. Thereby, both texts illustrate early modern representations of a natural disaster. Finally, work on historical representations of natural disasters in general helps to remember previously forgotten, or neglected, major events of the past, and thereby allows them to re-enter cultural memory. This article is a first step towards re-remembering the severe storm of 1660.

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## Appendix: The two poems

### Gerrit Jansz Kooch: Grootte sto[r]m 1660

*Van de haene vlucht en de kruijs val van Jan roode poorts tooren opt huys van de notaris  
G. Steeman*

*Als waeter ende Lucht het aertrijck quam bestrijen  
en op de texsel stroom wel hondert scheepen groot  
op sant of plaeten dreef oock na de grond dé gyen  
en over groot getal van menschen bleeven doot  
en dat t on weer ons huijs ten deele oock quam krenke  
steld ick dit vaers int schrift om op dien dach te denke  
den hartsten wint die men doen sach  
was smorgens vroech recht  
voor den dach*

*decembers negenthiende dach  
van sestien hondertsestich Jaren  
een grooten storm men doen sach  
dit meenich mens brocht in beswaren  
veel huijsen van haer dack ontbloot  
veel scheepen voor de stadt omwayde  
de scha int texsel over groot  
veel weeu en weesen dat beschreijde  
veel schoorstenen vielen ter neer  
verschajde huysen plat ter aerde  
veel boomen waeijden oock om veer  
t scheen lucht en aert tsamen vergaerde  
al stont de roopoorts tooren hooch  
de wint die deed het opperst bucken  
men weet niet waer de haen al vlooch  
het kruijs dat brack ons dack an stucken  
de geevel schoorsteen met gedruijs  
quam alles neer als donder slagen  
daer saeten wij doen ondert kruijs  
t waer goet leet niemant swaerder plaegen  
Ick was ontstelt in mijn gemoet  
maer doen ick mijn wel ginck versinnen  
ick docht alst kruijs ons quellen moet  
t is beeter opt huijs als daer binnen*

G[.] I[.] Kooch

*het kruijs van de tooren op de notaris gerrit stemans huijs gevalle sijnde en hij  
rooms gesint geen kinderen hebbende en smorgen op het stadt huijs koomende  
maeckte Joris de Wijse meede notaris metter vlucht dit vaersie*

*'t kruijs van Jan roopoorts tooren vil juijst op Steemans huijs waer om dat heeft sijn  
reen want hij hout veel vant kruijs maer waer om vil de haen daar oock niet op door  
t waeijen de haen en wou niet want sijn haen en wou niet kraeijen*

*also dit vaersie datelijck wat ginck onder al de prachte luys daer meede sij hem wat  
te quellen namen so hebben hem tot syn verschooning geassisteert met dit onder  
staende vaersie*

*Aen de quel geesten van de haene vlucht en kruijs val*

*spot niet om dat het kruijs  
neer viel op Steemans huijs  
de haen daer niet wou rusten  
de haen geen weerga lijdt  
dies Steemans huijs hij mijdt  
en vliecht naer andre kusten  
oft kruijs de pannen brack  
daert kruys blijft buijten t dack  
leeft men in huijs met lusten*

*T kruijs is gevallen want het was heel swear de haen is gevlogen men weet niet waer  
hij stont los opt kruijs en was ongebonden hij vlooch wech en is niet weer gevonden*

*G[.] I[.] Kooch*

## **Gerrit Jansz Kooch: The great storm of 1660**

(English translation by the author)

About the cock's flight and the cross' fall from the Jan Roodepoorts Tower onto the notary's house

When water and air came  
to battle the earth and to ensure  
that about 100 great ships drifted onto  
the sand and banks of stream Texel  
and sank down to the bottom of the sea  
and a number of people died  
the thunderstorm partly damaged our house  
I composed these verses to commemorate this day;  
the severest wind

was early in the morning,  
before the day broke.

On the nineteenth day of December  
of the year sixteen hundred and sixty  
people saw a great storm  
that got some of them in dire straits,

it robbed many houses of their roofs,  
toppled many ships before the city  
the damage on [the isle] Texel was extreme  
many widows and orphans mourned  
many chimneys fell down  
many houses were flattened to the ground  
trees were blown down  
Even if the Ropoorts-Tower remained aloft  
it too had to bow to the wind  
none knows where the cock flew  
the cross—it broke our roof into pieces—  
the gable-chimney fell with a crash  
there we sat under the cross  
it was good that no-one had to suffer a worse trial  
I was shocked  
then I thought it over.  
I thought if the cross had to torment us,  
it was better on the house  
than in the house.

G. I. Kooch

Because the cross had fallen from the towers onto notary Gerrit Steeman's house, who was Roman Catholic and had no children, Joris de Wisje, who likewise was a notary, quickly composed this little verse after Steeman had come to the town hall that morning.

The cross from Ropoorts Tower fell exactly onto Steeman's house. Why? There are reasons for that. Because he [Steeman] loves the cross very much! But why wasn't the cock blown there too? The cock did not want that because his [Steeman's] cock did not want to crow.

So this verse spread immediately among the better circles, which is why they teased him a little. To help him we have composed the following verse.

To the tormentors about the flight of the cock and the cross' fall

Don't scold because the cross  
fell on Steeman's house  
and the cock did not want to rest there;  
the cock does not accept his own kind,  
he shuns Steeman's house,  
because he flies away to other shores;  
although the cross broke the roof tiles  
while the cross rests upon the roof  
people live happily in the house.



The cross fell down because it was very heavy. The cock flew away, no one knows where to. He stood loosely on the cross but was not tied to it. The cock flew away and was never found.

G. I. Kooch

## Joannis Vollenhove: Op den Gruwzamen Nachtstorm

*In Wintermaant des jaars 1660.*

*Disjecitque rates, evertitque æquora ventis.*

*Afgrylsyk nachtgewelt, o wint!  
Hoe valtge aan 't stormen dus ontzint?  
Hoe dus verbolgen opgesteken  
Uit den Noortwesten, en die streken?  
's Lancs koopfortuin had u te vriend  
Met een' voorwint en spoet gedient  
Van alle winden, waar ons zeilen  
De werelt kopen en weer veilen.  
Van kust tot kust, en Hollants vlag  
De zon voorby zeilt en den dag,  
Om onzen zeeleew vet te mesten  
Met d' inkomst van zo veel gewesten:  
Toen quam uw gunst al 't lant te sta.  
Wat hitste nu deze ongena  
Zo schendig op; daarge al uw buien  
Tot ons bederf scheent op te ruien;  
Daar tonnen gouts, in zee gesmoort,  
Met kielen in den gront geboort,  
De Beurs uitschudden en bederven?  
Dit slaat des koopmans hoop aan scherven.  
Wat borg, wat zeeverzekeraar  
Staat voor dees shade in? geen gevaar  
Stopt Tessel nu: 's lants keel staat open.  
Maar och een vloot, eerze uit kon lopen,  
Legt in den schoot van 't Vrye Lant  
Vergaan, verdreven en gestrant.  
De Noort- en Zuidtzeë dryft vol wrakken,  
Gekerfde masten, kist en pakken,  
En gelt en goet, dat onder een,  
Langs al de dootsche kusten heen,  
Geslingert, los komt aangedreven,  
Met eigenaars met al gebleven.  
O Maas, en Waal, en Ysselstroom,  
Wat nachtstorm wekte u in den droom?  
Waar bergtge al 't nat, verlege vlieten,  
Gewoon uw stroomnat zacht te gieten*

*Uit uwe volle waterkruik  
In 's oceaans gezwollen buik?  
Dees zeeplaag komt uw dromen plagen,  
Veroveren, en ten bedde uit jagen.  
Uw vruchtbare akkers leggen blank.  
De zeeplas bruischt, en gaat zyn' gangk.  
(Geen dam noch paalwerk houdt nu tegen)  
Ja gaat met hele dyken vegen,  
En huilt, en schuimt, en scheyt, en sloopst.  
Waar 't vetsfte kleilant onder loopt.  
Zo ziedt de golf by d' Indianen,  
Op 't bulderen der dolle orkanen:  
Een zeedruis, dat schip by schip  
Te berde jaagt op bank en klip.  
Zo stortte 't onweer uit de wolken,  
Dat Latium, met steen en volken,  
En gansch Sicilje scheurt van een,  
Met kracht bevochten van twee zeen.  
Zyn weer en wint, van haar bezeten,  
Op ons verwaantsfceil fel gebeten?  
En woedt het woeste zeegewelt,  
Om zich te wreken, en weet velt  
Te winnen, in zyn' vaart en bruizen,  
Te no gestuit met magt van sluizen,  
Met wint en molens uitgemaalt?  
En poogt de zee heur scha betaalt  
Te zetten aan de Nederlanderen,  
Die haar natuurwet stout veranderen?  
Noch schut geen zeescha 't lantverdriet.  
Wien ryzen al de haren niet  
Te berge, ais 't onweer aan komt snuiven,  
Dat stenen aan hun stof verstuiven,  
Dat want en gevelspits en dak  
Van boven tuimelt, krak op krak;  
Geen' boom alleen rukt van zyn' wortel,  
Maar kerk en toren klinkt te mortel;  
En trest den aardboom met een' schrik,  
Als voor den jongsten ogenblik?  
De zon rees trager op in 't dagen  
Op haren sidderenden wagen,  
Gedootverft in heur aangezicht:  
De zon verschrikte en schroomde in 't licht  
t'Aanschouwen zo veel jammernissen;  
Dat handenwringen, menschevissen,  
  
Dat loejen van het stomme vee,  
De dorpen in een bare zee  
Gedompelt, wei by wei verdronken,*

*Als waar de werelt wechgezonden;  
Den Iantzaat, styf van kou, doormat,  
Van honger flaw, van arbeit mat,  
Op dak, of boom, om zich te redden,  
Gevlucht. O nacht, die gene bedden,  
Hun nachtrust gunt, te droef en bang,  
Gy zult ons heugen jaren lang.  
O stormwint, die elx hart vervoerde,  
En zo verwoedt uw vinnen roerde,  
Uw les quam ons te dier te staan,  
Om haastig in den wint te slaan.  
Gezegent weiland, Vry Geweste,  
Nu draag geen' moedt op muur, of veste,  
Of huizen, hemelhoog gebout;  
Al regent u de schoot vol gout;  
Al juichen alle zeen en wateren  
Uw vloten tegen, datze schateren;  
Al zietge, op ieder stroom en vaart  
Bedreven, andren in de kaart;  
En vreest voor watervloek, noch rover.  
Een wint, Godts adem, mag u over (I).*

### **Joannis Vollenhove: About the terrible night storm (1660)**

(English translation by the author)

About the terrible night storm [which occurred] in the winter month of the year 1660.

Moved by the winds the waves drove the ships apart and destroyed them.  
Terrible night power, oh wind!  
How could you rage so terribly?  
Why have you—[coming] from north-west and these regions—  
increased so furiously?  
You [wind] had been a friend of our country's commerce,  
served by a favourable breeze and haste.  
In all the corners of this world  
where our ships buy the world and sell it again.  
From coast to coast, where Holland's flag  
sails past the sun and the day  
to fatten our sea-lion  
with the earnings from so many regions:  
then your favours for the whole country came to an end.  
What incited your displeasure so wretchedly,  
that you seemed to stir up all your gusts to our ruin;  
that you sank a ton of gold into the sea;  
with keels drilled into the bottom [of the sea],  
that you plundered and ruined the stock market?

This all shattered the merchant's hopes.  
Which guarantor, which maritime insurance  
will cover the damage? No chance of that. [The isle]  
Texel now can't fend off threads: the country's throat is open.  
But, alas, before a fleet could sail  
it lay in the free country's bosom  
bygone, expelled, stranded.  
The North and South Sea was full of wrecks,  
masts snapped off, crates and packages,  
and money and property were hurled around,  
and washed ashore along the lifeless coasts  
together with their owners  
who had remained at that place.  
Oh Maas, oh Waal, oh IJsselstrom [these are rivers]  
which night storm awoke you from your dream?  
Where can you house all the water, shy rivers,  
since you are used to pouring softly your network of streams  
from your full water pitcher  
into the swollen ocean's belly?  
This plague of the sea comes to torment your streams,  
to conquer them and to chase them from their beds.  
Your fertile fields are flooded.  
The sea rages and goes its way.  
(No dam or piles can hinder it now)  
Yes, the sea wiped away whole dikes,  
it howls, and foams, and consumes, and rapes.  
There the rich clay-land is flooded.  
In the same way the golf boils among the Indians,  
from the raging of the fierce hurricanes:  
the roaring of the sea, which chases every single ship  
onto banks and cliffs.  
Thus plunged the storm from the clouds,  
so that Latium, with its stones, buildings and peoples,  
and all Sicily were torn apart,  
embattled by the power of two seas.  
Are wind and weather possessed by hate,  
bitterly furious with our conceit?  
And the wild power of the sea rages  
to avenge itself, it knows how to gain ground,  
in its passage and in its roaring.  
In such great distress will it be stopped  
by the might of locks, of windmills.  
Does the sea seek to repay the Dutch for the  
harm they did by altering the laws of nature without shame?  
And still no vessel can contain the country's distress.  
Whose hair is not bristling in mounds,  
when the thunderstorm is blowing in,

stones are shattered to dust [by the wind],  
walls, gable tops, and roofs  
plunge down from above, breaking and crashing;  
not only trees tear at their roots,  
but also churches and towers shatter;  
and hit the ground with horror,  
as if at the end of the world?  
The sun went up more slowly as it became day  
on its trembling wagon  
became very pale in its face:  
the sun took fright and was shy in the light  
upon seeing so many misfortunes;  
the hand-wringing, fishing for people,  
bellowing of the voiceless cattle,  
the villages submerged in a stormy sea  
drowned pasture by pasture,  
as if the world had sunk away;  
denizens, stiff from the cold, soaked [to the skin],  
weakened by hunger, tired of work,  
fled onto the roof or tree,  
to save their skin. Oh night, which grants no beds  
their night's rest, too woeful and anxious,  
we will remember you many a year.  
Oh stormwind, who seduced everyone's heart,  
and so madly moved your flippers  
we had to pay dearly for your lesson,  
to get rid of it quickly.  
Blessed grasslands, free region,  
do not be too proud now of walls or fortresses  
or of houses built high up in the sky;  
even if gold is pouring onto your lap,  
even if all seas and waters  
cheer your fleets, so that they ring with laughter,  
even if you—who is well versed with each stream and canal—  
look in others' maps;  
and fear neither water curse nor robbers,  
a wind, God's breath, is stronger than you

# Avatar in the Amazon – Narratives of Cultural Conversion and Environmental Salvation between Cultural Theory and Popular Culture

By John Ødemark

## Abstract

In 2010 the *New York Times* reported that ‘[t]ribes of Amazon Find an Ally Out of “Avatar”’, James Cameron. The alliance was against the building of Belo Monte, a hydroelectric-dam in the Xingu River in Brazil. Cameron made a documentary about Belo Monte, *A Message from Pandora*. Here he states that *Avatar* becomes real in the struggle against the dam. This appears to confirm U. K. Heise’s observation that the ‘Amazon rainforest has long functioned as a complex symbol of exotic natural abundance, global ecological connectedness, and environmental crisis’. This construal, however, downplays the ‘symbols’ cultural components. In this article I show that the image of an ecological ‘rainforest Indian’ and a particular kind of culture constitutes a crucial part of the Amazon as ‘a complex’ cross-disciplinary ‘symbol’. Firstly, I examine how an Amazonian topology (closeness to nature, natural cultures) is both a product of an interdisciplinary history, and a place to speak from for ethno-political activist. Next I analyze how Amazonian cultures have been turned into ‘ethnological isolates’ representing a set of grand theoretical problems in anthropology, not least concerning the nature/culture-distinction, and how environmentalism has deployed the same topology. Finally I examine how *Avatar* and one of its cinematic intertexts, John Boorman’s *The Emerald Forest*, is used as a model to understand the struggle over the Belo Monte. In a paradoxical way the symbolic power of indigenous people in ecological matters here appears to be dependent upon a non-relation, and a reestablishment of clear cut cultural boundaries, where ‘the tribal’ is also associated with the human past. Disturbingly such symbolic exportation of solutions is consonant with current exportations of the solution of ecological problems to ‘other places’.

**Keywords:** Avatar, Amazonia, Environmentalism, Narrative and Indigeneity, Cultural Theory



The Amazon is home to hundreds of indigenous communities with traditions of stewardship dating back thousands of years. And yet the Amazon serves an even greater purpose for all life on Earth: it is the living heart of our planet and the heat pump of our global weather system. Without it, our chances of stopping global climate chaos are zero. *For no reason less than the survival of our species*, we need your support to protect the Amazon today.

Amazon Watch (2013a)

## Introduction

In April 2010 the *New York Times* reported that '[t]ribes of Amazon Find an Ally Out of "Avatar"' (New York Times 10/4/2010). The alliance in question was formed between James Cameron, the director of *Avatar*, and indigenous people against the building of Belo Monte, a hydroelectric-dam in the Xingu River, a tributary to the Amazon in the state of Pará, Brazil. Opponents of Belo Monte identify damaging cultural and ecological consequences; deforestation and flooding threatens local biodiversity, as well as the global climate due to massive emission of methane. Moreover, the forced displacement of about 20 000 people will have severe consequences for indigenous cultures (Hall et al 2012).

Cameron made a documentary about his journey to the Xingu to fight the dam, *A Message from Pandora* (2010). Here he asserts that *Avatar* (2009) becomes real in the struggle against the Belo Monte. Further, the film shows how the director and leading actor joins indigenous leaders and 'lives *Avatar*'. For instance, we see how Sheyla Juruna, a leader of the Juruna people, paints Cameron's face and greets him as 'our new warrior' – a sign of alliance and cross-cultural collaboration eminently readable in global public culture.

Such co-authored symbolic actions appear to confirm Ursula K. Heise's observation that the

Amazon rainforest has long functioned as a complex symbol of exotic natural abundance, global ecological connectedness, and environmental crisis in the European and North American public spheres (2008: 91).

Yet Heise's construal downplays a crucial component of the 'complexity' of this 'symbol'; its underlying assumptions about 'tribal culture', and how it is constituted by acts of cross-cultural collaborations based on such assumptions. In this article I shall show that the image of the 'rainforest Indian' and a particular kind of culture constitutes a crucial part of the Amazon as 'a complex' and cross-disciplinary 'symbol'. In the words of Stephen Nugent, the 'iconic forest Indian [...] embody the

*anti-history* of the *ancient tribal isolate* yet also exemplify the survivor of a crushing set of *historical transformations*' (2007: 16, my emphasis). Thus, this iconic figure is placed outside history, in a cultural 'isolate', while he/she simultaneously is a 'survivor' of history (cf. Ramos 1998).

My aim is to examine some salient, cultural and human aspects of the 'complex symbol', and how it is articulated with the paradoxical topology and temporality described by Nugent. I shall be concerned with how different discourses converge around 'the rainforest Indian' and his/her construal of nature, and how particular notions of cultural place and time are mobilized. My main focus will be upon how notions of 'global ecological connectedness' is constructed as a *symbolon* in the etymological sense of the word,<sup>1</sup> namely a token of an alliance, a bond, between 'local' men in the Amazon and 'global humanity', and how certain notions of culture underpin such alliances between 'local men' and the *Anthropos*.

In environmentalist deployments of the 'symbol' Amazonians are construed as local forest keepers for global humanity. In the language of the NGO *Amazon Watch*, for instance, indigenous people are both an instrument for 'our' salvation; as 'the stewards of our planetary life-support systems' they play a global environmental role, and a source of ecological knowledge associated with ancient and indigenous knowledge that 'we' have forgotten: 'The indigenous peoples of the Amazon have long known this simple truth: what we do to the planet we do to ourselves' (Amazon Watch 2014).

This topology (ancient and/or alternative knowledge is found 'there') is also in play in recent cultural theory, not least in attempts to dismantle what is construed as the Euro- and anthropocentric assumptions underpinning the modern nature/culture-distinction. Amazonian perspectivism has, for instance, been a major influence behind the 'so-called ontological turns' (Halbmayer 2012: 9). If based on a different cultural theory than environmentalist 'essentialism', the topology is surprisingly similar; real/new knowledge about nature and culture is to be found, there, in a 'tribal isolate' on the outside of historical time.

A brief tour through the intellectual terrain and the issues associated with perspectivism as a cross-cultural alternative to 'our' notions of nature and culture both illustrates the power of the topology I am concerned with, its 'survival' in high theory, and it offers a set of categories that can be used to analyze the notion of the 'indigenous isolate'. Vassos Argyrou claims that environmentalism has produced a shift in cultural interpretation. He asserts that the exemplary anthropological problem was how to interpret 'natives'' disregard for the demarcation that separates nature, culture and the supernatural – without falling back on evolutionary ethnocentrism (2005: 64-65). The solution was to produce thick descriptions in which the informant's statements about animistic nature were converted into symbolic statements about society (magic was 'really' a social-symbolic event, not an attempt to cause changes in nature). Thus, the demarcation between nature and culture is re-

stored in the anthropological discourse, and the ‘native’ is freed of charges of making category mistakes (constructing an anthropomorphic nature). If, however, it is admitted that indigenous peoples have real insight in ecology, this kind of cultural translation becomes redundant. Now, natives ‘mean what they say and much of what they say is true’ (ibid: 65). As ecology the ontology of others can be taken at face value. Nevertheless, Argyrou claims, the ‘green primitive’ is still seen as a link to past forms of thought that ‘we’ have forgotten: ‘[n]ative populations are once again used as key building blocks in the latest Western constructs – the environmentalist vision of the world’ (ibid: 72).

Amazonian perspectivism could be seen as a case in point. According to Eduardo Viveiros de Castro, its main advocate, Western multiculturalism – i.e. the assumption that the world consist of different cultures that construe the same nature differently, the objective world of the natural sciences – is reversed in Amazonian cosmology. Here the original state of all beings is culture, not nature. All beings have soul and share the same cultural project, values and categories; they just perceive their external bodily shape (nature) differently. While the Jaguar may seem (to us) to be sipping the blood of his prey, he is ‘really’, from his own perspective drinking manioc bear. Thus multiculturalism is turned into multi-naturalism. If we turn to one of the ethnographic influences behind Amazonian perspectivism, Kai Årheim’s ‘Ecosofía Makuna’, we actually find that the anthropological and the environmental registers are fused. According to Årheim, the ‘integrated system of ideas’ of the Makuna and the ‘values and practices’ underpinning it, constitutes a ‘shamanistic ecosophy” that is comparable to the eco-philosophy of Arne Næss. This is so because both ‘systems’ invest nature with value (Årheim 1993: 122). Therefore, the shamanistic eco-philosophy, found ‘elsewhere’, provides a lesson in sustainable living for the secular and industrialized world (ibid).

Orin Starn has observed that perspectivism is based upon ‘the idea of discrete and bounded cultures’, along with ‘the treatment of “other” cultures as a kind of laboratory’ and ‘the complete absence of any reference to history’ (2012: 193-94). Moreover, Alcida Ramos has attributed this a-historic essentialism to an heritage from structuralism: ‘perspectivism replicates structuralism [...] without the latter’s ambitious quest to arrive at a universal human mind frame’ (2012: 483). Not least this is due to the fact that perspectivism is based upon a structural comparison of distinct cultural wholes, a cross-cultural topology, that turns out to be perfect inversions of each other in respect to how they construe the nature/culture-relation, the key distinction in ‘high-structuralism’ (Turner 2009).

Despite the absence of a concern with the history and the networks behind the production of this global comparison between Western and Amerindian ontologies, Bruno Latour views Amazonian perspectivism as a ‘bomb’ undermining the cleavage he associates with the modern demarcation of the relation between nature and culture. Moreover, Latour praises perspectivism as the beginning of ‘a bright new period of flourishing [...] for [...] anthropology’, and relates this to a situation of

ecological peril: the bomb is about to go off ‘now that nature has shifted from being a resource to become a highly contested topic, just at the time [...] when ecological crisis [...] has reopened the debate that ‘naturalism’ had tried prematurely to close (2009: 2). In a time of ecological crisis, then, there is an Amazonian foreshadowing of a rupture with ‘the modern constitution’ (parallel to the one taking place in theory). In this ‘constitution’ science is deemed not to be a social product but to be derived from a sphere of nature that existed apart from humans. This demarcation, however, is merely a fact of theory. If we turn to socio-cultural practice, we find processes of translation and mediation that constantly interlink the two domains; all objects are essentially nature/culture-hybrids. These mediations are further balanced by processes of purification that aim to clean up categorical confusions by re-establishing the borders between autonomous nature and the human products of culture. In our context it is highly relevant that the modern dichotomy of nature and culture lies behind the asymmetrical distinction between ‘us’ and ‘them’. Thus, while we shall be critical to the clear-cut topology that enables Latour to prioritize the ‘hybrid’, he also furnishes us with a workable description of the indigenous as a projection or inversion of the ‘ideal self’ of the ‘moderns’:

In order to understand the Great Divide between Us and Them, we have to go back to that other Great Divide, between humans and nonhumans [...]. In effect, *the first is the exportation of the second*. We Westerners cannot be one culture among others, since we also mobilize Nature. We do not mobilize an image or symbolic representation of Nature, the way other societies do, but Nature as it is [...] (1993: 97).

It is this export/import-system, then, that creates the anthropological object, cultures that do not uphold the division between nature and culture. Moreover, we could also say that it also creates the need for the importation of cultural wholeness and ecological salvation, or ‘bombs’, imported from other places. Besides, there is also a long history of mobilizations of ‘traditional cultures’ to establish symbolic reconciliation between nature and culture in the aesthetic realm (*Avatar* being a late case in point). Richard Bauman and Charles Briggs have been concerned with such mediation. They argue that

Latour’s formulation [...] left out two of the key constructs that make modernity work and make it precarious! We can refer to them in short hand as language and tradition (2003: 5).

According to these authors, the textualization of oral culture and tradition played a key role in the construction of modernity (2003, cf. Grossberg 2010: 88-89). The textualization of ‘others’, however, they explained with reference to Latour’s notion of mediation and purification: Texts accounting for ‘pure, traditional cultures’ had to be cleansed for traces of the cross-cultural contact that were their empirical enabling condition, so that a pure ‘other’ could be represented.

In the following I examine such processes of cultural mediation and purification between nature and culture, tradition and modernity, in different discourses and

cultural genres. I first examine how a shared Amazonian topology (closeness to nature, natural cultures) is both a product of an interdisciplinary history, and a place to speak from for ethno-political activist. Next I examine the manner in which Amazonian cultures have been turned into metonyms for a set of grand theoretical problems in anthropology, not least concerning the nature/culture-distinction. Finally I return to *A Message from Pandora* and examine the use of *Avatar* as a narrative model and metaphor to understand the Belo Monte case. *Avatar* quotes John Boorman's *The Emerald Forest* (1985), filmed in the Xingu and dealing with the conflict between ecologically rooted cultures and techno-industrial modernization. In a paradoxical way, then, the symbolic power of the eco-cultural bond here appears to be dependent upon a non-relation, and a reestablishment of clear cut cultural boundaries, where 'the tribal' is also associated with the human past. Disturbingly such symbolic topographies are consonant with current exportations of the solution of ecological problems to 'other places' – an exportation that makes possible the continuation of "our way of life, for instance through a carbon capitalism often rejected by indigenous peoples (e.g. *The Amazon fund*).

### **Cultural Topology and Amazonian Ecology**

Marilyn Strathern (1991) has suggested that particular culture areas are transformed into common places where particular research topics must be dealt with by anthropologists (e.g. Australia= kinship). In line with this we could say that Indigenous Amazonia has served as a topos for the inquiry of the nature/culture-distinction. Not least, this was a consequence of structural anthropology and, as sketched above, the work on Amazonian perspectivism reworks an old locus (Turner 2009). To Strathern's notion of a geographical distribution of research themes, we should add that topics in anthropology both come from, and are translated back into, popular culture, as we shall see below in the case of *Avatar* and *The Emerald Forest* (Nugent 2007).

Furthermore, indigenous people in the Amazon have successfully mobilized notions of ecology and culture to form intercultural bonds with NGO's and celebrities like Cameron. In the wording of Beth Conklin and Laura Graham, a 'shifting middle ground' has been 'founded on the assertion that native's peoples' views of nature and ways of using natural resources are consistent with Western conservationist principles' (1995: 696). Hence, notions of conservation have served as a cross-cultural common ground constructed upon the assumption that respect for nature is an intrinsic part of the culture of 'the Ecologically Noble Savage' – a new version of an older primitivist ideal of 'people dwelling in nature according to nature, existing free of history's burden and the social complexity felt by Europeans' (Berkhofer quoted *ibid*).

The struggle over Belo Monte testifies to the continued relevancy of Conklin and Grahams' conceptualization. Tracy D. Guzmán has observed that 'opposition

[to Belo Monte] is articulated more frequently in relation to economics and the environment than it is in relation to indigenous human rights' (2013: 172). Nevertheless, notions about ecological insight in 'tribal' zones ultimately hinge upon Western notions of indigenous culture and cultural history that are also reemployed in eco- and ethnopolitical discourses. One case in point is the occupation of Belo Monte in July 2012 when more than 300 people from 21 indigenous villages and 9 different ethnicities occupied the construction site (Amazon Watch 6/12/2012). On the demonstrators' website, *Ocupao Belo Monte* (Occupy Belo Monte), we find a moving request for political support along with a self-presentation, which also marks cultural contrasts:

We are people who live in the rivers where dams are being built. We are Munduruku, Juruna, Kayapo, Xipaya, Kuruaya, Asurini, Parakanã, Arara, fishermen and riverine. The river is our supermarket. Our ancestors are older than Jesus Christ (Amazon Watch 2013).

The slogan 'Occupy Belo Monte' inscribes the protestors in a global struggle against neo-liberalism. At the same time, indigenous activist are claiming a differential cultural identity within the 'global series' of protest (Occupy Wall Street etc.). The cultural contrast is made with reference to forms of subsistence and religion: indigenous religion is deeply rooted in the land; it outdates the Portuguese and Christian colonization. Further, the river about to be dammed is an equivalent of 'your supermarkets'. These contrasts underscore the closeness – and dependency – of a way of life upon a particular habitat. Moreover, they indicate that claims for cultural difference through ancestry and indigeneity, a deep history in a particular habitat, are premises for claims about conservation.

Even if the shifting middle ground is, precisely, 'shifting', many of the cultural assumptions it is based upon belong to a cultural topology – locating 'tribal isolates' outside historical time – with a long *durée*. Nugent, however, also underscores that 'essentialist features of Amazonian Indians have contributed in vital ways to the defense of the modern Indian and some improvement of life chances (2007: 59). More generally, Anna Tsing has warned that scholarly fear of 'simplistic representations of wild nature and tribal culture' may lead to the dismissal of 'some of the most promising social moments of our times', namely alliances between 'tribal' peoples and environmentalist NGO's (2008: 409 and 392). Tsing, however, also recognizes that empowering 'green development fantasies' (2008: 393) are conceived in Western language and based upon stereotypical conceptions of tribal cultures: '[O]ne must have a distinctive culture worth studying and saving' to enter international eco-cultural alliances (ibid). Thus, particular notions of cultural distinctness and authenticity serve as both a model *of* the real (there *are* authentic tribal cultures), and as a normative model *for* the formation of the eco-cultural bond between indigenous peoples and NGO's (alliances *should be* formed with 'pure cultures' worthy of aid). To have a distinct culture involves living up to standards imported from abroad. Regularly this also implies erasing long histories of contact and



prior ethnographic translations. For many ethnopolitical projects that also implicates translating oneself into the conceptual schemes of the ‘West’ (ibid) – or, as Manuela Carneiro da Cunha asserts to pass from being ‘culture in itself’ to having ‘culture for themselves’, i.e. turning ‘culture’ into a category of self-identification. This, however, ‘is a double-edged sword, since it constrains its bearers ostensibly to perform their culture’ with reference to imported criteria (2009: 3). In the next part I examine how Amazonian Indians has been turned into a figure for basic anthropological patterns – patterns that have been reemployed in the shifting middle ground. Then I turn to some formal similarities between the construction of the anthropological and environmentalist symbolon.

### **Ethnological Isolates between Evolution and Devolution**

We can use what Michel de Certeau calls ethnological form to analyze the conversion of local topology into a global symbolon. Using a culinary metaphor, de Certeau identifies a particular modern model for producing cultural theory by creating bounded ethnographic places, isolates, and then transforming these into figures for the human in general:

Using the imperatives that punctuate the steps in a recipe, we could say that this theorizing operation consists of two moments; first *cut out*; then *turn over*. First an ‘ethnological’ isolation; then a logical inversion. The first move cuts out certain practices from an undefined fabric, in such a way as to treat them as *a separate population*, forming a *coherent whole* but *foreign* to the place in which theory is produced. [...] The second move turns over the unit thus cut out. At first obscure, silent, and remote, *the unit is inverted to become the element that illuminates theory and sustains discourse* (1984: 62).

de Certeau uses Freud and Durkheim as examples; both reads a universal structure and their own theoretical keywords (The Oedipus-complex, totemism) into and out of ‘isolates’ (the ‘primitive horde’, the Arunta). Local details thus become instantiations of anthropological principles. Through the explanation of that which at first seems inexplicable, theory becomes ‘panoptic’, it ‘sees everything, explains everything’ (ibid). Likewise, Amazonian cultures were ‘cooked’ in Claude Lévi-Strauss’ work on myth. Here Amazonians were first assigned a cultural place foreign to ‘ours’, next they were turned into ‘a metonymic figure of the whole species’ (the Anthropos) by furnishing the local ‘reference myth’ from which the anthropological inquiry of the nature of mythical thought departed (ibid). Bororo myth served as an instantiation of the nature of human mind, and the idea that myth, like the ‘modern constitution’, was founded upon a distinction between nature and culture, which it sought to mediate by creating hybrid entities that traversed the space between the binaries. Essentially, the empirical reference myth illuminated the theoretical premise it was cut out to exemplify in the first place.

Concomitant with this structuration of part and whole in scientific structuralism, a temporal poetics of otherness was at work. Lévi-Strauss despaired over ‘the cannibalistic’ nature of the historical process, and how indigenous peoples have been trapped in ‘our mechanistic civilization [...] like game birds’ (quoted in Silver 2011). His sense of loss is brutal in his comparison of present informants with the past. Living Amazonians were ‘enfeebled in body and mutilated in form’, and not more than ‘a handful of wretched people who will soon, in any case, be extinct’ (quoted in Rabben 2004: 37). Thus, the ‘isolated population’ of the ethnographic present is timed – it is only a ‘fallen’ fragment of the former culture doomed to disappear. This notion of inevitable loss binds Lévi-Strauss’ scientific anthropology to a Rousseauian sentiment significantly older than structuralism (Derrida 1976: 107-144, Williams 1973). To conceptualize this temporal sensibility, we can generalize what Allan Dundes – commenting upon the tacit assumptions of folklore studies – has called the devolutionary premise. Dundes refers to an assumption of a temporal nature: The present state of cultural items and in some cases whole cultures is a mere fragment of the authentic artefact and/or cultural past.<sup>2</sup> As in Lévi-Strauss loss is inevitable, ‘[a] change of any kind automatically moved the item from perfection toward imperfection’ (1969: 8). This notion of devolution assumes that certain cultural items and types of culture are doomed to ‘decay through time’ (ibid: 6). Figures like ‘[t]he noble savage’ and ‘the equally noble peasant’ were destined to lose their authentic culture ‘as they marched ineluctably towards civilization’ (ibid: 12). Devolution, then, in this Romantic version, is actually a side-effect of evolution and modernization seen as normative and inevitable temporal processes bound to uproot ‘tradition’. Accordingly, devolution is only in play when a valued cultural item (a folktale) or cultural whole (indigenous cultures) comes into contact with the ‘cannibalistic’ historical process. This assumption of inevitable cultural devolution leads ethnographers to seek for ‘ethnological isolates’ comparable to those involved in the culinary poetics of cultural knowledge described by de Certeau. However, it also lies behind a preference for ‘isolates’ assumed to be ancient, and strategies of purification similar to the ones described by Bauman and Briggs. To seek for “pure” precontact cultural data, [s]tudents of the American Indian’, Dundes states, ‘would often write up their field data as if the Indians had never been exposed to or affected by acculturative European influences’ (ibid: 8). The mutual dependency of evolution/devolution, modernity/tradition actually furnishes an explanatory context for Nugent’s paradoxical topology where the ‘iconic forest Indian’ simultaneously ‘embody the anti-history of the ancient tribal isolate yet also exemplify the survivor of a crushing set of historical transformations’. We shall see some example of such temporal purification in the filmic constructions of an eco-cultural symbolon in the next part, and relate them to some paradoxes concerning eco- and ethnopolitical agency.

## The Past as Salvation

In environmentalist discourses on indigenous cultures in the Amazon the ‘separate population’ living in a ‘foreign place’ is not only an empirical ‘isolate’ where cultural theories are tested. As we saw in the introductory quotations from *Amazon Watch*, indigenous people, the ‘ethnological isolate’, play a vital role for planetary survival. A salient case in point from the Xingu is the intervention of Sting in rainforest politics in the 1980’es. On the webpage of the *Rain forest foundation*, and in a text that could be read as its charter myth, it is underscored that Sting’s intuitive understanding of the link between man and forest has been corroborated by climate science. Here the eco-cultural symbolon is already in place:

Twenty years ago, Sting went into the Xingu region of Brazil for the first time. He observed the deforestation of the Amazon first-hand, seeing vast stretches of barren land that had once been forest. He had the intuition then that the forest was important, and that those who lived there would best protect it. Today, scientists are recognizing that intuition as true, especially in the context of global warming (Rainforest Foundation n.d.).

A bond between people living ‘there’ and global humanity is formed. The survival of local cultures, in a particular environment, safeguards against global warming, while indigenous peoples, ‘those who lived there’, serve as mediators between life and death by preserving the forest, a life-sustaining force, and thus opposes barrenness and death.

The presence of indigenous peoples is of vital importance not only for the local eco-system, but for all men, the whole planet. In the vocabulary of narratology, we could say ‘those who lived there’ are turned into an actant of ‘helpers’ in a global drama (Rimmon-Keenan 1989: 34ff). Indigenous Amazonians illustrated general theory in the text of anthropology, and even furnished, through anthropological mediation, a ‘bomb’ that could shatter ‘our’ constitution. A symbolon between local culture and global humanity is formed also here: Now, however, it is ecological survival on earth that is at stake, not the epistemic bond between ‘natural men’ and the common cultural constitution of humanity. The role as stewards of the rainforest is linked to notions of Amazonians living close to nature, but even if planetary and panhuman future depends upon indigenous people living ‘there’, the foreign place is simultaneously associated with the past of humanity. The sign associated with human origins, the lost past that Lévi-Strauss mourned, is ‘turned over’ and converted into a hope for the future. Sting makes the temporal translation thus:

We are paying homage to our primeval history. We have stepped back to the Stone Age [...]. In some ways Western man is in reverse evolution, we’ve forgotten our real potential. The Xingu can remind us of what we really are (quoted in Oakedal 2005: 25)

This notion of cultural time could be construed as an example of what Johannes Fabian has called the ‘denial of coevalness’, namely a ‘tendency to place the refer-

ent(s) of anthropology in a Time other than the present of the producer of anthropological discourse' (1983: 31). Thus Fabian refers to how the informant (the *Xinguanos*), with whom the travelling anthropologist/environmentalist necessarily shares time, is delegated to the past in the text that accounts for the encounter (a travel in space is converted into a travel in time, to the Stone Age). In the eco-cultural middle ground, however, there is symbolic capital associated with the appropriation of what Fabian mainly sees as an asymmetrical form of 'othering' – based upon progress as the yardstick. But it is precisely the 'survival' of a link in indigenous culture to a forgotten wisdom that furnishes many ethno-political moments with a recognizable place to speak from: 'Our ancestors are older than Jesus Christ'. Moreover, as Sting states, Xingu is a place where 'we' are 'reminded' of a human essence that we have forgotten. This illustrates nicely another facet of the premise of devolution: If devolution and evolution really are co-dependent historical temporalities, this 'struggle' also occurs inside 'the moderns' who loose contact with their fundamental humanity as a consequence of the 'civilizing processes'.

I shall now turn to how such conception of culture, time and ecological salvation are calibrated in popular culture. The point of departure for this is Cameron's documentary about the struggle in the Xingu, *A message from Pandora* (2010), and how this film cites *Avatar*.

### ***Avatar* and the Shifting Middle Ground**

The message of the documentary comes from a fictive place; Pandora. In *Avatar* (2009), Pandora is the name of a planet colonized by humans in need of natural resources (in Greek myth, it connotes both destruction and hope). On the one hand, *Avatar* serves as a model for understanding the Belo Monte conflict. But on the other, Belo Monte is also inscribed in the cosmological plot of *Avatar*. By being inserted in the DVD special features edition of *Avatar*, the story about the dam, we could say, becomes an embedded tale from the real. This also furnishes contemporary eco-political relevancy to the fictive film. Moreover, the cast of *A Message from Pandora* includes Sigourney Weaver and Joel Moore, who played characters that joined forces with the endangered indigenous people in *Avatar*. Intriguingly, Weaver and Moore thus serve as a kind of meta-avatars; even if they are casted as themselves, they also carry with them the symbolical power of the film and the narrative functions of the characters in the actant of 'good white men'.

In contrast to the tight plot of *Avatar*, *A Message from Pandora* has but a soft narrative structure. It begins with a sequence of images of global, environmental degradation. These introductory images – related by a common theme, global destruction – are accompanied by Cameron's voice over, an autobiographical account of his ecological awakening. Next we see footage from the journey to the Xingu and the fight against Belo Monte. The documentary ends with Cameron asserting that 'we' cannot live as the indigenous people of the Amazon, and that they, in any

case, do not want us there. What *we* have to do to live sustainably is to merge the tribal with the technological, and thus create a global techno-culture saturated by tribal insights. *Avatar* could actually be seen as an example of this, for here a tribal and ecological message is produced with the aid of particularly advanced visual technology, but as we shall see, the story of *Avatar* actually takes us in the opposite direction.<sup>3</sup>

Let's turn to some of the plot features in *Avatar* that might lie behind the assumed equivalence between the fictive film and the Belo Monte struggle. Applying the language of metaphor-studies, we could call the domain to be illustrated the target domain (Belo Monte) and the domain used to illustrate the source domain (*Avatar*) (Kövecses 2002: 15ff.). A synopsis of the plot, seen as a source domain, could go as follows. In 2154, Pandora is colonized by humans backed by military might and corporate power. The aim: to extract a mineral (ironically) called unobtainium. This causes a threat to the indigenous people of the planet, the Na'vi, who live in harmony with nature. Avatars, external techno-bodies modelled upon Pandoran bodies, are developed to study the nature-culture of Pandora in an atmosphere hostile to human biology. Grace Augustin, a xenobotanist, leads this research, while Jake Sully, a former marine confined to a wheelchair, is recruited as a fieldworker. By controlling the avatar with his mind, Jake can move among the natives. In the process of the investigation, however, Jake and Grace 'go native'. This change of allegiance is due to their disgust with the ruthless use of power of the colonizers, an increased understanding of the Na'vi's ways, and, in Jake's case, a romance with Neytiri, a native woman.

Starting with its very title, *Avatar* stages a mind/body-split routinely associated with the 'modern constitution'. This split is reconciled at the end, when Jake becomes a Na'vi, and is able to walk again. Becoming indigenous, then, also heals Jake's injured body. After a healing ritual invoking the maternal goddess, Jake leaves his damaged biological body behind. The conversion is irreversible; the avatar now becomes his permanent body. It is significant that a trace of the colonizing techno-culture will remain on Pandora, even after the colonizers have returned to earth and the original eco-cultural harmony is restored. As mentioned, *A Message from Pandora* ends with a hope; that 'we' can develop a 'techno-tribal' culture 'at home' and stop the intrusion in the Amazon. The end of *Avatar* appears to be an inversion of this. The film deploys advanced technology to reconstitute a 'pure' tribal culture at the end of the film. Thus, the role of cinematic technology, and the avatar in the plot, is to save and re-purify an authentic tribal zone threatened by eco-cultural destruction. To be a source of values and an eco-cultural example 'to us', the 'tribal' apparently have to be situated in an isolated elsewhere; a space different from the one in which theory and movies are produced.

## **Ethnological Isolates, Ecological Connections**

In 2154, Gaia has already been turned into a wasteland by forces similar to the ones now afflicting Pandora.<sup>4</sup> In the narrative logic of *Avatar*, the ecological devastation on earth leads to the export of an unsustainable regime of extraction to space. Thus, the (future) colonization of Pandora is construed as a repetition of environmental disaster on earth.

If *Avatar* is lived out as reality in the Xingu and other asymmetrical contact zone where extraction meets tradition, this implies that the fictive chronology is synchronized with the real time of Belo Monte. The complexity of this narrative and temporal conjuncture is underscored by the way the concrete threat of Belo Monte for people in the region is associated with the mythical and cosmological generality of *Avatar*. The plot of *Avatar* is developed in the tension between the animistic life force of natural cultures and a death producing culture of extraction. On Pandora, it is a planetary nature-culture, not a 'mere' local, cultural adaptation to a particular environment that is threatened. The use of *Avatar* as a narrative model thus appears to underscore the role of the Amazon as a scene where a struggle of global importance is played out.

The documentary is obviously produced after *Avatar*, but with reference to the fictive time frame of *Avatar* – where the devastation of Gaia has already occurred – it is implied that the chain of events leading to the destruction of earth is at work 'now' in the Xingu. Stopping Belo Monte, therefore involves, in this logic of narrative embedding, preventing the destruction of earth. This turns what could be construed as a 'mere' local struggle into a struggle of cosmological proportions: Making a narrative inference that blends the time scales of fact and fiction, we could say that stopping Belo Monte would stop the regime, the actant, that eventually will result in the colonization of Pandora. Thus, the narrative merger of *Avatar* and Belo Monte inscribe local indigenous cultures in a cosmological drama similar to the one the *Rain Forest Foundation* and *Amazon Watch* outlined to spell out the consequences of deforestation; it is not only about the people living in the forest, it is also about 'us' and the very future of the Anthropos.

## **Indigenous Culture – Importing the Export/Import-System**

The notion of 'Avatar happening here' hinges upon the assimilation of the Na'vi with the indigenous people of the Xingu. The Na'vi has a range of positive traits routinely associated with indigenous cultures: They live close to nature, treat nature with animistic respect. On the negative side, the Na'vi becomes victims of modernization and 'development' schemes that destroy the complex eco-cultural whole in which their traditional forms of life ways are embedded. Thus, they also share an identity with other 'victims' of the cannibalistic historical process, as objects of the actions of the actant of modernity.



Critics have noted that the image of the Na'vi is a stereotype, an inversion of the 'modern culture' and 'rationality' that defines 'us'; that they are depicted as 'irrational' and 'retarded', as 'plain Indians in sci-fi drag', and based upon 'exotic tropes and colonial paternalism' (Benjaminsen & Svarstad 2010: 11, Starn 2012 179, Clifford 2011: 218). The point about the inversion is formally true, but it misses the content of the romantic counter concept of noble savages and ecological Indians, notions that are the cultural conditions for the ecological middle ground. The Na'vi are also 'consistent' with Western notions of conservation, and they are never construed as childish animists with 'irrational' beliefs about nature. On the contrary, real communication takes place between man and nature on Pandora.<sup>5</sup> This positive stereotype is certainly also constructed through inversion, but the Na'vi does not (only) represent the basic human building blocks that 'we' have evolved from, they also evoke what 'we' have lost; how a certain evolution has caused cultural and natural devolution by estranging man from nature.

The traits listed above could be seen as a product of Latour's 'export/import system' (the Na'vi does not distinguish between nature and culture) and thus just a function of this modern machine for making otherness. The cultural traits in play in both *Avatar* and *A message from Pandora*, however, are also similar to the ones used as contrastive markers of identity in the *Occupy Belo Monte* blog and other instances of eco- and ethno-political activism. And in the case of the equivalence between *Avatar* and the Belo Monte, an Indigenous leader in the Xingu, Arara, is reported to have confirmed it, using the movie as a narrative middle ground: "What happens in the film is what is happening here", while the Achuar leader Luis Vargas also saw it as a good narrative example of relations between the state, corporate power and indigenous people in Ecuador (New York Times, 10/4/2010, Adamson 2012).<sup>6</sup> Hence, we should not (simply) accuse Cameron for 'representing' others in a stereotypical way; he might actually also be *quoting* Indigenous people who has made the same cultural distinction long before the arrival of *Avatar* in the Amazon.

Indigenous activists, it seems, have imported the export/import-system and reemployed it for their own purposes – to export an image that can be calibrated with 'Western notions' of the tribal. To some extent such importation explains how the eco-cultural middle ground is constituted as a co-authored space. But through such importation and the concomitant exportation of an image of 'distinct cultures', indigenous people have in practice also moved out of the binary structure of the 'modern constitution', as well as the binary that grounds the discourse on perspectivism. For in this shift 'culture' has become a category of self-identification, as well as a vital rhetorical resource. Suzanne Oakdale relates an anecdote that can serve as example: In a bus, on the way to the Earth Summit a leader of the Kayabi-people from the Xingu indigenous park advised his compatriots to take off all Western clothing and don garments that would indicate authenticity. By presenting themselves in traditional gear, he proclaimed, they would also be received as carriers of a distinct indigenous '*cultura*'. Thus, the Portuguese word was imported to

re-conceptualize Kayabi heritage from a culturalist perspective through an act of ‘self-purification’ (2002).

### **A Tale of Cultural Conversion**

Cameron has stated that there is ‘some heritage linking it [Avatar] to “Dances With Wolves”, most importantly the motif of ‘a battered military man who finds something pure in an endangered tribal culture’. Moreover, he goes on

You see the same theme in [...] ‘The Emerald Forest,’ which maybe thematically isn’t that connected but it did have that clash of civilizations or of cultures. That was another reference point for me. [...] I just gathered all this stuff in and then you look at it through the lens of science fiction and it comes out looking very different but is still recognizable in a universal story way (Los Angeles Times 14/7/2009).

The use of *Avatar* to target Belo Monte evokes a set of filmic intertexts and tales ‘recognizable in a universal story way’. Firstly, *Dances with Wolves* (1990) that tells the story of a lieutenant (Kevin Costner) who leaves the army to go living with the Sioux. Secondly, *The Emerald Forest*, John Boorman’s Jungle Book-like film about a white boy who grows up with native people in the Brazilian rainforest. Underneath the particular way of narrating these films there is something similar to a narrative deep-structure (Rimmon-Kenan 1989: 11ff.) The struggle over Belo Monte must, if it is *Avatar* turned real, resonate with this narrative pattern.

I shall now turn to *The Emerald Forest* as a part of the intertextual source domain used to target Belo Monte. What interests me is the theme of cultural conversion that marks the end of the movie; a return to tribal harmony accomplished through the cultural conversion of the white hero, how this sheds light on the end of *Avatar*, and the narrative constraints around the shifting middle ground. The conversion-as-end is the resolution of a state of conflictive cross-cultural coevalness; the happy end is a return to a prior cultural stage, before ‘contact’ and the forces of coeval evolution/devolution were set in motion. This manner of constructing a narrative end could be seen as a resolution of the tensions inherent in the figure of the ‘iconic forest Indian [who] embody the anti-history of the ancient tribal isolate yet also exemplify the survivor of a crushing set of historical transformations’, and consequently also as a purification that re-establishes a clear cut distinction between the tribal and the modern. Clearly such a resolution is impossible in the case of Belo Monte.

Once again I turn to de Certeau to find an analytical point of entry into what I will call the conversion tale: de Certeau identified an ethnological ‘primary scene’ in Jean de Léry’s account of his life among the Tupinambá in *L’Histoire d’un voyage fait en la terre du Brésil, autrement dit Amérique* (1578). The scene took the form of a narrative about a passage from ‘over here’ (Geneva) to ‘over there’ (Brazil) – and back again with a symbolic prize, a ‘literary object, the Savage, that allows him [Léry] to turn back to his point of departure’. Moreover, the ‘story [of this passage] effects his return to himself through the mediation of the other’ (1988:

213). The Tupinambá are already the ‘ethnological isolate’ populated with exotic figures that will illustrate the nature of the sinful human condition for the Calvinist. In the conversion tales, the hero do not return to ‘over here’, but returns to himself by joining the other, going back to a tribal state before the fall.

*The Emerald Forrest* (1985) was filmed in the Xingu. As in *A Message from Pandora*, the construction of a hydroelectric dam is the cause of the conflict. The plot is set in motion when Bill Markham, a North-American engineer, moves to Brazil to work on a hydroelectric dam that will result in massive deforestation. This move from the North to the South introduces the narrative conflict, and as in *Avatar* it is the destructive capability of the techno-modernity that will make indigenous peoples visible.

Bill brings his wife and children to Brazil, but during a picnic on the edge of the jungle, the little boy, Tommy, is abducted by a tribe called the Invisible people. The picnic takes place in the liminal space between the construction site and the forest; the space where the struggle between life and death takes place in the film, as in the later charter myth of the *Rainforest Foundation*.

The ‘chief’ of the tribe is a wise old man who eventually will become the boy’s adoptive father. Expressing his views with natural metaphors – undoubtedly to illustrate a primitive, ecological mind – he declares that he decided to abduct the boy to save him from a life in the land of ‘termites’, at the world’s end. This combined eco-cultural judgment, then, lies behind the first turning point in the plot.

The boy grows up in the rain forest, in play between two fathers; for his engineer father never stops searching for the boy. Tomé (as he is called in the jungle) will save the Invisible people from destruction. First he secures a fresh supply of the sacred stones that make the people invisible, and through this ensures the persistence of a traditional way of life. Next, he rescues the young women of the tribe from captivity in a brothel, and thus secures fertility and the social reproduction of the tribe. As we shall see, he also brings down the dam of the termite people with shamanistic techniques. After the initial action, the turning point associated with the abduction, Tomé will be the agent producing the events.

To rescue the abducted women, Tomé seeks the assistance of a group of male *caboclos*; Amerindians who have left the rain forest, dresses as whites, and live impoverished in the liminal zone between the jungle and the city – a space structurally similar to the one in which Tommy was taken (between the jungle and the construction site). Towards the end it is foreshadowed that these *caboclos* will marry the rescued women, and return to the forest. Hence, the film ends with a prefigured romance. Romance in the form of marriage to native women is, indeed, a powerful trope of conversion here as well as in *Avatar*.<sup>7</sup>

The character Tomé has a narrative function similar to that of Jake Sully. In the beginning of the story the hero forms a part of the actant of modernity, the ‘opponent’ of tribal culture; the narrative force that brings tribal people into a conflictive but also coeval, narrative time. In the middle of the tales a change of alliance occurs.

Gradually the hero becomes a helper that safeguards the survival of the tribe. Between beginning and end, then, the hero shifts actantial position, the 'opponent' turns into the 'auxiliary', and at and as the end, he is fully assimilated.

As a result of the upbringing in the jungle, Tomé becomes 'territorialized', a local best suited for cultural life in a particular rainforest habitat. When he finally finds him, even the engineer father (himself at home both in the city and the jungle), acknowledges that the boy will have to remain 'over there'. To salvage his son and the natural habitat he has adapted to, Bill decides to blow up the dam – another shift of actant – but his explosives fail to do the work. Fortunately, magic turns out to be more efficient than the arts of the modern engineer. Tomé, who has been initiated as a shaman, destroys the dam with the aid of his power animal, and makes nature itself (torrents) bring down the dam. Even in the field of magic it is white man who creates events. Except for the abduction scene – which turns around the Invisible people's compassion for 'us' and the recognition of human purity (even) in a white boy – narrative agency is attributed to characters associated with intruding modernity; both destruction and salvation are in 'our' hands.

## Conversion and Anthropological Mediation

In both films, the entrance to the foreign cultures is through a kind of participatory observation; we could call it an anthropological mediation. Particularly in *The Emerald Forest*, the choice of the narrated events is indebted to anthropology.<sup>8</sup> We look upon the white hero Tomé as he goes through a series of rites of passages: initiation into manhood and shamanism, marriage and a mortuary rite. Thus, the events are also woven together with a well-known anthropological theme as a constant; the production of a culture-specific person through a ritual process. Jake's conversion in *Avatar* is also gradually accomplished through ordeals and rites of passages, through which he learns the green technology of the Na'vi. In *The Emerald Forest* the white hero learns to live in the jungle from boyhood. Conversion here, then, is the more gradual process of a white, *Jungle Book*-like child who never loses his innocence – not that of a 'battered military man' searching for purity in a lost, tribal paradise.

In both films, the narrative end is a return to the past and harmonious state of nature where autochthonous rites again become the sole markers of time. With reference to Bauman and Briggs, we could say that the mediations that necessarily characterize a story of a 'clash of civilizations or of cultures' here are purified infra-textually, in the plot about the hero's conversion (and not by the anthropologist wiping out external presences of history when writing up of the text). Certainly, the conversion tale resembles other narrative forms – like the cowboy variant about good gringos saving Mexican villages from bad Mexicans but leaving when harmony is restored. In our films, however, the notion of the entity to be saved, 'distinct tribal cultures', is imported from cultural theory.

## ‘Culture’ as Narrative Conversion

Conversion to the other culture leads to the end in both films – the hero stays ‘over there’. A consequence of this is that the narrative closure also serves as a cultural boundary marker; there is no return ‘over here’. Typical for this narrative of conversion is that the hero, one of ‘us’, leaves his own culture, and, in the logic of the plot, it is this transfer that leads to the salvation of a ‘*pure, endangered tribal culture*’. Obviously, narratives must end, but this particular kind of ending might actually be conditioned by the theological pre-history of the concept of culture.

Frank Kermode has examined ‘the sense of an ending’ as a cultural phenomenon. At the end of a story we expect the narrative equivalent to the *tack* of the clock that gives shape to the unit of time that begun with the initial *tick* (1967). The end, then, is charged with a cultural function; it is the place for resolution of narrative conflicts or the conclusion of an argument, the *tack* that gives closure, and hence form, to the work (ibid, cf. Becker 1979). Moreover, Kermode underscores that expectations of endings are deeply informed by Judeo-Christian cosmology and the apocalyptic notions of a final closure that gives narrative form to salvation history as a whole; and, in the last instance transport the saved back to Eden.

In our films, the salvation of a ‘doomed’ nature-culture only occurs through the cultural conversion of the male hero. It is easy to see that the mediation of Jake Sully and Tommy/Tomé has a Christ-like character; they offer salvation from collective death, and through this intervention traces of Eden remain. Unsurprisingly, critics have argued that *Avatar* is a variant of the ‘White Messiah Fable’, constructed upon the implicit, patronizing assumption that natives need ‘white heroes to come and rescue them’ (Grabiner 2012: 101). However, the conversion story is more complicated. Firstly, the hero is needed to save ancient wisdom that ‘we’ have lost through ‘our’ cultural and human devolution. Secondly, in the environmentalist narrative that the films are intertextually related to, the ‘saved’ natives turn out to be our ecological saviors.

Nevertheless, the purifications accomplished by the conversion story wrap indigenous cultures up as pure and bounded culture-units, as inaccessible as Eden. If they were opened by the mediations offered by the story of civilizational clash, they become, in the end – and this is the function of the happy end – unrelated to ‘us’, since they now are deprived of the narrative conflict that would make them narratively compelling to ‘us’.

Following Viveiros de Castro’s work on the encounter between cannibals and missionaries in sixteenth century Brazil (and thus the early networks and mediations behind the later generalized perspectivism), we could argue that the anthropological concept of culture actually contains an implicit story of conversion. Not least, this has to do with the religious roots of the concept: The ‘themes of acculturation and social change [...] depend profoundly on a paradigm derived from the notions of belief and conversion’. Changing culture, Viveiros de Castro argues, is construed

as equivalent to a change of confession (2011: 11). On this theological model you either belong to a particular confession/culture, or you don't. A corollary is that cultural change, as secular conversion, is final and thus structured as a minimal narrative, a passage from one state to another. The end of a former identity (state 1) implicates the beginning of a new (state 2). From different perspectives, this passage could be seen as a gain (evolution, the civilizing of 'primitives') or loss (devolution, the loss of authentic culture as a result of contact), but in any case as irreversible:

[O]nce they have been converted into something other than themselves, societies that have lost their traditions have no way back. There is no returning; the previous form has been defaced for good. The most that can be hoped for is an exhibition made of simulacra and false memories, where 'ethnicity' and bad conscience feed on the remains of the extinct culture (ibid: 17).

This finality is 'above all' a function of 'our' belief 'that the being of a society is its perseverance: memory and tradition are the identitarian marble out of which culture is made' (ibid). If the symbolic stuff of identity is lost, culture is doomed and can only be celebrated in an inauthentic mode as heritage. Indeed, this evaluation of cultural change presupposes devolution.. If there is 'no way back', indigenous mastery of modern eco-cultural discourses will always be haunted by a suspicion of inauthenticity, or of indigenous spokesmen being dupes of international NGO's playing out the 'white Messiah fable' – a common enough accusation in Brazil (Conclin & Graham 1996, Prins 2002, Ramos 1998).

### **Closing Texts – Storing Wisdom, Storing Carbon**

In *The Emerald Forest*, there is a closing text immediately after the end of the narrative. We could see this as the wrap up of the film's short documentary frame: Before the beginning of the story, a text states that the film was produced in the rainforest. Immediately before the credits, the film returns to this documentary register. A silent text conveys ominous statistics about the deforestation of the Amazon; 5000 acres of forest disappears each day. Associated with this is the extinction of indigenous people; it is stated that only 120 000 remains of an original four million. Thus, the disappearance of the forest is linked to the disappearance of indigenous people. The forest and its indigenous inhabitants are fused in an eco-cultural symbolon reminiscent of Sting and the charter of the *Rain Forest Foundation*. However, Sting reversed Boorman's more anthropocentric priorities. In the closing text of *The Emerald Forest* the protection the forest gives to humans appears to be most important. For Sting, indigenous people living 'there' are also an obstacle to deforestation. Furthermore, in the context of climate change, the forest not only shelters indigenous people from the death producing tribe of modern termites, it also protects humanity from global disaster by storing carbon.



Regarding the ‘uncontacted tribes’, the closing text states that ‘they still know what we have forgotten’. Here the isolation of ‘uncontacted people’ translates into historical distance; protected by the forest, ‘they’ have retained a wisdom that ‘we’ have forgotten. In the last shot of the film, an inter-cultural bond is simultaneously created and cancelled: For ‘our’ relation to ‘them’ should be a non-relation that keeps ‘them’ isolated and ‘uncontacted’; they should remain ‘invisible people’. Perhaps this is a wise strategy for them, but it also seems that this isolation fulfills a cultural function for humanity, storing an ancient wisdom which we have lost.<sup>9</sup> Storing wisdom, storing carbon; in both cases, a service to humanity.

The conversion stories places ‘us’ in a paradoxical relationship to the indigenous people that shall save us by saving the forest. In the environmentalist story they comprise an actant of ‘helpers’, but to be able to help ‘us’ they must themselves be saved by converted heroes. In the ‘universal story’ played out in the films this ensures a new isolation, a reestablishment of ‘a distinctive culture worth studying and saving’, and thus re-calibrates notions about worthy cultures and participants in the ‘shifting middle ground’.

The films stage tensions between nostalgia for a lost, cultural past and the fear of destruction wrought by ‘modern’ hands. One set of culturally recognized endings, apocalyptic destruction or the softer variant of gradual devolution, is replaced by a return to the beginning – the time before the narrative conflict interrupted harmony in a closed universe: The end of a ‘traditional’ world is postponed, at the end, and as an end. The human figure situated in such a safe space would simply have no need of communicating across an inter-cultural middle ground with ‘moderns’. Thus, such a symbolical division and purification will not help to stop the dam in Belo Monte (now well under way), nor help global nature/culture survive ecological disaster.

The narrative registers of the apocalyptic and the nostalgic can be traced back to Christian salvation history (the fall – the present – the end as destruction *and* final salvation). In the conversion tales ‘culture’ takes the place of man in salvation history. The story of the fall of cultural purity as a consequence of contact is, in the last instance, a story of evolution turned into devolution: people living ‘there’ become uprooted, spread, like the *caboclos*, in the interstices between the city and the rainforest. Eden is perhaps the original ‘ethnological isolate’; it is a place – and a narrative time – ‘foreign’ to our space and time where the pattern of all human history is decided metonymically. Expulsed from Eden, the ancient wisdom is lost, also for ‘us’ who now longer have cultural mediators that can link ‘us’ up with the origin.

On the one hand, such stories of conversion can cause powerful identifications and ‘fantastic collaborations’ around the eco-cultural *symbolon* with imagined ‘pure cultures’. On the other, one can also fear that the clear demarcations between ‘here’ and ‘there’ that the collaborations in some cases are based upon symbolically prepares an outsourcing of ecological problems to a ‘there’ already cleared as a place

for mediations about the relation between human culture and nature – so that culture ‘here’, our daily consumption pattern, can remain the same.

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## Notes

<sup>1</sup> *Symballo*: literally that which is thrown or cast together (Etymology Online 2001-14)

<sup>2</sup> The most salient case in point is perhaps the brothers Grimm who regarded folktales as fragments of ancient Germanic myths.

<sup>3</sup> Cf. Duncan & Fitzpatrick 2010 about the visual technology behind *Avatar*.

<sup>4</sup> Cf. the following description: ‘The Earth is now a decaying world, covered in a haze of greenhouse gasses. Overpopulation, nuclear warfare, pollution, environmental terrorists, significant deforestation, world hunger, ozone depletion, resources depletion, water shortages, and overhunting of what is left of Earth’s very few still living animal species are the main things that are slowly consuming what is left of the once beautiful planet’ (James Camerons *Avatar*.wikia. Earth).

<sup>5</sup> Cf. the following description for instance: ‘The Na’vi believe that Eywa acts to keep the ecosystem of Pandora in perfect equilibrium. It is sometimes theorized by human scientists that all living things on Pandora connect to Eywa through a system of neuro-conductive antennae; this often explains why Na’vi can mount their direhorse or mountain banshee steeds and ride them immediately without going through the necessary steps required to domesticate such wild animals’ (James Cameron’s *Avatar*, n.d. Eywa)

<sup>6</sup> Cf. Adamson 2012 for other examples of the accommodation of *Avatar* by ethno-political activists.

<sup>7</sup> As in Latin-American literature where inter-racial marriage is a foundational trope in national literature, it is a man who marries a native woman (Sommer 1991, cf. Nunes 1996 on Brazil).

<sup>8</sup> Boorman consulted anthropologist before making the movie (Boorman 1985).

<sup>9</sup> The exact content of the lost memory remains undetermined, but with reference to the narrated events in the film, it appears to be ancient forms of thinking, and practices like shamanism. A comment from Boorman relating to his stay in the Xingu points in the same direction: [his] ultimate acceptance by the Kamaira led to long talks with its shaman. ‘Increasingly,’ Mr. Boorman says, ‘I felt Takuma was in possession of a knowledge, a consciousness, that far surpassed my own. I can’t imagine ever seeing things quite the same again’ (New York Times 30/6/1985)

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## Who's Calling the Emergency? The Black Panthers, Securitisation and the Question of Identity

By Peer Illner

### Abstract

This article intervenes in a debate in cultural disaster studies that interprets disasters as *objects*, whose study opens up an understanding of societies' fears, anxieties and vulnerabilities. Widening the scope of disaster studies, it proposes to view disaster not as an object but as an *optics*, a matrix that frames elements of social life as an emergency. Presenting the case of the American Black Panther Party for Self-Defense through a framework of security studies, the article explores the Black Panthers' politics as a process of *societal securitisation* that allowed African Americans to mobilise politically by proclaiming an emergency. It traces a political trajectory that ranged from an early endorsement of revolutionary violence to the promotion of community services and casts this journey as a negotiation of the question of identity and ontological security in times of crisis. Drawing on Black studies and on stigma theory, it suggests finally, that the Panthers' abandonment of violence represented a shift from identity-politics to an engagement with *structural positionality*.

**Keywords:** Black Panther Party, Huey P. Newton, Cultural Disaster Studies, State of Exception, Securitisation, Ontological Security, Stigmatisation, Identity Politics, Positionality, Afropessimism



## Disaster optics

In recent years, cultural studies have come to play a vital analytical role in attempts to understand modern social and political life as constantly threatened by disaster. Cultural studies argues that the way we perceive disaster is shaped by the various cultural practices that create our common sensibility for disasters and, consequently, determine what we see and how we act in a world ravaged by disaster at an ever-increasing rate. Starting from concrete disasters, scholars of cultural and political theory have interpreted the manifold ways in which humans process and make sense of catastrophe. Dominant frameworks currently employed interpret disaster as trauma (Felman and Laub 1992; Caruth 1996; LaCapra 1998; Kaplan 2005) as an image of the apocalypse (Robinson 1985; Zamora 1989), (Williams 2011; Szendy 2012), as a state of exception (Žižek 2008; Honig 2009; Lazar 2009) and as an expression of society's underlying conditions of vulnerability (Klinenberg 1999; Tierney et al. 2006). While different elements of a disaster emerge as areas of research in these frameworks, all these approaches view disasters directly as an *object* of inquiry. The following article argues that disaster is not just an *object* that humans strive to make sense of but also an *optics*, a sense-making paradigm that we use to imagine, frame, problematise, or construct social life *as* an emergency. Rather than being something given that we simply respond to, our sense of disaster is actively produced through various cultural and social practices.

Drawing on the work of Ole Wæver and the emerging field of security studies, the article presents the case of the American Black Panther Party for Self-Defense (BPP) and its chief-theoretician Huey P. Newton to illuminate the performative dynamics of emergency declarations. Building on Wæver's framework of *securitisation* and recent theorisations of ontological security, the argument will firstly be followed that the Black Panthers declared American everyday life a vital threat in order to safeguard a consistent racial identity. The article then presents the Black Panthers' turn towards peaceful community service as a conundrum that cannot be grasped according to the logic of ontological security. Instead, I will suggest that the Panthers' abandonment of armed struggle expressed an insecurity about the feasibility of a politics, based on identity. In conclusion, I will argue that the case of the Panthers highlights an insufficiency in analyses that centre on identity and foregrounds the question of *positionality* as a key issue in the cultural production of emergencies.

## The Black Panthers and the Emergency

We, the people, are threatened with genocide because racism and fascism are rampant in this country [...] And the ruling circle in North America is responsible

(Newton [1970] 2002: 160).

With this, Huey P. Newton, the founder of the Black Panther Party for Self-Defense began his speech at Boston College on November 18<sup>th</sup> 1970. In that year, membership in the Black Panther Party peaked with thousands of enrolled members and established offices in over sixty-eight cities across the U.S. Speaking to a numerous crowd on a cold and clear Wednesday<sup>1</sup> Newton laid out the Panthers' view that African Americans were threatened with extermination inside the United States of America. According to Newton, black Americans were systematically oppressed inside a white supremacist society that had only seemingly broken with slavery. Foreshadowing an argument recently elaborated by Saidiya Hartman (1997), Newton argued that the abolition of slavery in the U.S wasn't followed by freedom, as officially proclaimed, but merely transcribed the non-subjectivity of the slave into the limited subjecthood of the criminal, the Ghetto-dweller and the pauper.<sup>2</sup> In *The Correct Handling of a Revolution*, written in 1967, Newton specified that the founding of the party was to counter this perceived existential threat:

The main function of the party is to awaken the people and teach them the strategic method of resisting a power structure which is prepared not only to combat with massive brutality the people's resistance but to annihilate totally the Black population ( Newton [1967] 2002: 143).

Newton's large audience testifies that, what had begun as a small grassroots organisation, had by 1970 become a nationwide enterprise with considerable public appeal. While the Civil Rights Movement had through peaceful protest abolished the *de jure* segregation in the American South, *de facto* segregation remained operative in the North and West with permanent racial discrimination by housing associations, banks, employers and trade unions (Bloom and Martin 2013). According to the historian Donna Murch, Black Panther membership consisted of the sons and daughters of Blacks from the South "whose families travelled north and west to escape the southern racial regime, only to be confronted with new forms of segregation and repression." (Murch 2010: 6) Contrary to the Civil Rights Movement that had demanded formal citizen rights for America's black population, the Panthers sought to fight the normative stigmatisation of black people that persisted despite formal equality.

Brady Thomas Heiner (2007) summarises the Black Panthers' perception of the threats to their existence as firstly, the view that Blacks constitute an internally colonised community within the U.S and are thus in a situation comparable to other anti-colonial struggles; secondly, that the U.S constitution, its laws and police work as functional agents in the oppression of Blacks; thirdly, that within the context of this intra-national colonisation, black self-defence was synonymous with anti-colonial war and fourthly, that the American prison system played a pivotal role in the criminalisation of black people. Beyond the legal equality granted after desegregation, the Panthers thus diagnosed a structural violence at the heart of American civil society that was set to maintain the normative inferiority of Blacks. Heiner explains

how Newton's first theoretical move lay in unmasking the proclaimed peace in 1960's America, that he recast as a struggle over life and death:

Beneath the law and order of American government, beneath the ostensible peace of the American civil society, a racially fashioned war is being continuously and permanently waged against the black community. The type of peace that American governmental and civil institutions officially prescribe, according to this argument, is not genuinely pacific at all but rather is itself a form of coded warfare (Heiner 2007: 322).

How should we interpret the Panthers' martial rhetoric? What political purpose did the declaration of a hidden civil war serve? Wæver's theory of securitisation allows us to abstract from the immediate content of Newton's declarations and hone in on its performative function that worked both outwards, in relation to whiteness, as well as inwards, in relation to the African American constituency. In *Securitisation and Desecuritisation* from 1995, Wæver asks "what constitutes a security issue today?" Using speech act theory, Wæver argues that something becomes a security issue by performatively declaring it so. Practically, securitisation occurs when a particular issue is taken up and placed within the question of the survival of the state. Traditionally rooted in a state's position of military enmity vis-à-vis another state, contemporary processes of securitisation have expanded to involve issues such as health, drugs, crime or immigration that are all now regularly dramatized as threats to public security. In Wæver's vocabulary, the elevation of an issue into a threat 'securitises' a problem that is dramatically framed as a question of life and death. When performed by a sovereign state, the act of securitisation allows the state to defend itself against the harm allegedly caused by the threat:

By uttering 'security,' a state-representative moves a particular development into a specific area, and thereby claims a special right to use whatever means are necessary to block it (Wæver 1995: 55).

When declared through a securitizing speech act, securitisation institutes a stark binary between *us* (the community that needs to be protected from a threat) and *them* (the unit representing the threat). Initially, Wæver claims, this practice pertained exclusively to the state. Recently however, the power to securitise has shifted to include actors from civil society who engage in a struggle around political issues they elevate into existential threats.<sup>3</sup> Applied to the Black Panthers, we can see that Newton's insistence on an existential threat to the black community represents precisely such an act of *societal securitisation*. For Wæver, the goal of state, as well as societal securitisation processes is to ensure the survival of the unit. While state security safeguards sovereignty, societal security is mobilised to protect the identity of the securitising group:

I have therefore suggested a reconceptualization of the security field in terms of a duality of state security and societal security. State security has sovereignty as its ultimate criterion, and societal security has identity. Both usages imply survival. A state that loses its sovereignty does not survive as a state; a society that loses its identity fears that it will no longer be able to live as itself. There are, then, at the collective

level between individual and totality, two organizing centres for the concept of security: state and society (Wæver 1995: 67).

Wæver's theory of societal security can shed light on emergency politics occurring outside of state sovereignty. The view of securitisation as a performative process allows us to see the power to call an emergency as unequally distributed across the social body. In this process, Wæver recognised a crucial problem that we also encounter with the Black Panthers. While state security has the authority to securitise issues on account of its legal and representative powers, societal security is practically powerless in comparison. It therefore always poses the problem of its own credibility. Lacking in representative powers, social groups have to rely on the persuasive power of their speech acts to make their point. This fact can help explain the rhetorical vehemence with which Huey Newton expressed his claims. According to the securitisation framework, the Panthers were involved in defending their identity against a white supremacist system they perceived as maintaining Blacks in a situation of existential inferiority. Their discourse had to be clear and violent to make their message succeed as a speech act, able to institute societal security. Drawing on Austin and Derrida, Wæver notes that speech acts are always haunted by the possibility of their failure. They put the speaker at risk, since success at credibly conveying securitisation is never guaranteed:

How does a society speak? Society is different from the state in that it does not have institutions of formal representation. Anyone can speak on behalf of society and claim that a security problem has appeared. Under what circumstances should such claims be taken seriously? (Wæver 1995: 69)

In the attempt to credibly securitise the issue of race, Newton used evidence from anthropology and sociology to sharpen his argument of a hidden war against Blacks. In his autobiography *Revolutionary Suicide*, Newton comments on Herbert Hendin's comparative studies of suicide rates in black and white communities (black suicide rates had doubled in the last ten years while white suicide rates remained level). Drawing on Durkheim's famous study on suicide that had fixed social factors as the root causes for suicide above individual, psychological reasons, Newton uses this argument to claim a hidden, deadly mechanism operating at the heart of white America that systematically produced the conditions in which blacks would kill themselves. If, according to Newton, death was what American society had in store for black people, there could be two ways for African Americans to die; either through reactionary suicide or through revolutionary suicide. Reactionary suicide meant to give in to the threatening conditions of the environment by taking one's own life, while revolutionary suicide meant acknowledging the lethal mechanisms that condemned Blacks to social and biological death and rebelling against them. While Newton insisted that this exposed the rebel to a likely death at the hands of the prison system or the police, it was in any case preferable to die a revolutionary death than to give in to the system:

Thus it is better to oppose the forces that would drive me to self-murder than to endure them. Although I risk the likelihood of death, there is at least the possibility, if not the probability, of changing intolerable conditions [...] Revolutionary suicide does not mean that I and my comrades have a death wish; it means just the opposite. We have such a strong desire to live with hope and human dignity that existence without them is impossible. When reactionary forces crush us, we must move against these forces, even at the risk of death (Newton [1973] 2008: 131).

We will see how, rather than being a historical aberrance, the tactic of revolutionary suicide that entails the willingness to die rather than to abandon a constituted identity has historical precedents, among other cases, in the First World War.

## Revolutionary Suicide

Following the argument of securitisation, we can trace how the Panthers politicised their everyday as a fight over life and death by proclaiming white America to be racist and genocidal. For a time, the BPP even began to arm itself for fully-fledged war. Heiner comments on this functional equation of politics and war that was at the heart of Black Panther discourse:

It is precisely on account of this perceived failure of American sovereignty to guarantee and protect black people's very right to live – moreover, on account of its persistent and explicit attack on that right – that the BPP conceived of politics and war as functionally inseparable (Heiner 2007: 325).

The notorious documentation of Panther members patrolling the streets of Oakland with shotguns poised, pictures of Newton posing on an African throne, spear and rifle in hand as tokens of Black Nationalism and the seizure of Attica prison in New York, where imprisoned Panthers held forty-two prison guards hostage can be seen as evidence for the militant equation of politics and war that dominated a certain strand of Panther ideology. This radicalism found admirers in European intellectuals from Foucault to Deleuze, who had started theorising politics on the basis of war after the events of May '68 in Paris.<sup>4</sup> Jean Genet, who visited Newton in California thus defended the Panther leaders' spectacular display of violence with reference to Guy Debord's *Society of the Spectacle*:

Wherever they went the Americans were the masters, so the Panthers should do their best to terrorize the masters by the only means available to them. Spectacle. And the spectacle would work because it was the product of despair [...] Did they have any choice? (Genet 2003: 99)

The doctrine of revolutionary suicide with which Newton commanded Blacks to rather die in battle than keeping an oppressive semblance of peace both confirms and challenges Wæver's insight about securitisation. On the one hand, the Panthers' rhetoric clearly sought to securitise the concept of race in order to build a strong, black constituency against white hegemony. On the other hand, Newton seemed ready to sacrifice the vital integrity of this very same constituency, thus calling into question Wæver's emphasis on securitisation as a means of *survival*. The following

section presents a more nuanced picture of the performative position of the Black Panthers with regard to the black community by elaborating the issue of securitisation within a wider context of the negotiation of identity that in certain cases can become “larger than life”.

### **Ontological Security**

Following Wæver, several theorists working in security studies have elaborated the link between security and identity to shed light on the politics of self-defence. We have seen that for Wæver, the situation of feeling existentially threatened does not need to be imposed from the outside. Issues are performatively elevated to the level of an existential threat by a social group to demarcate the group’s identity in relation to its inside as well as its outside. Originally developed by R.D. Laing in the realm of clinical psychiatry and imported into sociology by Anthony Giddens, the concept of ontological security has recently been appropriated by Jennifer Mitzen (2006) and Brent Steele (2008) to contradict the “survival assumption” that permeates political theory. The survival assumption – legible in thinkers of the state of exception from Carl Schmitt to Giorgio Agamben but also, residually in Wæver – claims that a political unit’s primary goal is necessarily its biological survival. Steele uses Laing’s concept of ontological security to argue that it is the preservation of a unit’s self-identity, rather than survival, that represents the primary motor of social action. According to Steele, political actors acquire a semi-permanent social identity, related to their own self-image, including the values, mores and behavioural patterns they desire to represent, as well as the expectations, the outside world has come to develop in relation to the unit’s identity. An actor’s primary political interest is the unperturbed continuation of this identity, as it is this continuity, which for Steele provides a sense of existential safety or ontological security. While Steele initially develops his theory in relation to nation states, Wæver has demonstrated the increasing importance of security concerns to actors from civil society. This is how Steele frames the debate around ontological security:

The central argument [...] is that states pursue social actions to serve self-identity needs, even when these actions compromise their physical existence [...]. While physical security is (obviously) important to states, ontological security is more important because its fulfilment affirms a state’s self-identity (i.e. it affirms not only its physical existence but primarily how a state sees itself and secondarily how it wants to be seen by others (Steele 2008: 2-3).

Steele outlines how political actors have historically defended their self-identity, often to the point of jeopardizing their own physical integrity. His analysis of the Belgian decision to fight the far more powerful German army in WWI serves to exemplify the ontological security framework. According to Steele, Belgium’s identity had been internationally ratified as politically neutral. Hence, accepting to align itself with Germany without offering resistance – while providing physical



security in the short term – would have compromised Belgium’s acquired identity, thereby threatening the nation’s sense of ontological security. For Steele, the case of Belgium disproves the established survivalist paradigm. While Belgium’s shattering defeat was practically guaranteed from the outset, the small nation still fought to secure its sense of uncompromised self-continuity. We can draw an analogy between Belgium’s behaviour in WWI and the Black Panthers’ doctrine of revolutionary suicide. While fully aware of being crushed by the U.S police in cases of armed confrontation, the Panthers still advocated this confrontational fight, not in the hope of any real political gains but in order to secure their self-identity as a combatant social group. As Steele specifies:

In such cases a state like Belgium ‘gives practical proof’ that in its consideration self-identity was ‘larger than life.’ The existential angst which befalls all social agents is therefore solved through a painful, costly, and tragic, but also emancipatory, action (Steele 2008: 113).

Through the ontological security framework, we can gain a better understanding of the Panthers’ doctrine of revolutionary suicide. Dramatizing a situation of poverty and racist marginalisation into a “civil war against Blacks” sharpened the antagonism between white hegemony and the black community and thus was likely to guarantee group cohesion among African Americans. In the words of Steele, it ensured ontological security by stabilising the black community’s sense of self. However, apart from the aggressions of a racist system, the Panthers perceived another threat to their identity, coming from within the African American electorate; namely the promise of formal integration into the American mainstream, embodied by the Civil Rights Movement. For the Panthers, this threatened to assimilate Blacks and dissolve their constituency into the wider body politic.

## **Peace Anxiety**

Writing on the relation between ontological security and political conflict, the political scientist Bahar Rumelili has presented a binary schema of political identity that we can apply to our case of 1960’s America. For Rumelili, political identity is constructed along a twofold axis. Both inclusively, by a set of practices, behaviours and values “that can possibly be acquired by any state if it fulfils certain criteria” (2007: 38) or essentially, through traits “assumed to be based on some inherent characteristics.” (ibid.) Following this perspective, we can say that prior to desegregation, full American identity was defined in essential terms by white skin colour and in practice-based terms by a capitalist market economy and the values of democracy, individualism and liberalism. In this context, the Civil Rights Movement demanded the abolition of the essential component of American identity *qua* whiteness and an opening of its parameters to include black people in the practice-based

performance of American citizenship. As is well known, white hegemony responded by somewhat attenuating the power of its essential, race-coded identity and admitting Blacks that were capitalist, democratic and liberally oriented.

While providing undeniable legal gains for African Americans in the South, from an ontological security perspective, this inclusion was at the same time threatening to black self-identity, as blackness now became integrated into the American mainstream. This inclusion diluted what had counted as black (the opposition to white privilege) and, in the words of Steele and Rumelili, it therefore enhanced black ontological insecurity by rupturing a continuous black identity. After desegregation, the Panthers took on the difficult task of mobilising politically around race issues in a situation of newly granted formal equality. This was a time when many within the black community had aligned themselves with the American mainstream in the hope of thereby reaching the end of racism. To safeguard a continuous black identity, the Panthers' point of contention had to be that America preserved a disavowed core of essential whiteness that still kept Blacks in a situation of radical exclusion.

It is possible that the continuous black identity the Panthers were advocating was to a large extent defined precisely by the struggle against normative whiteness. Rumelili has provided evidence of how identities become problematically attached to conflict. For her, "protracted conflicts and the habits and routines that states have formed around them generate a sense of ontological security," (2014: 3) as the conflict becomes a narrative of the individual actors' sense of self. The possibility of conflict resolution on the other hand induces ontological insecurity, as it involves actors giving up their well-kept narratives about themselves (as Greek over Turkish or Israeli over Palestinian in Rumelili's examples). Rumelili's research into ontological security can help explain the attachment that political actors form to certain structures of conflict. In our case, it provides an explanation of why the Panthers persisted with their radical politics especially after the pacifying gains of the Civil Rights Movement. Following Steele's example with regard to Belgium, it becomes understandable why the Panthers indeed preferred death to the assimilation into an identity that went against their established sense of self.

In conclusion, the ontological security framework is able to explain the dramatic early phase of the Panthers, in which the party endorsed a position of Black Nationalism and revolutionary violence. Through an aggressive and harsh political rhetoric, it performatively sharpened the identity distinctions between 'black' and 'white' as well as the 'real' Blacks that were opposed to the white mainstream and the 'integrationists' who had abandoned the struggle and assimilated to whiteness. However, the schema doesn't offer an explanation for the Panthers' sudden turn to community service after 1970, when all armed resistance and most overt aggression was dropped. It will now be argued that, in order to understand this political change we need to shift our gaze away from identity and onto the question of *positionality*.

## Community-Building and *Positionality*

While security studies' analysis of the interaction between actors from different identity-groups can provide insights into the Panthers' early position of radical self-defence, the notion of identity-preservation (or ontological security) cannot enlighten us as to why the Panthers suddenly abandoned any talk of blackness in terms of identity. Had they surrendered to the integrationist demands of formal equality? Did they believe they had become a fully integrated part of American society? I suggest interpreting the change of attitude in the Panthers' politics not as a *giving in* to the reformist aims the Panthers had previously rejected. Instead, I propose to read it as a moment of crisis regarding the very notion of identity; or at least, a budding doubt in the feasibility of claims made on the basis of identity. How did this doubt manifest itself for the Black Panthers?

Newton's gradual distancing from the spectacular and identity-building violence he had endorsed in the 1960's and his turn towards a less confrontational politics of community building can be traced most clearly in his dispute with the Panthers' Minister of Information Eldridge Cleaver. While Cleaver wanted to push the Party into full-blown armed warfare, Newton opposed this position. Abandoning his provocations in favour of a more attenuated politics, he argued from 1970 onwards that armed resistance was bound to be overpowered by the military superiority of the American police and that, rather than all-out war, the Panthers should adopt a politics of restrained resistance. In an article from 1967, he claimed:

The Black masses are handling the resistance incorrectly. When the brothers in East Oakland [...] amassed the people in the streets, threw bricks and Molotov cocktails to destroy property and create disruption, they were herded into a small area by the gestapo police and immediately contained by the brutal violence of the oppressor's storm troops. Although this manner of resistance is sporadic, short-lived, and costly, it has been transmitted across the country to all the ghettos of the Black nation (Newton [1967] 2002: 142).

Instead of paramilitary activities, the BPP began to invest strongly into their so-called Survival Programs, a range of over twenty-four different community service programs that the party ran free of charge to benefit the black population. The programs included a breakfast-for-schools initiative, in which breakfast was served to children before the start of the school day; health and dental clinics, where medical services were provided, a sickle-cell anaemia screening program; a buses to prisons service where families were transported to and from prisons to visit their relatives; a clothing program and various cultural activities such as a model school, music, poetry and Black History classes. In a televised interview with William Buckley, Newton explained this shift from an emphasis on armed escalation to an investment in community services:

We realized that it wasn't the principle of revolution or the armed principle of our Party, to take the gun and make the gun the only thing that could fight a revolution. So, it was a strategy that was mistaken [...] The media enjoyed the sensationalism of the gun. In many ways, we set ourselves up for the murder we received... We realized

that we had to treat the issues that the people were most concerned about (Newton [1973] 2002: 276).

While Newton still framed the need for the social programs as stemming from the threat of genocide and the necessity for black survival, he simultaneously highlighted a quality in survival that seems to escape the struggle over life and death through the affective categories of self-respect, dignity and enthusiasm:

A Ten-Point Program is not revolutionary in itself, nor is it reformist. It is a survival program. We, the people, are threatened with genocide because racism and fascism are rampant in this country and throughout the world. And the ruling circle in North America is responsible. We intend to change all of that, and in order to change it, there must be a total transformation. But until we can achieve that total transformation, we must exist. In order to exist, we must survive; therefore, we need a survival kit: the Ten-Point Program. It is necessary for our children to grow up healthy with functional and creative minds...Where there is courage, where there is self-respect and dignity, there is a possibility that we can change the conditions and win. This is called *revolutionary enthusiasm* (Newton [1970] 2002: 160-161).

The Survival Programs were thus destined to elevate the morale of their beneficiaries and make them receptive to the *affect* of revolution. More importantly, they had a strong temporal function, stretching the passive time pending death into the active time of survival, a time of holding out and holding on until the right time for revolution had come. They thereby mark Newton's sustained engagement with what one might call a revolutionary philosophy of time. In the article *On the Defection of Eldridge Cleaver*, Newton highlighted that a dispute around time was at the core of his disagreement with Cleaver. While Cleaver "ordered everyone into the streets tomorrow" (Newton [1971] 2002: 207), Newton knew that "a spontaneous revolution is a fantasy." (ibid.) Rather than provoking a revolutionary conflict in the here-and-now, the BPP's inflection around 1970 inaugurated a sustained investment into resistance and survival. Writing on the differentiation between resistance and revolution, Howard Caygill comments on the temporal difference between a revolutionary acceleration of time and the prolonged effort to extend the capacity to resist:

A capacity is precisely a prolongation in time – thus, the struggle for resistance occupies an extended time horizon, unlike the revolutionary bid for power which thrives on the acceleration of time (Caygill 2013: 10).

The Panthers' Survival Programs exemplify this marked shift from a politics of escalation to a sustained politics of survival. Investing into the physical wellbeing of the people as well as into their cultural education, they opened a sheltered space where the black community could exist outside the immediate pressures of direct confrontation and struggle. Crucially and signalling Newton's distance from the earlier endorsement of Black Nationalism, the Panthers' ceased campaigning around issues of an essential black identity. Their Survival Programs carved out a niche of life that for a time withstood the FBI's counter-intelligence operations of

defamation and criminalisation (COINTELPRO). During this time, Newton carefully guarded against advocating the revolution now, while promoting the belief in the longevity and eventual triumph of the movement in the face of likely death:

I have no doubt that the revolution will triumph. The people of the world will prevail, seize power, seize the means of production, and wipe out racism, capitalism, reactionary intercommunalism-reactionary suicide. The people will win a new world (Newton [1973] 2008: 132).

With its substitution of 'Black' with 'the people of the world' and its endorsement of vaguely formulated political aims such as the end of capitalism, racism and a number of other goals from the portfolio of 1960's counterculture, this statement is miles away from the neatly circumscribed Black revolutionary identity the Panthers had endorsed earlier. Rather than antagonistically building a strong identity around blackness (or black ontological security), I argue that Newton here expresses a deep insecurity concerning the very possibility of a positive black ontology. Instead of a struggle around the relative security or insecurity of an ontological position, around what Martin Heidegger calls 'the ontic', we are here dealing with *ontological* insecurity in the strong sense; with an insecurity about the viability of ontic identity.<sup>5</sup> Formalising this doubt regarding identity-politics, recent work in Black studies has demonstrated that 'blackness' and 'whiteness' are social *positions* before they become invested as *identities* (Patterson 1982; Hartman 1997; Sexton 2008). Writing on the structural relations between Whites and Blacks since the time of the slave trade, Frank Wilderson has argued for an understanding of slavery and segregation as relations of formal domination of one entity (Humans) over a subjugated entity (Slaves). Rather than seeing this conflict as a clash between competing identity narratives, Wilderson recasts it as a struggle around structural domination, regardless of identity. For Wilderson, arguing in Kantian terms, the slave relation forms the condition of possibility for 'black' and 'white' to emerge as identities in the first place. Drawing on Marxism and Psychoanalysis, Wilderson justifies this structuralist view as follows:

I argue that 'Savage', Human and Slave should be theorised in the way we theorise worker and capitalist as positions first and identities second, or as we theorise capitalism as a paradigm, rather than as an experience (Wilderson 2010: 24).

What is at stake here is the difference between fully constituted identities that can be remade or defended at will and the pre-identitarian formal relationality that guarantees the reproduction of systems of power and of domination. Wilderson calls this the *structural positionality* that social actors are born into, and Marx' famous insight about men existing not under "self-selected circumstances" but "under circumstances existing already, given and transmitted from the past" might have served as his model here. Let us now see how the shift from *identity* to *positionality* changes the viewpoint on the case of the Black Panthers.

## Negotiating Stigma and *Ontological Insecurity*

If we abstract from identity and examine the social position of the Panthers vis-à-vis white hegemony as well as the integrationist black mainstream, we gain a more flexible understanding of the shift in the Panthers' politics away from identity. Contrary to identity, the category of stigma is a normative attribution of inferiority that highlights a power relation, in which the stigmatised appear as *pure negativity* with regard to the 'normal'. Rebecca Adler-Nissen has developed a framework that combines Ervin Goffman's theory of stigma with questions of ontological security. She both reflects and contests Rumelili's differentiation between inclusive and exclusive identity aspects by arguing that stigmatisation, i.e. the normative judgement of behaviours as "deviant" or "morally polluted" easily persists even after successful behavioural adjustment. This explains why, after the Civil Rights Movement the stigma of blackness persisted, despite formal integration into behavioural American-ness. Adler-Nissen insists that stigmatisation always induces a binary between "us" and "them" at the expense of the stigmatised, who are deemed less human or often entirely un-human:

A third feature of stigma imposition occurs when social labels connote a separation of "us" from "them". The 'us' and 'them' designation in the stigmatization process implies that the labeled group is slightly less human, or, in extreme cases, not human at all (Adler-Nissen 2014: 147).

This emphasis on the 'inhumanity' of the stigmatised provides another argument for the Panthers' sudden doubt in identity as a political category. Applied to the black case, we can see that in conditions of structural inferiority (or structural stigma), there is no aspect of identity that can be positively invested in the hope of successful de-stigmatisation. Wilderson reflects this point when he asks: "What is a Black? A subject? An object? A former slave? A slave? The relational status, or lack thereof of black ~~subjectivity~~ (subjectivity under erasure) haunts Black studies as a field just as it haunts the socius" (Wilderson 2014: xi). The problem of investing in an identity that is constituted as negative with regard to the norm has also been elaborated in a number of contemporary critiques of identity politics. The bottom line of these critiques is that, if identities are constituted oppositionally in relation to a normative Other, then reclaiming a stigmatised identity in the hope of normative recognition only reinforces the oppressive hierarchy that instituted the stigma in the first place. The stigmatised might be able to change minimally the valence of their social position but they do not enable the conditions for a non-stigmatising sociality to emerge. Because of this, Wendy Brown has framed identity politics as a struggle for the recognition of our "wounded attachments", that masochistically strengthens the system it is trying to fight:

Politicized identity thus enunciates itself, makes claims for itself, only by entrenching, restating, dramatizing, and inscribing its pain in politics; it can hold out no future—for itself or others—that triumphs over this pain (Brown 1995: 74).



This awkwardness concerning identity can serve as an explanation for the Black Panthers' otherwise obscure change of heart regarding the former endorsement of identity-building violence. Apart from laying down their weapons, the Panthers also began to form alliances with diverse women's movements as well as gay rights activists and other formerly rejected marginalised groups, in the spirit of intersectional struggles that are defined by their social position, rather than by their identity. They realised that the stigma placed on them put into question the very idea of their humanity. Foreshadowing recent work in Black studies, their position expressed the extreme awkwardness of existing as the negative pole of the ontological plenitude of whiteness (expressed as having an identity, a subjectivity, a body, a soul). This ontologically thin ground meant that there was indeed no position left that could be positively invested. I have argued that the Panthers' community services testify to this awkwardness without resolving it. Contrary to the Panthers' beginnings, they represent a much more minimal position that remained invested in blackness only as a negative position with regard to whiteness. Rather than bolstering this marginalised identity through armed escalation, the Panthers now merely acknowledged it as a *position* whose occupants' lives were threatened.

## The End of Identity

The case of the Black Panthers documents how an emergency is produced through politics and through rhetoric as *an optics* that frames political positions and identities. Moreover it shows how declarations of emergency occur on a politically contested terrain, constituting a discursive process, whose success centres on its performative delivery. My argument suggested that the Black Panthers engaged in a process of societal securitisation to cast as a disaster, a situation that the U.S had disavowed as normal. Huey Newton's rhetoric was in this context analysed as serving a dual performative function. It sought to secure a radical black identity with regard to white hegemony as well as in opposition to the integrationist demands of the Civil Rights Movement. The analysis of the Panthers' sudden departure from identity-based politics was used to highlight an analytical limit within security studies that was addressed through Black studies' discussion of positionality. In addition, stigma theory was used to show how attributions of inferiority run deeper than identity and touch the social location of a subject in its deep ontological positioning as *negativity pure and simple*.

Referring to Wendy Brown and to Adler-Nissen's work on stigma and humanness, the question that security studies and cultural disaster studies need to address is: Can there be a politics that severs its "wounded attachments" to identitarian integration and instead addresses the structural level at which social positions are allocated? Following recent work in the so-called post-foundational tradition (Lacoue-Labarthe 1990; Lacoue-Labarthe and Nancy 2005; Marchart 2007)<sup>6</sup>, we can suggest this would mean shifting the focus from *politics*, as the arena of the

parliament, of parties and of policies that constitute our political reality as 'politics as usual' to *the political* as the space that constitutes the ground of our social order and firstly enables its normative coding. Methodologically this shift entails detaching disaster research from any already constituted *object* of research and recalibrating it as *an optics* that zooms in on the construction of the political field itself.

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## Notes

<sup>1</sup> The American Records of the Weather Bureau shows a temperature of 40 Fahrenheit (4,4 Celsius) and no rain for this day. See <http://www.archives.gov/research/guide-fed-records/groups/027.html>. (Accessed on 15.11.2014)

<sup>2</sup> In her book *Scenes of Subjection*, Saidiya Hartman reconstructs the transitional period between black slavery and freedom and argues that the legal ascription of subjecthood to blacks served to make African Americans legally accountable for crimes. Against liberal equations of subjecthood and freedom, Hartman argues that full subjectivity only further constrained blacks and controversially calls into question the presumed discontinuity between freedom and slavery.

<sup>3</sup> Wæver's theory of securitisation forms an interesting parallel to other attempts to theorise the performative politics of states of exception. While Giorgio Agamben (Agamben 1998) reserves hardly any room for performativity and instead grounds the state of exception in the formalism of the legal realm, Adi Ophir (Ophir 2010) has theorised man-made disasters as resulting from discursive processes of 'catastrophisation' that, similarly to Wæver's theory of securitisation constitute a practice of framing political life as a disaster.

<sup>4</sup> Brady Thomas Heiner claims that Foucault's preoccupation with war in his lecture series "Society Must Be Defended" originated in an exploration of the racial politics of the U.S and especially his knowledge of the Black Panther Party that he gained through Jean Genet.

<sup>5</sup> With the concept of 'ontological difference', Martin Heidegger (Heidegger 1991) distinguished between the realm of empirical beings or *Seiende* and the domain of being itself, or *Sein*. For Heidegger the sensory reality that offers itself to our experience is the realm of the ontic (*Seiendes*) whereas the foundation, origin or cause of this reality is the ontological (*Sein*) that transcends the ontic and escapes our perception. Applied to politics, the ontic is the empirical reality of constituted identities whereas the ontological is the existential, performative and symbolic, operation through which these identities are differentially constituted in the first place. Heidegger critiques Western metaphysics for always having sought to ground the ontic in a firm ontological principle such as substance, spirit or essence. For Heidegger, metaphysics has thereby failed to recognise the performative dimension of its own grounding operation (ibid: 51).

<sup>6</sup> Oliver Marchart (Marchart 2007) proposes to call this difference between the empirical reality of politics and their enabling conditions the 'political difference'. With this formulation, Marchart effectively distils the paradigmatic theoretical movement of many post-Heideggerian thinkers. The 'political difference' constitutes the main concern of the studies undertaken by Jean-Luc Nancy and Philippe Lacoue-Lacoue-Labarthe at the 'Centre des Recherches Philosophiques sur le Politique', founded at the ENS Paris in 1980. Because the political difference deprives subjects of any foundational identity, Marchart calls the ethics that this difference solicits post-foundational.

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# Multiscalar Narratives of a Disaster: From Media Amplification to Western Participation in Asian Tsunamis

By Sara Bonati

## Abstract

The international recovery system responds differently to disasters with similar characteristics. It answers to specific motivations that are not necessarily connected to the nature of the disaster. The variability of the answers given not only depends on the type of disaster but also, in particular, on the local social structure and on the transcalar narrative of the disaster used to move communities not directly affected to action.

This paper therefore analyses the level of Western involvement in two Asian tsunami recovery plans and the role of the media in attracting Western private donations. To this end, Italian involvement in the two cases is discussed.

Beginning with a literature review to support the argument that the media are crucial in stimulating private participation through ‘spectacularizing’ the disaster, this paper illustrates that, when spectacularization is insufficient, the media additionally adopts the strategy of ‘transposition’, leading to ‘appropriation’ of the event. In particular, during the Boxing Day tsunami of 2004, the transposition became the ‘Westernization’ of the narrative of the disaster. The process of transposition or Westernization, however, did not happen with the same modalities in the narrative of the Tohoku tsunami of 2011. In this case, the focus was more on the technological disaster that followed the natural hazard.

The author concludes that emotional transposition of the disasters by the media played an important role in stimulating private donations and in spurring governmental relief in both the disasters. Foreign governments, however, are mainly moved by other factors such as ‘flag policy’ or what Olsen et al. (2004) identified as the concept of ‘donor interests’.

**Keywords:** spectacularization; humanitarian aid; tsunami; mass media; disasters narrative.

## Introduction

This paper aims to understand Western involvement in the Asian recovery processes following the Boxing Day tsunami 2004 and the Tohoku tsunami in March 2011. It takes Stromberg's words (2007: 200) – “the decision about what to call a disaster and how much relief provided depends on who is suffering” – as a point of departure. It analyses the role of the media in attracting Western attention and private donations, with a particular focus on the Italian response. The Boxing Day tsunami of December 2004 and the Tohoku tsunami of March 2011 are the two most devastating Asian tsunamis of the last hundred years in terms of victims and ecological and social effects. In analysing the media accounts, this paper will use *transcality*, *spectacularization* and *transposition* as key analytical terms. It is a preliminary study on the usefulness of these concepts in disaster narrative analysis. In particular, transcality will be used with the aim of defining the indirect experience of events<sup>1</sup> that can be consequent to the interconnection of places and geographical scales. The concept is useful in understanding how a geo-localized event can also have impacts in other places not geographically contiguous. As a consequence, we can have a perceptive reduction, or loss, of distance. This paper maintains that spectacularizing and transposing events are two communication strategies used to implement this process, which is described further in the next section. Spectacularization means the amplification of information given by media in order to emotionally move the audience, whereas with transposition the author identifies the process of transcality victimhood that can occur when the audience perceives the disaster, in Ulrich Beck's words (2005), as an “individual experience”.

Kasperson (et al. 1988) states that, when experience is lacking or minimal, individuals learn of risk through other people and information systems:

Most people in a particular society do not experience disasters first-hand. Rather, they learn about disasters through the experiences of others, as told by survivors, expressed by others, or conveyed in a movie or media account. Cultural representations shape a group's understanding of disasters and may influence the way in which that group prepares for, responds to, and recovers from actual disasters (Webb, Wachtendorf and Eyre 2000: 7).

Accordingly, images offered by the media can alter the image of the condition of a place struck by disaster in the minds of those people who have no direct knowledge of said place.

Therefore, “cultural representations of disasters play an essential role in transmitting knowledge between individuals, groups and generations” (Webb, Wachtendorf and Eyre 2000:7). One part of these representations is the narratives of disasters. According to narrative theory, disaster narratives are the result of cultural and individual factors (Daly 2011). In the nineteenth century, they were produced by all popular forms of communications such as narrative fiction, poetry, drama, opera, fine art history and landscape paintings; contemporary forms of disaster narrative



include on-site graffiti, which survivors draw in order to send messages of hope and humour, to provide basic information, or to protest against government recovery processes (see Hagen et al. 1999; Webb, Wachtendorf and Eyre 2000).

Accordingly, the process of making information must pass through several filters (geographical and cultural), all of which shape individual interpretation. The actors involved (directly or indirectly) in a disaster thus have a different image of the event. They perceive benefits and damages (defined “goods” and “bads” in Beck 1992) according to a different range of values that depend on their perception. Public perceptions are identified as the products of “intuitive biases and economic interests” that “reflect cultural values” (Kasperson et al. 1988: 178). Stromberg (2007) recognized a number of central factors that move humanitarian aid, including the historic and cultural proximity of the location, economic and geo-strategic interests, colonial history, geographic distance, and trade values. Indeed, an awareness of the benefits modifies the perception of risk (Finucane et al. 2000). Today, there is a vast amount of literature supporting the hypothesis that international aid is conceived according to more factors than the level of the emergency. Some of these factors are the media narrative of disasters, foreign policy, and economic outlook (Stromberg 2007).

Indeed, as Beck (1992) states, all events (local and global) are also always subjective events. Subjectivity is the tool through which people interpret situations and make decisions. Accordingly, the scientific community talks about “subjective risk” and investigates the role that this dimension plays in disaster risk production and reduction (see Lewis and Kelman 2012). According to Beck (1992), the weight of subjectivity is low in local events because we can ‘touch’ and experience the objective dimension. Indeed, in the face of extreme events, experience reduces the level of concern of people and determines their sensitivity to risks (see Richardson, Sorensen and Soderstrom 1987; Barnett and Breakwell 2001). Thus, “distance” (Beck 1992, 2005) is the new geographical element for defining individual processes of event interpretation. However, distance must be interpreted not only in physical terms but also in cultural terms. We read global events through our own eyes (see Beck 1992), filtered by our geographical identity (see Delage 2003; Bonati 2015) and perception. Thus, subjectivity becomes the tool for interpreting these phenomena due to the absence of experience of the event.

## **Role of Media in Disaster Communication**

The media has a role to play in reducing distances. This paper therefore argues that there are today two ways to “bring a disaster near” to people who have not had direct experience of it. First, through the media telling stories that produce an indirect experience (transcalar narrative). Second, when indirect impacts or extra-border impacts occur and are experienced by members of the same community (transcality of impacts). In the first case, the media usually employs the strategy of

spectacularizing the disaster narrative in order to catalyze attention and obtain an audience. As a consequence of this process, the media have the power to stimulate an audience into action. In the second case, the media adopt the strategy of transposing the disaster, leading to the appropriation of the condition of the 'victim'. All the auditors become victims when a part of their community is involved in a disaster. In particular, during the Boxing Day tsunami, the transposition became the Westernization of the disaster narrative, in accordance with the high number of Western victims. Given global interdependence, all disasters can have repercussions on an international scale, with people living far from the place where the event occurred also becoming victims.

In the context of globalization, the sociological notion of disaster (see Quarantelli 1985) assumes special importance. The social system 'mediates' a physical event, amplifying or containing its consequences. Therefore, according to De Marchi et al. (2001), the global system can decide to ignore thousands of victims in marginal and deprived areas. It cannot avoid concern, however, if the people affected are from the vital centres of the economic and financial world, the collapse of which would inevitably affect the present global system. In this context, the role of the media is central in catalyzing audience opinion.

Etymologically, the word 'medium' (the plural of which is 'media') comes from Latin and has been adopted by the English language with the meaning of "median", "mean", "middle" or "intermediary". In the process of building communication, each transmitter operating as an intermediary alters the original message. This impacts the way people process information (Kasperson et al. 1988). According to Kasperson's considerations, in a humanitarian crisis the media do not report events objectively, but rather in a number of different ways (Robinson 1999). Indeed, in the media's communication strategy, the method of conveying an event is usually adapted to the audience it is directed at. Salience, style and frequency of message are communication strategies that can alter risk perception (Mileti and Fitzpatrick 1992; Tekeli-Yesil et al. 2011). Moreover, dramatization is an important instrument in risk communication (Kasperson et al. 1988). Accordingly, all disaster narratives demand the 'pleasure' of the destruction "of people, poverty, hopes" (Daly 2011: 255). This 'pleasure' may recall both the terror of Aristotelian tragedy and the innate Freudian death-drive. There is a contemporary familiarity, however, with disaster narratives (Daly 2011).

The media therefore appear to play a fundamental role in stimulating private emotional and economic participation (Roseblatt 1996; Olsen et al. 2003) through spectacularization of the disaster. The process of spectacularization involves amplifying information by the media and can also demand a loss of distance (transposition). In Kasperson et al. (1988: 178), social amplification of a risk framework is provided through "the ways in which individuals receive and process risk information and their role in affecting the ways in which risks can be intensified or attenuated". In the system, individuals act as "stations of amplifications"; according

to a psychometric model elaborated by Trumbo, they can be classified as “amplifiers” or “attenuators”.

Moreover, an event is said to be on a global scale when it catalyzes international attention – reaching an international audience through the media, for example – and when it contributes to shaping harbingers of a global culture (Roche 2000; Dansero and Mela 2007). According to the theory of the ‘CNN effect’, the media can influence political decisions and the granting of humanitarian aid (Olsen et al. 2003). ‘CNN effect’ refers to the capability of the media to influence leaders’ decisions, in particular as regards the foreign policies of Western countries. Examples of this have been identified by Robinson (1999) in situations of humanitarian emergency and troop deployment as part of non-coercive operations.

The role of the media, however, appears more important in the production of public stimulation than in governmental action. Over the years, the scientific community has in fact noted a gradual process of declining media influence on politics. Instead, it can be argued that the media today has become mere servants of governmental messages, or impersonal intermediaries between the government and the public (Robinson 1999, Conoscenti 2004). They are interpreted by Conoscenti as political expediencies, used for obtaining the emotional consensus of the population (according to language engineering theory, see Conoscenti 2004). In particular, Conoscenti (2004) argued that the power of the media decreased during the Kosovo, Afghanistan and Second Gulf Wars. Only Iraq-Kurdistan and Somalia appeared as examples of the CNN effect. The instrumental use of information pertaining to wars is only one metaphor of media control, which is vested with governing powers. This does not rule out the fact that some forms of manipulation can be used in the case of environmental emergencies to obtain and provide the desired image or message.

Political forces are not always able, however, to show the image they desire. During Hurricane Katrina in 2005, the situation was out of control and the governmental image in the media was one of weakness, displaying an inability to manage the crisis. In Europe, Katrina was perceived as a reflection of socioeconomic inequality and political incompetence. On the other hand, Hurricane Sandy in 2012 was interpreted as a reflection of global warming (see Bonati 2014). The media created highly different images of the two disasters. Furthermore, it used different elements and event characteristics to arouse a special range of emotions.

The role of the media therefore seems to depend on political interests, as opposed to influencing such interests, until the time when political forces are able to impose their vision. On the other hand, the media loves telling stories that can catalyze mass attention, as discussed above. The selected news must stimulate people’s emotions. The attention focused on disasters decreases if they are unfamiliar or distant to the viewers. As anticipated at the beginning of this paper, the media narrative of disaster can reduce this distance. The reduction of distance can be achieved through the process of transposing the disaster, as analysed below in the two case studies.

## The Case of the 2004 Tsunami in Southeast Asia

One example of the transposition of a disaster is the process of Westernization in the narrative of the Southeast Asian tsunami of December 2004. In this paper, the Westernization<sup>2</sup> of disasters is taken to mean the process interpreting events according to Western culture and experience. This may follow a process of geographical transposition and a Western appropriation of disasters that occurred in non-Western regions, as justified by the high number of Western victims. During the 2004 tsunami, international intervention was officially justified by the consistent number of foreign tourists in the areas engulfed by the disaster. This gave the hazard greater Western media coverage (Keys et al. 2006). The tsunami, which struck during the holiday season, killed many Western tourists and was covered extensively in the Western media. Approximately 9,000 tourists (most of them European, in particular from northern Europe) were killed or went missing. The country worst hit was Sweden: 428 of its citizens were killed and 116 were missing. Sweden was the ninth largest country in terms of international aid in the aftermath of tsunami.

As the tsunami affected a lot of tourists from several countries, it was immediately identified as an international disaster – or, rather, it became a catastrophe for all the countries that suffered directly or indirectly. On January 5, 2005, all EU member countries participated in a day of mourning for the tsunami victims. It was the first time that the European Union officially proclaimed a European day of mourning; it should be noted that it happened in memory of victims who died outside national territories, and not in a war situation. The tsunami tragedy helped create a temporary sense of European citizenship, as was also demonstrated during the recovery process. Immediately after the disaster, all of the member countries sent relief autonomously and in a disorderly fashion. Later on, however, the EU entrusted coordination of the aid to Italy, in accordance with this new sense of common participation in mourning. The internationalization of the disaster was also perpetrated by media propaganda, which “authorized” a number of countries to intervene and make decisions in the recovery process. Foreign countries contributed a total of approximately seven billion US dollars.

The Westernization of the narrative is also the result of telling stories from a ‘Western point of view’. Accordingly, in the aftermath of the Boxing Day tsunami, a number of documentary films were produced in order to tell the disaster: *Tsunami: The Aftermath* (directed by Bharat Nalluri, 2006); *The Third Wave* (directed by Alison Thompson, 2007); *The Impossible* (directed by Juan Antonio Bayona, 2012); and *Hereafter* (directed by Clint Eastwood, 2010, which has among its main characters a French journalist who survived the tsunami). All of these shared similar features: the narrator is from a Western country, the main characters are Western people who experienced the disaster and/or the post-disaster first-hand; and the Asian people appear as secondary characters – both in the roles of innocent victims and saviours. This Western-centrism of the movie narratives could be the result of

the transcalarity of victimism condition, due to the great impact that Western people experienced directly and indirectly. The media attention on the disaster was high; if we adopt the idea that climate change is still a risk<sup>3</sup>, then for the first time since the ‘Great Flood’ and the Ice Age, we have had a natural disaster that was also a transcontinental disaster (directly affecting Asia and Africa, and indirectly, Europe, Oceania and America).

This Western victimhood can be also interpreted as the result of the “unexpected” and of the need to learn from experience. No one in Western countries has expected a similar disaster; this caught them unprepared. It is not a coincidence that Thailand is the country that is most represented in Western post-tsunami narrative. It was the place where the greatest number of tourists died and served as a comparison between the outsider and insider, but it was also presented as an example of the flaws in the relationship of the Western world with nature. In Thailand, many island populations – on the Andaman and Nicobar Islands, in particular – survived the catastrophe because they anticipated the disaster, relying on their traditional knowledge of the area. Other communities – both immigrants and tourists in particular – did not understand the natural signals of what was happening (e.g., Arunotai 2008; Baumwoll 2008; Gaillard et al. 2008; Mercer et al. 2013). These events challenged the excessive confidence in the human capacity to control nature and moved scientists’ attention to focus on the role of indigenous knowledge in reducing the exposure to risks.

## **The Tohoku Tsunami of 2011**

In the aftermath of the Tohoku tsunami, the process of transposition was different; it is only indirectly and partially possible to discuss the Westernization of the disaster. Furthermore, we can talk of the transposition of risk. Western involvement in the Japanese disaster was not as high as it was in the Southeast Asian tsunami of 2004. In the former case, transposition was not justified by the number of victims or by the direct impact on the Western population. The Japanese tsunami introduced the risk of technological disaster (national and international), due to the damage to the Fukushima nuclear power plant, which immediately brought to mind images of Chernobyl. Faced with the risk of radioactive diffusion, an international debate therefore followed and the media focused its attention on that. Accordingly, this disaster had an impact on international policies regarding nuclear power. Germany decided to accelerate the closure of seven old nuclear power plants operating on its national territory; in Italy a referendum said ‘no’ to nuclear energy in the country. Additionally, in Switzerland, a project with three new nuclear power plants was temporary stopped. Additionally, prudence and new controls on national nuclear power plants were requested in France, Russia, China, Taiwan and India.

In the media narrative of the disaster, the Tohoku tsunami was presented as a local disaster, which obtained a global dimension when the risk of radioactivity

diffusion reached an international scale. Indeed, Japanese requests for assistance reached an international scale only after the risk of radiation diffusion became real and the Government of Japan recognized the nation's inability to stop it. Accordingly, the media focused on the international debate on nuclear energy that followed the disaster.

Confirming interest in the nuclear debate, the analysis of three Italian newspapers (*Il Corriere della Sera*<sup>4</sup>, *La Repubblica*<sup>5</sup> and *Il Giornale*) showed that the most frequently-used words in articles about the Tohoku disaster were “(anti-) nuclear” and “radioactivity”. During the period analysed (March 2011–December 2011), the word “nuclear” appeared in association with “disaster” and “Japan” in 49 articles published by *La Repubblica* (source: *Repubblica.it*), 33 of which were published in the first two months after the tsunami. In *Il Giornale*, the words appeared together 33 times (source: *Ilgiornale.it*), while in *Il Corriere della Sera*, they appeared together 60 times (source: *Corriere.it*). A total of 145 articles with a reference to the tsunami in Japan were published during this period in *Il Corriere della Sera* and 142 in *La Repubblica*. Only 44 are the articles published in *Il Giornale* to which it is possible to access on the newspaper website using the key-words “tsunami” and “Japan”. Thus, about one-third of the articles published defined the Tohoku disaster as a nuclear disaster. Moreover, about half of the articles published used the word “nuclear” in association with “tsunami” and “Japan” (e.g. 87 articles in *La Repubblica* newspaper). References to the Chernobyl disaster appeared frequently in the three newspapers. In *La Repubblica*, it appeared 16 times in association with “nuclear, disaster, Japan” (3 times in the title); 19 times in *Il Corriere della Sera* (two times in the title); and 20 times in *Il Giornale* (3 times in the title). Thus, *Il Giornale* associated the disaster of Fukushima and the disaster of Chernobyl in about 50% of the articles analyzed. While some of the articles discussed the differences between the two disasters and disputed possible comparisons, others underlined the possible risks of experiencing an Asian Chernobyl. References to the Ukrainian disaster thus fueled the debate on the safety of nuclear power.

The debate on the topic was confirmed by the contents of the articles published. *Il Giornale* accused the international community of being too focused on the technological risk and ignoring the large number of victims of the tsunami. In an article from March 20, 2011, titled “Japan: The world thinks only of the nuclear and forgets the post-earthquake humanitarian drama”<sup>6</sup>, the newspaper reproached other national newspapers for paying more attention to the risk of a second Chernobyl (according to the article, this was the case in *La Repubblica*) rather than talking about the people who had died in the natural disaster. After these statements, the newspaper was accused of being politically influenced. Indeed, in 2011, the newspaper was being published by the Berlusconi family; Silvio Berlusconi – a supporter of nuclear power at that time – was Prime Minister of the Italian Government at the time. Additionally, the nuclear debate was reaching a peak in Italy: the Italian people had been called to decide on nuclear energy with a referendum in June 2011,



where 94.05% of voters said ‘no’. On June 14, *Il Giornale* published two articles, the first entitled “Nuclear power: Nuclear plants terrify only Italy”, and the second “France and Japan confirm their nuclear choice. Saudi Arabia opens 16 nuclear plants”.

On the other hand, *La Repubblica* affirmed its ‘no’ to nuclear power in several articles: “And Germany speeds up its farewell to nuclear power in May: Only 4 reactors out of 17 in operation”<sup>7</sup>; “Why it’s possible to give up nuclear”<sup>8</sup>; “Chernobyl: After 25 years, risk of tumours in survivors still high”<sup>9</sup>.

Therefore, the process of transposition in the Tohoku disaster was associated with the ‘possible’ condition (the risk) of European people becoming victims. In front of the news and images of Japan, all the Western communities – with or without nuclear facilities – became aware of (or could no longer deny) the risks associated with nuclear power. The process of Westernization that followed was associated with the idea of the risk affecting every country with nuclear power plants, rather than with the disaster and the possible consequences of radioactive diffusion from Japan.

In particular, what emerged in an article published in March 22 in *Il Corriere della Sera* (Maraini,<sup>10</sup> “Human arrogance before nature: Shouting emotional choices in the face of the nuclear makes no sense”) was that all Europeans can become victims of progress; this requires deep reflection on the vulnerable condition of technology in the face of the strength of nature. In conclusion, according to the articles published by the three newspapers, we can say that the Japanese disaster moved from to be a natural disaster, due to earth surface movements, to an anthropic disaster (the nuclear disaster). Thus, it inevitably introduced also the human guilt (the responsibility of humans in producing disasters) that prevailed in terms of effects on the responsibility of nature (the earthquake and the consequent tsunami).

## **Role of the Media and Italian interventions in Asian Tsunamis**

In light what has been discussed up to now, people’s interest appears to be directly linked to communication engineering by the media. Public opinion is mainly driven by media communications; this can have various impacts such as a decrease in tourism or economic investments in the affected area and an increase in people’s attention to the crisis. At the same time, the media can directly or indirectly become an instrument of action, for example moving people to send private donations as demonstrated after the tsunami in Southeast Asia. In contrast, when the media stops talking about an emergency, people’s attention towards the event wanes. Images of disasters are forgotten and regular touristic and economic flows in the affected regions are re-established (Olsen et al., 2003).

According to data from the Italian Foreign Ministry, in an analysis of the ‘wave’ of aid that followed the Boxing Day tsunami, national private donations reached

€43.3 million (the Italian Government and local public administrations donated €15 million). The funds were collected thanks to television spots and newspaper articles. A telephone number for SMS donations was promoted by TIM, Vodafone, WIND, 3, Telecom Italia (the five biggest telephone companies), *Un aiuto subito* (a solidarity committee organized by *Corriere della Sera* and TG5 news), and RAI TV, and was adopted by all the mobile companies operating in Italy. RAI and Mediaset, the biggest national television networks, broadcast the telephone number for two weeks until January 9, 2005, and €28 million was collected. It was the first time in Italy that all of the main national media broadcasters were promoters of a fundraising campaign for an international disaster. Later, the funds collected were turned over to the 'Protezione Civile Italiana' (Italian Civil Protection, the national body of emergency response), which guaranteed the transparency of the fund's use through its website [www.protezionecivile.it](http://www.protezionecivile.it) and the control exercised by the media.

Other funds were collected through other media initiatives. *La Stampa* (one of the most widely-distributed national newspapers in Italy) appealed to its readers in order to fund the *Specchio dei Tempi* foundation, which rebuilt schools and houses in Sri Lanka and a professional school and an orphanage in Thailand, as well as a nursery school in India. The foundation also donated boats and tuk-tuk (a three-wheeled automotive rickshaw) to people who had lost everything in the disaster. And finally, *Il Giornale* decided to fund some NGOs involved in Southeast Asia.

In the aftermath of the Japanese tsunami, fundraisers and the use of the funds were entrusted to CRI (the Italian Red Cross). The telephone number used for the fundraiser was activated by CRI and was broadcast by all national media until the end of operations on March 30, 2011. There are no data regarding the total number of donations collected by the National Red Cross, though there is information regarding the donations to the International Red Cross. The funds were sent to the Japanese Red Cross, however, and used to promote local programmes for assistance to victims, health prevention, and education, and to improve the living conditions of the displaced. The media thus had a secondary role in this disaster compared to the Southeast Asian tsunami, when the Italian media was promoter of the 'wave of aid'. Indeed, in the aftermath of the Tohoku disaster they operated simply as a means through which to collect donations, rather than as promoters.

Comparing the two disasters, the data on the outcomes are clearly different. In the 2004 tsunami, 11 countries were affected and there were about 240,000 victims, while the 2011 tsunami was primarily a national disaster in which 16,000 people died. The characteristics of the disasters, however, are similar in terms of magnitude and depth of the earthquake, as shown in Table 1.

<b>Disasters/Data</b>	<b>Number of Deaths</b>	<b>Number of Countries Affected</b>	<b>Description of the Earthquake</b>	<b>Description of the Tsunami</b>
<b>Southeast Asia, 2004</b>	About 240,000	11	Magnitude: 9.3 Depth: 30 km Distance (nearest coast): 160 km	Max run-up: 27 m  Upthrust of impact: about 10 m
<b>Japan, 2011</b>	About 16,000	1	Magnitude: 9.0 Depth: 32 km Distance (nearest coast): 72 km	Upthrust: 6-8 m

Table 1 – Data on the tsunami disasters in Southeast Asia (2004) and Japan (2011).

A second important difference between the two disasters is the level of development of the countries affected. In 2004, all the countries directly affected by the tsunami were developing countries with poor warning and defence systems, whereas Japan is one of the most well-equipped countries in this respect.

The reaction and role of the Italian government – and of the Italian Civil Protection in particular – were different in the two disasters, as shown in Table 2, and had different justifications.

<b>Interventions of Italian Civil Protection</b>	<b>First phase of intervention</b>	<b>Second phase of intervention</b>
<b>Southeast Asian Tsunami, 2004</b>	<ul style="list-style-type: none"> <li>- Italy intervened for a number of the 4,000 Italians affected.</li> <li>- Sanitary teams were sent to the Maldives, Sri Lanka and Thailand.</li> <li>- Established the first flight bridge (4,308 Europeans aided).</li> </ul>	<ul style="list-style-type: none"> <li>- ICP became coordinator of the European intervention.</li> <li>- €28 million (private donations via SMS) was donated to ICP for post-tsunami recovery.</li> <li>- In Sri Lanka, 24 projects were completed.</li> </ul>

<b>Japanese Tsunami, 2011</b>	<ul style="list-style-type: none"> <li>- ICP intervened in Tokyo to support the Italian Embassy.</li> <li>- ICP was called to monitor the air level of radioactivity in the city.</li> </ul>	<ul style="list-style-type: none"> <li>- ICP intervention was confined to the metropolitan area of Tokyo.</li> <li>- ICP continued to monitor the air level of radioactivity close to the Italian embassy and in the neighbourhoods where Italians lived.</li> <li>- ICP promoted information on radioactivity risks</li> <li>- A pocket guide to radioactivity risk was published and distributed</li> </ul>
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Table 2 – Italian Civil Protection intervention in Asian tsunamis.

In the first phase of the recovery process, the role of the Italian Civil Protection was limited mainly to responding to national needs in both disasters, in accordance with the flag policy<sup>11</sup>. The needs were those of Italian citizens directly affected by the disaster. In the second case, while the role of the ICP did not substantially change in Japan, in Southeast Asia it was extended to assisting local relief and launching reconstruction projects. The difference can be attributed to three conditions present in the Boxing Day tsunami: first, as already discussed, private donations collected by mobile operators and national broadcasters were donated to the ICP in order to promote reconstruction in the affected countries; second, the countries affected immediately asked for international assistance because of their inability to respond by themselves to the emergency and the dimension of the impact, and because of the absence of local coordination; third, the condition of the affected countries – viewed as developing countries – created a feeling of responsibility in Western people (as a consequence of the comparison between the European tourists and the local populations). This was associated with transposition or Westernization of the disaster, which elevated the disaster to a transcalar dimension.

## Conclusion

Ulrich Beck (2005) described the Southeast Asian tsunami of 2004 as a personal/individual experience, according to the different geographical levels of experience people had. The entire international community went into mourning. The number of European victims, the media narrative and the political interests of Western countries, however, transformed the tsunami into primarily a Western catastrophe. It became a collective experience as a consequence of the reduction of distance, which also contributed to spurring the incredible generosity of the European people. According to the statements of the ICP project manager, Dr. Miozzo (Bonati, 2007), media spectacularization of the tsunami in 2004 was the start of a European wave

of generosity; the role of the media in this tragedy was therefore recognized as fundamental. Analysis of donations confirmed that a higher percentage of financial aid came from private donations, which were stimulated by media images broadcast worldwide. The Southeast Asian tsunami led to massive private solidarity, which ‘forced’ Western governments to take action. The initial rescue efforts, however, were completely directed towards recovering European nationals involved in the disaster, in accordance with the flag policy and confirmed through analysis of the Italian case study.

Moreover, the media ‘tsunami’ unearthed several problems that had been experienced in other international disasters. In fact, the international media claim moved a great number of ‘well-wishers’, who would not usually be involved in the recovery process. As a consequence of the great number of stakeholders involved in the disaster, there was confusion and rescue efforts were slowed down (Bonati, 2007).

On the other hand, the Tohoku disaster – which began as a local tragedy – rapidly became a potential international catastrophe. The risk of radiation leaks alerted all of the international communities, and the nuclear risks went from a local level to an international one. At a global level, the situation challenged and impacted the policies of nuclear power. The media became promoters of transposing reflections on the risks of radioactivity, feeding the political debate. An analysis of foreign relief makes it clear that it was mainly directed towards its citizens in the areas affected by the tsunami and by the radiation. The ICP, in particular, was limited to ‘monitoring’ the situation. This was, however, a consequence of Japanese (i.e., local) control of the recovery process – something that did not occur in the Southeast Asian regions.

In conclusion, the disaster narratives were different in the two aftermaths, according to the different images of the role played by humans in producing disasters. In the Japanese tsunami, human responsibility (linked to the inefficiency in managing the nuclear emergency and to the obsolescence of the nuclear plant) overtook the tsunami and the nuclear risk predominated in the natural disaster. Here, man was both a victim of the natural disaster and responsible for the technological disaster. On the other hand, in the Southeast Asian tsunami, man appeared to be vulnerable and powerless in the face of nature. The people that were killed were tourists during the holiday season – innocent victims of the violence of nature.

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## Notes

- <sup>1</sup> In this paper, event is interpreted as a space-time point (see Dansero and Mela 2007).
- <sup>2</sup> The Guardian, 22 June 2015 “New study links global warming to Hurricane Sandy and extreme weather events”
- <sup>2</sup> The word ‘Westernization’ is usually used to designate the process of standardization or globalization of Western culture. Edward Said, in *Orientalism*, argued that Westernization coincided with the process of colonization. In the dictionary, the word is used to define the act of influence with ideas, customs, practices, etc., characteristic of the Occident or of the Western USA. However, in this paper, the word is used in order to identify the process through which the Western world appropriates a disaster that occurred out of the Western geographical borders.
- <sup>3</sup> Indeed, climate change can be responsible for disasters, or rather it is the possibility that a disaster happens, thus it does not fall into the category of disaster as defined in literature
- <sup>4</sup> This is the first newspaper for the number of copies sold in Italy, founded in Milan in 1876.
- <sup>5</sup> This is the second national newspaper, after *Il Corriere della Sera*. Eugenio Scalfari founded it in Rome in 1976. It has always been associated with the Italian socialist movement.
- <sup>6</sup> Giappone, il Mondo Pensa Solo al Nucleare e Scorda il Dramma Umanitario del dopo Sisma
- <sup>7</sup> Published on 21<sup>st</sup> March, 2011, original title “E la Germania Accelera L’addio al Nucleare a Maggino in Funzione Solo 4 Reattori su 17”
- <sup>8</sup> “Perché è Possibile Rinunciare al Nucleare”
- <sup>9</sup> “Chernobyl: Dopo 25 Anni Ancora Alto il Rischio Tumori Nei Superstiti”, Repubblica.it
- <sup>10</sup> L’arroganza umana davanti alla natura. Gridare a scelte emotive davanti al nucleare non ha senso
- <sup>11</sup> The ‘flag policy’ is when a foreign country takes action autonomously and is disrupted by cooperation logic in order to safeguard its interests and recover its dispersed people. It usually produces an uneven and unequal distribution of goods among the people involved. In such cases, local interests are accorded the least priority (see Oslen et al., 2003).

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# Political Communication in Disasters: A Question of Relationships

By Hamish McLean & Jacqui Ewart

## Abstract

Politicians are both a help and hindrance in the provision of information to the public before, during and after disasters. For example, in Australia, the Premier of the State of Queensland, Anna Bligh, was lauded for her leadership and public communication skills during major floods that occurred late in 2010 and in early 2011 (de Bussy, Martin and Paterson 2012). Similarly, New York Mayor Rudy Giuliani was praised for his leadership following 9/11. This is in contrast to the poor performance of political leaders during Hurricane Katrina (Cole and Fellows 2008, Olson and Gawronski 2010). Political actors' lack of credibility and their poor situational awareness contributed to the problems. The involvement of political leaders in disaster communications is also problematic from the perspective of emergency agencies. For example, politicians who move their communication position from supportive to tactical can take over the role of providing official disaster information, such as evacuation warnings, without sufficient expertise, credibility or situational knowledge. This paper builds on the expanding body of research into the politics of disasters by exploring relationships with political actors from the perspective of emergency managers. Drawing on interviews with emergency agencies in Australia, Germany, Norway and the UK, we firstly examine when and what a politician should communicate during disasters and secondly, offer six principles toward a roadmap of involving political actors in the disaster communication process when life and property is at stake.

**Key words:** politicians, communication, disasters, emergency management

## Introduction

Scholars agree that disasters are political events (Olson 2000, Olson and Gawronski 2010, Kelman 2012). Much of the increasing body of research into the politics of disasters has taken a broad-brushed approach. In this paper, we drill into the relationship between emergency managers and political actors in times of calamity. Two key themes arise from a series of interviews undertaken with senior emergency managers in Australia, Norway, the UK and Germany. The first is the need to clearly establish the role and expectations of the political actor during a disaster, particularly during tours of impacted locations and, secondly, the key messages to be communicated during such times. We have established that these issues are important operationally to response agencies, but until now these topics have not received any scholarly attention. In fact, political involvement in disasters, although accepted as an important role by emergency agencies, can be problematic. For example, political actors with poor situational knowledge of the disaster while, at the same time, wanting to show leadership, have become more of a hindrance than help when timely, accurate, credible and relevant information is crucial when lives and property are at stake. Further, politicians, now dubbed ‘flood tourists and welly wallies’ in the United Kingdom (Ingham 2014) can also be a hindrance during the resource-intensive response phase of the disaster. Emergency managers, faced with the demands of saving life and property, have developed strategic ways of delaying ill-timed political requests for visits to disaster locations while protecting their unwritten relationships with their political masters.

## Methodology

This paper draws on in-depth interviews with disaster response agencies which were undertaken in the course of a larger project about disaster communication. The methodology consisted of open-ended, conversational style interviews (Denzin & Lincoln, 1994) to allow for in-depth discussion of the issues associated with the research topic. An interpretative approach to the interviews was taken to explore deeper insights into the complexities of the lived experiences of the interviewee from their own perspectives (Andrade 2009; Schwandt 1994). Both authors have professional backgrounds in disaster and crisis management. They were able to draw on their experiences in managing crises and disasters when developing the guiding themes for the interviews. Interviews, ranging between 30 minutes and two hours in length, were held with a number of senior emergency managers including:

- Anders Aspaas, Communication Advisor, Tromsø Police District, Norway (12 November 2013)
- Kjell Brataas, Senior Advisor, DSB, Norway (4 November 2013)
- Ian Cameron, Media Advisor to the UK National Steering Committee for Warning and Informing the Public (NSCWIP)

- Phil Campbell, Manager Corporate Communications, NSW State Emergency Service, Australia (3 June 2013)
- Anthony Clark, Group Manager, Corporate Communications, New South Wales Rural Fire Service, Australia (3 June 2013)
- Nicholas Hefner, Head of Public Relations, Federal Agency for Technical Relief, Germany (20 November 2013)
- Anne Leadbeater, community development officer, the Murrindindi Shire, Victoria, Australia (3 June 2013)
- Commissioner Ole Bredrup Saeverud, Tromso Police District, Norway (12 November 2013)
- Bob Wade, Emergency Planning Society, UK

Participants were given the option of having their names attached to their comments or to have their comments de-identified. As part of the larger project from which this paper drew data we undertook eight interviews in Norway, the UK and Germany and seven interviews in Australia. The interview with community development officer Anne Leadbeater from the Murrindindi Shire, which was affected by bushfires, known as the Black Saturday bushfires, in Victoria, Australia in 2009, was included because she took on a significant leadership role in the disaster and recovery and in that position had substantial contact with politicians and media. The themes that emerged from the coded interview transcripts provided a pathway to develop six principles of how emergency managers and politicians can best manage their relationships, particularly when lives are at risk and the need for factual, timely and accurate information from a credible source is critical.

## **Literature Review**

The ways in which political actors and emergency agencies interact during the various phases of a disaster has received sparse scholarly attention. For example, the authors were unable to source any research on how, when or why politicians should communicate before, during and after a disaster. An explanation for this may be found in Olson and Gawronski's (2010) observation that political science had been largely ignored until recently by disaster researchers. This is changing, however, with an increasing body of mainstream research into what Olson and Gawronski (2010: 219) describe as 'the politics of disaster'. There is little disagreement among scholars that disasters are political events (Kelman 2012, Olson and Gawronski 2010). Kelman goes as far to say that disasters are inherently political and it is 'naïve to think otherwise' (Kelman, 2012b: 14). Similarly, Wei et al. (2010: 1016) identified that the information provided during a disaster is 'always a political decision'. Cottle (2014: 3) argues that social and traditional media shape disasters 'from the inside out, and outside in, reconfiguring disaster social relations, channeling forms of political control and projects for change, and circulating deep-seated cultural views and sentiments'.

We found scholars take a broad approach to the topic of politicians and disasters. For example Kelman (2012, 2007) examines the question of whether disaster related activities spur diplomatic ties among opposing countries. Drilling down, Olson and Gawronski's (2010) research into the 'politics of disaster' found that disasters often, but not always, evolve into political crises (207). They argue that the way a disaster is managed has significant political repercussions, both positive and negative. Olsen and Gawronski (2010) elaborate:

A well resourced and managed response reassures both victims and the larger public, but a poorly resourced and managed response has the opposite effect. Indeed, how well a government or regime handles any type of large-scale crisis event will instill greater or lesser public confidence in specific political leaders and government institutions, and it can even affect the legitimacy of the regime itself. (208)

Disasters challenge political leadership because nature and society are severely disrupted. In turn, this violates 'all the rules of plot' leading individuals and communities to question who they are, why the world is unpredictable and why order has temporarily ceased (Erikson, 1994: 147). 'Politicisation' of the disaster increases as the impacted community, or at times an entire society, moves from emergency response through to the recovery and reconstruction phases (Olson, 2000: 265). The recovery phase, in particular, has significant implications for politicians. Olson and Gawronski (2010) describe it as a 'special time', where both victims and the public expect a 'diligent' response from the government. They explain (2010):

Public officials who fail to grasp the dynamic nature of public expectations during a disaster and attempt to respond in normal ways create a disjuncture with their publics. That is, publics expect government officials to do their jobs, and to do them well, in times of crisis. (208)

Additionally, failure to adequately respond to a disaster often becomes the focus of media attention. As Olson and Gawronski (2010) observe, social and traditional media cover disasters 'with extraordinary intensity and often in real time' (208). There is intense pressure to fill 24/7 coverage over extended periods as the media perform their sense-making role on behalf of their audience. As observed by Littlefield and Quenette (2007: 29) the media act in the role of a 'judge' as to how the disaster is managed, thus providing the authority for the media 'to assign blame when the situation requires it'. In turn, the public is 'willing to attribute blame and punish incumbents accordingly' (Arceneaux and Stein, 2006: 50). Hurricane Katrina, in 2005, is a useful example of political mismanagement of a disaster. Poor situational awareness by political leaders, combined with media broadcasting of unsubstantiated rumours, diverted the priorities of officials from rescue to law enforcement. As CNN (2005) reported during Hurricane Katrina, Governor Blanco declared that law and order would be restored with battle-hardened troops equipped with 'M16's and they're locked and loaded'. It is not surprising that Maestas, Atkeson, Croom and Bryant (2008: 615) identified that media coverage in the weeks



following Hurricane Katrina focused on blame and responsibility, with much of the criticism leveled at government.

Given the aforementioned issues, this paper turns to two pragmatic questions: when should political leaders engage in public comment during a disaster and what information should their messages contain? We argue this is important because, as discussed, political leaders face unprecedented leadership and communication challenges in a disaster. Furthermore, we have observed at least in the Australian context, political actors are taking an increasingly active role in disaster communication, from three positions - strategic, supportive and tactical. It is the tactical position, however, that is problematic for emergency managers, where boundaries of who should provide what information become blurred. At the supportive and strategic level, in the 2011 floods in Queensland the-then Premier Anna Bligh was lauded for her leadership and inspirational supportive public commentary (de Bussy, Martin and Paterson, 2012) as the scale of the disaster unfolded. Thirty-eight people died in the Queensland floods and three-quarters of the State was declared a disaster zone. In 2014, the current Queensland Premier Campbell Newman, in preparing communities for an approaching cyclone, took on a more tactical role by providing evacuation advice and information about the capacity of buildings to withstand the cyclonic winds (ABC, 2014). We found the role of politicians in providing this sort of information is subject to debate based on source credibility. For example, a New Zealand study on credibility in evacuation messaging using a simulated flood found that evacuation orders issued by disaster agencies, rather than the Prime Minister, were more trusted (Lamb et al. 2012: 278).

## **Findings**

Our paper now turns to the two key questions that emerged from the literature review to explore the perspectives from the interview participants. They are (a) when a politicians should engage in a disaster and (b) how they should shape their messaging. There was consensus from interviewees in Australia, Norway, the UK and Germany, that politicians had a role in disaster communication. What was subject to debate, was how far that role extended in the context of what was communicated, by whom and when. In any event, the interviewees agreed that political actors needed to show leadership and concern for their communities during the various stages of a disaster. For Anne Leadbeater, who led devastated communities through the 2009 Black Saturday bushfires in Australia, political leadership in a disaster is crucial. She explains (interview 2013) '(it) doesn't really matter whether it's the Prime Minister or the local ... councillor. There is a role to be fulfilled in terms of leading by example'. Anthony Clark, Group Manager, Corporate Communications, New South Wales Rural Fire Service argues that disaster and emergency agencies are ultimately 'responsible to the Minister, the Premier and the people. It's not

something I think anyone can just look at and go, ‘We don’t want a politician involved’ (Interview 2013). Interviewees in Norway also argued that politicians have a role in a disaster to support their communities. For example, Anders Aspaas, Communication Advisor, Tromsø Police District, Norway, argues that politicians should be involved to ‘take care’ of the communities impacted by the disaster. This approach resonates with Kjell Brataas, a Senior Advisor with the DSB, Norway’s disaster agency, who notes that politicians need to show ‘that they are in control of the situation or capable of managing it’ (Interview 2013). Brataas points out that this is particularly evident during an election year, when it is ‘even more important for them to show that they are in control and that they care’ (interview 2013).

The theme of political leadership in a disaster also emerged in Germany. Nicholas Hefner, Head of Public Relations for Germany’s Federal Agency for Technical Relief (THW) asserts politicians want to provide leadership by ‘being on the spot’ to show they are ‘worthy’ of being elected and for the public relations benefits. Although emergency agencies in Germany, Norway and Australia agreed that politicians had a role in a disaster, none had developed specific written policies defining how the relationship between them and the politician would be structured and the boundaries of responsibility in what would be communicated to an impacted community. It seems two important aspects of that relationship identified by emergency agencies - when a politician should communicate in a disaster and when they should visit a disaster location – are managed on a co-operative ad-hoc basis. From the perspective of emergency agencies, the timing of political VIP tours of disaster locations is a critical factor. This largely depends on resources being available and perceptions being managed. This second point is a particular challenge for political actors.

Ingham (2014) observes that floods in the UK have given rise to two terms ‘welly wallies’ and ‘flood tourists’, referring to politicians who have ‘appeared sloshing through the waterlogged wastes of the UK’. Ingham points to the tightrope faced by political actors in disaster perceptions – if they do not go to the disaster scene they are ‘lambasted’ for failing to care, while those that do are criticized for exploiting a media opportunity rather than genuinely helping with the relief effort. Ian Cameron, of the UK national warning committee argues that politicians are tending to visit disaster locations without sufficient briefing and advice. He pointed to the example of a Government Minister arriving at a flood without appropriate wet weather gear. He continues:

‘As a result the whole (media) story was about a Minister who was unprepared, who turned up with the wrong gear. And so that was the story. Whatever he was saying was overshadowed’ (interview 2014)

There was consensus across the interviews for this paper that on-the-ground political visits were important, however they should be scheduled after the disaster has transitioned from the response to the recovery phase. This would avoid a scenario that Aspaas, of the Norwegian police, describes as placing officers in the difficult

position of ‘trying to save lives [while] at the same time as we are hosting politicians’ (interview 2013). Police Commissioner Ole Bredrup Saeverud, Tromsø District, Norway, put his position succinctly: politicians should ‘stay away’ during the response phase. He noted, however, that they would not have long to wait, observing that the recovery phase can happen quickly after the impact. It is then, Saeverud argues (Interview 2013), that politicians have a role in the recovery phase to ‘see what happens and what needs to be done’.

A similar position is taken in Australia on the timing of political visits to disaster locations. Philip Campbell, Manager Corporate Communications, NSW SES, argues that the impact phase of a disaster is the least favourable time for such political activity. He finds that politicians generally agree with this, observing ‘politicians very rarely become involved when the weather is absolutely awful and the rain is pelting down’ (interview 2013). In Norway, politicians take a similar approach of stepping back to allow emergency agencies to deal with the disaster impact. Aspaas observes that politicians ‘are really good at keeping their hands off and have an understanding of the work we do’ (interview 2013).

For emergency managers, however, dealing diplomatically with an ill-timed political request to visit a disaster location can challenge their relationship with the political actor. For example, Brataas, of the Norwegian disaster agency DSB, observes:

In the end of course it’s the Minister who decides, and if someone is brave enough to tell him that maybe you should wait two days and then you visit, and he still wants to go, of course he goes, you can’t deny him that, or then you are out of a job probably. (interview 2013)

A similar sentiment is held by an Australian emergency manager, who notes that refusing a political request can result in negative career consequences. He elaborates:

If you just keep on saying no your career is probably going to be a very short one. And I know there’s been plenty of situations where people have just consistently said no, no, no. And you never hear of them again. They become the disaster. Yeah, so providing that alternative is quite often the best tactic (interview 2013).

Rather than bluntly refusing a request, Australian emergency managers paint a picture of the perception which may be gained by the impacted community and the media of an ill-timed political visit and offer an alternative activity, such as a tour of the disaster operations centre. One emergency manager (interview 2013) noted this approach often worked with political actors, and their media minders, keen to avoid an ill-timed disaster tour:

You might think that’s a good idea now, but as soon as one community member finds out that there was a helicopter trip in there with the Minister and the Premier and six cameras in tow, yet you’re not letting someone who has lost their home to a fire or it’s been flooded, you’re not letting that person in there I mean, that’s when you start having issues and when you actually explain that to them, most of the time they get it. (interview 2013)

Another Australian emergency manager argued political tours are inevitable. He explains (interview 2013): ‘you know that inevitably the politicians are going to turn up at some point during a major operational response and that you’re going to need to find those particular resources.’ Clark, of the NSW Rural Fire Brigades, accepts this position and argues disaster agencies do ‘everything possible’ to facilitate political visits to disaster zones when timing is appropriate and resources are available. A request, however, may be declined if ‘it is too early’ for a political visit based on safety and the information and resource needs of the impacted communities. Clark (interview 2013) observes that,

What the people on the ground are actually wanting is information, not just photos in the local papers, for instance. It’s a very simplistic way of looking at it, but that’s a reality of it. Sometimes (for a political visit) it’s just too soon and working in communications you’ve got a pretty good idea of when something is a bad idea.

The impact on resources for a VIP disaster tour is another consideration. Brataas, of the Norwegian disaster agency DSB, recognizes that political leaders require extensive support from emergency agencies. He elaborates,

They come by helicopter and they visit a few places in a day. And of course it’s lots of work just to coordinate and deal with the media. And some of these local communities, or local government agencies, don’t have more than maybe one or a half person to normally deal with communications questions. It’s lots of work, and they are not able to work on the crisis. So that’s another challenge that we have seen. (interview 2013)

Emergency managers in Australia share similar concerns about resourcing VIP visits. For example, one emergency manager describes the pressure in this way:

There are times when (our) media team have felt a little bit like travel agents for the politicians rather than getting on with our role of getting the message out...we also find that operations staff can equally be frustrated that they have to take time out from their day to get senior personnel who are running the operation to spend three or four hours showing around a politician when they really would rather be getting back into what they’re doing (interview 2013).

Cameron, of the UK warning committee, asserts that traditional and social media are a major factor driving politicians to the location of a disaster. He explains:

‘I think they (politicians) always see a chance to be on camera as an opportunity. I think the way that the media is changing is that in the past blue light services and politicians during a disaster were your first port of call as a journalist. The difference now is that social media means that the journalist has access to those victims and their families and people who experienced it first hand and the tales and the stories that they get from them have more colour, are more interesting. And so the politician comes a bit further down the line. And I think the politicians are finding that sometimes they’re not even approached for a comment and so therefore they’re desperate to get on the TV. And therefore they’re desperate to make any comment.’ (Interview 2014)

Hefner of Germany’s THW, argues political visits to the location of the disaster will happen in the response phase at the height of media coverage. Hefner continues,

So if the media are not there, the politicians won't be there. That's why you won't be able to tell them come in the recovery phase. [The] media will be there, and the politicians will be there. (interview 2013)

This reality for Hefner means he plans for resourcing political visits in the midst of a disaster response phase, noting that the political priority is to 'talk to the forces', thus politicians want to be seen with 'the people on the ground with a shovel and pick' (interview 2013). Hefner argues that perceptions about political visits during the response phase need to be carefully managed. It is accepted practice that VIP visits are associated with volunteer responders, and that the visiting politician has the ability and authority to provide resources, to avoid perceptions of creating the kind of self-serving public relations opportunities identified by Ingham (2014). Hefner elaborates,

The tricky thing is on the one hand it's PR, and on the other hand it's important. They [politicians] can be on the spot and they show their empathy to the people and they bring, they always have to have something in their pocket like money, money and [resources]. (Interview 2013)

Hefner notes that political minders sometimes have unrealistic expectations on what can be delivered on the ground in the heat of the disaster. From an operational perspective, Hefner's approach is to examine the political wish list and go 'ok, what's realistic, what's unrealistic' (interview 2013). Australian Black Saturday bushfire community leader Anne Leadbeater argues that there are benefits in providing political actors with appropriate early access to disaster locations. This allows politicians and the media to quickly gain a clear picture of the disaster impact that could result in increasing support for survivors. She asks (interview 2013):

If you don't have your Premier there going, 'oh my goodness, this is terrible', how does he, in good conscious, put the stamp on the form that says you've got an open cheque book? (Interview 2013)

Leadbeater asserts that political support needs to be meaningful and pragmatic. She explains, 'we don't want to hear that we're going to be given millions of dollars to build new community assets, because we don't know where we're going to eat tonight' (interview 2013). Although such statements may be welcome in the later stages of recovery, Leadbeater suggests that the initial post-impact phase the political messaging should be 'we're here for you and our job is to try and help you get what you need to just make it through the first week, the first month and so on' (interview 2013).

The senior emergency managers identified that politicians engaging with the media during a disaster could be problematic. The interviewees for this paper agreed that a fine line exists between tactical operational information, usually in the jurisdiction of practitioners, and supportive and strategic information at the political level. For Brataas of the Norwegian disaster agency DSB, the line can become blurred when political actors open the door to media engagement. Brataas explains it can quickly lead to follow-up questions about operational matters and politicians

delivering ‘advice that maybe police or health officials should be doing’ (interview 2013). Brataas argues that media commentary should be discussed and planned between agencies before a disaster happens. He offers his personal view,

The politicians have a right to and should be talking sometimes, but not about the details, and that’s a very dangerous and difficult situation, because it’s very easy to start answering the detailed questions. They should probably more talk about funding and how the government is supporting the local communities and things like that. (Interview 2013)

For Hefner of Germany’s THW, political communication in a disaster should focus on the supportive rather than operational aspects and they should ‘talk about what they see at the moment, not about the general overview’. He offers this example of a statement that refers to volunteers, rather than operational details on the response to the disaster:

It is good to see ... citizens help citizens in Germany. I am very proud that we have such a wonderful system in Germany. (Interview 2013)

Wade, of the Emergency Planning Society, offers a simple formula for political commentary in the early stages of an unfolding disaster – the three P’s of pity, pledge and praise. Wade (interview 2014), explains the concept:

They can go on camera showing empathy for the victims; they praise the emergency responders, what a great job they’re doing, to reassure the public, get confidence back in the public; and then of course the pledge, “We don’t know what’s caused this but we will leave no stone unturned to find out what it is.” Again, reassure the public that they’re not trying to whitewash it. And I think that still holds.

There are a number of challenges that face those charged with managing disasters including, the involvement of politicians in disasters and the types of messages they provide to various publics and news media during these types of events. This paper has identified a number of key areas for improvement in the unwritten and rather ad-hoc relationships between emergency managers and political actors. We argue that the boundary of who communicates what in a disaster is fragile and alters depending on the situation. Political actors, without sufficient situational awareness or operational expertise, are problematic when engaging with media that are keen to obtain tactical information. As Brataas, of the Norwegian disaster agency, points out, the media will take advantage of the opportunity to delve into operational questions with a politician. Thus, we offer six principles for the effective collaboration between emergency agencies and political actors in the context of a disaster:

- Politicians have a role in disaster leadership and communication;
- Political disaster tours should be undertaken in the recovery phase when resources are more readily available and those tours are part of the operational planning;
- Disaster tours should not be only about public relations opportunities;
- Political actors should embark on disaster tours with the authority to provide additional resources to support response and recovery efforts;



- Communication by political actors should be supportive rather than tactical;
- Politicians should defer tactical questions to operational people in their area of expertise.

## Conclusion

This paper examined two key questions: when a politicians should engage in a disaster and how they should shape their messaging? This paper has found that politicians should refrain from engaging in disaster tours during the response phase when resources are needed to save lives and property. Instead, political actors should be actively involved in the preparation and recovery phases. Secondly, that political messaging should be shaped using a supportive narrative rather than operational narratives. We argue that this paper contributes a hitherto unexplored area of disaster politics. Further research would be useful from the perspective of political actors to explore how they see their role in disaster communication. This would build a more comprehensive picture of how both emergency managers and political actors can collaborate in the effort to save life and property during a disaster. It would also help prevent many of the mistakes we have seen in the recent past.

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# Towards an Integrated Approach to Emergency Management: Interdisciplinary Challenges for Research and Practice

By Christian Webersik, Jose J Gonzalez, Julie Dugdale, Bjørn Erik Munkvold & Ole-Christoffer Granmo

## Abstract

This article presents an interdisciplinary vision for large-scale integrated emergency management that has been inspired by the transition from platform centric to integrated operations in the oil and gas fields, which uses remote emergency control centres collaborating virtually with local responders. The article discusses some of the most salient research challenges for integrated emergency management, including the role of mobile technology, human-centred sensing, citizen participation and social media, and the socio-cultural determinants of disaster management. The purpose of this article is to frame an integrated emergency management approach that adopts a multi-disciplinary approach, including human computer interaction, information systems, computer science, development studies and organization science employing different methodologies. Most importantly, we need to better understand the socio-cultural determinants of how people prepare to, respond and perceive disasters, in order to evaluate whether and what kind of information and communication technology (ICT) support is appropriate. There is need for more research as to why in some regions local people ignore official orders to evacuate, and rather follow the advice of local leaders, elders or religious leaders. In other instances, disasters are seen as 'acts of God' thus shaping disaster preparedness and response.

**Keywords:** Disaster, disaster perception, disaster vulnerability, social media, emergency management, integrated operations, information and communication technology, human-centred sensing, ad hoc networks, smart phones, virtual collaboration, Integrated Operations

## Introduction

Large scale emergencies require response and management under circumstances disrupted by the disaster itself (Simpson and Hancock 2009). When indigenous systems have been disrupted, emergent groups that often do not share common practice and experiences must be coordinated. On site conditions may have been adversely affected and the lack of integration across phases and organizations, together with exhaustive stress impairs the response quality (Turoff et al. 2010). Experiences with Integrated Operations, pioneered in the Norwegian offshore oil and gas fields, suggest a different model – an Integrated Emergency Management approach. This is a promising approach for emergency management and is a realistic goal in the next ten years.

Most important, mobile phones are spreading rapidly, with soon reaching one mobile phone subscription per person creating new opportunities to realise Integrated Emergency Management (International Federation of Red Cross and Red Crescent Societies 2013). Even if technological solutions, such as smart phones, are available underpinning an Integrated Emergency Management approach, for instance to warn populations at risk, it is not clear how local communities can effectively use them and be involved in managing the disaster (Drabek 1999). Moreover, do solutions developed for environments with sophisticated and well-functioning infrastructure, also work in emergencies and regions with poor technological infrastructure and lack of technological awareness? Furthermore, cultural differences may make it difficult to apply solutions that are developed for and in industrialised countries that may not work in a different cultural setting in countries, where religious and spiritual beliefs dominate.

Notwithstanding, ongoing activities in early alerts, collaborative decision making systems, situation room technology, integration of physical data, remote sensing, geographical data and social media information for emergency management can be viewed as emergent components for Integrated Emergency Management (IEM). This article proposes four major research challenges for creating a future IEM approach, discusses its strength and weaknesses, by focusing on the socio-cultural aspects of Integrated Emergency Management.

## Making Integrated Operations Relevant for Emergency Management

In an Integrated Operations approach, teams in onshore control rooms, working in three to four time zones around the globe, virtually collaborate with a local offshore workforce to handle oil and gas operations. Since different oil and gas companies implement Integrated Operations in different ways there is no common description of the Integrated Operations concept. However, all Integrated Operations solutions share the following generic properties: 1) Use of ICT and a digital infrastructure to

enable new work practices; 2) increased capture of offshore performance data; 3) use of real-time data to monitor and manage operations across geographical and organizational borders; 4) use of collaborative technology to link different actors in a closer, more efficient way; 5) access to expert knowledge (Albrechtsen and Besnard 2010). Integrated Operations implementations include processes for all stages of emergency management in oil and gas platforms. A serious test of emergency management using Integrated Operations has not yet occurred since there have been no recent major accidents in the Norwegian offshore operations. However, Albrechtsen (2010) argues that Integrated Operations is an enabler for new practical approaches to risk assessment and management; that risk assessment may be improved through use of real time data; and that it provides better risk visualization and facilitates effective safety support. While Integrated Operations is relevant for Integrated Emergency Management as it employs ICT infrastructure to react quickly and appropriately to unforeseen events, emergencies involve a large array of actors and victims, who are not part of the same organisation, using different modes of communication, and having divergent societal and cultural backgrounds and identities.

### **First challenge: Enabling Infrastructure-less Communications**

Today, worldwide cellular networks are the fundamental infrastructure for communications among citizens. However, such an infrastructure is vulnerable in large-scale emergencies. Even in small-scale emergencies, e.g. the storm in west Norway in December 2011, thousands of people can lose network connectivity for weeks (Nyfløt 2011). Although a satellite-based infrastructure will still be operational after natural disasters, handset prices of around USD 500-1,700 and high subscription fees restrict citizens' use of satellite phones. Therefore, improving the resilience of infrastructure-based mobile systems by enabling infrastructure-less ad hoc communications is a paramount theme for emergency management. Thus, availability, reliability, robustness, coverage, and energy efficiency are essential topics for building and deploying ad hoc networks in emergency areas. Future research work concerns enhancing network connectivity by introducing redundancy to infrastructure-based mobile systems using ad hoc networks. Network connectivity can be improved by using easily deployable ad hoc networks to provide redundant links (Egeland and Engelstad 2009). However, current works fail to propose concrete strategies on how to combine partial static topology with dynamic links. Furthermore, the performance of such strategies needs to be evaluated through mathematical analyses, simulations and test-beds. Moreover, in an emergency, mobile base stations must be rapidly deployed to emergency areas. A promising approach is to integrate ad hoc networks with infrastructure-based communication systems using mobile base stations and mobile devices. This could form a standalone network,

e.g., as a citizen-to-citizen, or rescue team-to-rescue team network, or a combination of both. This network could also form an easily deployable temporary wireless network, connecting to other infrastructure networks such as satellite or cellular systems. In such context, a light-weight mobile base station or gateway will be an optimal alternative. In order to ensure effective first response to emergencies, reliable and robust communications over large areas for rescue teams and affected citizens must be established. Considering link instability and topology of ad hoc networks, a bi-connected topology has been proposed for reliable communications (Ogier and Spagnolo 2009). However, this imposes strict requirements on high node density, which is unrealistic in emergency scenarios. Another approach is to develop new Media Access Control (MAC) mechanisms and routing schemes for low density ad hoc networks in order to provide peer-to-peer reliable communications in emergency scenarios. Lastly, lifetime of communication networks need to be extended in an emergency situation. Recent research (Jung and Ingram 2011) demonstrates that per-hop transmission range can be extended by cooperative transmissions of neighbouring nodes towards a common destination. In this way, an energy-constrained node can survive over longer periods, resulting in improved network lifetime. Here work could focus on designing energy-efficient mechanisms to extend network lifetime.

## **Second Challenge: Human-Centred Sensing**

Recently, “human-centred sensing” has been introduced for emergency management, using humans as information collectors (Jiang and McGill 2010). By taking advantage of smartphone based sensor technology, human-centred sensing offers the potential for remote sensing and information fusion in an emergency (Schade et al. 2012). Mobile wireless devices such as mobile phones and smartphones are widespread, including developing countries, and are often equipped with advanced sensor technology, including accelerometer, digital compass, gyroscope, global positioning system, microphone, and camera. Consequently new types of smart phone applications that connect low-level sensor input with high-level events are emerging (Lane et al. 2010). These applications can involve individuals, groups of users, and even entire communities. An example is the automatic classification of a smart phone’s environment by using its microphone (Lu et al. 2009). By combining the smart phone's accelerometer with GPS, the owner’s movement patterns, e.g. walking, running, or cycling, can be determined (Zhang et al. 2010). Interaction between multiple smart phones provides further possibilities. For example GPS data collected from large user groups can identify the places frequented by different subpopulations. Consequently users can receive targeted recommendations on evacuation paths, emergency equipment, and nearest hospitals, fire brigades and police stations, etc., based on the behaviour of the subpopulation that best fits the user's own movement patterns. Another example is using smart phone sensor technology



to determine how the actions of large groups of users cause different types of environmental pollution (Mun et al. 2009).

However, human-centred sensing also implies a number of research challenges. Firstly, human-centred sensing in emergency situations with ad hoc networks implies a plenitude of fragmented information, collected and propagated in an opportunistic manner through locally formed “communication hubs” (Hall and Jordan 2010). Also, different emergency response agencies will have their own interpretation of what is important data, and their own storage formats. Furthermore, crucial data may be provided even by citizens and victims of the emergency, in an ad hoc manner (Jiang and McGill 2010). The resulting data heterogeneity and huge amounts of data, introduces several research challenges (Tomaszewski et al. 2007). Integrating different formats using a common information model, and the intelligent routing of the data constrained by limited communication resources, are great challenges in human-centred sensing.

Distilling pertinent cues from collected information in order to obtain situational awareness at the individual, local, and global level of an emergency, forms a formidable data fusion problem (Hall and Jordan 2010). Such fusion includes context dependent hazard forecasting, damage and risk estimations, and statistical analysis. The problem must be solved in a decentralized manner, as dictated by the resource constrained computing and communication devices involved. Moreover, spatio-temporal aggregation of information fragments is required since information from geographically related sensing devices may also be used to recognize and track evolving local and global emergency patterns. Additionally, conflicting or even contradictory information, typical in the early emergency phase, requires harmonization, and methods are needed to discriminate between erroneous, misleading, and awareness-bringing information.

Opportunistic mobile phone sensing requires privacy preservation (Kapadia et al. 2008). In some emergency situations, e.g. terrorist attack, shared information could be abused posing significant risks. Information sharing may also lead to the spread of false information. To prevent hostile attacks, human-centred sensing should ensure information integrity and guard against information misuse. An ability to interpret sensor readings so that a threat picture may be formed is central to IOs. Furthermore, a comprehensive picture can only be formed when the sensor measurements from several devices are taken in context (Hall and Jordan 2010), possibly in combination with information from involved authorities.

### **Third Challenge: Citizen Participation and Social Media**

In recent years our society has seen huge advances in information technologies resulting in marked changes in the way that individuals interact and communicate. The emergence of the smart phone and other ICT has given us mobile access to web services, such as social networking sites, which encourage sharing and exchanging

information. Through these ICT developments, citizens are now playing a much more active role in providing information to emergency managers. Recent large-scale emergencies, such as the Haiti Earthquake in 2010 gave rise to an unprecedented surge of citizen involvement where humanitarian workers tried to cope with massive amounts of information provided by citizens through web portals, platforms, and new social networking media, such as SMS feeds, Twitter, etc. (Dugdale et al. 2012). Such is the increase of citizen participation that current information systems for emergency management, e.g. the SAHANA Open Source Disaster Management System and the crowd-sourcing platform Ushahidi, now purposely provide ways to incorporate information sent by citizens through social media and SMS.

Emergency response may be viewed as an integrated socio-technical system where citizens play a key role in shaping the response through information provision and action (Palen et al. 2010; Palen and Liu 2007). However, this vision has not been realized in practice. IEM should incorporate as an essential element a citizen participation component. Despite the well-documented advantages of citizen participation, e.g. in organizing public action and improvising rescue efforts (Qu et al. 2009), providing practical help with temporary housing and food (Palen et al. 2007), providing eye witness accounts and images to help rescue recovery (Cowan 2005), etc., challenges remain in integrating citizen participation into IO, as well as into IEM. The first concerns the sheer volume of information that emergency managers receive. Additionally, there are difficulties in processing information in a non-standard format from different sources and in various languages. One solution was to use a globally dispersed, virtual community of humanitarian volunteers to filter and process the information. This solved some problems but it proved difficult at a macro level to manage these communities (Koeppinghoff 2011). There are also problems with the validity and value of the information, e.g. 80% of reports of people trapped in rubble received via SMS by rescuers from citizens in the Haiti earthquake were incorrect (Koeppinghoff 2011). The same applies for disaster warnings: if disaster warnings are unclear or not precise, people affected may interpret the information received to minimize their perception of risk making them more vulnerable, as Drabek argues (Drabek 1999). However when the information was aggregated it became useful at an area level, highlighting general search locations. In addition archiving and summarizing of information is required if we are to benefit and learn from past mistakes (Starbird and Stamberger 2010).

#### **Fourth Challenge: Putting Emergency Management into the Socio-cultural Context**

Emergency management is context specific, and this is key to all previous research challenges. Even if human-centred sensing is promising to provide useful data, it

only can work in societies where public and private sectors work together in a synergistic way. Citizen participation is important but as mentioned, linguistic and cultural common codes need to be established to improve the sense-making of relevant information. Moreover, to what extent emergencies affect people depends on socio-political circumstances (O'Riordan 1999). Historically, disasters have always shaped human society and its interactions with nature for centuries. For example, the poor response of the Pakistani leadership to the Bhola tropical cyclone in 1970 played into the hands of those seeking independence of East Pakistan, leading to today's country of Bangladesh (Reilly 2009). More recently, and in terms of disaster impacts, the year 2011 was one of the most damaging years in human history: 302 disasters claimed 29,782 lives; affected 206 million people and caused damages of an estimated USD 366 billion, according to the United Nations (EM-DAT 2012). This, of course, is partly due to the devastating tsunami in Japan, and most of the economic and human loss occurred in Asia. Figures show that some countries are capable and well trained to respond to hazards such as Norway and Cuba, while others, such as Myanmar and Bangladesh are poorly prepared and ill-equipped to withstand hazards. Today, every country, rich or poor, risks experiencing a hazard or emergency. Yet, the physical, economic and human impact of hazards and emergencies vary greatly.

Poor communities are affected by hazards and emergencies to a far greater extent. While the majority of economic damages (82 percent in 1977-97) occurred in the developed world, the gross of the fatalities (87,4 percent in 1977-97) occurred in the developing world (Alexander 1997). For instance a single event, a tropical cyclone hitting Bangladesh in April 1991 caused 145,000 deaths alone (Alexander 1997). Another, more contemporary example is the Chilean earthquake of 2010 that was far stronger than the Haitian one in 2010, though it affected far less people. The death toll in Haiti, a country with a 20 times smaller Gross Domestic Product compared to Chile, was 500 times larger compared to Chile (Mutter 2010). The increased disaster risk in poor countries is a function of the natural hazard and vulnerability (Alexander 1997). Vulnerability refers to the capacity to be wounded, argues Hans-Martin Füssel, and this is a good starting point (Füssel 2007). This definition implies that vulnerable societies are already weakened and therefore more sensitive to external stress, such as tropical cyclones or seismic events (Webersik 2010). The vulnerability concept is important as it includes issues of marginalisation, past losses, susceptibility to future damage, race, gender, culture and other socio-economic factors.

Moreover, there is also the need to better understand the long-term impact of hazards on development, measured in mortality and fertility rates, and other human development indicators. For instance, re-population and recovery of essential social amenities, such as schools and hospitals, were much slower in poorer neighbourhoods of New Orleans compared with the wealthy parts of the city following the 2005 hurricane Katrina (Mutter 2010). Previous research confirmed this notion that

disasters can push poor communities into long-term poverty. Drawing on data from the three-year drought in Ethiopia in the 1990s and Hurricane Mitch in Honduras in 1998, research shows that the lowest wealth groups needed more time to rebuild their lost assets compared to wealthier groups. Further, the lowest wealth groups tended to settle on a low equilibrium and then do not grow in terms of capital assets (Carter et al. 2007).

However, in a rather provocative article, entitled "Do natural disasters promote long-run growth?", Skidmore and Toya (2002) argue that higher frequencies of natural disasters correlate with higher rates of human capital accumulation, more specifically economic growth. Their article examines the long-term impact of natural hazards on economic growth. The long-run aspect makes their research interesting. Most disaster studies examine the immediate economic and physical loss natural hazards cause. For instance, the risk to lose economic income due to drought is particularly high in sub-Saharan Africa, but little is known about the long-term impact of drought (Webersik 2010).

Skidmore and Toya's underlying assumption is as follows: disaster risk reduces physical capital investment but at the same time provides an opportunity to update capital stock and thus fosters the adoption of new technologies. A good example is the 2011 earthquake and tsunami in Japan. It has been argued that the reconstruction of destroyed Japanese neighbourhoods offers an opportunity to create sustainable cities with an emphasis on green public transport, low-energy housing and the use of renewable energy for power and heating, just to name a few areas of intervention.

The authors use a sample of 89 countries and find a robust and significant positive relationship between climatic disasters and economic growth (Skidmore and Toya 2002). Though this finding gives the impression that disasters are actually good for development, this approach does not take into consideration the great differences in income within countries. This notion is captured by the term vulnerability, an important concept in disaster studies. This stands in contrast to authors who argue that natural disasters cause heavy losses in capital assets, disruption of economic and social infrastructure, affecting supply chains and hence production processes, thus undermining the capacity of affected people to cope with such a disaster. In addition, natural disasters "not only cause heavy losses to capital assets, but also disrupt production and the flow of goods and services in the affected economy, resulting in loss of earnings" (Ahrens and Rudolph 2006: 208). In the Philippines, agricultural crops, including those used for biofuel production, are frequently destroyed by tropical cyclone activity (Stromberg et al. 2011). Even where there is no physical damage, important infrastructure, such as ports, shut down when a certain wind speed threshold is passed, with negative economic consequences (Esteban et al. 2010).

More specifically, disasters do not affect people equally, even within societies. This for instance applies to gender. Neumayer and Plümper examined the impact of disasters on life expectancy and how disasters affect women differentially from

men (Neumayer and Plümper 2007). The authors find that in societies where the socioeconomic status of women is low, disasters will kill more women than men. This can be explained with socially constructed gender roles. In these societies, for example in Sri Lanka, women were less likely to learn how to swim or more likely to wear clothes that hinder them from swimming. In events of flooding, or during the 2004 tsunami, they are less likely to escape. The authors argue that it is the "socially constructed gender-specific vulnerability of females built into everyday socioeconomic patterns that lead to the relatively higher female disaster mortality rates compared to men" (Neumayer and Plümper 2007: 551). This as well supports a vulnerability approach to disaster studies. Other studies show that younger persons are quicker in responding to disasters (Drabek 1999).

Once an emergency unfolds, the focus is on top-down relief and emergency management. Yet, the knowledge and capacity of local communities to prepare for and to respond to emergencies is greatly underestimated. Local communities are often well aware of their immediate environment and its associated risks; they have developed adaptation strategies to cope with hazards, such as selling off livestock in a drought situation or human migration to diversify incomes. Informal exchange networks, livelihood diversification and supporting networks are key coping strategies as noted by Hewitt (Hewitt 1997). This especially applies to countries with poor technological infrastructure, lack of trust in government institutions and lack of resources. In a nutshell, where local communities cannot rely on the state or private insurance schemes.

However, when a hazard turns into a disaster, risk perceptions of affected populations will influence how a disaster is managed, prepared for and mitigated. This depends on the cultural context, hence affecting the immediate disaster response and strategies to prepare for a disaster. Disaster warnings are often neglected and a first response in many cases is denial, as Drabek argues. Moving beyond denial, then a social process of debate is initiated in processing disaster warnings (Drabek 1999). In poor countries with large, poorly educated populations, communities often consider disasters as "acts of God" or attribute them to spiritual powers, thereby affecting the way these communities prepare and respond to disasters. (Misanya and Øyhus 2014) This should not mean that communities in poor countries act irrational while in industrialised countries, rational decisions dominate the assessment of disaster risk. Globally, all disaster risks should be placed in a social context, rather than seen as an independent outcome of a natural hazard or human erroneous behaviour. As Hewitt puts it: "[Disasters] depend primarily on the social order, rather than climate or, say, weapons potential. They express a success or failure in the shared responsibilities and expectations of public life." (Hewitt 1997: 360). Yet, it is important to recognise differences in belief systems relevant for disaster management, to make ICT solutions work in different contexts. Chester et al. argue that faith-based explanations of disaster occurrence can be found in most African societies. In Eastern Africa, some communities attribute earthquakes to the dead

(Chester and Duncan 2009). In Eastern Uganda, landslides on the slopes of Mount Elgon have killed a few hundred people and displaced several thousands (Misanya and Øyhus 2014). The empirical findings of this study show several explanations for this landslide disaster: Excessive rainfall, volcanic activities, deforestation, and religious and indigenous explanations. The latter two cite the impact of local rain-makers, the Womaniala, and God's power causing the disaster. While others claim that disasters repeat themselves in regular cycles. Bearing the religious and indigenous explanations in mind, it becomes clear that this will affect the way, local communities respond to the disasters, including prayers, anxiety and misbelief, and community meeting. The lack of formal education may explain part of the non-scientific explanations, as local residents felt that their environmental impact was not strong enough to cause the landslides (Misanya and Øyhus 2014).

In addition, local people, in the very communities that consider disasters as “acts of God”, proactively relocated and engaged in tree-planting and improved farming methods. This makes it clear that disaster victims are not purely passive victims but also have knowledge, agency and capacity to adapt and to cope with natural hazards and their associated risks, such as droughts, floods and landslides. Considering vulnerability as a “passive” concept as Alexander proposes, perhaps misses the point that local communities have agency and deliberately take risks, rather than being passive victims of extreme weather, poverty, or political arbitrariness (Alexander 1997). And the answer to how to prepare, to respond and to manage disasters is linked to the active participation of those who are directly affected by natural hazards. As Hewitt puts it: “Reasonable and effective response will always incorporate understanding of the conditions of those at risk, or otherwise directly involved (Hewitt 1997: 358).

It is important to note that the answer to the question as to why a natural hazard turns into a disaster is very complex. In all societies, in addition to objective disaster risks, imaginaries of disasters form the way we understand, prepare for and respond to disasters. For instance the media, including the emerging importance of social media such as Twitter, has created and maintained disaster myths, such as the claim that chaos and panic rules in the aftermath of disasters, and rational social behaviour is the exception rather the norm (Kverndokk 2014; Tierney et al. 2006). A good example is hurricane Katrina featured in Tierney's article (Tierney et al. 2006).

Still, local knowledge is key, for instance for search and rescue missions. Research demonstrates that real-time information on disasters and response measures can be coordinated with the use of social media (such as Facebook and Twitter). Following the 2011 earthquake in New Zealand, first responders and local communities used a Google tool named “Person Finder” (Garcia 2011). This also applies to community-based early-warning systems. Friends and family members living in different time zones are able to warn and inform affected relatives and friends of a looming emergency using social media. The use of mobile communications devices is spreading rapidly, most notably in developing countries. Here, communities



adopt technologies, such as the use of mobile and smart phones for banking (like in Kenya), without using a personal computer in the first place. Also in Eastern Uganda, local communities developed early warning signs, ways to interpret them and to alert government authorities of excessive rainfall, volcanic activities and cracks on the mountain. As Misanya and Øyhus state “Community leaders in Nametsi Parish acknowledged that in the digital age the most viable means of communication is through telephone calls. However, it is vital to note that use of telephones may lead to the demise of local communication systems such as drums and person-to-person networks involving physical contact.” (Misanya and Øyhus 2014) Alexander argues along these lines by stating that “a fine balance must be struck between respect for local practices, without venerating them, and introduction of outside innovations, without exalting these” (Alexander 1997). This notion of leap-frogging, jumping one or several stages of ICT, is an important trend in developing countries (Bjørke 2011). Yet, poor countries often lack the appropriate infrastructure to implement ICT solutions for disaster preparedness and management. And even when resources and infrastructure are available, they need to be cultural transferable to make them work (Alexander 1997).

Moreover, to better understand where ICT are most needed and best suited to guide emergency management on the local and national level, a key issue is mapping vulnerable regions. Hot spot analysis using Geographic Information Systems (GIS) can help to guide policy makers to identify areas of intervention. Here, natural hazard risk mapping combined with spatial and temporal socio-economic indicators, such as population density, infant mortality rates, and economic activity can help to better understand where the use of ICT tools is most needed and most appropriate. With regard to climatic hazards, future projections of the impact of climate change, such as sea-level rise and changes in intensity and frequency of sudden-onset hazards, will amplify these existing social vulnerabilities. Recent research demonstrates that patterns of El Niño/Southern Oscillation (ENSO) are associated with a higher risk of armed conflict in the tropics in the past 50 years (Hsiang et al. 2011). Given developing countries’ climate-sensitive economies and low adaptive capacity, they are at greater risk to be adversely affected by natural hazards and man-made accidents, such as chemical spills, as well as other types of large-scale emergencies. This idea is not new, vulnerability is the key determining factor, turning a natural or technological hazard into a disaster (Oliver-Smith and Hoffman 1999). However, the risk of conflict in the aftermath of a disaster is small, as chaos, looting, and other criminal behaviour hardly occur (Thomas and David 2003). One of the reasons why social violence tends to be in the focus in the aftermath of disasters is due to the role of the media. In the aftermath of hurricane Katrina for instance, the media reported incidences of looting and lawlessness creating disaster myths of social violence (Tierney et al. 2006). Likewise, the Norwegian media reported on chaos and violence in urban areas affected by hurricane Katrina, following disaster narratives shown on American television. (Kverndokk

2014). Natural hazards are one of the many challenges, people in developing countries face, and as Hastrup argues often do not appear as something extraordinary (Hastrup 2011).

### **Towards an Integrated Operations View on Emergency Management**

The fundamental design premises that address the above shortcomings and challenges were discussed in a paper on the design of Dynamic Emergency Response Management Information Systems (DERMIS) (Turoff et al. 2004). The DERMIS design premises, objectives and requirements are applicable to all types of crisis and emergency situations, whether natural, man-made, industrial or humanitarian. It is precisely the lack of situation dependency that makes an emergency response system such a powerful tool. Turoff et al. (2004) further argue that any supporting databases, containing information such as the location and availability of specific resources, hazardous materials, buildings, etc. can be located anywhere. The only prerequisite is that local responders are aware of them and know how to use them if needed given the very different cultural contexts.

Confronted with the realities of global emergency response, emergency management stakeholders should rethink the role of ICT support and seriously consider an IEM approach. The design, development, use and evaluation of such systems must take a prominent place on the agenda of stakeholders worldwide (Van de Walle and Turoff 2007). Effective IEM will require mobilizing stakeholders and resources from several locations enabled by different forms of ICT support. The challenges of virtual collaboration across geographical, cultural and organizational boundaries include developing a shared understanding of the problems, establishing effective mechanisms for communication, coordination and decision-support, and managing information (Dubé and Robey 2009; Powell et al. 2004). The ad hoc nature of emergency management also poses challenges in building trust among participants, overcoming issues of denial, the imprecision of information and other social constraints (Drabek 1999). For instance, local communities can assess risk of natural hazards and man-made disasters (United Nations International Strategy for Disaster Reduction 2012) but distrust local government. Public goods are instead provided by the private sector or non-governmental organisations. The involvement of local communities and governance in emergency planning and management is therefore paramount. Whilst different stakeholders and local communities may bring relevant experience, the unique nature of emergency situations requires a different configuration of participants, many of whom have little or no history of working together, and with different cultural backgrounds. This requires 'swift starting virtual teams' (Munkvold and Zigurs 2007), that are capable of immediately structuring their interaction through sharing information on the background and competence of the

team members, discussing actions and deliverables, defining roles and responsibilities, and agreeing on the preferred communication media. For global IEM operations, cultural diversity (national, organizational and professional) and the cultural context may also represent a challenge for communication, decision-making and role understanding (Munkvold 2006). Overall, virtual collaboration boundaries should be understood as being dynamic, having different consequences in different virtual work contexts (Watson-Manheim et al. 2012). This again implies the need for a flexible collaborative IT infrastructure (Evaristo and Munkvold 2002).

A key challenge in Integrated Operations is developing functional methods for analysing the large volume of real-time data from different human and non-human sensors and process control systems. This involves providing advanced support for data management, visualization and analysis, and defining a functional collaborative work environment. Finding the optimal design of operation centres requires experiential learning. For example, ConocoPhillips, an Integrated Operations pioneer, is moving away from centres that use large, shared data screens focusing common awareness, to rooms with individual work stations in smaller clusters. Similarly, IEM centres will need to be configured to support awareness and effective data processing of the data received both from rescue operations and from citizens (Palen et al. 2007; Palen and Liu 2007).

As with research on both virtual collaboration and Integrated Operations, IEM research should adopt a multi-disciplinary approach, including human computer interaction, information systems, computer science, cultural studies, behavioural psychology and organization science. This also implies a multi-method approach, combining case studies (Zook et al. 2010), experiments (Tyshchuk et al. 2012), action research (Harnesk et al. 2009; Meum 2014), design-oriented research (Palen et al. 2010; Turoff et al. 2004), and research in regions that need effective emergency management the most: the poor and underprivileged.

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# Resilience and Complexity Conjoining the Discourses of Two Contested Concepts

By Rasmus Dahlberg<sup>1</sup>

## Abstract

This paper explores two key concepts: *resilience* and *complexity*. The first is understood as an emergent property of the latter, and their inter-relatedness is discussed using a three tier approach. First, by exploring the discourse of each concept, next, by analyzing underlying relationships and, finally, by presenting the Cynefin Framework for Sense-Making as a tool of explicatory potential that has already shown its usefulness in several contexts. I further emphasize linking the two concepts into a common and, hopefully, useful concept. Furthermore, I argue that a resilient system is not merely robust. Robustness is a property of simple or complicated systems characterized by predictable behavior, enabling the system to bounce back to its normal state following a perturbation. Resilience, however, is an emergent property of complex adaptive systems. It is suggested that this distinction is important when designing and managing socio-technological and socio-economic systems with the ability to recover from sudden impact.

**Keywords:** Resilience, robustness, complexity, emergency management, Cynefin Framework.

## Introduction

Resilience has gained remarkable popularity over the last decade, after the 2005 Hyogo Framework for Action adopted the concept as a core element in its strategy for global disaster risk reduction (Dahlberg et al. 2015). Countries adopt “resilient strategies” in emergency planning and disaster preparedness (Cabinet Office 2011; National Research Council 2012; Rodin 2015) to a degree that in just a few years has elevated ‘resilience’ to buzzword-status. For instance, following the 2004 national plan in the USA, even critical infrastructure (CI) was subjected to resilient strategies meant to imbue CI “with a particular agency that literally breathes life into what was once deemed inanimate” (Evans & Reid 2014: 19). Resilient communities and cities are wanted and needed everywhere (World Bank 2008; Ungar 2011; Walker & Cooper 2011: 144). Further, corporations as well as individuals need to be resilient, and able to not only accept but also cope with the stress and shocks of modern-day society (Kupers 2014; Rodin 2015). Resilient citizens thus become subjects who “have accepted the imperative not to resist or secure themselves from the dangers they face (Evans & Reid 2014: 42). Unsurprisingly, a Google Ngram search shows an increase in the use of the word ‘resilience’ in English-language publications during the last two decades.<sup>2</sup>



**Figure 1.** Google Ngram showing the percentage of publications in English with the occurrence of “resilience” (case sensitive) 1800-2008.

The term resilience has been widely used over the last decade to describe man-made systems’ ability to recover from sudden impact. This widespread use has in fact led to the concept’s origins in ecological systems theory to be sometimes forgotten. A basic distinction that is both useful and necessary when working with the concept of resilience is the distinction between what one of the founding fathers of the concept, Canadian ecologist Crawford Stanley Holling, has termed *engineering* and *ecological* resilience (Holling 1996). On the one hand, engineered ecological, economical, or technological systems are governed by an equilibrium steady state, and in such systems resilience denotes the ability to “bounce back” to this steady state

after a shock. On the other hand, in natural ecosystems and complex adaptive systems, instabilities can flip the system into new stable domains with very different inner functions: “There is strong evidence that most ecosystem types can exist in alternative stable regimes, for instance lakes, coral reefs, deserts, rangeland, woodlands, and forests” (Brand & Jax 2007).

The meaning of resilience has been transformed over the last decade and a half. Before the early 2000s resilience was primarily defined as a descriptive concept that in itself was neither perceived as good nor bad. An ecosystem may be highly resilient, but unwanted by humans, and some of the most feared and hated social systems such as terrorist networks and organized crime can be extremely resilient and therefore difficult to eradicate. Brand and Jax (2007), however, identified a general movement towards a more normative view of resilience that followed the introduction of the concept into a much broader spectrum of disciplines around the turn of the millennia. They suggested that resilience was becoming a “boundary object”, rather than a well-defined scientific concept, providing scholars from many disciplines with a crosscutting theme with common vocabulary that could enhance cooperation and coordination. This however happened at the cost of losing the practical value in a more precise ecological definition. More recently, Davoudi updated this analysis by asking in the title of a paper if resilience was “a bridging concept or a dead end” (2012).

How to measure resilience is a question that has occupied researchers from many disciplines over the last several decades, and one which continues to do so. With regard to measurement, the above-mentioned distinction also proves useful: while engineered resilience can be thought of in terms of *elasticity* – resilience is exactly what provides such systems with the ability to absorb a shock and return to their steady state, and that which can be observed and measured – ecological resilience is more difficult to grasp. Holling states of ecological resilience, “In this case the measurement of resilience is the magnitude of disturbance that can be absorbed before the system changes its structure by changing the variables and processes that control behavior” (1996: 33).

In other words: if an engineered resilient system bounces *back*, an ecological resilient system bounces *forward* to a different state. These introductory remarks on the concept of resilience lead into a more historical approach to its development.

### **A Brief History of Resilience<sup>3</sup>**

Resilience is a contested concept with a long and winding history, and numerous definitions or resilience exist – scholars have identified as many as 46! (Tierney 2014: 162). It is not my aim to provide the reader with an exhaustive conceptual history of resilience (for such reviews, see Folke 2006, Brand & Jax 2007, Walker & Cooper 2011, Davoudi 2012 and Alexander 2013), rather I wish to highlight important milestones and definitions.

First of all, resilience must be differentiated from resistance, which is “the extent to which disturbance is actually translated into impact” (Adger 2000: 349). While a system’s resistance protects it from an agent of threat by deflecting the shock, resilience is what enables the system to absorb and bounce back from the impact. In his etymology of resilience, David Alexander demonstrates that the concept originates from Latin (*resilire*, “to bounce”), and that resilience was first used in a somewhat modern sense by Francis Bacon in 1625. Historically, the term developed from literature and law through scientific method in the 17<sup>th</sup> century, and entered the language of both mechanics and child-psychology in the 19<sup>th</sup> century. The engineers of the Industrial Revolution thought in terms of resilience when they added redundant strength to structures such as buildings and bridges. In general, the concept retained the original core meaning of “bouncing back” regardless of the system being mechanical or psychological. It was not, however, until the second half of the 20<sup>th</sup> century that resilience found its way into ecology and the social sciences (Alexander 2013).

Overall, resilience denotes a system’s ability to withstand shock through absorption and adaptation. Traditionally, engineering, economy, and ecology viewed technological, financial, and natural systems as being able to return to equilibrium (a “normal state”) after subjection to a sudden, violent disturbance. From this ability arose robustness of such systems. The turning point came in 1973 when C.S. Holling in a seminal paper defined resilience as “a measure of the persistence of systems and of their ability to absorb change and disturbance and still maintain the same relationships between populations or state variables” (Holling 1973: 14). This idea of “resilient homeostasis” (dynamic equilibrium) became highly influential in the following decades of integration of the concept into social science and climate studies, even if it was debated if it could be “transferred uncritically from the ecological sciences to social systems” (Adger 2000; Gallopín 2006: 299). Holling’s original ideas eventually matured into the Resilience Alliance, established in 1999 as a multi-disciplinary research organization providing advice for sustainable development policy and practice.

The modern multidisciplinary understanding of resilience also has its foundations elsewhere. In the middle of the 20<sup>th</sup> century, Austrian economist Friedrich A. Hayek laid out the foundations for the Austrian school in Neoliberalism with his thoughts on self-organizing economies. Hayek “understood that shocks to economic systems were caused by factors beyond our control, hence our thinking about such systems required systems of governance that were premised upon insecure foundations” (Evans & Reid 2014: 31). Rejecting the stable equilibrium sought by Keynesian economists, Hayek argued that markets exhibit such complex behavior that no government or other regulating body could ever hope to predict or control them. At the same time, markets themselves “have proven to be among the most resilient institutions, being able to recover quickly and to function in the absence of government” (*ibid.*: 35-36). Walker and Cooper point out that Holling and Hayek

worked in very different fields and were inspired by very different political concerns, but that their contributions nevertheless “have ended up coalescing in uncannily convergent positions” (2011: 144).

Around the time Holling wrote his 1973-paper, the term resilience was also picked up by psychologists (via anthropology) as the discipline’s substitute for robustness (Kolar 2011). By the turn of the millennium the term continued its transformation, when the relationship between social and ecological resilience was developed into a broader understanding of community resilience (Adger 2000). The Hyogo Framework for Action (an UNISDR-initiative), adopted by 168 UN members in 2005, placed resilience on the international agenda by focusing on the concept of *resilient communities* – such as cities, neighborhoods, and networks – as a corner stone in future humanitarian development. And in recent years both the UK and US governments have taken on a “resilience approach” to Disaster Risk Reduction/emergency preparedness (Cabinet Office 2011; National Research Council 2013).

Although different disciplines and traditions still disagree on the exact meaning of the concept of resilience, a broad and commonly accepted definition today would be along the lines of “the capacity of an individual, community or system to absorb and adapt in order to sustain an acceptable level of function, structure, and identity under stress”. Note the emphasis on adaptation: what makes a complex adaptive system resilient is its learning and transformational capabilities, not its ability to merely resist a shock. As phrased by Folke: “[R]esilience is not only about being persistent or robust to disturbance. It is also about the opportunities that disturbance opens up in terms of recombination of evolved structures and processes, renewal of the system and emergence of new trajectories” (2006: 259).

## Complexity

As with resilience, ‘complexity’ has permeated the scientific and, to a lesser degree, public discourse over the last few decades, addressing the still tighter coupling and growing interdependencies of modern societies: “As technological and economic advances make production, transport and communication ever more efficient, we interact with incrementally more people, organizations, systems and objects” (Heylighen et al. 2007: 117).

Pioneered in the 1880s by Henri Poincaré, who showed that deterministic systems need not be predictable, the understanding of complexity was propelled forward by Edward Lorenz and his famous “Butterfly Effect” in the 1960s. Complexity science in its purest form originated in general systems theory and cybernetics in the second half of the 20<sup>th</sup> century. Complexity science is, however, “little more than an amalgam of methods, models and metaphors from a variety of disciplines rather than an integrated science” (ibid.), but it nevertheless offers fundamentally



new insights into the properties and functions of man-made as well as natural complex systems.

Central to complexity science is an anti-reductionist approach. Contrary to the basic approach in Cartesian, Newtonian, and Laplacian science, complex systems cannot be fully understood by taking them apart and studying each of their parts individually. This is due to the “emerging properties”: synergies that are created through interactions and interdependencies within the system in an unplanned way. An aircraft or a cruise ship is a highly complicated, but predictable system, where you can tell exactly what will happen if you press a button or pull a lever. Insert operators and place the system in an environment with fuzzy boundaries (e.g. an airspace with other planes or a busy shipping lane), and performance variances that no designer ever thought of are bound to happen eventually. Emergence is thus key to understanding complex systems (Perrow 1999; Dekker et al. 2011).

Unpredictability is not only a property of complex technological systems. Large social systems such as organizations, communities, and institutions also exhibit complex behavior due to many interactions between agents and subsystems. Such systems are therefore unpredictable and uncontrollable – something that often comes as a total surprise to economists, city planners, legislators, and regulators. Consequences are usually expensive and often also fatal. The failure of risk management in the late Industrial Age may be seen as the outcome of continuous application of linear predictive methods on unpredictable complex systems. Such misinterpretations and misapplications have produced disasters such as Bhopal, *Challenger*, *Deepwater Horizon* and *Costa Concordia* (Dahlberg 2013b).

In the Industrial Age, accidents and failures were understood as “a disturbance inflicted on an otherwise stable system” (Hollnagel et al. 2006: 10), exemplified by Heinrich’s Domino-model (1931) representing the linearity of a technical system with chains of causes and effects. From this perception of systems came the hunt for “The Root Cause Effect” and an overall reductionist focus on broken/weak components. The late Industrial Age saw the rise of complex linear accident models such as James Reason’s Swiss Cheese Model (1990), adding more contributing factors in the form of “holes” in the barrier layers – but still based in error-trajectory.

A much more non-linear approach to understanding performance and safety in complex systems was taken by the Resilience Engineering movement founded in 2004 by Erik Hollnagel, David D. Woods, and other safety researchers. While Charles Perrow’s Normal Accident Theory (first published in 1984, see Perrow 1999) represents the pessimist approach to complexity and adaptive systems, Resilience Engineering took from the outset an optimist’s stand, assuming that “an adaptive system has some ability to self-monitor its adaptive capacity (reflective adaptation) and anticipate/learn so that it can modulate its adaptive capacity to handle future situations, events, opportunities and disruptions” (Hollnagel et al. 2011: 128).

## Resilience and Complexity

The Resilience Engineering movement investigates socio-technological systems in which predictable technological processes interact with unpredictable human behavior. Together they form complex adaptive systems that are dynamic (ever changing) and able to adjust to conditions that cannot be built into the system at the design-phase. The movement's definition of resilience reads: "The essence of resilience is therefore the intrinsic ability of an organization (system) to maintain or regain a dynamically stable state, which allows it to continue operations after a major mishap and/or in the presence of a continuous stress" (Hollnagel et al. 2006: 16). David D. Woods, however, noted in the same publication that *all* systems adapt, even though some adaptation processes are very slow. Therefore, resilience in his view could not simply be the adaptive capacity of a system, prompting him to reserve the term to a system's broader capability of handling performance variations. Failure, either as individual failure or performance failure on the system level, was seen by the founding fathers of Resilience Engineering as "the temporary inability to cope effectively with complexity" (ibid.: 3). Following from this, David D. Woods argues that "organizational resilience is an emerging property of complex systems" (ibid.: 43), thus connecting the two concepts explicitly.

It follows from the above that an up-to-date understanding of resilience is more or less synonymous with what Nassim Nicholas Taleb, author of *The Black Swan*<sup>4</sup> (2007), recently has termed "the antifragile": systems that not only survive disturbance and disorder but actually develop under pressure. In his usual eloquent style, Taleb in a footnote addresses the relationship between his antifragility concept and resilience: "the robust or resilient is neither harmed nor helped by volatility and disorder, while the antifragile benefits from them" (Taleb 2012: 17). But in this he confuses the terms in viewing resilience and robustness as synonymous: "Antifragility is beyond resilience or robustness: The resilient resists shocks and stays the same; the antifragile gets better" (ibid.: 3).

Taleb's understanding of resilience is pre-Holling, and therefore somewhat undermines Taleb's otherwise interesting aim to "build a systematic and broad guide to *nonpredictive* decision making under uncertainty in business, politics, medicine, and life en general – anywhere the unknown preponderates, any situation in which there is randomness, unpredictability, opacity, or incomplete understanding of things" (ibid.: 4). He sees complex systems as weakened, even killed, when deprived of stressors, and defines the fragile as "what does not like volatility" in the form of randomness, uncertainty, disorder, error, stressors, etc. (ibid.: 12). However, he underlines that complex systems are only 'antifragile' up to a certain point. If the stressor is too powerful, even the most resilient system will be unable to absorb and adapt. The result, then, is catastrophic (ibid.: 69).

If the resilience of complex systems cannot be designed (as it is an emerging property), it can, however, be exercised and cultivated. The principle of "hormesis",

known by the ancients and (re)discovered by modern scientists in the late 19<sup>th</sup> century, states that a small dose of poison can stimulate the development of an organism (ibid.: 37). Hormesis, on the social scale, means “letting people experience some, not too much, stress, to wake them up a bit. At the same time, they need to be protected from high danger – ignore small dangers, invest their energy in protecting themselves from consequential harm. [...] This can visibly be translated into social policy, health care, and many more matters” (ibid.: 163). Hormesis can be likened to what Evans and Reid call “endangerment” of agents in social systems which “is productive of life, individually and collectively” (Evans & Reid 2014: 64). Erik Hollnagel and David D. Woods also note the need to provoke complex systems in their epilogue to Resilience Engineering movement’s first publication: “Resilience requires a constant sense of unease that prevents complacency” (Hollnagel et al. 2006: 355-56). This exact formulation also connects the resilience discourse with High Reliability Organization theory, as formulated by Karl Weick et.al, with its emphasis on chronic unease, fear of complacency, and attentiveness to weak signals (Weick & Sutcliffe 2007).

The point is that for complex systems, disturbances, performance variations, etc. are beneficial. As Taleb points out: “machines are harmed by low-level stressors (material fatigue), organisms are harmed by the *absence* of low-level stressors (hormesis)” (Taleb 2012: 55. He also lists the most important differences between the mechanical (non-complex) and the organic (complex) (ibid.: 59). While the mechanical needs continuous repair and maintenance, dislikes randomness, and ages with use, the organic is self-healing, loves randomness (in the form of small variations), and ages with disuse.

While fully accepting the need for constant endangerment of agents in complex systems in order to cultivate resilience, Evans and Reid also deliver a critique of what they identify as a Neoliberal strategy of governance:

Rather than enabling the development of peoples and individuals so that they can aspire to secure themselves from whatever they find threatening and dangerous in worldly living, the liberal discourse of resilience functions to convince peoples and individuals that the dream of lasting security is impossible. To be resilient, the subject must disavow any belief in the possibility to secure itself from the insecure sediment of existence, accepting instead an understanding of life as a permanent process of continual adaptation to threats and dangers which appear outside its control. (Evans & Reid 2014: 68)

In their view, the Neoliberal discourse, stemming from the theories of Hayek and Friedman, has been the main force driving resilience to its current omnipresence: “‘Resilient’ peoples do not look to states or other entities to secure and improve their well-being because they have been disciplined into believing in the necessity to secure and improve it for themselves”, they write. “Indeed, so convinced are they of the worth of such capabilities that they proclaim it to be fundamental ‘freedom’” (Evans & Reid 2014: 77).

Another characteristic of complex system is “hysteresis” – a consequence of emergence among entities connected by nonlinear relationships. If a linear, predictable system shifts from one stable state to another, it can be switched back by reversing the process, Newtonian-style. This is what happens when you change gears back and forth in your complicated, but (usually) predictable car. In complex systems, however, “if a system is to return to its original configuration, it must take a different path” (National Research Council 2007: 26).

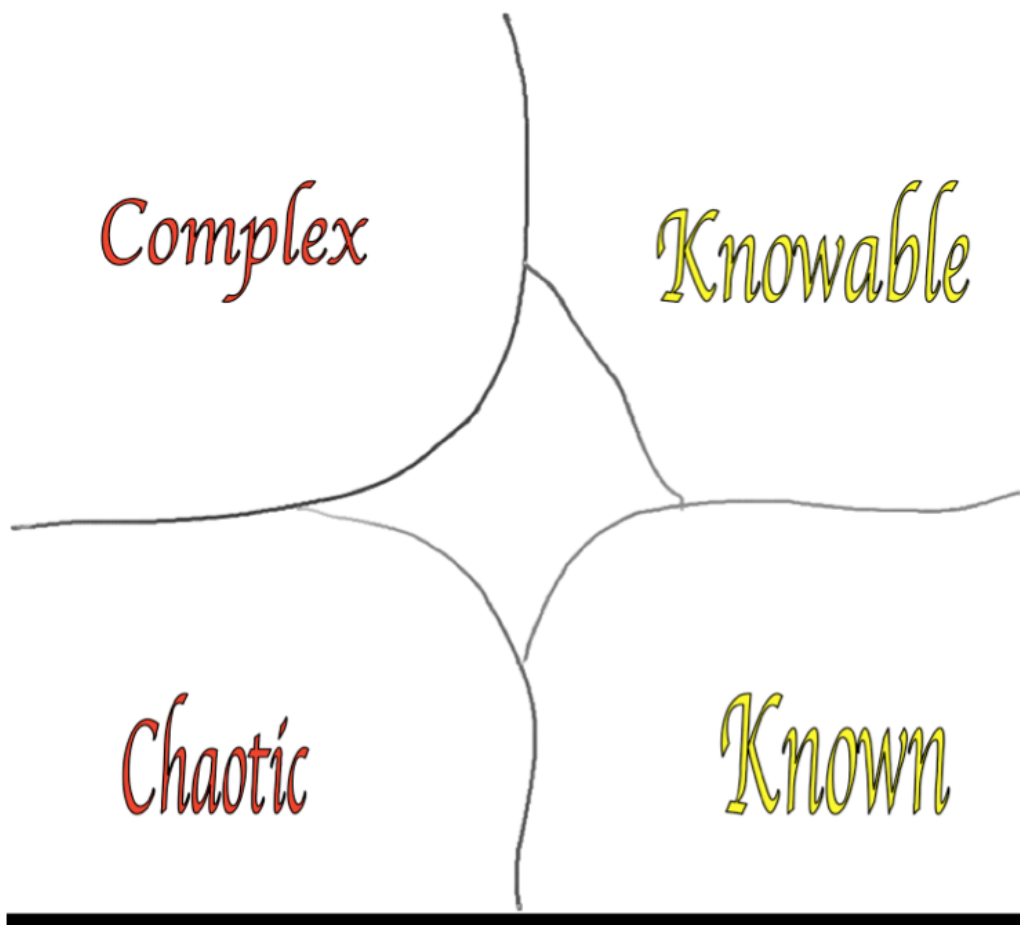
A complex system, however, not only depends on its current inputs, but also on its history. Hysteresis contributes to the irreversibility of complex systems, and renders the “Best Practice”-approach to problem-solving in organizations and societies virtually useless, as the multitude of historical factors in any socio-economic system create vastly different initial states, even if they look similar on the surface. The path-dependency of complex systems forms the basis for what could be called the mantra of the turn towards resilience in emergency management: “Stop planning – start preparing.” We may predict that catastrophic events will unfold in the future, but it will always be different from last time. A resilient approach to emergency planning and crisis management is based less on rigid contingency plans than on heuristics and adaptability.

## Introducing the Cynefin Framework

Complexity is not absence of order – rather it is a different form of order, of un-order, or emergent order. While ordered systems are designed, and order is constructed top-down, un-ordered systems are characterized by un-planned order emerging from agents and sub-systems to the system as a whole. The Cynefin Framework developed by David Snowden offers a useful approach to sense-making by dividing systems and processes into three distinct ontologies: (1) Order, (2) un-order and (3) chaos. Order and un-order co-exist in reality and are infinitely intertwined. Separation of the ontologies serves only as a sense-making tool at the phenomenological level, as assistance in determining the main characteristics of the situation you find yourself in, thus guiding you towards the most useful managerial and epistemological tools for the given ontology (Snowden & Boone 2007; Renaud 2012).

In the ordered ontology, there is a correct answer, which may be reached through observation or analysis. In un-order, multiple right answers exist, but their nature defies observation and analysis. The three ontologies are divided into five domains. Two of them are in the ordered ontology: while the *simple* domain is characterized by obvious causalities that may be immediately observed and understood, the *complicated* domain requires expert analysis – yet still yields an exact answer after reductionist scrutiny. The un-ordered ontology is home to the *complex* and *chaotic* domains in the Cynefin Framework. In the complex domain, analysis fails due to feedback: any diagnosis is also an intervention that disturbs the system. Emergent

order may be facilitated, but is difficult to design, and impossible to predict. The chaotic domain is characterized by the lack of perceivable causality rendering any form of planned intervention useless – here you can only act and hope for the best, because chaos has no right answers at all as there is no relationship between cause and effect. There is also a fifth domain, namely that of disorder which is impossible to label and make sense of (Kurtz & Snowden 2003: 468).



**Figure 2.** The Cynefin Framework, reproduced by permission from Cynthia Renaud. The known/simple and knowable/complicated domains are in the ordered ontology while the complex and chaotic domains belong to the un-ordered ontology. The domain of disorder is found in the middle.

The complex domain is characterized by weak central connections and strong distributed connections (ibid.: 470), meaning that agents interact directly instead of being controlled by an omniscient puppeteer like in the ordered domains. Lacking the common traits of order (i.e. structures, procedures, rules), the complex domain is governed primarily by co-operation between agents, mutual goals and interests,

and competing forces. It is from these infinite interactions and dependencies that un-order emerges. “Most crises arise as a result of some form of collapse of order, most commonly from visible order” (Snowden 2005: 51). The boundary between the ordered and the chaotic domains is strong, meaning that after a “fall” from order to chaos there is no easy way back other than moving through complexity. Falling over the boundary is also known as “Asymmetric Collapse”:

Organizations settle into stable symmetric relationships in known space and fail to recognize that the dynamics of the environment have changed until it is too late. The longer the period of stability and the more stable the system, the more likely it is for asymmetric threats or other factors to precipitate a move into chaos. (Kurtz & Snowden 2003: 475)

Right at this boundary we find catastrophes such as the *Deepwater Horizon* incident, a disastrous sudden transition from order to chaos produced by the “atrophy of vigilance” (Freudenburg & Gramling 2011). When the offshore semi-submersible drillrig exploded on April 20 210, a delegation from the company was on board to award the rig management a certificate for being the safest installation in the Mexican Gulf because seven years had passed without Lost Time Incidents on the *Deepwater Horizon* (Dahlberg 2013). A strategy of resilience may be seen as a countermeasure to exactly this fallacy: “To be resilient is to insist upon the necessity of vigilance in relation with one’s surrounding” (Evans & Reid 2014: 16).

The Cynefin Framework does not imply a differentiated value between the domains. Some systems perform very well in the ordered domain, while other systems benefit from operating (perhaps only momentarily) in the un-ordered domain. Only in the ordered domain, however, does a focus on efficiency through optimization of the separate parts of the system make sense. The reductionist approach to a complex system will never bear fruit. Likewise, traditional command and control-style management approaches are impossible to implement in the complex domain. Instead, complex systems are best managed by setting boundaries and adding or removing path-forming attractors (i.e. fixed points in the time-space of possible states). Constant monitoring and probing through small-scale experiments facilitate continuous development of the complex system towards a desired outcome (Snowden & Boone 2007). This resonates well with Holling’s comments on how to manage resilient ecological systems (Holling 1996: 38-41).

Taleb identifies two separate domains: one where prediction is to some extent possible, and one where it is not (the Black Swan domain): “Social, economic, and cultural life lie the Black Swan domain, physical life much less so” (Taleb 2012: 137-38). These are more or less comparable to the ordered and the un-ordered domains in the Cynefin Framework: “There is, in the Black Swan zone, a limit to knowledge that can never be reached, no matter how sophisticated statistical and risk management science ever gets” (ibid.). The unpredictability of the complex domain is primarily produced by human collaboration. The “superadditive functions” of people working together to innovate and create is impossible to forecast



(ibid.: 233), just as complexity arises in complicated systems when “they are opened up to influences that lie way beyond engineering specifications and reliability predictions” (Dekker et al. 2011: 942). Erik Hollnagel also notes the limits to prediction in the complex domain: “It is practically impossible to design for every little detail or every situation that may arise, something that procedure writers have learned to their dismay” (Hollnagel et al. 2006: 16).

The ordered domain is home to Gaussian curves and “statistical confidence”, while the complex domain is haunted by black swans and fat tails. In the ordered domain, normal distributions of height, for example, enable us to predict how tall the next person is likely to be – if we have a large enough sample for measuring the mean. Fat tails are somewhat synonymous with Black Swans in the sense that they constitute “high impact, low probability events”.

The so-called fat tail distributions found in the complex domain defy prediction: instead of convening around a mean, these samples consist of large numbers of not-very-surprising cases and a few extreme outliers: “In the past decade or so, it seems like fat tails have been turning up everywhere: in the number of links to Web sites and citations of scientific papers, in the fluctuations of stock-market prices, in the sizes of computer files” (Hayes 2007: 204).

The Italian economist Vilfredo Pareto discovered fat tails in the distribution of wealth in the early, industrialized societies, where a limited number of very rich people were balanced by a huge number of workers with a modest income. Paradoxically, a larger sample size provides less useful information about the distribution among the majority of the cases, as the probability of including additional outliers increases.

The shape of a probability distribution can have grave consequences in many areas of life. If the size and intensity of hurricanes follows a normal distribution, we can probably cope with the worst of them; if there are monster storms lurking in the tail of the distribution, the prospects are quite different. (Hayes 2007: 204)

Taleb even argues that the famous 80/20 rule coined by Pareto in the beginning of the 20<sup>th</sup> century (that 80 % of land in Italy was owned by 20 % of the population) is outdated: Today, in the network society, we are “moving into the far more uneven distribution of 99/1 across many things that used to be 80/20” (Taleb 2012: 306). Such a development towards increased complexity constitutes an ever-growing challenge to the epistemological strategies we apply. History seems to drive a clockwise drift in the Cynefin Framework, while the Future exercises a counter-clockwise force upon the systems in question. It seems to be natural for people to seek order, for societies to convene towards the simple domain: “This phenomenon of grasping at order is common in people, governments, academia, and organizations of all shapes and sizes” (Kurtz & Snowden 2003: 476). And then disaster strikes and sends us plummeting over the fold into chaos.

## Concluding Remarks

The Cynefin Framework was designed by Snowden to be a sense-making device, and as I have demonstrated in this paper, it is an effective lens to view and understand the concept of resilience through. The framework offers an arsenal of useful dynamic strategies that may be executed in the different domains. Many negative performance variances in our modern societies may be seen as the result of people, agencies, and governments trying to solve complex problems with solutions from the ordered toolbox – or vice versa. Instead, we should perhaps focus our efforts on *planning for the predictable* and *preparing for the unpredictable*. And this is exactly what the turn towards resilience in emergency planning and management is about.

Resilience is the ability of a complex system to adapt to disturbances and changing conditions, and resilience should be understood as an emergent property of the complex domain. This complies with recent developments in safety science according to which safety itself is “an emergent property, something that cannot be predicted on the basis of the components that make up the system” (Dekker et al. 2011: 942). Instead of looking for broken components in the causal chain that leads to an accident or disaster, a complex approach to safety science accepts competing truths and multiple explanations. From this follows that an accident might very well be no-one’s fault – but merely a negative outcome of unpredictable behavior among tightly coupled interdependencies.

Resilience enables the system to cushion the effects of unforeseen disturbances by absorbing the shock and adapting to changing conditions, thus bouncing not back but forward to a more advanced level better suited for future hazards. Instead of focusing on the vulnerability of a socio-economic or socio-technological system, resilience addresses its potentials (Gallopín 2006: 294). Emergent order does exactly this: Distributed agents of change work together to solve problems and face challenges, and out of their combined efforts emerges a new un-order capable of coping with the perturbation in question. But cultivating resilience means stopping clinging to plans and beliefs in predictive capabilities:

Disasters do not follow preordained scripts. Even in situations where there is extensive disaster experience, those seeking to respond invariably confront unforeseen situations. One counterproductive way of dealing with the unexpected is to adhere to plans and procedures even when they are ineffective or offer no guidance in the face of unfamiliar challenges. (Tierney 2014: 208)

Should all planning then be abandoned? No. Many processes and systems, technical as well as socio-economic, exhibit complicated or even simple behavior, and for those we should develop and rehearse plans which can be executed in case of emergencies. But at the same time we must accept the unpredictability of complex systems and prepare for the unknown future by cultivating resilience.

For instance, a well-rehearsed method in emergency planning is scenario-building. Most agencies tasked with national emergency preparedness create and maintain registers of risk framed as most-likely scenarios, i.e. earthquakes, flooding, train crashes, industrial accidents (European Commission 2014). While scenario-building and comparable methods work well in the ordered domain with its knowable facts and right answers, they are of limited value when dealing with complex systems. Complexity is the realm of “unknown unknowns”, to paraphrase Donald Rumsfeld, and here the shortcomings of methods developed for the ordered domain become evident. How would it, for instance, be possible to construct a scenario to prepare for an emergent calamity that has not yet revealed itself? How can one assess the probability of an event that has happened only once or perhaps never before? No analysis, no matter how thorough, will be able to identify the pattern of such a hazard before it actually manifests itself – because a pattern does not yet exist.

A consequence of such applications of ordered epistemological tools on un-ordered ontologies is 20/20 hindsight, which – unfortunately – doesn’t lead to foresight. Taleb calls this the “Lucretius problem”: humans have a tendency to prepare for the future by reviewing the past, but are not expecting anything worse than has already happened to happen (Taleb 2012: 46). Improvisation, creativity, and imaginative capacity are key elements in resilient strategies: “The challenge is understand (sic.) when a system may lose its dynamic stability and become unstable. To do so requires powerful methods combined with plenty of imagination” (Hollnagel et al. 2006: 17). The understanding of risk is challenged by complexity as no other concept. Defining risk as likelihood  $\times$  consequences” of a future event, presupposes our ability to predict and assess the probability of the event in question, but this is much easier to do in the ordered domains than in cases of un-order. Uncertainty must be re-installed in the concept of risk from where it has been largely absent since Frank Knight established the distinction between uncertainty and risk (seen as measurable uncertainty) in 1921 (Jarvis 2011).

Resilience cannot be created – and it does not have to be, as it is already present as an inherent, emerging, property of all natural as well as engineered complex adaptive systems. But it may be facilitated, nudged, exercised, and cultivated, unleashing strengths and resources hitherto hidden from linear-minded planners, controllers, and predictors. Even when faced with clearly complex problems that undergo fundamental changes while being solved (“diagnosis equals intervention”), these heirs of the Enlightenment insist on reductionist thoroughness in hope of full knowledge and perfect prediction. But, as Evans & Reid note (2014: 201): “Reason imagines nothing. It cannot create and thus it cannot transform. [...] It is not made for opening up new worlds, but enabling us to survive present ones.”

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## Notes

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<sup>2</sup> Note also the historic increase in usage of "resilience" in books published during the 1880s. This is probably due to the many publications on engineering, shipbuilding, bridges, etc. of this time - which was the apex of the age of engineering: "The first serious use of the term *resilience* in mechanics appeared in 1858, when the eminent Scottish engineer William J.M. Rankine (1820-72) employed it to describe the strength and ductility of steel beams" (Alexander 2013: 2710).

<sup>3</sup> This section is an elaborated version of Dahlberg (2013a).

<sup>4</sup> The "Black Swan" is a metaphor for unforeseen events with great consequences that in hindsight look like something that could have been predicted (i.e. the 9/11 terror attacks in the U.S.). The origins of the concept can be traced to Roman antiquity, and the term was common in London in the 1600s as an expression of something most unlikely. In western discourse only white swans existed until 1697 when a Dutch explorer found black swans in Australia. Later, John Stuart Mill used the Black Swan metaphor when he described falsification in the 19<sup>th</sup> century: If we observe 1,000 swans that are all white and from these observations state that "all swans are white", we fall victim to the *inductive fallacy*. The observation of a single black swan would falsify our claim. Lately, the Black Swan metaphor has also entered professional risk discourse (Aven 2014).

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## Introduction

### Cultures of Disasters

By Anders Ekström & Kyrre Kverndokk

Disasters and hazards are ubiquitous to contemporary societies. There are 1400 earthquakes rocking the globe every day. A new volcanic eruption is occurring every week. The floods and landslides are so numerous that they are impossible to keep track of (McGuire 2005: 9). About 240 million people were affected by major natural disasters in 2011. With the prospects of a warmer and wilder future, the number of people affected by climate-related hazards such as floods, storms, heat-waves and droughts is expected to increase. Despite the global scale of climate change, the suffering caused by such disasters remains unevenly distributed between different regions and groups of people.

But disasters are nevertheless increasingly taking on a connected nature, materially as well as discursively. The Great East Japan Earthquake in 2011 is a telling example. The earthquake triggered a series of interconnected events of different temporal duration and geographical reach: tsunami waves and flooding, the Fukushima nuclear explosion and fire, the slow and continuing catastrophe of radiation and environmental effects, financial and social crises. Disasters are not events but processes with unclear beginnings and no obvious endings.

In this and many other respects, contemporary disasters fundamentally challenge our understanding of global and cross-temporal relations as well as long-established distinctions between natural and technological disasters, human and non-human agency, culture and nature. The materially connected nature of disasters further reinforce a long-standing cultural impulse, triggered by the human quest for meaning, to metaphorically and discursively connect extreme events of different scale and character. An "emergency imaginary" (Calhoun 2010) frames the manner in which crises and cataclysms are told in news media and popular culture, and is encouraged by the cultural exchange between them. More or less stereotyped images of disaster also influence how extreme events are managed and remembered, in some cases with devastating results. This is why social norms and cultural metaphors make a crucial difference to the capacity of societies to cope with and come to terms with disruptive events (Tierney et al 2006).

To an influential line of critical thought, from Ulrich Beck (1992) to Giorgio Agamben (2005) and beyond, the emergency imaginary also works to normalize and legitimize an interventionist politics both on a global and a local scale (Fassin & Pandolfi, 2010). In this understanding, there is in the early 2000s a more general

and increasingly powerful tendency towards "catastrophization" (Ophir 2010) in the means by which modern societies are organized, managed and perceived. But catastrophes and extreme nature events were instrumental to the emergence of societal institutions, administrative tools and political concepts in the past as well. For example, recent historical scholarship reveals that early 20th century emergencies of nature such as the Great Kanto Earthquake in 1923 played an important role in the crafting of modern emergency language (Orihara & Clancey, 2012). So, as much as modern disasters are by definition connected in chains of disaster processes, they constantly connect the world in new and unexpected ways.

Natural disasters turn order into chaos, and threaten to overthrow social and economic structures. However, disasters also inhabit a liminal character, in the sense that they put our understanding of the world on trial. Fundamental norms and values are made visible when the world is tossed and turned, simply because they can no longer be taken for granted. Hence, disasters work as catalysts for negotiations of cultural meaning, norms and values, and the patterns of social organization. Studies of historical as well as recent catastrophes in different parts of the world give rich insights to the intense cultural and social improvisations that are triggered by disasters and that are keys to both immediate and long-term recovery work (Solnit 2009; Hastrup 2011).

Culture in the sense of narration and meaning making is thus a necessary resource in any post-disaster society. The work of interpretation is everywhere in disaster management, including the analysis of causes and the mapping of consequences. It is sometimes stated that catastrophes are beyond representation. But, in fact, the opposite is true. Extreme events are represented over and over again and anything else is unthinkable. Neither are disasters incomparable to other catastrophic events. To the contrary, meaning is transferred to disasters by analogy and comparisons. Such acts of representation links disasters of a different scale and location to each other, and depend on both prevalent discourses, for example on global warming and the war on terror, and on historically and aesthetically established patterns of interpretation (Ekström 2012).

Despite these and other cultural dimensions to the understanding and management of disasters, it is only recently that cultural research on disasters has begun to develop more broadly. This can in part be explained by the history of disaster research. Modern disaster research, dating back to the early 1920s, first developed as a branch of sociology. Early studies of human reactions to disaster drew on late nineteenth-century theories of crowd psychology, framing disaster management as an issue of protecting society from the irrational and dangerous behaviour of panicking victims. From the 1950s and onwards this approach was criticized by sociologists like Enrico Quarantelli who argued that the notion of anti-social behaviour as the dominant response to disaster was weakly supported by empirical research (Quarantelli 2001).

Contemporary disaster research has developed in the context of broader discussions on risk sociology, social vulnerability and societal resilience (see, for example, Alexander 2000; Lindell 2013; Tierney 2014). Much of this research share an overall focus on economic and institutional aspects, but also on communicative practices and political action in relation to emergencies. Signaling an important shift in policies, practices and perceptions of disaster, discourses on preparedness and mitigation, rather than avoidance, have been proliferating in the last decades (Amin 2012). An important contribution of anthropological, historical and cultural studies has been to investigate the systems of meaning that are activated in the management of disasters. Early work on disaster imaginaries cover a broad spectrum of approaches to the representation of catastrophes in art, literature and media and apocalyptic notions more generally (Kendrick 1956; Sontag 1965; Kermode 1967; Steinberg 2000).

It is only recently, however, that disasters have become an expanding humanistic and cross-disciplinary research field in its own right. Some scholars suggest that disaster research has taken a cultural turn (Webb 2007, Holm and Illner 2015). There are several reasons for this growing interest in the cultures of disaster, but most important is an increasing awareness of how cultural aspects affect the how societies manage crises and extreme events.

Humanistic research within this field also reflects and elaborates the discursively connected nature of disaster imaginaries. Disasters are incessantly foretold and re-told – in news broadcast, movies, novels, operas, computer games and amusement parks. Due to global media networks and communication technologies, audiences all over the world are able to follow the stories of floods, earthquakes and volcanic eruptions in real time and at long distances. The myriad of stories of cataclysm are structured around a limited number of narrative forms and motifs; for example, the theodicy, the apocalypse, the state of exception, and the trauma (Holm 2012) This repertoire of cultural patterns not only structure how we imagine disasters, they also structure how we handle them. A much discussed instance of this was the fatal consequences of the flawed disaster management after hurricane Katrina and how the action of authorities was affected by stereotyped reports of the event in certain news media (Tierney et al 2006, Dynes and Rodríguez 2007). Thus, stories of disasters may work as both models for and models of social practices.

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This thematic section of the journal *Culture Unbound* is one result of a joint initiative to bring together ongoing cultural research within the field of humanistic disaster studies, and to create a forum for exchange between scholars within the human and social sciences who work on the cultural analysis of disasters from different research traditions. With this objective in mind, we started the network project "Cultures of disasters" in 2012, funded by the Research Council of Norway, and

organized in collaboration between a group of researchers at the universities in Copenhagen, Oslo and Uppsala. In the autumn of 2012, the network organized two workshops inviting Scandinavian researchers in the field to present and discuss their ongoing work. A year later, in November 2013, the conference "Cultures of disasters" was organized in Oslo. The conference was attended by scholars from Europe, America, Asia and Australia, and with a focus on humanistic approaches to disaster research. Paper presentations, keynotes and panel discussions covered a wide range of topics including, for example, case studies of past and more recent catastrophic events; historical perspectives on cultures of risk, uncertainty and resilience; disasters fictions and apocalyptic imaginaries in popular culture.

After the workshops and the conference, participants were invited to contribute to two special journal issues on the theme of "Cultures of disasters". The first group of articles was published in the journal *Tidsskrift for kulturforskning* 2014:3. This issue of *Culture Unbound* contains the second collection of articles. It has been divided into three sections, tentatively entitled, respectively, "Disaster Narratives", "Catastrophizations", and "Contingency, Resilience and Culture".

The first section includes four papers on quite different types of narratives. The first three explores one of the most deeply rooted disaster imaginaries – the apocalypse. The papers discuss how societal and environmental issues are articulated as apocalyptic narratives. Gaia Giulliani is concerned with how the cultural fear of disasters has influenced Western self-representations. More specifically, her paper examines the racial stereotypes, "white fantasies", and gender hierarchies in a number of zombie movies and TV-series. Jacob Lillemose investigates the animal horror movie *Kingdom of the Spiders*, and argues that it articulates an environmental critique that is best described as a "speculative staging of apocalyptic processes in the 'deep ecology'". The title of Jerry Määttä's contribution is "Keeping Count of the End of the World", and that is exactly what the article does. Using quantitative methods from the sociology of literature, Määttä's paper traces the historiography and canonisation of Anglophone apocalypse and post-apocalyptic literature and films. The last article in the first section has a somewhat different focus. Katrin Pfeifer presents a close reading of two fairly unknown Dutch poems about a storm that ravaged the island of Texel in 1660. Early modern disaster poetry is a genre that most often frame disasters as an instance of divine punishment, but Pfeifer demonstrates how in this particular case a secular and spiritual understanding of the storm was combined.

The second section on "Catastrophizations" consists of two papers that share an analytical focus on how an optics of disaster, and political and cultural narratives of different types, in some cases translates into prolonged and even permanent states of emergencies in a much wider sense. It is from this perspective that John Ødermark, in his article "Avatar in the Amazon", examines the entanglement of popular culture, environmentalism, ethno-political and cultural theory in the framing of the Amazon as an ecological symbol. Peer Illner, on the other hand, turns to the history

of the Black Panther Party in the 1960s and 70s, and its modes of operation in mobilizing African Americans by proclaiming a continual emergency. From different vantage points, both Ødemark and Illner take issue with the notion of disasters as singular and disruptive events, focusing instead on the cultural work involved in processes of catastrophization.

The last section on "Contingency, resilience and culture" displays some of the variety of cultural approaches in contemporary disaster studies. The first three articles in this section investigate how mass mediation and practices of communication affect the political, social and cultural response to disasters. Sara Bonati inquires the relationship between the level of Western involvement in remote catastrophes and their mass mediation. By comparing the Western response to the Boxing Day tsunami in 2004 and the Tohoku tsunami in 2011, the paper discusses different forms of "Westernization" in relation to disasters in non-Western parts of the world. Hamish McLean and Jacqui Ewarts contribution to this section is focused on communication processes in the management of disasters, and especially the role of politicians in communicating disasters. Based on interviews with emergency agencies in Australia, Germany, Norway, and the UK, the article outlines a roadmap for how to involve political actors in disaster communication processes. In the third paper in this section, a research group led by Christian Webersik argues for an interdisciplinary approach both to disaster research and emergency management. They emphasize the importance of socio-cultural perspectives on how people imagine, prepare for, respond to and perceive disasters as an integrated part of emergency management. The last contribution to this thematic issue on "Cultures of disaster" takes an explicit theoretical approach to one of the key concepts in contemporary understandings of disaster, the concept of resilience. From an analysis of the role of this concept in disaster studies as well as disaster management, Rasmus Dahlberg argues for a merging of the concepts of resilience and complexity as a useful development for emergency management.

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## Fears of Disaster and (Post-)Human Raciologies in European Popular Culture (2001–2013)

By Gaia Giuliani

### Abstract

This article aims at mapping the impact of ‘fears of disasters and crisis’ on European self-representations in terms of racial stereotypes, ‘white fantasies’, gender hierarchies, and heteronormativities. Its methodology is a critical discourse analysis of texts – specifically television series such as the BBC’s *Dead Set* (2009) and the first season of BBC US and UK, *In the Flesh*, (2013) and movies such as *28 Days Later* (2002), *L’Horde* (2009), and *World War Z* (2013) – read through the lens of postcolonial theories, critical race and whiteness studies, the concepts of political philosophy and the theoretical insights of post-human feminism. This composite theoretical framework permits a grasp of gendered, racialised and classed fantasies behind the narratives of catastrophe and the visions of the post-apocalyptic world(s) the catastrophe is supposed to bring to life; it also allows an analysis of the meaning and articulations of catastrophe and post-world spatial constructions, and the latter’s relation to actual and imagined social hierarchies (gender, colour and class of the survivors). These are examined in order to understand whose eyes we are expected to imagine and experience the crisis/catastrophe through; the geographies of catastrophe and of post-world(s) (where in the world, and why); the relation between the undead and the living; life amongst the living before the undead threat; and the way protagonists look at the laws, rule, governmentalities, and use of violence in the past, present and future societies. These are a few of the themes that this article discusses in an attempt to uncover what fantasies of the present are hidden behind present memories of the future.

**Keywords:** Apocalypse, visual products, discourse analysis, postcolonial and cultural studies, critical whiteness studies

## Introduction

In order to grasp how and to what extent ‘fears of disaster’ engender European racist and (hetero)sexist self-representations, this article investigates the emotional coding of ‘sameness’ and ‘otherness’ in zombie narratives, primarily in the form of European television series and films from the past 15 years. These are popular and transnational cultural products, meant for the general public regardless of their location, and they will be discussed from the point of view of ‘fears of disaster and crisis’. The visual and literary texts this essay takes into consideration will be read in terms of European self-representations regarding racial stereotypes, ‘white fantasies’, gender hierarchies, and heteronormativities.

Since the end of the Cold War, Europe has been troubled by fears and an unprecedented sense of vulnerability related to a number of social, political, cultural, and economic phenomena that have transformed them from the ‘centres’ of modern empires to the post-modern ‘peripheries’ (Chakrabarty 2000) of new empires. These same phenomena have often been transfigured in contemporary horror visual productions (contagions, economic crises/natural catastrophes, genetic mutations, weapons of mass murder, etc.); in this essay the zombie narratives discussed will be read within a framework that links them to what I call the ‘return of the repressed colonial memory’: the return of the memory of invasion, expropriation, genocide, slavery, disaster, and death. They will thus be understood as if the memory of future catastrophe recalls the memory of past (colonial) violence; as if the undead stand for the limitless ‘strike back’ of their victims, whose return brings to light the previously unadmitted horror that so-called ‘civilised’ humanity perpetrated on the ‘uncivilised’.

This particular reading was introduced by British sci-fi writer H. G. Wells, who brilliantly stated in his introduction of the famous novel *War of the Worlds* (1897):

before we judge of them [the Martians invading the earth] too harshly we must remember what ruthless and utter destruction our own species has wrought, not only upon animals, such as the vanished bison and the dodo, but upon its inferior races. The Tasmanians, in spite of their human likeness, were entirely swept out of existence in a war of extermination waged by European immigrants, in the space of fifty years. Are we such apostles of mercy as to complain if the Martians warred in the same spirit? (Wells 1897: 7)

The purpose of seeing zombie visual and literary productions as authorial readings of an historically situated fear of the striking back of those who have been the victims of colonial violence – a fear outlined by Sven Lindqvist (1991) – derives from various similarities that those texts show with historical reconstructions and literary narratives from colonialism and slavery (1500s-1900s). The repressed, painful and troublesome colonial memories that I refer to are related, for example, to the physical elimination of natives and the expropriation of their lands and resources through settler colonialism – the Western rule of colonised people, their resources, and production – as well as the objectification and exploitation of men and women

through the slave trade. These memories refer to the emotional records of horrible regimes of segregation, sexual violence, forced reproduction, and death that involved both victims and perpetrators, but also to those who fought for freedom. Those are shared memories; they still produce fears, anxieties, repressions, internal fights, and a sense of guilt, rage, indignation, hatred and self-hatred.

This article's methodology is a critical discourse analysis of texts relating to the undead – more specifically, two television series: the BBC productions *Dead Set* (Brooker 2008) and the first season of *In the Flesh* (Mitchell 2013); and three films: *28 Days Later* (Boyle 2002), *The Horde* (Dahan & Rocher 2009), and *World War Z* (Forster 2013). To provide historic context, the work of director George Romero will also be discussed in some detail. These texts will be read through the lens of postcolonial theories, critical race and whiteness studies, the concepts of political philosophy and the theoretical insights of post-human feminism. This composite theoretical framework permits a grasp of gendered, racialised and classed fantasies behind the narratives of catastrophe and the visions of the post-apocalyptic world(s) the catastrophe is supposed to bring to life; it also allows an analysis of the meaning and articulations of catastrophe and post-world spatial constructions, and the latter's relation to actual and imagined social hierarchies (gender, colour and class of the survivors). These are examined in order to understand whose eyes we are expected to imagine and experience the crisis/catastrophe through; the geographies of catastrophe and of post-world(s) (where in the world, and why); the relation between the undead and the living; life amongst the living before the undead threat; and the way protagonists look at the laws, rule, governmentalities, and – finally – the use of violence in the past, present and future societies.

## **Zombies, Cannibals and Colonial Genocides**

Following the history of political ideas, cultural anthropology and semiotics, it could be stated that since the very beginning of human social life, monstrosity has always referred to the 'representation of the *finis mundi*', an embodiment of the end of the world. Monstrosity is the embodiment of the border between man on the one side and woman, non-human beings (animated and inanimated nature, and animals), and post-human entities on the other. Monstrosity was associated with Evil and the anti-Christ, and as such has been associated with the act of cannibalising flesh and souls of sinners and infidels:

With six eyes he was weeping and over three chins dripped tears and bloody foam. In each mouth he crushed a sinner with his teeth as with a heckle and thus he kept three of them in pain; to him in front the biting was nothing to the clawing, for sometimes the back was left all stripped of skin (Dante, *Inferno*, Canto XXIV, 1304-1321, 56-60, trans. in Warner 1998:161).

Bestialised in iconographies from Scholasticism to the mid-fourteenth century, evil monstrosity is assigned to natives in the travel memoirs of fifteenth-century sailors,

corsairs, and the men of science who rounded the Cape of Good Hope towards the Pacific. During the European Renaissance, the actual or alleged cannibalism of New World natives was considered evidence of their animality and proximity to Satan in a necessarily binary vision of creation and otherworldliness (Good and Evil). Africa, Caribbeans, Amazonia and the Pacific were places inhabited by Shakespeare's misshapen Caliban, a mutated being, a beast – “half man half fish” (Shakespeare 1610-1611: I.ii. 356-357; Vaughan and Mason Vaughan 1991) – of a dark colour (“son of the Devil and an Algerian woman”) who could be educated only to some degree, because the Caribbean/Calibans/Cannibals' “monstrosity and brutality” would never disappear (Schmigall 1981: 176-177).

Those areas were identified as the landscapes of both Heaven and Evil, a double feature that still animated early twentieth century images of the cannibals' land in Joseph Conrad's *Heart of Darkness* (1902) and – in the late twentieth century – the censored *Cannibal Holocaust* by Ruggero Deodato (1981), a proto-snuff movie dealing with an expedition of young American anthropologists in Amazonia to study cannibalism.

In early modern colonialist discourse, (cannibalistic) monstrosity featured as the last evil to fight in order to create overseas utopias, where the righteous could build the City of God. Monstrosity and utopia thus became inseparable terms of the same narrative consecrating colonialism (Said 1978, 1993), as well as enslaved (see Fredrickson 1971) and indentured labour (see Banivanua-Mar 2007 and 2005; Biber 2005; Berglund 2006), to a much higher – transcendent – *ratio*. This is testified earlier by late medieval heroic romances (*romans de geste*) describing the Crusades and literature accompanying the conquest of Americas, and is praised by English philosopher John Locke, author of the *Second Treatise on Government* (1690). Locke famously proclaimed America the chosen land to give birth to a new and more righteous society, grounded on a social contract amongst equals (male, white, Anglo-Saxons, proprietors, faithful to the Crown and its Church) (Locke 1962[1690]). The model of this society was Virginia, but the promise of equality was not extended to the slaves of the colony's plantations.

In order to expropriate the land on which to build utopias, the indigenous human beasts were eliminated or subjected to the rule of Christianity, its political formations, and more recently, to capitalism. *Hic sunt leones* ('here there are lions' – usually written on uncharted territories of old maps), and there *homo is homini lupus* ('man is wolf to man'), as Thomas Hobbes used to say (see Avramescu 2003), a condition to which even the monstrous Leviathan was preferable. In a very Marxian sense, the elimination of the beast was the only way to engender «primitive accumulation» (see Philipps 1998; Bartolovich 1998). In early sixteenth-century American colonialism this meant cannibalizing lands and replacing the natives – who were considered useless for labour – with a domesticated labour force from other colonised lands (Creed 1998; Hoorn 1998). From the seventeenth to the nineteenth centuries, new monstrosities – the black slave, the yellow peril, the brown coolie, the Mediterranean immigrant, and the feminine and queer monstrosities of

Georgian and Victorian times – were forged to serve the construction of differential regimes of exploitation that were gendered and racialised. This was strengthened through mythologies of the *noble savage* and the *unmasterable warrior* during Enlightenment, and later through bodily measurements, as positivism and eugenics hypostatized the perfect measurability of human behaviour.

The Enlightenment was a time when the ideas of humanity had legal, political, cultural, and religious borders, and these were very different from those at the core of early nineteenth-century anti-colonial and anti-slavery feelings; the denied humanity of enslaved and colonial Others brought no limits to the violence of word, rule, and sword.

It is within this framework that the repressed memory of past violence appears like a bad conscience, re-emerging through the rising of the undead, the one who was in the realm between life and death for centuries, waiting for revenge. S/he is the Caliban who has come back to revenge the stigma and persecutions, suffering and grief s/he experienced in life: it is as if Fanon's black consciousness (1952) has escaped from colonial amnesia, to be reincarnated as an entity that mortally wounds both his/her actual persecutors and their heirs.

### **The Rise of the Undead**

The etymology of the word *Zombie* (*nzumbe*) has been traced back to Bantu dialects. It arrived in the Americas through the Middle Passage – first Haiti, then other French and British Caribbean islands – and is a human state of being that results from voodoo rites and consists of the dead returning to life or a condition between life and death. In the twentieth century, the zombie begun its career on the screen. Cannibalism was absent in the few visual representations in US cinema of the 1920s through the 1940s such as *White Zombie* (Halperin 1932) with Bela Lugosi as the sorcerer who neutralises his rivals in love giving them a zombifying powder, *Ouanga* (Terwilliger 1936) which set itself in a Haitian plantation, *King of the Zombies* (Yarbrough 1941) – a spy story where Nazis are attacked by Black zombies – and the famous *I Walked with a Zombie* (Tourneur 1943) where the undead is the manifestation of a community's unbound mourning. All these movies deal, whether evidently or instrumentally, with the sense of guilt owing to the grief and pain suffered by enslaved Black people in the Caribbean and the unconquerable fear of their 'striking back' against Americas' slave and post-slave societies. In some cases, movies bring together Haitian voodooism with vampirism. These movies are all very conservative (see Rhodes 2006:15, 23) – the climax is followed by the restoration of the Good and the defeat of the Bad. The zombies' cannibalism – the idea that the dead want to devour the living as a payback for pains they suffered in life – is only first realised in 1968 by US film director George Romero.

The zombie is thus a figure made up of a number of connected cultural inheritances – transnational and transoceanic – that dominated, resisted, interpreted and appropriated each other. It cannot therefore be, as stated by Kyle W. Bishop



(2010), an ‘authentic American product’: as with all cultural constructs, it is un-authentic. As such it is instead an example of a very high synergy of symbolisms, among which the Protestant Gothic plays an important role (see Luckhurst 2012). As a figure, the zombie also draws many of its own features from a constellation of many different Others in sci-fi and fantasy (robots, cyborgs, aliens, clones, vampires, and werewolves) that have been seen over time as enemies and monsters, mirrors of ourselves (the “more human than human” trope, see Sobchack 2000: 138), companions and family members (the most famous example of which is Steven Spielberg’s *E.T.*), and revolutionary subjects revolting against corporate business, individualism, and commodification (see Grebowicz 2007). The zombie is also peculiar in itself for playing with both the familiar (the dead are community and family members), the uncanny (the living dead’s condition), and the colonial monstrosity and its memory. As I have argued elsewhere (forthcoming 2016), other cinematic figures are more respondent to other forms of Modern Otherness and to fears: vampires and aliens more often epitomize migrants in a quite radically different way; vampires also refer to the “the horrors of modernity and decadence in a conservative value system” (Browning & Picar 2009: xvi); cyborgs and clones generally represent human mutations and metamorphoses; and werewolves indicate the Nature/Culture, Civilised/Uncivilised double feature of the white Western *petit bourgeoisie* (see also Kirkup & al. 2000, Christie & Lauro 2011, Giuliani forthcoming 2016).

### **Zombies become cannibals: The Undead from Romero to post-9/11**

George Romero’s thirty-eight year career – from the *Night of the Living Dead* (1968) to *Land of the Dead* (2006) – thematises the return of American society’s wretched, subalterns, and outcasts as cannibal zombies. They are the only ones who are able to reveal the blood-thirstiness of modernity, the failures and violence of which reproduce today’s social division, wealth inequalities, individualism and selfishness – characteristics of late capitalism and its consumerist culture, the verticalisation of power, and the reproduction of marginality and exclusion. Movie by movie, Romero’s zombies are increasingly represented as a mass that becomes similar to what political philosophers Antonio Negri and Micheal Hardt (2002) described as a ‘revolutionary multitude’. More precisely, Romero’s zombie is the result of a restless oscillation between indistinction and self-differentiation, which Marx called modern ‘individuation’ – that is, the construction of men and women as individuals that possess an acknowledged juridical persona, property rights, inviolable bodies, and subjectivity.

In Romero’s last work, *The Land of the Dead* (2006), the multitude achieves its highest level of self-organising, internal self-differentiation (or individuation), and mutual empathy: the African-American man who was the last and most important victim of ‘white liberators’ in his first movie returns as Big Daddy, the living dead

leading a multitude, whose members are mourned when they are killed by the living. In this movie, the zombie subalterns embody the subjectivity of those who have nothing to lose and don't need to negotiate with any power: as the last scenes make evident, their goal is to subvert human laws. In the final scene, after attacking the City where the humans live, the zombies walk away together as a new community replacing the human community. While crossing a bridge, Big Daddy looks down to where the human survivors are hiding and the human leader prevents another survivor to shot him by saying: "they are just looking for a place to go, same with us". The zombies are thus presented as fighting for a new social foundation that gives birth to a society grounded on a set of values that consider Nature as a peer, and focuses on communion, mutual sympathy, support, and equality. There's no production, and hence no capitalist accumulation in this view; no social division or hierarchy, gender relation, sexual reproduction, or time-space boundary is envisioned.

In one sense, Romero's zombie is the inverted figure of the monstrous mob crossing modern cities at the end of the nineteenth century. As described by conservative philosophers across *fin de siècle* Europe, the mob was amorphous, instinctual, beastly; an overflowing river, easily manipulable by obscure agitators. In another sense, however, although Romero's multitudes contest the modernity, progress, individuality and selfishness ingrained in Enlightenment ideas of subjectivity, they do not deny them as such; they are proposing their own (post-human) version of them.

For the living, the result is the realisation of a permanent 'state of exception' (Agamben 2003). An unlikely (or hyper-real) zombie apocalypse is not figured as a state of war, but as a state of permanent survival for both humans and post-humans (Lillemoose 2013). This image of catastrophe challenges the idea that a 'better' human society is possible in the aftermath of a crisis. This is clarified by the structural nature of the post-apocalyptic condition that progressively erases any human mark on earth: it abolishes the space-time dimension established by the living, because it is potentially global; it doesn't have brakes or artificial barriers; it is immortal. The sense viewers get is that in this condition of permanency, a convivial society able to welcome the living as well as the dead is the only chance for both to survive.

What distinguishes Romero's cinematography from more recent movies deeply marked by global wars on terror is that his zombies address a critical point regarding the contradictions, conflicts, and iniquities of globalised US capitalism. His critique of power in *Night of the Living Dead* (1968) and *Dawn of the Dead* (1978) questions authority – state, military and patriarchal (Towlson 2012). Today the figure of the zombie is more frequently engaged to highlight the enduring necessity of 'eliminating monstrosity' – which is not yet or not only the Cartesian exception, but rather the result of the mistakes and horrible deeds of the living. In contrast to Romero's work, the focus is neither on humanity's horrible deeds (lading to capitalism and State authority) nor on the living dead as the figure representing human mistakes,

but on the necessity of a new start. According to this viewpoint, the enemy that comes back from underworld, the new (she-) Caliban “who has a voice but no language” (Ashcroft 2008), who roars like an “animal”, needs to be eliminated through an ultimate war and the foundation of a new society – and a new ‘colony’ of superior (the fittest) human beings. This is the case of the zero-budget, award-winning Spanish movie *REC* (2007). Here the epidemic has a satanic origin, and the evil project of recalling the dead to life and transforming him/her to an infernal threat for the living becomes the opportunity for a new Leviathan. This is also the case in the first so-called ‘horror colossal’, *World War Z* (henceforth *WWZ*), which I will analyse in depth later in this article. Although there are many similarities with Romero’s poetics, the ‘state of war’ in *WWZ* aims at the restoration of an idea of Progress that definitely excludes the post-human, which is seen as the ultimate enemy. In all these cases, the enduring state of threat is not – as it is in the critical work of Romero – the ills of contemporary society including post-Fordist capitalism, military power, international politics, and conflict management. On the contrary, the post-apocalyptic society envisioned is based on a new eugenicist/warriorist idea of the fittest and the whites in which the hero is also heteronormative, sometimes bourgeois and elite, sometimes representative of the toughest and most virile of the working class.

In the case of *WWZ*, the mutation that characterizes the figure of the zombie after 9/11 has already occurred; in the next two sections I will analyse that mutation (from living dead to undead mutant), outlining how it makes the new zombie different from earlier versions. I will also discuss the sense in which the ‘imagined catastrophe’ of the contemporary zombie is an allegory for the more likely apocalypses of the present, and how some of the most recent productions in this genre embody a deeper critique of the ontology and normativity of unchallenged, inescapable, multi-layered and multi-located postcolonial global power (for an overview on ‘imagined catastrophe’ in sci-fi, horror cinema and Western culture at large, see Seed 2000).

In the last section I will focus on the idea on which the BBC series *In the Flesh* is grounded: that the living need to reconcile with the undead. These productions propose a shift from what Foucault calls “the state’s power to kill” to the governmental state’s power to ‘let live’ and then ‘rule over the *bios*’. Here the post-zombies are individualised and subjectivated. To a greater extent than in Romero’s films, they are medicated, made docile and unthreatening, their memories are recovered, and they are re-inserted into their former families. They become a governmental object, to use Michel Foucault’s expression – they need to live, in order to let the living reconcile themselves with the trauma induced from the rising. And at the same time they become naked (post-)life – a very particular *bios* if we follow Italian philosopher Roberto Esposito’s articulation (2004) – whose social and biological re-coding as ‘members of society’ depends on the chemicals doctors (and

then families) inject in their spine. The state rules over their biological-cortical constitution, and in so doing, allows people to rebuild their communities. Post-rabid quasi-humans are transformed from an overwhelming threat to the entire community into the living memory of an ineradicable mutation (from human to post-human) involving all contemporary societies.

### **Fear runs fast: zombie mutants in a neo-colonial post-world**

The zombie is now animalistic, charged, and feral, and instead of being predictable, it's now inscrutable and volatile.  
P. Dundle, *Zombie Movie Encyclopedia*, vol. 2, p. 7.

The French film *The Horde*, co-directed by Yannick Dahan and Benjamin Rocher (2009), opens with a funeral and a group of desperate friends and colleagues. They form a police squad made up of French and North Africans and set out to avenge their murdered colleague. Aurore, a white female soldier who is expecting a child fathered by the deceased, is part of the punitive mission. The objective is to exterminate the 'Nigerians' who killed their companion. At sunset, the executioners arrive at a dilapidated building in the Parisian *banlieue* – a suburb far from the centre – that is the base of a criminal gang made up of two Nigerians, a Pole, a Roma, and two white watchmen. (Here, the city is 'provincialized' and the suburbs, normally ignored by the city, are placed in the foreground.) Later, on the terrace of the building, the protagonists become aware that Paris is under attack by the living dead, and they see the city in flames from afar. This nearly abandoned building, a black hole isolated from the rest of the world, turns into a kind of black consciousness for contemporary France.

This sensation is confirmed when the group tries to get out of the building: the good and the bad team up, in line with a certain tradition of violent, urban films such as US cult director John Carpenter's *District 13* (1976). In trying to get out of the building, they encounter an Indochinese war veteran, a disgusting-looking old man that revisits colonialist gestures, language, and behaviours of war constructed for the domination/extermination of 'barbarians'. Symbolic of the old colonial mentality, which is still effective today, the old man shoots the arriving zombies with a machine gun calling them 'dirty gooks'. Faced with a good-looking zombie that he kills in the hallway, he suggests that his new comrades 'do her', leaving them puzzled and disgusted. The group splits up and is decimated, offering fleeting intimate and dramatic scenes. Adawale, one of the two Nigerians, is attacked by Bola, his brother – who after having mutinied and abandoned the group was infected and transformed into a zombie – and is forced to kill him. Quessem, an agent, faces the zombie horde in order to save Aurore and the baby in her womb.

Only she and Adawale will come out of the building unscathed, when the sun is already high. But the final message is clear: even if they likely are the only human beings left on the earth and of opposite sexes (which implies the possibility of a new post-colonial and mixed society), Aurore (the name now absolutely evocative) kills Adawale, to avenge her partner. She is the ultimate girl – a figure so important in horror movies (classic representations of this figure are Laurie Strode in *Halloween* 1978, but also Sally in *The Texas Chain Saw Massacre* 1974, and more Sydney Prescott in *Scream* 1996) – who dramatically expresses her hatred and suffering for the loss of her partner and, although pregnant, never withdraws from the fight. Even in the face of the extreme threat of disaster and the end of humanity, the fantasy of white supremacy does not make allowances. Despite the fact that the forgotten colonial past has re-emerged, requiring alliances between new victims and executioners of post-colonial France, the future is a white warrior and her baby.



1. Frame capture from *The Horde* 2009. The last survivor, Aurore when fighting inside the building.

In Danny Boyle's *28 Days Later* (2002) two people of opposite sexes and different colours survive, envisioning the creation of an unorthodox mixed-race family that offers hope for a new world 'purified' of racialised and gendered violence. The survivors are an Irish man called Jim, a young, black woman called Selena, and a white child, Hanna, whose father was infected and shot by the military before his mutation. In this film, the apocalyptic scenario is triggered by animal rights activists liberating monkeys infected with a virus that triggers murderous and cannibalistic instincts. The activists and the laboratory operators are all infected, initiating the epidemic.

The film starts with a simple incident: the protagonist, Jim is hit by a car and falls into a coma. Jim wakes up from his coma 28 days later, looking out onto a



London that is seemingly abandoned, only to discover that in fact it is far from dead but inhabited almost exclusively by infected people. Jim will be rescued by two survivors, including Selena, with whom he will travel through the rubble of a world that still offers hope for humanity and salvation. They eventually reach a fortified mansion, held by the military, but here they meet further violence as the military want to rape the two girls and show no mercy towards the zombies (represented here as subhumans, transformed by the infection into rabid animals).



2. Frame capture from *28 Days Later* 2002. The protagonist, Jim, enters the empty city center (Westminster) of London

*28 Days Later* introduces a new type of zombie that is not (only) the returning dead, but also represents a new and different kind of animalized humanity, governed only by the rules of the strongest in the pack. It is the result of an epidemic (rampant but potentially circumscribed or circumscribable) and embraces both the image of mutants and rabid animals. This image also inspires the zombies of *The Horde*. They do not stumble, like G.A. Romero's living dead, but run fast, implying a type of film direction that expertly blends action and war movies. A typical European product, these fast-running zombies evoke the idea that only young people can survive (and women particularly), especially suburban ones and, in any case, people who are familiar with weaponry (such as people in the military). The future hope of Europeans apparently builds on the abandoned people of its past of racial and gender discrimination: if we look closer we notice instead that these 'margins', in order to be successful in the struggle for survival, need to be reorganised in a traditionally gender hierarchy-based nuclear family that sees the black Selena reverted to women's traditional role of care-giver (she takes care of Hanna) and subaltern companion of their men, and a white man (Jim) that used to be defenceless and powerless (naked, with just the surgical green coat on) to



become the new warrior and defender of the two women (on the socially conservative fantasy behind the imagination of disaster, see Broderick 1993 in response to Sontag 1965).

There are some important contextual narrative differences between *28 Days Later* and *The Horde*. British insularity, at the centre of its national and imperial conception, allows us to imagine that outside, beyond the seas and oceans, the infection has not spread. In contrast, the Paris that we see engulfed in flames in *The Horde* refers to the no-longer-radial and potentially limitless relationship between postcolonial centres and peripheries, where there are no barriers to the spread of cannibalistic violence.

In its opening words, *28 Days Later* contains a criticism of humanity's unbridled sense of omnipotence over nature (reason/technique/language vs. feelings/nature). In *The Horde*, the origin of the resuscitation of the dead is not even hinted at, implying that the catastrophe could be one with apparently no meaning, origin or *telos* (aim). Human beings are faced with the end of humanity as we know it simply because they have been – and still are – bad to each other.

In these two films, the catastrophe is set in the urban space where the protagonists belong (the centre of London in *28 Days Later*) or from which they are partly outcast (the Paris of *The Horde*). The European metropole – the past centre of colonial power, a place that attacks immigrants and has become the testing ground for governmental practices in the present – is the stage for the action. In both movies, the urban mobilization/dislocation of bodies under the rules of biopolitical control and the collapse of the market occurs on the arrival of the cannibals whose frantic group does not admit barriers of class, race, and gender. It is a destructive and engulfing tide that cancels the spatial segregation and devices of capitalist production embodied in European cities.

### **No future (?)**

The rurality that is instead the focus of the critically acclaimed BBC mini-series *Dead Set*, directed by Charlye Brooker, serves to reflect isolation and the inability to defend and control territory – another great theme of globalised geopolitics and wars on terror. Rural territory is not geometrical; it hides monstrosity in its fronds, it cannot be brightened by artificial light, and it escapes actual military action. In European productions, the rural environment often refers to the construction of internal barbarism in conflict with 'civilized' urbanity. In the specific case of *Dead Set*, the critique of mass culture – and of Big Brother television in particular – uses the idea that the broadcast studios are immersed in the green countryside to strengthen the image of enclosed life, the one that is reproduced in the TV show, unaware of the monstrosity that lives outside it.

The mini-series begins during eviction night on *Big Brother*, when a zombie outbreak leads to rioting in several cities across the UK, with emergency services struggling to cope and the military being called in. A production runner travels to

the studio with the mother of one of the Big Brother housemates. As they reach the studio their driver, who was bitten by a zombie earlier, dies and reanimates, killing both women and biting a security guard. As eviction is announced, the guard stumbles into the crowd of fans, dies and reanimates and begins to infect others. The zombies invade the studio's interior and attack the production crew. In the morning, the housemates are wondering why Big Brother seems to be ignoring them, but they are later alerted to the situation by another production runner. Throughout the series the relationships among the runners, the surviving production crew, the producer and their lovers and friends who try to reach the House deteriorate as they need to support each other, find and share supplies, and collaborate on finding a way out of the situation. In this case, no hope is left for a human future: even the last survivor is infected. She finds herself in the last scene of the miniseries watching the TV screens with blank eyes, screens where her image is reflected as a zombie version of the 'stereotyped' audience of Big Brother's television format.



3. Frame capture from *Dead Set* 2008. The last survivor, Kelly Povell, sits in the 'confession room' of the Big Brother

As in *28 Days Later* and *The Horde*, in *Dead Set* the zombies can run, creating a strong contrast to the serenity of the rural context. Yet in a sense this is consistent with the speed of television shows – a speed that stuns the audience from the first scenes in the first episode. In this miniseries, humanity is described as devoid of love, empathy, respect and loyalty to people and relationships. It is implicitly presented as not worth saving. Here, as in *The Horde*, humanity comes to terms with itself, with its own vanity and fear, with the selfishness and hatred that distinguishes it. Spectators and fans literally 'eat' the set of Big Brother, the actors, operators and producers included. The metaphor is clear; in a certain sense, it fits the critique of

consumerism – in this case, of TV consumerism – in Romero's zombie movies. The main difference lies in the characterization of the zombies. They are not re-humanized figures (like in the latest movies of the American director) that hint at the emergence of a world inhabited by a new immortal post-human race. They are bearers of a catastrophe that leaves no-one alive.

What seems to emerge from our reading of *28 Days Later*, *The Horde* and *Dead Set* is the reversal of what Elias Canetti argued about the representation of death as 'liberating' the living spectator:

Fortunate and favoured, the survivor stands in the midst of the fallen. For him there is one tremendous fact: while countless others have died, many of them his comrades, he is still alive. The dead lie helpless; he stands upright amongst them, and it is as though the battle had been fought in order for him to survive it. Death has been deflected from him to those others. Not that he has avoided danger; he, with his friends, stood in the path of death. They fell; he stands exulting (Canetti 1960: 228)

The films discussed here seem to suggest that it is not the dead or the undead that are central to reassuring fantasies designed for the contemporary living human being; instead, the focus is on the effects of the catastrophe on the idea of the world and, consequently, the feasibility of a political project for the future. In these European mass productions, white fantasies and gendered regimes are reframed locally while the reach of the catastrophe is supposed to be global: this because the aim of their authors and directors seems to be that of giving back a highly emotional narrative (on the evocative power of sci-fi and horror literature, and movies in particular, see Sontag 1965) of what is not solved in the recent past of their national history in order to invite audience to rethink the monstrous in history rather than in fantasy. The nightmare has strong historical roots and is reproduced in the ways people look at, relate to, and consume Otherness.

### **The (Negative) Power of Progress**

The critique of the superpower of human technologies and their effect on the planet is the underlying theme in *WWZ* as well as in *28 Days Later*. In *WWZ*, the origin of the epidemic that the film addresses is not due to an apocalypse as transcendental event, but the work of nature in response to humanity's nefarious exploitation. It is no coincidence that the opening credits are accompanied by a series of voice-overs (TV and radio) that report the impact of man on the planet in terms of global warming, epidemics, pandemics, carcinogenic transformation of resources, etc. As in *28 Days Later*, *The Horde*, and *Dead Set*, which address the metamorphosis of the undead into infected mutants, the undead do not rise from the grave but arise from an infection that spreads through a bite, or biological contamination resulting from a misdirected experiment in genetically modifying the measles virus. In this post-apocalyptic zombie movie – where the epidemic starts in Pakistan and evolves in Western metropolises – the protagonist, former UN investigator Gerry Lane (Brad Pitt), is called back in service by international authorities in order to deal with an

emergency that is immediately compared to those he experienced in Liberia, Sudan, and Palestine. He left the United Nations because he wanted to be with his own family – his wife and two little girls – but now he needs to break his promise and again be a ‘hero of world peace’ and survival. His world tour in search of a solution to the epidemic (South Korea, Palestine, England, United States) is desperate, and he loses track of his family (first rescued by a US navy carrier in the middle of the Atlantic under the protection of Lane’s former colleague and friend UN Deputy Secretary-General Thierry Umuntoni, but then abandoned in an isolated refugee camp because of the carrier’s overpopulation). Lane’s desperate tour is driven against the revolt of both Fate and Nature against human beings.

Lane flies to Israel, because a CIA agent in South Korea told him that the Mossad knows something more about the epidemic. Observing the cannibal masses attacking humans, Lane notices that the zombies do not attack those who are sick, and theorizes that this is to avoid eating infected and corrupt beings. The narrative thus invites the audience to a new ideology of progress: surviving (strongest, fittest, and Western) humanity, once rescued from the disaster and made even bio-physically stronger through natural selection, will be able to definitely overcome the ultimate reaction of Nature against human despotism. Fleeing from a Jerusalem under attack by the infected coming from the ‘other side of the wall’ (thus presumably former Palestinians), he causes his plane to crash in order to kill zombies in the aircraft and, together with Israeli female soldier Selden, to land close to World Health Organisation headquarters in Cardiff. Here, Lane finds test tubes containing viruses and bacteria and is able to confirm his hypothesis regarding illness as a cure for the zombie epidemic. In most of its recent output, Hollywood reframes the final human catastrophe as something solvable by humans themselves. Here and there, mutation seems to be an allegory for the defeat of humanity in its ‘war of domination’ over Nature. But it is a very temporary defeat: *WWZ*’s apocalyptic scenario is reversed in a new progressive epic that finds a solution to what is meant to be the End of the World by inoculating survivors with a deadly virus, from and through which the world’s scientific and technological progress laid claim to saving ‘real humans’.

In *WWZ*, there is no mention of American social inequalities, the unbalanced power relation and racist segregation between Israel and Palestine, and the violence and genocide; the white, Western-centred fantasy of humanity overpowering Nature and its catastrophes is finally projected on the entire world. This is in contrast to the other texts discussed in this section, where there is no single hero, no solution to the crisis, no human revanchism against the catastrophe in these movies. The protagonists are finally overwhelmed by the post-human version of their removed past.

There is another feature the three visual productions discussed previously noticeably have in common when compared to *WWZ*. This concerns what Talal Asad, in talking about the “little (neo)colonial wars” of the twenty-first century (2007),

refers to as the differential space assigned to someone's mourning for those relatives who have become undead. This space changes according to the position of the subject of mourning within gendered, racialised and classed global hierarchies. The anonymity assigned to the mob is common to the genre and to the productions I have discussed here, but it is less evident or more gently managed in *The Horde* (especially in the relationship between the living Adawale and the undead Bola), in *28 Days Later* (in particular when the father of the little girl who joins the two protagonists notices that he has been infected and gives her his last farewell) and in *Dead Set* (when a black girl becomes infected and her best friend, the 'queer guy' of the House of Big Brother, looks after her until she 'rabidicizes').

This is absent from *WWZ*, where very few scenes address the emotional consequences of the transformation of 'loved' or 'known' people into cannibal persecutors. In their escape from a 'lost' Philadelphia under invasion, the Lanes are hosted by a Latino family who are later infected. Their child Tomas escapes, however, and joins the Lane family on the roof of the building, but is never seen mourning the transformation of his loved ones – not even in the scene where his father and mother are trying to tear him to pieces. Instead, the emotional and intimate tension deriving from the fear of loss (from mutation and thus death) is reserved exclusively for Gerry Lane's loved ones; only for his very white family. Indeed, the torment of his wife and daughters, left in the grips of the war economy and US Army 'refugee management' that isolates the survivors on a platform in the middle of the Atlantic, is the main theme of the entire movie. Unlike other innovative plots in which courage does not belong only to white heterosexual men and fathers, female roles are always ancillary to Lane's actions, as with the Israeli female soldier Selden whom Lane saves by cutting off her infected hand.

The emotional element is thereby so completely reduced to the protagonist (and to his family only by extension) that some of the scenes portraying survivors' joy risk becoming grotesque and significantly out of place. I refer to the songs sung by many Jews and very few Palestinians who managed to flee to Jerusalem, while outside the city their loved ones devour each other's relatives, former colleagues, neighbours, and friends. The existence of a common enemy allows a coalition to form between those who had hitherto hated each other. But those who remained beyond the wall, in that area normally known as Palestine, are primarily the Palestinians confined for decades in liminal areas afflicted by poverty and the lack of a means of defence – except for self-organized armies. Nevertheless, from a symbolic and dramatic point of view, the scenes of Lane's visit to Jerusalem are the most interesting of the film. There the walls built to divide the occupied territories and Palestine have been reinforced, multiplied and made even higher to defend against zombies. But the barriers built by men can do nothing against the fury of Nature. Director Marc Forster, who must have been influenced by Juan Antonio Bayona's *The Impossible* (2012) – which depicted admirably the devastating and unstoppable power of the 2004 tsunami – creates the effect of a tide of zombies that, by running



over each other, are able to build a pyramid of flesh that overcomes the protective wall, thus casting the cannibals onto fleeing humans. The images from above of an infected, bloodthirsty, and anonymous tide destroying everything greatly resembles the same shot from above of the violence and destructive speed of water. One might even compare these effects to aerial shots of fleeing civilian populations in war movies that made history and created a model script for films that followed, such as Francis F. Coppola's *Apocalypse Now* (1979) and Stanley Kubrick's *Full Metal Jacket* (1987).



4. Frame capture from *World War Z* 2013: Zombies climb over the wall separating Jerusalem from Palestine

### **“Death walks with me”: the emotional link between the dead and the living**

In all the productions discussed in the previous section, the zombie is figured as an anonymized mob, like the colonized populations facing public space at the end of the nineteenth century. In *WWZ*, however, the mob is depicted as having no social connection with anyone, as being deprived of any emotionality or aspiration, like an aimless multitude of monsters. For these reasons, the zombie mob only deserves to be sacrificed in the name of humanity and civilisation (in the singular). In this respect, many similarities can be found with the mainstreamed figure of the dehumanised global terrorist that Talal Asad (2009) brilliantly deconstructed in his book, *On Suicide Bombings*. This figure is often depicted in military despatches, mainstream political debates, and international geopolitical agreements as moved by «uncontrollable anger» (rabid, indeed) – instead of embodying an “act of death dealing that reacts to injustice by transgressing the law” (Asad 2009: 47) – and for that irrationality deserving only to be killed:



The right to kill is the right to behave in violent ways toward other people – especially towards citizens of foreign states at war and toward the uncivilized, *whose very existence is a threat to civilized order* (Asad 2009: 60).

Compared with *WWZ*, the zombies in the European productions discussed above – as the ultimate terrorists on earth – appear less an external enemy, and more ‘one of us’, someone who used to belong (to family, to community, and to post-imperial nation).

In this section I will discuss this view of the zombie as ‘one of us’ in the BBC mini-series *In the Flesh* (2013), which focuses on reintegration of the undead into society and the latter’s reaction to this recovered proximity, sometimes seen as a gift, sometimes as something monstrous. *In the Flesh* tells the story of the return of the repressed memory of past violence in the figure of the zombie, whose rise is defeated by the living, but not through extermination. The undead do not disappear; instead, they are domesticated.

In this series, the plot is very intimate and private, dealing with family conflicts in a small Lancashire town, the fictional Roarton (evocatively named, hinting at the roar as the sound of the zombies). The series is set a few years after ‘the rising’, as the zombie apocalypse is called, when the government tries to rehabilitate the undead and reintegrate them into society. Kieren Walker returns, after being rehabilitated as a PDS (person affected by the Partially Deceased Syndrom), and is welcomed by his parents who consider his return as a gift, a second chance to correct parental mistakes made during the ‘first life’ of their son. Kieren had committed suicide after his lover Rick was killed fighting in Afganistan. (It was Kieren’s father who, after Kieren’s disappearance, found him in a cave – the same where Kieren used to meet his lover, as witnessed by the inscription «Rick + Kieren 4 ever» – with his wrists slashed.)



5. Frame capture from *In The Flesh* Season 1 2013.

When the zombies rose, Kieren found himself locked in his coffin and broke out of it. He then chose the local supermarket as his hunting ground for human flesh, together with another risen undead, Amy. The rehabilitation process restores his memories with chemicals that doctors – and later family members – inject into his spine through a little hole cut below his neck. These chemicals stimulate his memory of events before and during the rising, when he was a human and when he was a zombie. In one of these flash backs he sees himself attacking and eating Lisa, the best friend of his sister, Jem. At the time, Lisa and Jem were members of the HVF (Human Volunteers Force) – a paramilitary force was engaged in the extermination or conviction of the living dead. Jem was the one who discovered Kieren and Amy eating Lisa’s brain, but rather than killing him she consigned him to the army for rehabilitation. In contrast to the rest of the Walker family, Jem finds it difficult to accept PDS Kieren; as she gradually comes to love her brother again, she still struggles with memories of what he did to her friend.

The idea of transforming the undead into a new chance for love and redemption is here particularly successful. The undead is still conceived as a permanent threat – for many inhabitants of Roarton they are the living memory of the loss of their beloved, inclined to ‘go wild’ unexpectedly; the HVF is not dissolved and is willing to exterminate rabbits (the rabid undead) as well as PDS. It is formed by a dozen men and women led by Bill Macey, an ultraconservative man who sees himself as the last bulwark against a post-human conception of the world. He led a raid against an old woman PDS, who is dragged outside her house and killed with a bullet to the head in front of her desperate husband – very similar to what armed official and unofficial *militias* used and still use to do against subalterns and supposed terrorists. The clash between humans and post-humans stands as the metaphor of the struggle between the fit and the unfit, at the very core of Western positivism and its idea of the State and its settler colonialism in Europe and its empires. There, the virile male – proud, nationalist, straight and white – fights against the returned, who represent the emancipated girls in the village (Amy), homosexuals (Kieren and Rick) and infidels. In the name of these values, Bill Macey denies that his returned son Rick is a PDS; he is rather a human and a war hero (as if he could not have been a PDS and a war hero too). But when Rick cannot hide his nature any longer and shows up to his father with neither make up nor eye-lenses (prescribed to PDS by doctors to ‘become less monstrous and more acceptable to their communities’), Bill kills him. He believes that Rick is the result of an evil resurrection. There will be, the vicar Oddie said, a second resurrection, the one described by Saint John, and then the dead will come back to life as living beings rather than as undead rabbits. In killing his son, Bill is convinced that he is giving him the chance to resurrect again. But once he kills him, the community revolts against an idea of society based on a virile, white, working-class, non-affective, military idea of social boundaries. The man whose wife Bill shot kills him with a gun. Jem abandons the HVF to protect her PDS brother.

The series has many examples of the emotional ties between the living and the undead. Philip, the vicar's secretary, is in love with PDS Amy, while his mother helps other mothers in dealing emotionally with their PDS children and husbands. Two moments are particularly noticeable for bridging the three worlds of zombies, PDS, and humans into a shared 'emotional community'. First, the scene where Rick does not shoot the two «rotters» the HVF has found in the hood: Kieren opposes him when Rick aims his gun at them, after noticing that the old male rabid is just protecting the young rabid girl he is hiding in the cave (the same cave): he suggests a second chance for them through the rehab he and Rick enjoyed for themselves. Rick agrees, and, in disobeying his father's order to shoot, acknowledges his own PDS condition.

Secondly, the scene that deeply deals with familiar intergenerational conflicts and boundaries. When Kieren runs away from home after the second death of his lover, his mother finds him in the cave, confessing that she knew he was there because she and her husband always knew about Kieren and Rick. She then tells him the story of her near-suicide due to abandonment by her upper-class fiancé. At the pharmacy where she went to find the pills she needed to take her life, she found her future husband, who gently dissuaded her from committing suicide. She thus knows what impossible love means and how painful the loss of your beloved can be.

These scenes somehow explain the director's choice to use extreme horror (the living dead) and the uncanny situation of a community whose members are both human and post-human to talk deeply about marginality and suffering (for gender, racial, and homophobic discrimination) in rural Britain: the post-human and post-apocalyptic – as feminist scientists and post-human philosophers argue (Evelyn Fox Keller 1992; Donna Haraway 1991, 2003, 2007; Karen Barad 2007, 2010; the collection of essays edited by Stacey Alaimo and Susan Hekman 2008; and more recently Rosi Braidotti 2013) – thematizes feminist and queer critiques of male and white epistemologies, anthropocentrism, heteropatriarchy, and phallocentrism; that is, the privileging of the masculine in the construction of meaning (according to Derrida 1967). Enlightenment and Christian ideas of progress and the order of the State are questioned here via the unaggressive deeds and emotional engagement of a PDS queer quasi-person who fights to reclaim the love and forgiveness of his beloved.

Thus, as in the other visual productions I have discussed, Western modernity is here the locus of the crisis, the secularised construction that undergoes the catastrophe. Its crisis is precisely the event that opens the permanent state of exception which is the condition within and against which *The Horde*, *28 Days Later* – and particularly *In the Flesh* – imagine the building of new 'emotional communities'. This condition strongly recalls all the more recent UK and broadly Western rhetoric against global terror, especially focussed on national security after the attack on New York and Washington, DC in 2001, and the suicide bombings in Madrid in 2004 and London in 2005.

As with the enemy in the London suicide bombings, the enemy in *The Horde*, *28 Days Later*, and *In the Flesh* is no longer eradicable. Consequently, as has been shown by media, political, and academic debates around the London attacks, the State and its military forces have three options for dealing with the inheritance of fear, rage, grief and disaster engendered by the 'rising': an extreme *mors tua vita mea* (the wars in Afganistan since 2001, and Iraq in 2003, but also the Israeli bombing of Palestine, as in *WWZ*); a more feasible regime of segregation and totalitarian social control (something UK already experienced in Northern Ireland and in the colonies, which is reproduced in *28 Days Later*); or a project for a new 'affective community' grounded on a collective amendment of past and present violence and discrimination (as exemplified by *In the Flesh*).

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## At the Mercy of Gaia Deep Ecological Unrest and America's fall as Nature's Nation in *Kingdom of the Spiders*

By Jacob Lillemose & Karsten Wind Meyhoff

### Abstract

This paper looks at the animal horror genre as a way to discuss current notions of ecology in relation to a specific American idea of being "Nature's Nation". The central work for the discussion is the movie *Kingdom of the Spiders* (1977) by John Cardos, which depicts how a small Arizona town is taken over by a "swarm" of tarantulas. Without any obvious explanation the spiders slowly but steadily invade the town and start killing both other animals and humans until they have completely covered the town in their web. The paper connects the movie to a long tradition of fiction describing how nature turns on humans and reverses the power relation between man and nature that is fundamental to modernity. Moreover, the paper connects the movie to Maurice Maeterlinck's ideas of swarm communities as manifested by ants and termites to argue that these communities are ecologically superior to the communities of man-made civilisation. Finally, the paper discusses *Kingdom of the Spiders* and animal horror in general in relation to recent ideas of non-human ecologies and critiques of anthropocentrism and makes the point that these works of fiction serve as both dramatic and philosophical visions of a world without humans.

**Keywords:** Gaia, dark ecology, animal horror, Maurice Maeterlinck, nature's nation.

“Whatever it is, we have disturbed it.”

- Foreman Mike Carr, *Ants!*

## Introduction

The area is scattered with tarantula mounds. Like buildings in a large city, they spread out across the entire landscape. It is hard to tell the exact number. There are maybe 20, maybe 30, maybe more. Or perhaps the mounds are all connected, forming one big construction under the earth? Who knows? These strange configurations cover too vast an area in the dry and mountainous desert landscape of Verde Valley in Arizona to allow human perception an overview. The mounds vary in height and length and look like something ants or termites could have built. The tarantulas exit and enter the mounds through holes in the facades following some obscure plan. They inhabit the landscape like it was the most natural thing and form a kind of pattern whose logic escapes conventional notions of planning in modern civilisation. Yet, their strangeness is a source of undeniable fascination. Rather than expressing a state of exception and chaos they seem to be part of the highly planned infrastructure of an ancient civilisation. The tarantulas move around this infrastructure like individuals in an abstruse collectivity that humans cannot understand, let alone decipher. As such the mounds are also a source of a ground-shaking insecurity. A source of fear and of angst. Although the mounds are accessible to humans it is impossible to see and know, what is going on inside them. Facing them, humans can only speculate about the subterranean corridors and chambers that form their base. And the conclusion seems inevitable: It is a civilisation whose energy of life and logic of planning is beyond – perhaps even superior to – human civilisation. One thing is certain, the tarantulas do not recognise nor do they pay any attention to humans. They move around, doing what they are supposed to do according to an obscure million-year old masterplan. The masterplan does not include humans.

The scene described above unfolds in John Cardos' film *Kingdom of the Spiders* (1977). In the film neither the arachnologist Diane Ashley (Tiffany Bolling) nor the local veterinarian Robert Hansen (William Shatner) can explain the strange occurrence. What they do understand however is that they are facing something rather unusual and highly unsettling. The spider mounds cannot simply be ignored or removed by spraying the area with a strong dose of insecticide. That latter is nonetheless what the mayor suggests as a desperate measure to secure that the annual country fair will happen as planned and allow the city's businessmen to make an important profit. But the presence of the tarantulas is more than a question of pest animals. Much more.

The scene constitutes a turning point in the plot of the film. The relation of strength between human ability to control the forces of nature is turned upside down. The persons involved are overtaken by a fundamental fear of being the potential prey of a dark and dim nature that does not behave like itself. It operates

beyond ideological and political rhetoric and instead expresses a kind of ecological will power that manifest itself in an instinctual sense of hunting and territorialisation. It is indeed a frightening moment and when the humans in the film realise what is going on they panic. They follow an urge to act, notwithstanding that the actions are counterintuitive, discard the democratic procedures of society and ignore long-term considerations for the common good. The social coherence of the little town in Verde Valley comes undone in the encounter with this ungovernable and merciless force whose origin and objective is completely unknown to the inhabitants. It is the beginning of the end of human society in the hitherto peaceful area of Arizona's desert.

Far removed from the events in Verde Valley, the focus of the present article is to try to come to grasp with this strange force and its national as well as planetary implications through a number of speculative proposals.



Frame capture from *Kingdom of the Spiders* (1977). No one is safe when the spiders invade Verde Valley. In their brutal territorialisation of the peaceful little town, the spiders do not consider who they kill, they just kill.

## Animal Horror and the End of Humans

*Kingdom of the Spiders* belong to the so-called animal horror genre. It is a very prolific and diverse genre that is often stigmatised as pulp or exploitation. In this article, we will however argue that the genre in exemplary fashion articulates a serious challenge to human understandings of and engagements with nature. The challenge takes the form of a speculative staging of apocalyptic processes in the “deep ecology”.<sup>1</sup> The notion of deep ecology is based on an understanding of nature as an intricate network of relations between all the organic entities living on Earth. Animal horror takes on the widespread, yet also contested belief associated with the notion that the network is harmonious. On the one hand, the genre shows how human activities continuously interfere with the network and seems to cause some

kind of imbalance or aggressive reaction, on the other hand it suggests that the network never was harmonious in the first place but is constituted by chaotic and violent processes. In both cases the result is a fatal fight between man and animals. Moreover, a fight that man seems destined to lose as the result of some kind of cosmic reason or logic that predates civilisation. By way of the animals the deep ecology demonstrates powers of a scale that man cannot comprehend, control or trump, let alone exploit as a resource. Rather than a harmonious network or a natural resource that can be exploited to the fulfilment of human civilisation deep ecology is presented as a radical force that dethrones the belief that humans are the sovereign species on the planet.<sup>2</sup> It is the fundamentally incomprehensible and horrifying nature of this force that the films of the genre articulate with an extraordinary visual and conceptual wit.

The article looks at animal horror in general but will particularly focus on those films, like *Kingdom of the Spiders*, in which various kinds of spiders and insects “attack” human civilisation and impair its physical as well as intellectual infrastructure. This focus is motivated by the idea that spiders and insects to a greater extent than other kinds of animals represent something radically different from the human-centred perception of nature that civilisation is based upon. Spiders and insects embody a deep ecological consciousness and life form, developed over millions and millions of years inhabiting the planet and adapting to its ecology. This process has taken place independent of and without any consideration of humans. Spiders and insects were here long before mankind and will most likely survive us. They are the original and true inhabitants of the planet. The perspective they present us with is not simply pre-human but essentially non-human and point to the notion of man as a cosmic banality that is emphasised throughout this article.<sup>3</sup> In terms of notions of Being, spiders and insects open up towards a dizzying horizon, whose temporal extension exceeds the approximately two hundred thousand years that humans have walked the Earth. They are the only living beings compatible with the multiple transformations that the planet has gone through the past 4,5 billion of years.

Animal horror including *Kingdom of the Spiders* is predominantly a genre that is developed and thrives in the US film industry and film culture of independent movie makers. The article will take this circumstance as a cue to connect the deep ecological apocalypse of the genre with a particular American history and its associated notion of nature.<sup>4</sup> It is a history that originates with the birth of the new nation in the middle of the 18<sup>th</sup> century and extends all the way up to the social, economical and political crisis – including environmental issues and a massive energy problem – that the mature nation experienced in the 1970s.<sup>5</sup> Throughout those two hundred years it tells the story of how the United States of America fell from the dream world of being “Nature’s Nation” to the realization that it was rather the embodiment of a destructive control and exploitation of nature. As a self-conscious genre animal horror experiences a hay-day at the end of this history – in the 1970s – and a main point of the article is to argue that the genre articulates a unique and eminent

critique of this destructive society as well as of the historical perception of the US as a nation predestined to flourish in harmony with nature as the creation of the almighty God. Films like *Kingdom of the Spiders* inverses this romantic perception and draws the conclusion that Americans – as the pinnacle of modern Man – no longer or rather never did own a God given privilege to inhabit the vast amount of land on the North American Continent that stretches from the Atlantic Coast in the East to Pacific Coast in the West. In fact, the genre not only dismisses any hope of recreating a balanced and exceptional relation between Americans and the American landscape, it also points to the total extinction of humans – not just Americans – from the face of the planet.

### **The Birth and Mutation of Nature's Nation**

The US is a mythological nation and one of the foundational myths is the notion that it is destined to be “Nature's Nation”.<sup>6</sup> The notion has Christian religious roots and is based on the belief in an almighty God who has manifested his greatness by creating the extraordinary American nature, from Niagara Falls over the Great Plains to California. Already nourished by the nation's founding fathers in the 18<sup>th</sup> century, the notion expresses the conviction that this specific nature was created for a special nation of hitherto unseen if not in fact sublime greatness. However, to these early American citizens that came over from Europe it was not simply a question of nature reflecting the greatness of the nation but of nature as an unequivocal, almost self-evident proof of the destiny of the nation to be one under God, like no other nation before it.

The notion of Nature's Nation influenced not only American self-perception and identity but also its political make-up. The principles written down in The Constitution of the United States (1787/1788) were influenced by principles of nature, which meant that they essentially were written by God. Of these principles, democratic ideals of liberty and equality in the open wilderness of opportunities for the new American people were of the highest importance.<sup>7</sup> It was these principles that distinguished the political constitution of the new American nation from earlier empires such as ancient Greece and Rome and not least the British Empire with its social and economical hierarchies. The USA was conceived as a natural appearance, created by and for the landscape.

Moreover, according to this myth the nation was marked by a political innocence, in the sense that it existed beyond the time and space of political history.<sup>8</sup> If anything it existed in a kind of eternity guided by the will of God and as such the nation could do no wrong as long as it followed its destiny.<sup>9</sup>

As fascinating and pure as the notion of the USA as nature's nation was to those who believed in the myth behind it, the notion turns out to be a highly problematic one. Hence, throughout the 19<sup>th</sup> century it becomes increasingly clear that it is

haunted by a fundamental schism between a spiritual understanding of the notion and an understanding of the notion shaped by processes of civilisation.

Since the first frontier men began their journey westward in the beginning of the 19<sup>th</sup> century, the development of the American identity have been partly characterised by a spiritual quest.<sup>10</sup> It is a quest that finds its objective in nature. Beyond the religious institutions of the old world it freely explores what it means to be American and as such to be deeply connected to the Creator in all his incomprehensible and yet perfect greatness. The American nature contains a transcendental truth, which defies any conceptual formalisation. It needs to be experienced to be realised. A large number of Americans interprets this quite literally and starting at the end of the 18<sup>th</sup> century, they leave civilisation to live a life in absolute harmony with nature.<sup>11</sup> This life is both primitive and modern in its conception: Primitive because it appreciates the simple life and modern because it reflects an enlightened awareness of the progress of civilisation. One of the primary protagonists of this quest is Henry David Thoreau and his detailed and contemplative accounts of the lively nature around Walden Pond. In the passing of the seasons, the freezing lake and the melting of the ice, the rich and diverse subtlety of the fauna and the vitality of the wild-life, Thoreau finds a meaning that is greater and deeper than anything civilisation can ever create.

In parallel to the spiritual quest, more material and mercantile aspirations also emerged, even with the frontier movement. Like the spiritual quest, these aspirations had their source of inspiration in nature. However, they interpreted the notion of “Nature’s nation” quite differently. The American nation was chosen by God and destined to improve, cultivate and commodify nature. Accordingly, nature was not a completed creation, but “a land of opportunities” and to take advantage of these opportunities was the ultimate goal of the American people.<sup>12</sup> In essence, the aspirations amounted to a utilitarian quest that placed the white American frontier man, his interests and needs, at the centre or rather at the top of the order of nature.<sup>13</sup> The contrast to the spiritual quest was stark and in the case of Thoreau and other of his contemporaries led to the realization that nature and civilisation constituted two incompatible phenomena. Nature bred intuitive understanding, while civilisation promoted calculative profit thinking. The disparity revealed a schism that a hundred years later in the 20<sup>th</sup> century would prove to be the beginning of the fall of the notion of the US as nature’s nation.

The utilitarian quest was fulfilled in the decades following the Second World War. Industry and science made extraordinary advancements culminating with the landing on the moon – the conquest of another frontier and the territorialisation of outer space nature – in 1969. The US demonstrated its role as the leading civilisation in the modern world. However, it also became increasingly obvious that the progress of this great nation happened at the expense of the very same nature that constituted the origin and entitlement of the nation. Public protest rose as the media more and more frequently reported on civilisation’s disastrous engagements with



nature. The mythology surrounding the notion of nature's nation was in other words confronted with a reality that was far from ideal and the fear that Thoreau expressed a century ago seems all too real, in fact it was worse than he imagined. Nature's Nation appears to be a rather ambiguous notion. Success and sin, progress and destruction tragically turn out to be two sides of the same coin.

In the late 1960s and throughout the 1970s this tragedy generates a strong and wide-ranging environmental movement in the US. The means of the movement are both peaceful and militant but the goal is the same: To restore the nation's authentic pact with nature.

As mentioned earlier animal horror becomes highly popular at exactly this time and accordingly it seems obvious to read the genre as a disillusioned depiction of a nation caught in the act of destroying its privileged relationship with nature and furthermore its political *raison d'être*. However, contrary to the hippies and eco-activist Edward Abbey the genre advocates no romantic ideas of reconnecting with nature. Instead, it demonstrates how the deep ecology led by an army of animals seems determined to destroy the American nation in an indifferent chaos.

## The Rebellion of the Animals

Animal horror has existed at least since the 1950s and although its defining era is the 1970s it is a genre that has been continuously revisited up until today where it remains a popular formula among both filmmakers and audience. In addition to the numerous new animal horror films that have been produced in every decade since the 1950s, the *Jaws* series spans 12 years (1975–1987) while the *Piranha* series spans 34 years (1978–2012) and the on-going *The Planet of the Apes* series so far is into its 47<sup>th</sup> year (1968-).<sup>14</sup> As such, the genre constitutes a major narrative in modern American film that in terms of a continuous discussion of the significance of landscape – including animal life – in the shaping of a specific American identity and nation is comparable to the Western genre. But whereas most Western movies support the myth of Nature's Nation by emphasising a special relation between the landscape and the people who live there, animal horror disclosed the myth as myth by showing that the landscape in reality belongs to nobody but the animals.<sup>15</sup>

The notion of animal horror as it is defined in this article refers to films that are organized around animals – from insects to the large mammals – that in an intensified form becomes a threat to US citizens and society. It can be small creeps like the millions of worms that arise from the muddy grounds “supporting” the small town of Fly Creek in Jeff Lieberman's *Squirm* (1976) and the flying African cockroaches that invades the American East Coast in Ellroy Elkayem's *They Nest* (2000) but it can also be large killers such as the gigantic crocodile that haunts Chicago's sewerage in Lewis Teague's *Alligator* (1980). In any case, the genre shows how the USA – from rural areas over large cities to the entire nation – is challenged by animal forces that does not recognize nor care about the myth of Nature's Nation.

In this context animal horror does not cover movies based on imaginary monsters like the ones featured in invasion movies that derive from the tradition from H.G. Wells' classic *War of the Worlds* (1897) and Jack Finney's equally famed novel *The Body Snatchers* (1955). In these movies monsters come to Earth from outer space in order to execute a hostile takeover of humanity. Neither does the notion include mythical, yet earthly creatures from forgotten regions of the World, such as Skull Island in Edgar Wallace's *King Kong* (1933) or Odo Island, where Ishiro Honda's *kaiju* roams in *Godzilla* (1955). What the notion of animal horror refers to in this article are essentially creatures from *Kingdom Animalia*, animals that are at once strangely familiar and frighteningly strange. These animals have been mastered and domesticated through stories and cultural products, yet they remain wild at heart and at close encounter they are as bestial as ever. The genre stages and dramatizes this untamed nature of the animals and casts them as the protagonists in a violent rise of the deep ecology.

Animal horror primarily unfolds in US movies and the genre is essentially a sub-genre of the disaster movie where an increasingly severe state of emergency is taking place and human life, as we know it becomes a fight for survival. In animal horror movies the state of emergency is characterised by the fact that humans are confronted with an uncanny enemy that they thought they had domesticated as part of the progression of civilisation. In that sense the movies of the genre expose a classic narrative inversion, where humans as the controlling agent in the world falls from their position at the top in the food chain only to suddenly find themselves becoming prey to the animals that they normally control. The infrastructure that humans have created as a shield of protection is coming undone and they are now exposed and vulnerable creatures with minimal chances for survival.<sup>16</sup>

With this inversion of Darwinian logic and the history of civilisation, the genre fosters some of the most frightening visions of the presence of humans on the planet and their place in the greater cosmos. The visions are based on a sensibility for everything alive and a conception of humans as an accidental and passing feature in the process of creation.

In that sense, animal horror is driven by a critical awareness of ignorant and arrogant interaction with deep ecology by humans. The agenda of the genre is to dramatically accentuate the consequences of this lack of respect for the deep ecology, whether it is the pollution from industrial complexes, modern society's composition in general or the authorities' lack of action when it comes to sustainable solutions that considers the vulnerability of this ecological system. It is an agenda that is often articulated as an explicit part of the narrative, as in William Girdler's *Day of the Animals* (1977), where the disappearance of the ozone layer heats up the habitat of the animals in a wild-life park in Northern California and causes eagles, bears, pumas, wolves and deer to attack the visitors in a last act of desperation before they eventually die from the climate changes. What was meant to be a romantic hike into a piece of "authentic" US nature for the little group of people in the film

is tainted by the effects of the consumerist lives they live outside the park and turns into a bloody nightmare of raging animals seemingly led by the same bald headed eagle featured on dollar bills and the seal of the American President. The movie shows that going “back to nature” is no longer a possibility for Americans as their civilisation has left its corrosive mark on the landscape. The romantic scenery of Walden Pond has been distorted and Americans are no longer welcome let alone safe in the nature that they once thought was made for them.

Typically, the critique of human interaction with the deep ecology of the planet is delivered without meditating facts or empirical detail. Rather, the critique is presented in images and stories that in a deeply disquieting manner dramatize the state of emergency and destruction of the human life world. As such, animal horror presents a catalogue of nightmarish visions and scenes from an on-going process of transformation in the deep ecology, which manifests itself on many fronts and which the genre describes at various specific moments, actual as well as virtual.

Even though many animal horror movies can rightly be characterised as pure exploitation films, they still articulate a moving and challenging awareness of the deep ecology. The movies often draw on scientific facts and ethical-philosophic analyses, but their critique is a lot more radical. Their speculative visions of the apocalypse do not depict the deep ecology simply as a victim, but feature it as an entity with vigour, will and capabilities for “revenge”. In that sense the ecological uncanniness in the movies is disquieting in two ways. They describe how human civilisation has a destructive effect on the deep ecology as well as how this destruction calls forward forces of the deep ecology that with no hesitation annihilates humans. These are forces that cannot be cultivated by the processes of civilization or fought with ordinary means of defence at hand. Ancient forces originating in a time many millenniums before the modern project of enlightenment began to violate and exploit nature. Forces superior to man. Forces that in a sovereign demonstration of power both revenge nature and redeem the animals as the true inhabitants of the American land as part of the deep ecology of the planet.

## **Freak Creature Horror**

Animal horror can be divided into two subgenres, *freak creature horror* and *deep eco horror*. Generally, freak creature horror focuses on the problematic aspects of scientific experiments with nature, while deep eco horror stages a deep ecological drama in which the main protagonist is the immanent forces and intelligences of nature. While the animals in freak creature horror are mostly of a supernatural size, the animals in deep eco horror are predominantly small. Yet, in terms of thematics and animal species there is an overlap between the two subgenres. The most characteristic distinction between the two subgenres is that freak creature horror focuses on how humans deal with and overcome (man-made) events in nature, deep eco

horror as the name indicates sees the cause and unfolding of events from the perspective of deep ecology that reduces humans to extras. Or put in other words, while freak creature horror is based on a human conception of nature, deep eco horror takes its point of departure in deep ecology as a frightening and obscure system beyond human understanding.

Freak creature horror is introduced with Gordon Douglas' *Them!* (1954) and Jacob Arnold's *Tarantula* (1955). Both films deal with the angst that modern science generates. They speculate about how its processes can easily mutate, run amok and turn against mankind, for instance by involuntarily creating freakishly threatening natural phenomena. The bogey is the first and foremost nuclear science. After the bombings of Japan to end the Second World War and numerous tests on American soil, this new science comes to occupy the collective imagination of the US population. Not as a lighthouse of progress but as a discipline with potentially unlimited destructive risks whose ultimate end point was global Armageddon. This point was furthermore enforced by the aggressive rhetorical propaganda intended to produce fear that characterised the arms race of the Cold War. Hence, the films depict the nuclear science as a discipline that in uncontrollable and disastrous ways tangles with Creation, with the work of God, and as such compromises the self-image of the USA as nature's nation.

The bad guy in freak creature horror is thus the irresponsible experiments done by government scientists in the pursuit of political power through nuclear power. As extreme metaphors the abnormal scale and behaviour of the animals reflect the risks and dangers of modern science playing God and read as the nemesis of a nation that has betrayed its exceptional relation to nature by exploiting it in the name of progress.

After the success of the first freak creature horror films a large number of movies are made elaborating on the freakish appearance of the animals and how they kill humans. In the 1970s the subgenre receives a strong dose of exploitation in the form of close-ups of animals in rage and gory images of mutilated human bodies. Among the most memorable ones are Bert I. Gordon's *The Food of the Gods* (1976) and *Empire of the Ants* (1977) that are both loosely based on H. G. Wells novels. Also John McCauley's creepy claustrophobic *Rattlers* (1976), Joe Dante's baffling horrific *Piranha* (1978), Harry Kerwin and Wayne David Crawford's underrated underwater scare *Barracuda* (1978) and Hernan Cardena's *Island Claws* with its stylistic homage to 1950s sci-fi needs to be mentioned.

The collective imaginary of the Cold War is still in effect today and many of the film in the subgenre stages scenarios that resemble those of *Them!* and *Tarantula*. However, it is no longer so much nuclear science as it is genetic and brain science that is fraught with the end of civilisation. Guided by deeply dubious motifs and the warped self-image of being the ultimate Creator, these new sciences – like nuclear science before them – ignore both risks and precautions and end up creating something unwanted and destructive. The list includes Lorenzo Doumani's *Bug Buster*

(1998), Fred Olen Ray's *Venomous* (2001), David Jackson's *Locusts: Day of Destruction* (2005), *Glass Trap* (2005) and Jeffrey Scott Lando's *Insecticidal* (2005).

Despite a number of artistic successes, the quality of freak creature horror is generally decreasing by indulging in fictional universes in which the political discourse is trivialised – if at all present – in favour of a grand scale freak show featuring ever more supernatural, baroque and monstrous creatures. From the 1950s when the subgenre was introduced to today, the latter track has become dominant and the critical expressiveness and potency diluted. Nevertheless, the notion of the discussion of the USA as nature's nation remains an implicit frame of reference for these movies.

### Deep eco horror

The subgenre of deep eco horror, to which *Kingdom of the Spiders* belongs, can be traced back to Alfred Hitchcock's *The Birds* (1963). Hitchcock's seminal work outlines a new direction for working with dangerous animals as "characters" in films. It proposes a highly original interpretation of the genre with a strong focus on the intelligence of animals as setting an apocalyptic agenda for human civilisation. First of all the animals in the movie are not depicted as gigantic mutants. On the contrary, they are simply animals with a reality of their own. No more, no less. Moreover, the birds in the movie are ordinary birds. Seagulls. Crows. In this sense, *The Birds* is fundamentally characterised by a straightforward and recognisable realism and this goes for most – and certainly the best – movies of the genre. What is abnormal is not the animals, but their behaviour and organisation. Hence, the horror of these movies mirrors the Freudian idea of "the Uncanny", i.e. the known showing itself to be something different than you thought.<sup>17</sup> The domesticated turns alien and hostile and humans are left with a shaken perception of reality.

More than anything, Hitchcock's intuition introduces a new and defining narrative element that is developed further in exemplary fashion by *Kingdom of the Spiders*, namely the swarm as the main character. In the classic freak creature film it is typically one or a few mutated individuals that take on the role as the slashers of nature and the challenge facing human civilisation is the elimination of the monstrous animal(s). It is humans against animals and the fight is characterised by both symmetry and transparency. With the introduction of the swarm, the symmetry and transparency disappears. It is no longer possible to identify the enemy as a large overgrown super shark like the one in Steven Spielberg's iconographic *Jaws* (1975) or the 18 feet giant bear in William Girdlers *grind house* hit *Grizzly* (1977). In deep eco horror the animal enemy is way more intangible and can no longer be clearly identified in terms of size and outline. How large are the flock of birds in *The Birds* and the swarm of killer bees in Irwin Allen's *The Swarm* (1978)? How many tarantulas have come together in Verde Valley in *Kingdom of the Spiders*? And exactly



how large a territory do they cover? The films do not give many, if any clues, making it impossible to answer these questions. Hence, much of the horror in deep eco horror films originates in the blurring of the contours of the threat, which in that sense makes the threat potentially ubiquitous and all encompassing. A part of this horror is also a lacking understanding of the qualities and order of the swarm, its intentions and intelligence. What is it that the birds want in *The Birds* or the bees in *The Swarm*? It is impossible to say. With their mum presence, the animals articulate something beyond our comprehension and so annul the political-discursive room for negotiation that the power structures of Modern civilisation are based on. They cannot be negotiated with. Arguments, political will or weapons are of no use. The traditional instruments of power have no effect on the changes in the deep ecology. They are unstoppable and leave humans without any escape routes. That is the plain message that the darkest works in the genre delivers to the audience.



Frame capture from *The Birds* (1963). Ordinary birds suddenly become aggressive and humans have no answer to cope with this ecological reversal. Instead humans become prey.

The narrative in deep eco horror is not, as in freak creature horror, related to science. The motives for the violent behaviour of the animals are rarely explained in detail and the narratives in the films follow a relatively loose structure. In *The Birds* the attacks of the birds seems unmotivated by direct actions. Certainly, the inhabitants on the small town are unaware of why the animals suddenly turn aggressive and become determined to kill every human that come into sight. More and more birds gather and the situation develops from a few accidental attacks to a massive and seemingly well-organised attack orchestrated by the birds themselves



based on unknown and opaque motives. *Kingdom of the Spiders* and *The Swarm* have exactly the same narrative structure. The animals attack without giving any reasonable explanation and for humans to try to figure out why they are attacking seems only to weaken their chances of survival.

As already indicated deep eco horror experienced a golden age in the 1970s with a lot of original films such as Walon Green and Ed Spiegel's Oscar-winning mockumentary *The Hellstrom Chronicle* (1971), George McCowan's progressive "sound-piece" *Frogs* (1972), Jeff Lieberman's muddy nightmare *Squirm* (1976), Robert Scheerer's unforgettable critique of land exploitation and the recreational conception of nature in *Ants!* (1977) as well as Saul Bass' psychedelic space vision *Phase IV* (1974). Despite being produced with minimal budgets the films develop the genre by way of aesthetic experiments that fully compare with and in many ways trump more respected contemporary art films and large productions from Hollywood. Later contributions to deep eco horror typically tend, exactly as in the sub-genre of freak creature horror, towards exploitation and gore. That is evident when one watches films such as Juan Piquer Simón's campy blood feast *Slugs* (1988), Frank Marschall's humorous neo-classic *Arachnophobia* (1990), Ellory Elkayem's earlier mentioned *They Nest* (2000) or David DeCoteau's legendary homo-gore ballad *Leeches* (2003). Yet, the fundamental horror caused by an animal threat that cannot be clearly identified and therefore impossible to avoid or overcome remains intact.

Like freak creature horror movies, deep eco horror movies are often set in small American towns such as Verde Valley or Bodega Bay and it is also life in a well-ordered American society that is at stake and being threatened by a faceless enemy. In deep eco horror however it is not possible to overcome the threat and return to the life of yesterday. As the endings of both *The Birds* and *Kingdom of the Spiders* make evident, with the birds completely taking over the village and potentially the world and the tarantulas have enshrouded the town and the surrounding area into a giant cobweb, the animal take-over is definitive.

In Evan Hunter's original manuscript to *The Birds* there is a final scene with the Golden Gate Bridge in San Francisco completely covered with birds. The image was supposed to illustrate that not only Bodega Bay, but also large American cities had been taken over. Similarly, there is a never used end scene to *Kingdom of the Spiders*, where it is the whole world and not only Verde Valley that is covered by cobweb. The alternative end scenes indicate in both cases a deep ecological apocalypse of omnipotent extent. That is if you are human. For the animals and the planet it is just another phase in the transition towards a new era in the deep ecology.

## **Territorial anarchy**

A general motive in deep eco horror is that the animals transgress the borders of a given territory, be that a private home, recreational areas or whole cities. The point,

nonetheless, is that this is not really a transgression, but a manifestation of the fact that these territories were not delimited in the first place. Since life originated on the planet the landscape have been connected to the deep ecology, which as a planetary network recognises no borders, certainly not man-made ones. As such the deep ecology challenges the territorial discourse and the institutions that promoted it that were foundational for the American pioneer movement and the westward expansion of American civilisation.

In *Kingdom of the Spiders*, before discovering the disquieting number of mounds the people of Verde Valley involved in the situation believe the problem is isolated to the Colby farm where a dozen calves have been found bitten to death and covered by spiders. One mound has been burned down in order to find a quick solution to the problem, but as the days goes by more and more inexplicable episodes occurs in other areas and places in the little town. The body count grows exponentially and people are found dead in strange cocoons. Soon the entire valley is covered in a gigantic cobweb. Valley Verde is no longer a human territory.

Even if America understands itself as nature's nation, it nonetheless begins to map the land onto what the historian Andro Linklater (2002?) has described as "the perfect grid" and starts selling it as small defined parcels as early as the end of the 17<sup>th</sup> century. The proprietary understanding of the land was thought of as a democratic initiative that enabled even less well-off Americans to own and cultivate land, but it also lead to a widespread speculation that directly countered the political ideas and created new social hierarchies. Beyond the political sphere, the parcellation of the American land introduces another challenging schism for the notion of the USA as nature's nation, namely a schism between owning and being in nature. It is obvious to ask, how one can own something that is God's creation? Certainly, the capitalist enterprises that benefitted from the proprietary transformation of the land saw no schism. If the land was given to the American people by God in order to prosper, it it was only natural that they also owned it and made it a business.

Deep eco horror on the other hand ridicules the idea of owing land as a naïve and highly fragile construction. From the perspective of the deep ecology the question is not just, if humans have the right to own the American landscape, but if they are capable of defending it like animals do in nature. Deep eco horror answers "No" to both questions. In the confrontation with the animals human ownership of the land means nothing. Animals do not care about certificates, let alone read them. All they care about is the territory and what they have to do to take it over.

*Kingdom of the Spiders* contains a number of minor, yet significant scenes, which emphasise the territorial challenge that the deep ecology represents to human society. In one of the movie's classic scenes the arachnologist, Diane Ashley, is finally alone in her hotel room after a long day of work and while she – with a nod to Hitchcock – takes a bath, the camera shows a tarantula crawling on her desk. When she returns to the room with a towel around her body, the audience is getting

ready for an attack, but she gently takes the tarantula up in her hand and puts it out in nature where it belongs.

The scene is discrete but points to the territorial schism that repeatedly is articulated in the genre. As natural science has documented, life on planet Earth was antagonistic until a territorial order was established and a hierarchy between God's creations was put in place, including a food chain. A defining moment for humans was the step away from the daily direct contact with the animals to the new isolated life in cities and houses where the dealings with the natural surroundings had been minimized. In an act of territorial sovereignty humans distanced themselves from animals and their natural habitat both in order to protect themselves against potential dangers that animals present and in order to be able to focus on other things than the battle for survival. A silent covenant is decided for the animals, namely that they can live and master all other areas than those areas – from houses to cities – where humans live. If animals transgress the border to these areas and disturb human life they will be destroyed by humans with extreme prejudice. In nature – in the fields and in the gardens – on the other hand the animals have territorial sovereignty and can establish their own order without human interference.

In *Kingdom of the Spiders* is it exactly that order that no longer can be sustained and isolated to the outside of human society. Instead the territory of the tarantulas expands into human society, causing its infrastructural order to break down. The spiders intrude garages, cars, planes and not least houses where they hunt humans out of their "kingdom". The radical state of the situation is evident in the end scene. The state of emergency is already in full effect. Verde Valley is struck by panic and the tarantulas are attacking humans, young and old, and taking over the city. Just as in classic horror movies such as George Romero's *Night of the Living Dead* (1968) and Hitchcock's *The Birds* (1963) a little group of people, amongst them the arachnologist and the veterinary has taken shelter in a house to survive the attack. The group runs from room to room and tries to keep the tarantulas out by putting up boards in front of the windows and doors, etc., but to no avail. Moreover, the ensuing fight between humans and animals is uneven, because even if the little group of people succeeds in keeping some of the spiders out, other spiders keep coming in without any concern about the life of the single spider. The spiders seem to accept or almost expect the death of a few individuals in the fight for the success of the species.

After a night of fighting and deep frustration, fear and sadness, the people in the house wake up to a new territorial order. Outside it is strangely quiet. On the radio the situation in Verde Valley is ignored and a very frustrated Rock Hansen removes a couple of boards from the windows and he can only turn to his creator by saying, "Dear God" when he sees the world outside. The camera changes perspective and zooms out from the city and the whole area is covered in one humongous cobweb. It is only a question of time before the little group will have to give in and become

prey to the new master race in the kingdom of the tarantulas – the horrifying manifestation of the deep ecology annihilating the human race and reterritorialising the land.

## The New Collectivity

The apocalyptic vision in *Kingdom of the Spiders* is a bone-chilling nightmare from the darkest regions of the human subconscious. To witness tarantulas turn an entire valley – or the entire globe depending on what ending of the film you watch – into a giant cocoon-like food storage will produce a strange uncanniness in any audience with just a little respect for animal life. But what is it that we are actually witnessing in the film? The disaster is cataclysmic, yet it is not generated by the unstoppable and uncontrollable forces that we know from earthquakes, tsunamis and tornados and have come to acknowledge as some sort of cosmic necessity that occasionally hit us with relentless power and then disappear again. We know we have little means to avoid these large-scale disasters and have learned to prepare for and handle them as an unavoidable evil. The evil in *Kingdom of the Spiders* is of a whole other kind. The inhabitants of Verde Valley are facing the violent force of something that humans until now has been able to live with and to a large extent also been able to control. The tarantulas are animals that apart from a poisonous bite when attacked have lived quietly outside human civilisation minding their own business. Until now. Like the apes in the *Planet of the Apes* series and the ants in *Phase IV*, the spiders develop a new sense of collectivity or rather they reorganise and remobilise their existing collectivity and turn it into a force that the collective of human society is not prepared for and has no defence against.



Frame capture from *The Rise of the Planet of the Apes* (2011). When the apes decide to turn against the human civilisation there is no stopping them. While crossing the Golden Gate even the military is defeated.

This vision of the development of a new tarantula collectivity in *Kingdom of the Spiders* can be approached with the Belgian writer and Nobel Prize winner Maurice Maeterlinck's (1862-1949) philosophy on nature. His philosophy is based on observations of bees, termites and ants and is articulated in the three books *The Life of the Bee* (1901), *The Life of Termites* (1926) and *The Life of the Ant* (1930). The insects fascinate Maeterlinck because they much like humans live in advanced collectives and are organised in large societies with millions of individuals. They are equipped with a social instinct and their centre of attention is the extended family of these collectives, which are systematically organised in order to maintain self-sustainability. In Maeterlinck's opinion the collectives of the insects is a herald.

Maeterlinck describes a number of characteristics in the social life of insects that resembles features found in the best animal horror films. Firstly, Maeterlinck is highly fascinated by the ability of insects to build functional and complex edifices, e.g. the enormous dwelling of the termites: "Nothing is more bewildering, more fantastic, than the architecture of these dwellings... With their needles, their crest of spires, their flying buttresses, their multiple counterforts, their overhanging terraces of cement, they recall age-worn cathedrals... like skeleton pyramids or obelisks fretted and scarred by centuries more devastating than in the Egypt of the Pharaohs" (Maeterlinck 1926: 25-27). In addition to being impressed by the sheer architectural genius of these insect dwellings, Maeterlinck focuses on how these "republics of the insects", where millions of individuals live in peace and harmony in gigantic collectives, are very successful examples of "nature's experiments" in terms of creating intelligent forms of existence. As he writes, "the bee, the ant and the termite alone, among all the living creatures we know of, present the spectacle of an intelligent life, of a political and economic organisation" (Maeterlinck 1926: 185-186). In another part of his analysis, Maeterlinck points out that the design of the dwellings of the termites besides from enforcing a strict social order also includes advanced ecological systems for ventilation, water management and nutrition as well as complex physiological mechanisms and technologies. Hence, he concludes that, "the termites are chemists and biologists from whom we might have much to learn" (Maeterlinck 1926: 49).

Maeterlinck is in other words fascinated by the intelligent design that the life of the insects exposes. What we need to acknowledge according to Maeterlinck is, "to mistrust the intentions of the universe towards ourselves" (Maeterlinck 1926: 186). From an evolutionary perspective, the societies of the insects have been here millions of years before humans arrived on the planet, let alone began to build societies. Moreover, the societies of the insects will most likely be here a long time after humans have disappeared from the planet. As species humans arrived later than any other species and even if we claim to be superior compared to animals when it comes to intelligence and inventiveness, our ability to adapt to the surroundings is clearly not sustainable and inferior to the insect societies, which have survived ice



ages, tectonic shifts and meteor impacts. That is the dark, yet honest point of both Maeterlinck's studies and animal horror.

While spiders like insect are from the arthropod phylum – by far the largest in the animal kingdom – they are not insects but arthropods with distinctive characteristics such as eight legs instead of six, no antennas and no ability to fly. Yet, this biological difference aside, Maeterlinck's thesis on the social life of insects and not least the brutal force of this life serves as a relevant prism for an analysis of *Kingdom of the Spiders*.

In a basic sense the movie speeds up the above-mentioned evolutionary process and gives it a dramatic twist by presenting a vision in which a new collective of tarantulas systematically and with determined intelligence annihilates a competing species, humans, from the face of the planet. It is a vision that shows that animal life can operate as a well-regulated collective. However, its intentions remain a mystery to humans. In the film, Diane Ashley and Robert Hansen, the scientist and the local veterinarian with knowledge of the area, do not understand the events since it do not correspond to anything they have seen before. The collective behaviour of the tarantulas exceeds the knowledge that the two have acquired as professionals. Science – the pride of human progress – is rendered inadequate when faced with this ancient civilisation and the lesson learned by Ashley and Hansen as well as the other inhabitants of Verde Valley is that it is too late to try to recognise it and take measures.

Like the majority of disaster films, *Kingdom of the Spiders* emphasises how humans cannot agree on a strategy to deal with the current challenges. Political and economic agendas are opposed to scientific and ecological arguments, and even when the survival of the town (read: the species) is at stake, it is not possible to reach a common approach to the challenge. That is a disturbing portrait of an impotent human society, split by egoism and special interests. Seen from Maeterlinck's perspective, the insect society of the other hand embodies a radical collectivity. All spider individuals have assigned roles and functions in the great totality that is sustained as the sole purpose of life. It is a totalitarian order characterised by an extreme work ethic and energy, manifested in the collective structures of the mound, the nest and the swarm.

Maeterlinck is especially fascinated by the insects' will to sacrifice everything in order to support the greater good as an ultimate goal that exceeds the individual. In the insect society the dwelling or the nest is larger than the individual, and the survival of the collective and the reproduction is the purpose of all activities. This collectivity is in Maeterlinck's eyes a form of absolute communism, where all individuals are anchored in a higher purpose and lives for the execution of this goal without questioning the current organization. The ego is non-existent and every insect is completely focused on working for the common good.

For Maeterlinck the greatness of the insect collectives is the,



absolute devotion to the public good, their incredible renouncement of any individual existence or personal advantage or anything that remotely resembles selfishness; to their complete abnegation, their ceaseless self-sacrifice to the safety of the state. In our community they would be regarded as heroes or saints (Maeterlinck 1926: 150).

In a modern America that built its self-image in opposition to Communism this is both an unattractive and scary thought, but *Kingdom of the Spiders* shows that it is nevertheless a powerful alternative to a society based on individuality. Moreover, the movie shows that individuality can be a weakness for the survival of societies.

## The Spider Intelligence

If we dig further into Maeterlinck's thinking we discover an additional aspect that helps explain the fundamental fear we experience when facing the collective of spiders in *Kingdom of the Spiders*. Maeterlinck articulates it quite simply as the wonder you experience when you are confronted with the dwelling of the termite or the mound of the ant: "What is it that governs here? What is it that issues orders, foresees the future, elaborates plans and preserves equilibrium, administers, and condemns to death?" (Maeterlinck 1926: 150) Humans are used to see the world as a gathering of individuals, but what if the way the tarantulas organise should not be conceived as a gathering of individuals but rather as one multifaceted individual? Then one would be forced to see the dwelling and the mound, "as a single individual, with its parts scattered abroad; a single living creature, that had not yet become, or that had ceased to be, combined or consolidated; an entity whose different organs, composed of thousands of cells, remain always subject to the same central law, although outside it and apparently individually independent" (Maeterlinck 1926: 150). The question that both Maeterlinck and *Kingdom of the Spiders* raise is if humans are ready to cope with such a conceptual turn.

Maeterlinck compares the organisation of the insects with the human body, where our own physiological systems are working completely independent of our consciousness and based on principles that normal people have limited knowledge of. As such, the vision of the tarantulas in *Kingdom of the Spiders* is the development of a body with swarm-like characteristics, regulated by an irreducible intelligence that gives the scattered body parts direction, purpose and a deep necessity in every single movement. This is an intelligence that humans have consciously ignored since it turned to modern science as the exclusive model for explaining the world and as *Kingdom of the Spiders* makes clear humans are therefore not able to respond to the manifestations of this intelligence with sufficient sensibility. Modern science has put humans out of sync with the way animals think and act, and it is this ignorance that comes back to haunt the inhabitants of Verde Valley and the people in animal horror in general. They are totally unprepared – mentally as well as practically – when confronted with this ancient intelligence of animals inherent

to the planet that has no sentimental concerns when it comes to the survival of humans.

Maeterlinck is repeatedly trying to describe this intelligence, because it gives him a sense of understanding the different experiments and options of life that nature has brought forward as cosmic experiments competing for dominance in the earthly kingdom. In a central passage in *The life of the Termite* the intelligence is described as,

“an intelligence dispersed throughout the Cosmos; to the impersonal mind of the universe; to the genius of nature; to the Anima Mundi ... the vital force, the force of things, the “Will” of Schopenhauer, the “Morphological Plan,” the “directing Idea” of Claude Bernard; to Providence, to God, to the first Mover, to the Causeless-Cause-of-all-Causes, or even to blind chance; these answers are one as good as the other, for they all confess more or less frankly that we know nothing, that we understand nothing, and that the origin, the meaning and the end of all the manifestations of life will escape us a long time yet and perhaps for ever” (Maeterlinck 1926:155-156).

In the grand cosmic scheme that deep eco horror outlines humans are just one amongst other intelligent life forms and have a very limited understanding of the vital energies that characterise the scheme. Instead our knowledge and intelligence tend to place humans at the centre of the scheme. Hence, when we describe and interpret other modes of being, other forms of life, we typically do so from an anthropocentric perspective. We attribute motifs and intentions that we know from ourselves to these non-human species. This “method” is indeed ignorant and as deep eco horror demonstrates it is furthermore fatal. *Kingdom of the Spiders* and deep eco horror shows that to underestimate the intelligence of small creatures such as ants, termites and tarantulas in comparison with human intelligence is a death trap of hubris. Because the behaviour and intelligence of the tarantulas do not conform to human models of explanation neither science nor society have any answers to the appearance and later attack of the spiders. Thousands of years of progress are rendered useless in a matter of a few days by the intelligence of a collective of small hairy creatures and reminds us that our accumulation of knowledge is fundamentally inadequate in terms of dealing with the forces of the deep ecology.

*Kingdom of the Spiders* is in other words a speculative attempt to articulate images and visions of non-human intelligences as a historical and cosmological perspective beyond human intelligence. Even though it is now more than forty years since the film premiered, art has still only scratched the surface in terms of giving form to and reflect on these perspective. As such *Kingdom of the Spiders* is still current and fresh. It might seem more like a gloomy myth from the Jungian depths of the collective subconsciousness than anything else, yet as a cinematic vision it feels surprisingly concrete, horrifying real.

## A Planet without Nations and Nature

Deep eco horror connects with existing discussions of a possible environmental apocalypse in the near-future. In this context, the genre seems to express an ethical challenge to the inconsiderate and egoistical behaviour of humans. It responds critically to pollution, manipulation and straight-forward destruction of the environment in the name of civilisation. This critique is well-known and concerns the inability of humans to handle their sovereignty on planet Earth with respect for its ecological systems. As such the genre points beyond the specific American perspective to a global situation, where every nation is falling from grace when it comes to its relationship with nature.

Extrapolating this critique, deep eco horror also introduces a critique of the inability of humans to handle their role on the planet to their own best. Not only do they disturb the deep ecology, they also naively continue to ruin their own habitat. As the example of *Kingdom of the Spiders* shows it is not the deep ecology but the humans who are the true victims of the environmental changes. It is the humans who die “at the mercy of Gaia”, while the spiders live on as if nothing happened in their newly won territory. Moreover, the deep ecology seems to have absolutely no problem with the disappearance of mankind. It never had any use for humans in the first place. Covered in the silk threads of the tarantulas Verde Valley looks as peaceful as ever.

Although the alternative ending of *Kingdom of the Spiders* in which the entire planet was covered by spider thread was dropped, the article wants to conclude by connecting the film and the genre in general to the radical vision of a planet without humans. The vision is presented by a number of current products of fiction. In the remake of *War of the Worlds* (2008) and the TV series *Falling Skies* (2011-) aliens invade Earth and the surviving humans are destined to fight against total extermination. The environment is not the issue in either *War of the Worlds* or *Falling Skies*. They tap into the Cold War narrative of outside enemies. Disastrous environmental changes are on the other hand the main frame of reference in films like *After Earth* (2012), *Oblivion* (2012), *Elysium* (2013) and *Interstellar* (2014) as well as in TV series like *Terra Nova* in which mankind has left the planet due to pollution, overpopulation and nuclear war and is now living on space stations and other planets.<sup>18</sup> However, the heroic human individual still thrives in these stories, if not on Earth, then in space, and secures the anthropocentric perspective on the situation. It is exactly this perspective that deep eco horror closes off. The ending of *Kingdom of the Spiders* emphasises this perhaps clearer than any film in the genre by a shift in point of view from the people inside the house looking out through the barricaded windows to a look down on the covered Verde Valley from “somewhere” above the town. The alternative ending shows the entire covered Earth from a distance, hanging in space. In both cases, the point of view exceeds human perception and serves to connect the events to a planetary perspective.

Compared to these movies and TV series, a more consequent and thought provoking version of the vision is developed by Alan Weisman in his book *The World without Us* (2007) and the related TV series *Life After People* (2008-2010). Both the book and the TV series speculate about the development of Earth without humans and they do so without speculating about the reason why humans have disappeared. They are just gone. No more. From one day to the next.<sup>19</sup> What remains are the products of civilisation and the marks that civilisation has put on nature. Yet, they also disappear as time goes on and after hundreds of years they come to resemble prehistoric objects.<sup>20</sup> It is a view into the near and far future, where nature liberated from the interference of humans can create its own ecological system. One of Weisman's main examples are the island of Manhattan and he describes how the New York City borough in time will change as part of a process where nature will grow back to a state from before humans began to settle there.

In essence, Weisman's vision is a romantic one, in the sense that he nurtures a mythology of a pure, true and harmonious nature. Like deep eco horror films, his point of view is post-human but as he writes in the preface to his latest book *Countdown: Our Last Best Hope for a Life on Earth* (2014) he nevertheless still dreams of a life on earth. His books are written as encouragements to develop new forms of life that makes this dream possible.<sup>21</sup> Deep eco horror has no such dreams. Its point of view is a cosmological point of no return. The deep ecology has begun a new different process that does not consider nor include humans.

This difference between *The World Without US* and deep eco horror connects with Timothy Morton's notion of "ecology with nature." Morton belongs to the group of contemporary thinkers that attacks anthropocentrism and challenges the phenomenology of subjectivity in favour of an object-oriented understanding of the world according to which humans are no longer privileged but just one object among many. As he writes in *Hyperobjects. Philosophy and Ecology after the End of the World* (2013), "true planetary awareness is the creeping realization not that "We Are the World" but that we aren't" (Morton 2013: 99). According to Morton, Earth never belonged to humans in the first place and nature is just a concept that humans have invented to comprehend, frame, control and exploit this fundamentally alien phenomena. Nature as such does not exist, he argues. What does exist is an ecological hyperobject whose spatial and temporal scale exceeds the horizon of human perception.<sup>22</sup> Its qualities, network of connections and dynamics are basically imperceptible to humans and for Morton the challenge humans are facing is to develop a philosophy that can cope with this nature of the hyperobject. Only thereby can humans also develop an adequate – in the sense of respectful and sustainable – ecological awareness and behaviour.

Deep eco horror expresses a similar understanding of the ecological hyperobject as something that is fundamentally alien to humans and at the same time fundamentally connected to human life. However, contrary to Morton who sees this as a philosophical problem the genre uses the schism as the point of departure for dystopic

speculations about how humans are confronted with a superior intelligence and force. As Nils Hellstrom – the main character of the film *The Hellstrom Chronicle* – points out, insects have a 300 million years head start on humans when it comes to life on Earth. Moreover, unlike humans, the insects have succeeded in creating the perfect society, including an effective army of soldiers that sacrifice themselves for the survival of the society as a whole. “The insects will endure, where man will fail,” as Hellstrom laconically expresses it.<sup>23</sup> As such deep eco horror can be seen as a potentialization of Maeterlinck’s thesis combined with an exposure of the weaknesses in human society. The conclusion is critical and absolutely without sentimentality: The spiders and insects will trump and the American nation as well as the global civilisation will come to an end. Humans may have been able to land on the Moon and collect data from the far regions of outer space but its planetary intelligence is too limited and narrow-minded to enable them to outlive, let alone crush those little creatures that have gathered and processed data on planet Earth for many millions of years.

To use the word of the author J. G. Ballard, the visions of deep eco horror are indeed “extreme metaphors”. The truth-value of these metaphors cannot be confirmed nor can they be refuted. Maybe they are real and not simply metaphors. We humans cannot know that and that is perhaps the most frightening and fascinating aspect of the films. They introduce us to the limit of our perception and control and leave us with the realisation that we are mere subordinate organisms in the ever changeable and super violent planetary narrative that constitutes the deep ecology.

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## Notes

<sup>1</sup> See Næss 1973.

<sup>2</sup> As such the genre connects with the critique of anthropocentrism that has been launched by the recent branch of environmental studies that focuses on "keeping the wild" and argues that not only humans but also animal can "inhabit" the Earth. (See Crist 2014) However, the vision that animal horror presents is less concerned with the ethical question of animals as "inhabitants" as with the mythological fear of animals as sovereign force.

<sup>3</sup> As such the perspective of animal horror – and of the article – differs from the recent "animal turn" in environmental discourse, which argues for the recognition of animals as equals to humans in the integrated bio system of the planet Earth. Animal horror is not concerned with such an extension of civil rights as it shows how animals without ethical or institutional support eventually will "rise" and prove that human sovereignty is a myth. See Weil 2010 and Crist 2013.

<sup>4</sup> Of course, the apocalypse is not limited to the US context but for the sake of argument the article will focus on the significance of the apocalypse in that specific geopolitical context.

<sup>5</sup> See Thrower 2007.

<sup>6</sup> See Miller 1967 and Hughes 2003.

<sup>7</sup> The frontier movement is of course not the first settlers on the North American continent. Recent discoveries shows that the first humans arrived from Asian on the coast of what is today California as early as 13.000 years ago. When the frontier movement began its travels westward to explore the "untouched land" the descendants of these first settlers, the Native Americans, already inhabited the land. Furthermore, the democratic ideals were to a considerable extent inferred with by an aggressively expanding capitalism and its inherent power structures.

<sup>8</sup> Of course, the mythology ignores that the USA was indeed founded on a political struggle, namely The American Revolution (1765-1783), the fight for independence from the British Empire and the wars with Mexico and Native Americans.

<sup>9</sup> This claim of innocence has ironically – and tragically – accompanied military interventions and wars in foreign countries in the 20th century by the USA. Also, since he was elected President Barack Obama has continuously referred to the USA's "manifest destiny" as the reason behind the nation's active and leading role in the global politics. That the USA is a nation driven by higher principles than simple politics is in other words a myth created to justify and disguise the liability of its political actions.

<sup>10</sup> See Schmidt 2005.

<sup>11</sup> See Ron Sakolsky and James Koenhline (1993). As it is well-documented in the literature on the frontier movement realising the dream of the peaceful life in nature was no easy task. The conditions were tough and included a great deal of violence both internally between the settlers and in confrontations with Native Americans.

<sup>12</sup> As an illustration of this see J. Hector St. John De Crevecoeur's classic text *Letters from An American Farmer* (1872), which is instrumental to the idea of cultivating the American soil.

<sup>13</sup> As it is often pointed out in the critique of Fred Jackson Turner's seminal essay "The Significance of the Frontier in American History" (1893) large parts of the frontier movement also justified genocide on the Native American population in the name of the progress of civilisation and capitalism. The Native Americans were considered to be a disturbing – "savage" – part of nature and thus were to be exterminated for the landscape to be claimed by the frontier movement. An obvious example of this dark and horrible side of the utilitarian quest is the construction of the first transcontinental railroad, which to save time and money went straight through several Native American territories and left blood in its track.

<sup>14</sup> To get an idea of how widespread the genre is see the list of 389 "Killer Animals/Insects and Giant Monsters (Horror) Movies" at <http://www.imdb.com/list/ls050510252/>.

<sup>15</sup> It needs to be mentioned that by "the people" the Western genre almost exclusively means the white settlers of the frontier movement. The Native Americans' "right" to the land is either ignored or suppressed by racist politics.

<sup>16</sup> A US specific perspective on this point would be to see the genre as a "reenactment" of the exposure and vulnerability experienced in the wild nature by the settlers of the frontier movement.

<sup>17</sup> See Freud: *The Uncanny*.



<sup>18</sup> See Lillemose 2013.

<sup>19</sup> For the sake of argument Weisman does mention two possible causes: A virus or aliens.

<sup>20</sup> This vision points to the recent notion of the anthropocene, which claims that the material presence of humans on Earth has reached such a massive state that it constitutes a geological layer in itself.

<sup>21</sup> Whereas *The World Without Us* is a speculation *Countdown* is a description of actual situations. The main argument of the book is that Earth's and man's biggest problem is overpopulation.

<sup>22</sup> Morton does not subscribe to James Lovelock's Gaia theory. He criticises the theory for its misleading understanding of the current environmental crisis. He argues that Lovelock on the one hand encourages a kind of ecological defeatism thinking that Gaia will replace man as a dysfunctional component, and on the other hand is simply an alibi not to do anything.

<sup>23</sup> The Nils Hellstrom character is further developed by Frank Herbert in his novel *Hellstrom's Hive* (1978). In the novel Hellstrom leads a secret underground experiment intended to create a society based on the life of insects and take over the world.

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# Keeping Count of the End of the World A Statistical Analysis of the Historiography, Canonisation, and Historical Fluctuations of Anglophone Apocalyptic and Post-Apocalyptic Disaster Narratives

By Jerry Määttä

## Abstract

Over the past decade, apocalyptic and post-apocalyptic disaster narratives seem to have become more popular than ever before. Since its inception in secular form in the first decades of the nineteenth century, however, the genre has experienced a number of fluctuations in popularity, especially in the twentieth century. Inspired by Franco Moretti's influential *Graphs, Maps, Trees* (2005), the aim of this study is to analyse the historiography, canonisation, and historical fluctuations of Anglophone apocalyptic and post-apocalyptic disaster narratives in literature and film through an elementary statistical analysis of previous surveys of the field. While the small database on which the study is based essentially consists of a meta-study of historiography and canonisation within the genre, disclosing which works have been considered to be the most important, the data is also used to assess the periods in which the most influential, innovative, and/or popular works were published or released. As an attempt is also made to explain some of the fluctuations in the popularity of the genre – with an eye to historical, cultural, medial, social, and political contexts – perhaps the study might help us understand why it is that we as a society seem to need these stories ever so often.

**Keywords:** Historiography, Canonisation, Science Fiction, Apocalypse, Post-Apocalypse, Popular Fiction, Sociology of Literature, Bibliometrics

## Introduction

Whether a reflection of widespread fears of terrorism, financial crises, impending climate change, uncontrolled mass immigration, the potential aggressiveness of the working classes, uninhibited and brainless mass consumption, or something else entirely, apocalyptic and post-apocalyptic disaster narratives seem to be more popular than ever before. Over the past decade or so, stories about the end of the world as we know it have appeared in a number of genres and forms of media, from depictions of zombie apocalypses in films such as *28 Days Later* (2002), novels such as Max Brooks's *World War Z: An Oral History of the Zombie War* (2006), or multi-media franchises such as *Resident Evil* and *The Walking Dead* – spawning a number of video games, graphic novels, novels, films, and/or television series – to works of literary fiction such as Margaret Atwood's *Oryx and Crake* (2003) and Cormac McCarthy's *The Road* (2006). Despite its pervading presence in both popular and literary culture, however, this extraordinary interest in the end times is only the latest in a number of waves that have struck the shores of public imagination since the inception of the secular apocalyptic and post-apocalyptic disaster narrative in the first decades of the nineteenth century, with works such as Mary Shelley's *The Last Man* (1826). Regardless if one sees it as a genre of its own or a subgenre of science fiction, however, the apocalyptic and post-apocalyptic disaster story is mainly a product of the late nineteenth and the twentieth centuries, and has produced a large number of both popular and influential works of fiction and film.<sup>1</sup> But what does it look like in a historical perspective, is there any consensus as to what works constitute its (minor) classics, and is there any accounting for the intriguing fluctuations in its popularity?

The aim of this study is to analyse the historiography, canonisation, and historical fluctuations of Anglophone apocalyptic and post-apocalyptic disaster narratives in literature and film through an elementary statistical analysis of previous surveys of the field. Methodically, the study is inspired by the first part of Franco Moretti's *Graphs, Maps, Trees: Abstract Models for Literary History* (2005), but also by related studies within the Swedish tradition of sociology of literature (for instance Williams 1997 and Nordlund 2005), and by bibliometrics and the digital humanities. While the small database on which the study is based essentially consists of a meta-study of historiography and canonisation within the genre, with clear indicators of not only which works have been considered to be the most important, but also the periods (stretching from the 1820s to ca. 2010) in which they were published, the data can, I believe, also be used to assess some other factors, such as the fluctuating popularity of the genre through the years, in different countries and in various media – all differences that beg for explanations with an eye to the historical, cultural, medial, social, and political contexts. As such a contextualisation will to some extent be attempted, perhaps the study might even help us understand why it is that we as a society seem to have a need for these kinds of stories ever so often.

## **The Database: Construction, Selection, and Demarcation**

In order to analyse the historiography and canonisation of apocalyptic and post-apocalyptic disaster narratives, one first needs to find a reliable selection of texts on which to base the analysis. As there are dozens of monographs and anthologies dealing with British and American apocalyptic and post-apocalyptic disaster stories (cf. Wagar 1982, Rabkin et al. 1983, Seed 2000, and Curtis 2010), pinpointing and weighing the classics against one another from book-length studies would both take a long time and some ingenious ways of determining which are the most important works (such as a bibliometric analysis of the number of times they are mentioned or referred to, or the number of whole chapters or articles that are devoted to them or their authors). A much more convenient way, especially as some of the critics and scholars are recurring ones from the longer studies, is to look for shorter surveys of the genre, often seen as a subgenre of, or theme within, science fiction and thus frequently treated in separate chapters, articles or sections in handbooks, encyclopedias, and introductions to science fiction. With a length restriction of only a few pages, one can be fairly confident that the scholars or critics mention and discuss what they think are the most important and influential (either widely read or serving as inspiration for other writers) works in the field, with only a minimum of idiosyncratic choices added for flavour.<sup>2</sup> Furthermore, by using texts mainly in handbooks and encyclopedias, one is also certain to base the analysis on the opinions of some of the main authorities on the subject.

The database used in this study is based on the thirteen relatively brief surveys I could find, written by critics and scholars recognised within the field of Anglophone science fiction (most of them interestingly male British scholars specialising in literature).<sup>3</sup> They stretch from the mid 1970s to the early 2010s, although with a predominance of surveys written in or after the 1990s, and deal with either parts of or the whole apocalyptic and post-apocalyptic genre, usually in both literature and film. The works mentioned are primarily British and American, but there are also examples of other Anglophone titles, and even a few non-English titles that have been considered important for the field of Anglophone apocalyptic and post-apocalyptic disaster narratives.

The database itself consists of a spreadsheet in SPSS, with different columns for title of the work, name of the author or director, his or her gender and nationality, year of publication, medium, genre, or format of the work, and lastly separate columns for indicating in which of the thirteen surveys the work is mentioned. In all, the database contains 490 unique entries, i.e. titles which have been mentioned (or occasionally referred to, usually through their series) in one or more of the surveys. The only exclusions are a small number of works, often of non-fiction, mentioned in the surveys for contextual purposes.

Doing a selective meta-study such as this is no exact science, but even though some of the surveys only cover a certain subtype of story, or a shorter period (such

as just a few decades), the overall total of mentions nevertheless gives a relatively clear picture of the canon of apocalyptic and post-apocalyptic stories, seen from the perspective of Anglophone science-fiction scholarship. There is, however, always the problem, hinted at above and commented on by David Ketterer, that when writing a survey, “[t]he very best and the very worst examples are the ones that immediately suggest themselves” (Ketterer 1974: 124), which means that some of the often mentioned works might in theory have become minor classics within the genre as much for being notoriously inadequate as for being outstanding or original, even if chances are that these are restricted to the idiosyncratic mentions by individual scholars.

Furthermore, one must keep in mind that surveys in handbooks and encyclopedia entries are often influenced by earlier surveys, either directly, as writers of new surveys often cast a glance at older ones and rely, in varying degrees, on earlier judgements of aesthetic quality and historical importance rather than making individual assessments of every work they mention (which also explains, to some extent, why the works mentioned, out of hundreds or even thousands, are so often the same ones) – or indirectly, as the surveys are in many ways both manifestations of and influences on the critical and scholarly consensus of the time in which they were written, and these change only gradually. In this way, an idiosyncratic inclusion of a work may in time generate further inclusions, and some works may even be handed down as canonical even if they might not be that widely read or appreciated (even by writers of surveys).

Before diving into the database and its results, a short reminder of what the figures stand for might be necessary. Based as they are on surveys written by scholars and critics, the entries in the database do not represent the number of stories written, shot, distributed, read or viewed in the genre, and they are not necessarily an indicator of the popularity of the genre – even if I believe that that does come into it (more of which below) – but a listing of important, interesting or otherwise memorable stories published or released in the genre according to a handful of scholars and critics. Everything else is, by necessity, speculation, albeit with varying degrees of plausibility.

## The Apocalyptic Canon

One of the most interesting results to be found in the database concerns the works that are mentioned in the most number of surveys, forming an apocalyptic and post-apocalyptic canon of works consecrated within the field of science-fiction scholarship.<sup>4</sup> In fact, only 133 of the 490 entries (or 27.1 percent) are mentioned in two or more of the surveys, and of these only 55 (or 11.2 percent of the total) are mentioned in three or more (interestingly, *The Epic of Gilgamesh* falls outside the three mentions while Cormac McCarthy’s *The Road* makes it). Conveniently, there are 35 works which are mentioned in four or more of the surveys, marking out a relatively

clear statistical consensus regarding which works in the genre are considered to be the most important, irrespective of the no doubt various criteria – such as perceived quality, originality, contemporary impact, and survival value – used by the individual critics and scholars (Table 1, next page). Among these works are Jean-Baptiste Cousin de Grainville’s posthumous book-length prose poem *Le Dernier Homme* (1805), “the first tale of the future to consider the death of all human beings and the destruction of the earth” (Clarke & Clarke 2002: xviii), but also what is arguably the first secular apocalyptic novel, Mary Shelley’s *The Last Man* (1826), three novels by H. G. Wells, a few often adapted novels by John Wyndham and Richard Matheson, a handful of works of literary fiction by authors such as Aldous Huxley and Angela Carter, three early novels by J. G. Ballard, and five films, among them the three original *Mad Max* films (1979–1985). Interestingly, three of the top five titles are depictions of nuclear war published in the late 1950s, by Walter M. Miller, Jr., Mordecai Roshwald, and Nevil Shute.

When it comes to the crises or disasters depicted in all the 35 canonical works of apocalyptic and post-apocalyptic fiction and film, nuclear wars and pandemics are the most common scenarios, with nuclear wars and their aftermath accounting for sixteen, or almost half (45.7 percent), of the cases, and with pandemics (viruses, plagues, etc.) coming second with five entries (14.3 percent), although diseases (and famines) often figure as secondary calamities in many more, especially in the stories dealing with nuclear war. The disasters in the remaining classics consist of celestial phenomena, alien invasions, floods, and freak occurrences (if they are not unknown).

Besides Mary Shelley’s and Angela Carter’s novels, there are two other novels by female authors (Judith Merril and Leigh Brackett), which might seem little (11.4 percent of the canon), but is in fact slightly more than the proportion of entries with female authors or directors in the whole database (see below). As for nationality, there is an almost equal split between the US and the UK, with 16 entries for the former, and 15 for the latter, and with the Australian *Mad Max* films behind most of the remaining.

Although the 35 canonical works (as suggested by the database) range from the nineteenth century to the mid 1980s, as many as twelve are from the 1950s, and no fewer than eight from the late 1950s (which can be compared to only five entries from the 1960s, four from the 1980s, and even fewer from the other decades). Apart from James Morrow’s novel *This is the Way the World Ends*, there are also just four works published or released since the 1960s – three of which are the *Mad Max* films, and the fourth Russell Hoban’s experimental novel *Riddley Walker* – but chances are that a future study of a similar kind would include a few more, especially Cormac McCarthy’s *The Road* and Margaret Atwood’s *Oryx and Crake*, but perhaps also Max Brooks’s *World War Z* and Suzanne Collins’s *The Hunger Games*, which are likely candidates for canonisation not, perhaps, solely on grounds of originality, but on their historical and contextual interest.



Title	Author/Director	Gender	Nationality	Year	Medium etc.	Total
<i>A Canticle for Leibowitz</i>	Walter M. Miller, Jr.	Male	US	1959	Novel	10
<i>The Last Man</i>	Mary Shelley	Female	UK	1826	Novel	9
<i>Level 7</i>	Mordecai Roshwald	Male	US	1959	Novel	9
<i>Earth Abides</i>	George R. Stewart	Male	US	1949	Novel	8
<i>On the Beach</i>	Nevil Shute	Male	UK	1957	Novel	8
<i>Le Dernier Homme (The Last Man)</i>	Jean-Baptiste Cousin de Grainville	Male	Non-English	1805	Poetry	7
<i>The Purple Cloud</i>	M. P. Shiel	Male	UK	1901	Novel	7
<i>When Worlds Collide</i>	Edwin Balmer & Philip Wylie	Male	US	1933	Novel	7
<i>The Day of the Triffids (Revolt of the Triffids)</i>	John Wyndham	Male	UK	1951	Novel	7
<i>The Drowned World</i>	J. G. Ballard	Male	UK	1962	Novel	7
<i>Riddley Walker</i>	Russell Hoban	Male	US	1980	Novel	7
<i>The Crystal World</i>	J. G. Ballard	Male	UK	1966	Novel	6
<i>The Scarlet Plague</i>	Jack London	Male	US	1912	Novel	5
<i>The World Set Free (The Last War)</i>	H. G. Wells	Male	UK	1914	Novel	5
<i>Shadow on the Hearth</i>	Judith Merrill	Female	US	1950	Novel	5
<i>The Long Tomorrow</i>	Leigh Brackett	Female	US	1955	Novel	5
<i>The Death of Grass (No Blade of Grass)</i>	John Christopher	Male	UK	1956	Novel	5
<i>Alas, Babylon</i>	Pat Frank	Male	US	1959	Novel	5
<i>On the Beach</i>	Stanley Kramer	Male	US	1959	Film	5
<i>Heroes and Villains</i>	Angela Carter	Female	UK	1969	Novel	5
<i>After London; Or, Wild England</i>	Richard Jefferies	Male	UK	1885	Novel	4
<i>The Time Machine</i>	H. G. Wells	Male	UK	1895	Novel	4
<i>The War of the Worlds</i>	H. G. Wells	Male	UK	1898	Novel	4
<i>The Second Deluge</i>	Garrett P. Serviss	Male	US	1912	Novel	4
<i>Deluge</i>	S. Fowler Wright	Male	UK	1928	Novel	4
<i>Ape and Essence</i>	Aldous Huxley	Male	UK	1948	Novel	4
<i>The Long Loud Silence</i>	Wilson Tucker	Male	US	1952	Novel	4
<i>I Am Legend</i>	Richard Matheson	Male	US	1954	Novel	4
<i>The Chrysalids (Re-Birth)</i>	John Wyndham	Male	US	1955	Novel	4
<i>The Burning World (The Drought)</i>	J. G. Ballard	Male	UK	1964	Novel	4
<i>Dr. Strangelove, or, How I Learned to Stop Worrying and Love the Bomb</i>	Stanley Kubrick	Male	US	1964	Film	4
<i>Mad Max</i>	George Miller	Male	Australia	1979	Film	4
<i>The Road Warrior (Mad Max 2)</i>	George Miller	Male	Australia	1981	Film	4
<i>Mad Max Beyond Thunderdome</i>	George Miller & George Ogilvie	Male	Australia	1985	Film	4
<i>This is the Way the World Ends</i>	James Morrow	Male	US	1986	Novel	4

Table 1. The 35 apocalyptic and post-apocalyptic novels or films mentioned in four or more surveys.

## Medium, Gender, and Nationality

Besides canonisation, the database as a whole also yields a number of interesting results when it comes to describing the apocalyptic and post-apocalyptic genre in

general. Starting with medium, genre, and format, the entries consist of (in descending order, and with percentages in brackets) novels (53.3), short stories (20.4), film (18.4), poetry (2.2), children's and YA fiction (1.6), other print (1.4), TV series (1.4), short-story collections (0.6), and drama (0.2), demonstrating perhaps not only the interests of scholars and critics specialised in literature, but also that the genre is predominantly one of novels, short stories, and film, even though the large number of apocalyptic and post-apocalyptic TV series and YA books from recent years will probably have an impact on comparable surveys in future.<sup>5</sup>

As already hinted at above, the male dominance in the database is absolutely massive, with female authors and directors standing for less than 10 percent of the entries (or 9.2 percent, to be precise). Naturally, this reflects not only that both science fiction and the film industry have long been male-dominated, but perhaps also that the types of fantasies represented in apocalyptic and post-apocalyptic stories – with widespread disasters leading to chaos and barbarism, survival of the fittest, etc. – are probably more popular with both male writers/directors and readers/viewers. There is, however, a slight difference when it comes to media and genre, as female writers stand for 12.3 percent of the novels, while only 4.4 percent of the films are directed by female directors, and only 4.0 percent of the short stories are written by female writers.<sup>6</sup> Of course, 12.3 percent is still a very small number, but 32 apocalyptic and post-apocalyptic novels by female writers does at least amount to a whole shelf in a bookcase, and they contain some of the most interesting work in the genre, often by female writers who have decided to write against its traditionally male values and perspectives.

As my main interest is Anglophone fiction and film, the database doesn't differentiate between the relatively small number of non-English authors and directors. It does so, however, when it comes to the different countries in the English-speaking world. In all, US authors and directors stand for more than half (55.5 percent) of the entries in the database, followed by UK authors and directors, who stand for almost a third (29.8 percent). The non-English category (mostly European authors and directors, even if some of the latter worked in Hollywood) makes up 8.4 percent of the entries, and the rest of the English-speaking world is represented by less than 4 percent, although some of the most well-known works are actually from these countries, such as the Australian *Mad Max* films, the New Zealand film *The Quiet Earth* (1985), or Canadian writer Margaret Atwood's novels.

Looking at nationality by medium, a few interesting differences emerge, as UK authors stand for as much as 39.5 percent of the novels in the database, whereas US authors stand for 52.1 percent (compared to 29.8 percent and 55.5 percent respectively for all media, genres, and formats). Furthermore, while films by US directors make up 54.4 percent of all films in the database, the films by non-English directors stand for as much as 18.9 percent, which is roughly 5 percentages more than the ones by UK directors (13.3 percent). It is also notable that US authors stand for as much as 78 percent (or even more) of all mentioned short stories, with UK authors

standing for most of the remaining. The apocalyptic or post-apocalyptic short story is thus a very American form, probably as the science-fiction magazines, and the tradition of publishing science-fiction short stories, have largely been an American twentieth-century phenomenon; if the British excel at one form of apocalyptic or post-apocalyptic narrative, it is the novel rather than film (of all UK contributions in the database, 70.5 percent are novels, compared to 50.0 percent for the US contributions).

## Periodising Apocalypse

The entries in the database stretch from the Sumerian *Epic of Gilgamesh*, written a millennium or two B.C., over the *Book of Revelations*, the *Völuspá*, the Romantic poets, the British fin-de-siècle writers of scientific romances (such as H. G. Wells), early twentieth-century American pulp fiction, post-war Hollywood disaster and World War III films, and all the way to science fiction and consecrated literary fiction from the last decade, not to mention the various recent zombie films.

Even if there are many potential factors of error involved – such as the fact that the database is based on thirteen more or less subjective surveys written by a small number of people, and that the total number of entries (despite being almost 500) is only a sampling of all the thousands of apocalyptic and post-apocalyptic narratives published or released in the last century or two – the database can be used to estimate the periods in which the most number of stories considered to be memorable were published or released, results which can then be compared with not only the changing historical, cultural, medial, social, and political contexts of the last two centuries, but also with some of what has been written on the periodic popularity of apocalyptic and post-apocalyptic narratives.

In contrast to the regular field of cultural production, where there is an almost inherent contradiction between perceived aesthetic qualities and popularity – and thus the opinions of critics and scholars rarely reflect the popularity or even the wider cultural impact of individual films or works of literature – in a field of so-called genre fiction such as science fiction, there is probably a sufficient overlap between the tastes of critics, scholars, and a majority of the readers and viewers to permit making at least some assumptions about the popularity of the genre based on its historiography.<sup>7</sup> Add to this that the historiography of a genre often consists of not only the works which have been judged to achieve certain aesthetic standards, but also works which have, in one way or another, been seen as important in the sense of having influenced other writers, directors, or even public opinion (often through both popularity and publicity) – and that many science fiction films and novels have been included in the surveys at least partially due to their popularity – and it would seem that this method could be a feasible shortcut to assess the fluctuating popularity of the genre in different periods, lacking the time and resources to find not only the total number of apocalyptic and post-apocalyptic titles published

or released each year (and in different countries and media), but also the exact figures for the total number of books, cinema tickets, magazines, etc. sold, which would not only be tremendously time-consuming, but often outright impossible.

To further complicate the already complex relationship between consecration, historiography, and popularity, it could be argued that the presence of important or memorable works from certain periods often reflects both the popularity of the specific titles and a widespread interest in the subject matter, and that a few consecrated works might be seen as the tip of an iceberg – that it is statistically likely that a period with many memorable works saw an unusually large number of other works in the genre as well, most of which are today forgotten. On the other hand, it could also be argued that it is often during periods (and in social, political, historical contexts) when there is an increased need for these kinds of stories that authors and directors produce them in unusually large numbers, or even that it is only during these periods and their specific *Zeitgeist* that certain works manage to make lasting impressions and become minor classics (sometimes almost regardless of perceived aesthetic qualities), both of which would seem to suggest that examining the contexts of the consecrated and memorable works of the genre might in fact be seen as at least partially representative for the popularity and impact of the whole genre.

Breaking down all the 490 entries in the database by five-year-periods, starting in 1800, several interesting things emerge (Figure 1, next page).<sup>8</sup> First, and perhaps most important, is the fact that even if most of the surveys were written since 1990, only four of them are completely from the 2000s, which means that the figures for the 1990s and especially the 2000s are probably on the low side. Preceding the 1990s, however, are four decades – the 1950 to the 1980s – with what seems to be a relatively steady output of interesting and memorable stories in the genre, bringing to mind I. F. and M. Clarke’s words that, “after Hiroshima, the greatest flood of apocalyptic fiction would begin; and, throughout the ensuing four decades, a seemingly endless succession of books and films would describe the End of the World as the last act in a chain of human follies” (Clarke & Clarke 2002: xviii). As we shall soon see, however, this neat conformance with the threat of nuclear war isn’t entirely true.

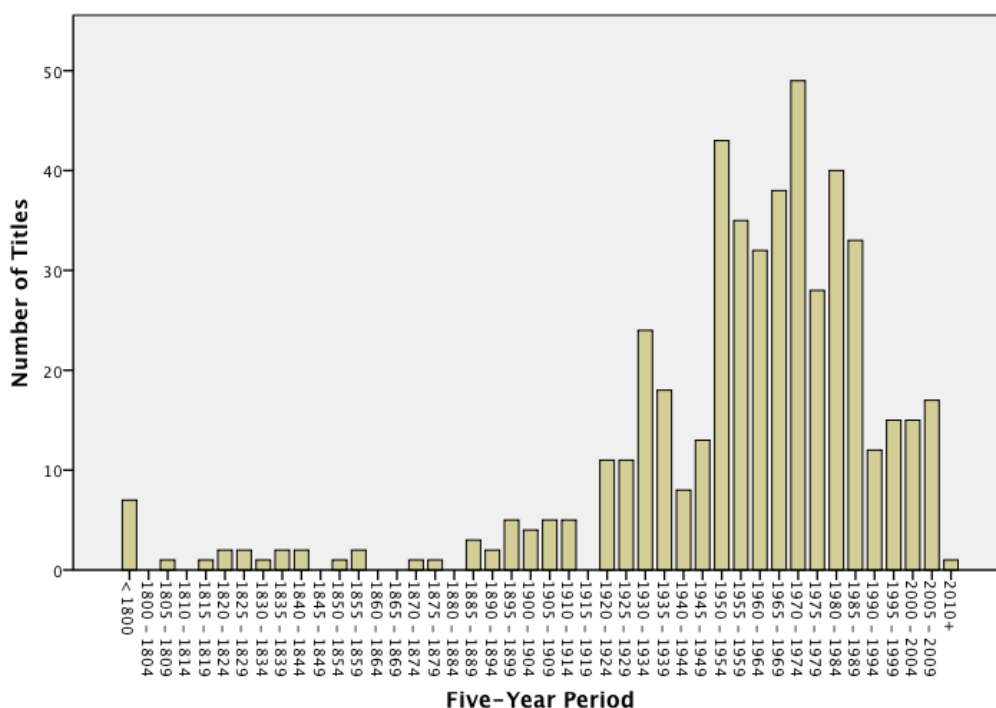


Figure 1. The total number of apocalyptic and post-apocalyptic disaster narratives in the database published or released after 1800, by five-year period.

The most surprising element in the breakdown is probably the declines in memorable stories in the genre from the late 1910s and, perhaps even more striking, the early 1940s, coinciding with both world wars. This might be explained by the writers and filmmakers being busy doing military or civil service, or surviving harsh living conditions (such as the Blitz), by paper rationing (which would, however, perhaps affect the number of magazines and books printed rather than the innovations of the authors), or simply by the fact that reality at the time was far too bleak and grim for writing, shooting, publishing, or releasing any memorable fantasies of worldwide destruction.<sup>9</sup> Furthermore, it is intriguing that the interwar period of 1920–1939 – and especially the Depression years of the early 1930s – produced quite a few noteworthy apocalyptic and post-apocalyptic stories, with steep rises comparable only to the ones in the early 1950s, the early 1970s, and the early 1980s. Also notable is a relatively continuous output of memorable works from the nineteenth century, starting with British Romantic poems depicting end times and last men, such as Lord Byron’s “Darkness” (1816) and Thomas Campbell’s “The Last Man” (1823). As with Mary Shelley’s *The Last Man* (1826), these were inspired by the uncredited and anonymous English translation of Grainville’s *Le Dernier Homme* as *The Last Man; or, Omegarus and Syderia: A Romance in Futurity* (1806) (Paley 1989, Clarke 2002, Clarke & Clarke 2002, and Ransom 2014).

In future, a similar study would likely show a sharp rise in interesting apocalyptic and post-apocalyptic disaster stories from the years 2000–2015, following a decade of slightly less important work in the genre. (Contrary to popular belief, the years preceding the millennium don't seem to have seen any sharp rise in popularity for this particular genre, although apocalyptic themes did figure prominently in public discourse at the time.) As for the notable decline in the early 1990s, it might not be entirely related to the fact that the decade is too recent for these historical surveys – it is possible that at least part of it can be explained by the fall of the Berlin Wall, the democratisation of Eastern Europe, the end of the Soviet Union, and the *détente* in international tensions after years of *perestroika* and nuclear disarmament treaties; or, simply by the fact that audiences were tired of apocalyptic and post-apocalyptic narratives after a decade infused with such scenarios, and instead turned to fantasy novels, romance, and comedy. Remarkably, in 2002, I. F. Clarke attributed this lack of interest specifically to the disarmament treaty of 1990 and asserted that “the tale of the last days of Earth no longer had any power to attract readers. Nowadays, it seems, the Last Man belongs to an almost extinct species.” (Clarke 2002: xli) Of course, the pendulum swung again in the early 2000s, with a new wave of post-apocalyptic and zombie narratives starting in precisely 2002, with, among others, Danny Boyle's and Alex Garland's *28 Days Later* (2002), and, after the events of September 2001, a changed international context in which they were received. An important factor in the expansion of the 2000s is unquestionably also the breakthrough for computer-generated imagery in the 1990s, which has given new possibilities for depicting especially large-scale or even global disasters (Sanders 2009: 15–16).

As it is difficult to know for sure how reliably the most memorable titles reflect popularity, the results should be compared to previous assessments of the popularity of this and related genres in film and literature, which might also offer explanations for the fluctuations. In an essay condemning the latest wave of horror films in the late 1950s, for instance, Derek Hill observed a connection between horror films and troubled times, claiming that “[e]very horror film cycle has coincided with economic depression and war”, and that the late 1950s with their escalating nuclear arms race experienced “the biggest, ugliest threat of them all, and a bigger, uglier horror boom than ever before” (Hill 1958: 7). What is particularly interesting about Hill's observations is that he tries to trace the cycles back a few decades, and that he touches upon the subject of national economy:

Until the coming of sound, Germany dominated the horror field – a country suffering from post-war depression and the *malaise* of defeat. The first American cycle ran throughout the 'thirties – the depression years – but the films became less popular as the economy gained strength. By the time America entered the war, virtually no horror films were being made. In 1943 a new boom began; and then, after the war, there was another recession.



Horror literature, it has often been noted, becomes increasingly popular when a society is undergoing outward stress. The cinema, which provides a more accurate reflection of a nation's mood, confirms this. (Hill 1958: 7)

Even though Hill's essay deals with horror film, and that his observations concerning the Second World War do not conform with the results of the present study, it is nevertheless interesting to note a few similar conclusions in an essay on a related (and to some extent overlapping) genre. In fact, analogous, recurrent patterns have also been noted regarding pre-Hiroshima apocalyptic films, for instance by Mick Broderick: "Examining the historical clusters of these films prior to 1945, it appears that many reflect popular fears of devastating calamities in times of perceived global crisis, such as the approach of the World Wars, the 1917 communist revolution, and the Great Depression." (Broderick 1993: 364) Unfortunately, this can neither be corroborated nor disproved with the database, as it contains only one pre-WWII film, *Deluge* (1933).

A comparison of the major media of novels and film in the database does, however, show both interesting differences and similarities (Figure 2, next page). Apart from the fact that memorable apocalyptic and post-apocalyptic films – which, with all their special effects, were long expensive to make – are clearly a post-war phenomenon, the early 1980s seem to have been an exceptionally good period for film in this genre, especially compared to the late 1980s and the early 1990s, which saw a dramatic drop.<sup>10</sup> (When it comes to novels, a comparable rise can be seen from the late 1970s to the early 1980s, but lasting a few years longer, before the probable drop in the 1990s.<sup>11</sup>)

The early 1980s are, of course, an especially interesting period, as it saw a new stage in the Cold War, often called "the Second Cold War", with the Soviet invasion of Afghanistan, heightened international tensions, and especially a renewed and widespread fear of nuclear war. The escalating nuclear arms race is not only reflected in many of the memorable films from this period – such as *WarGames* (1983), *The Day After* (1983), and *Threads* (1984) – but also in the large number of low-budget imitators of the highly successful *Mad Max* films. Although Mick Broderick has listed no fewer than 80 post-nuclear war films from the 1980s – most of them action-oriented and with titles such as *Exterminators of the Year 3000* (1983), *Warrior of the Lost World* (1983), and *Land of Doom* (1986) – very few of these were memorable enough to make it into the surveys (and they were often made in Italy, Spain, Israel, and the Philippines) (Broderick 1993: 366, 376).<sup>12</sup> Notably, they seem to have tied in well with the prevalent ideology of their time (Thatcherism and Reaganism), as Broderick argues that, with their hero mythology, these

cinematic renderings of long-term post-nuclear survival appear highly reactionary, and seemingly advocate reinforcing the symbolic order of the status quo via the maintenance of conservative social regimes of patriarchal law (and lore). In so doing, they articulate a desire for (if not celebrate) the fantasy of nuclear Armageddon as the anticipated war which will annihilate the oppressive burdens of (post)modern life and

usher in the nostalgically yearned-for less complex existence of agrarian toil and social harmony through ascetic spiritual endeavors (Broderick 1993: 362).<sup>13</sup>

Add to this that the depicted wastelands of the genre are often characterised by an absence of a strong state and by anarchic conditions where might is right, and it is easy to see the similarities not only with libertarian ideology, but also with the punk movement of the mid- and late 1970s (which also influenced the films aesthetically).

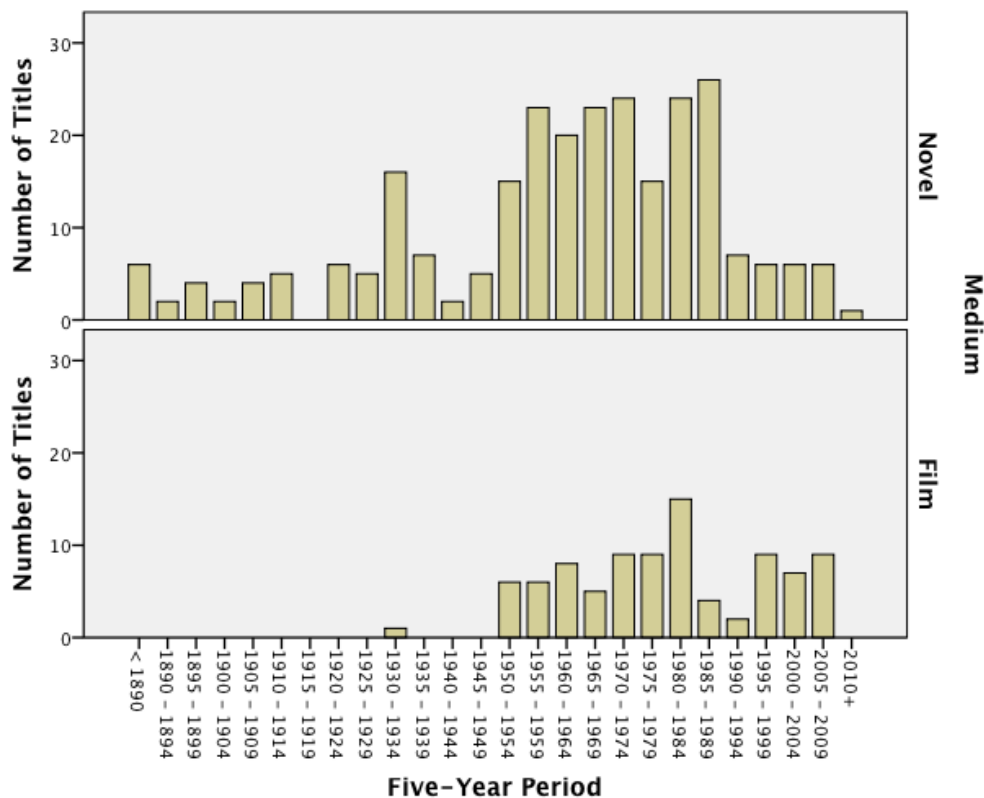


Figure 2. The total number of apocalyptic and post-apocalyptic disaster narratives in the major media of novels and film in the database, by five-year period.

Apart from the fluctuations in 1980–1994, however, the output of memorable apocalyptic and post-apocalyptic films has been relatively constant since the early 1950s. Compared to the novels, it is also striking that many of the memorable films are from the 2000s, perhaps indicating a rise in interesting work done, but it might also have to do with the fact that it is easier to determine the classics of a young medium such as film.

When it comes to the novels, the late 1970s show a curious, if only relative slump (Figure 2), which begs explanation. In fact, looking only at novels from the two most important countries, one finds one of the biggest and most important differences in the entire database (Figure 3, next page). Whereas many of the classic British apocalyptic and post-apocalyptic novels were written in the late nineteenth

century and up until the First World War, in the inter-war years and the first three post-war decades, a clear majority of the US classics of the genre were written between 1950 and 1989, with a noticeable peak in the 1980s. The most striking difference between British and American novels, however, is in the fifteen-year period 1975–1989, when it seems interest and innovation abated in the UK while it peaked in the US. This difference is likely connected to the post-war US supersession of the UK as the dominant Western superpower, which seems to have affected the genre fully a generation after WWII.

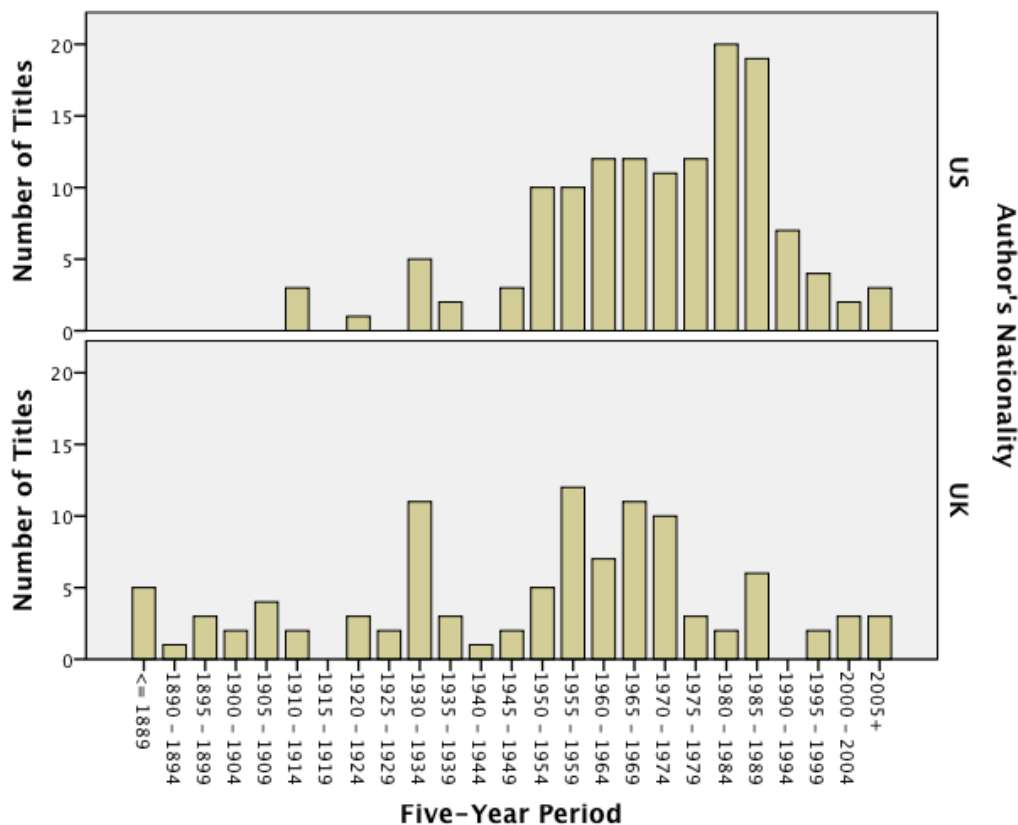


Figure 3. The total number of British and American apocalyptic and post-apocalyptic disaster novels in the database, by five-year period.

Interestingly, the preceding 25–30-year period coincides neatly with the heyday of what has sometimes been called the cosy catastrophe, a specifically British type of disaster novel by writers such as John Wyndham, John Christopher, Susan Cooper, Keith Roberts, John Brunner, and Richard Cowper (most of whom are also represented in the database). According to Jo Walton, these stories, with often quirky disasters killing off almost all but a small number of middle-class survivors who are left to rebuild civilisation from scratch, dealt with "middle-class resentment towards the newly empowered working class" in post-war Britain (with reforms

such as free public education and the National Health Service). They were "immensely popular" between 1951 and 1977, but then disappeared, perhaps because "the zeitgeist had changed and they had served their purpose. By the time they died away, the social world had completely changed, a whole generation had grown up with the post-war reforms and Thatcherism was on the horizon." (Walton 2005: 38)<sup>14</sup> Indeed, the crowning achievement of the subgenre might well have been the highly successful TV series *Survivors* (1975–1977), which also tapped into the prevalent rural nostalgia of the 1970s.

It has also been suggested that the lingering popularity of especially John Wyndham's 1950s disaster novels (with their obvious fears of invasion and supersession) may be related not only to the gruelling experience of WWII, but also to the dismantling of the British Empire and the loss of Britain's status as a superpower.<sup>15</sup> As Roger Luckhurst has pointed out, there is almost something monomaniacal about these stories: "What cultural work does this British 'imagination of disaster' perform for its audience? The repetitive plots invite a reading of the genre that sees it as a compulsion to return to some traumatic event, in order to master its devastating effects." (Luckhurst 2005a: 130) In this instance, the narratives seem to work as a form of symbolic national trauma treatment, not unlike the Japanese monster films following the bombings of Hiroshima and Nagasaki (see Sontag 1966: 218).

In an essay on British science fiction in the 1970s, Luckhurst discusses what he terms the "post-imperial melancholy" of the decade, with its economic and ideological crises, loss of national identity and sense of belonging, and rural nostalgia. Besides deliberating on it as "a crucial decade in reorganising the symbolic capital of Empire" (Luckhurst 2005b: 79), he also sketches (with a reference to Baucom 1999) the historical development of disaster narratives, observing how

the renewal of the English catastrophe novel in the early 1970s was a response to a newly intensive phase of crisis around nationhood – allegorical, or not so allegorical explorations of that 'cult of ruin', as Baucom calls it. The English genre of catastrophe has been intrinsically linked to critical phases of Empire at least since the invasion fantasies and future wars of the late nineteenth-century, flaring again at the waves of decolonisation in the 1940s and 1950s. (Luckhurst 2005b: 84)

Perhaps there is here at least a kernel of an explanation for the striking shift taking place in the 1970s, as in the UK, WWII and the British Empire were more than a generation away, whereas in the post-Vietnam US of the late 1970s and early 1980s, international tensions and threats towards national security were once again on the rise – possibly also making the US novels more forward-looking than the British. Stephen King, author of the popular apocalyptic novel *The Stand* (1978), has described the period in which he wrote it as an unusually turbulent time in US history, following the oil crisis, the Watergate scandal, and the end of the Vietnam War:

There was a feeling – I must admit it – that I was doing a fast, happy tapdance on the grave of the whole world. Its writing came during a troubled period for the world in general and America in particular; we were suffering from our first gas pains in history, we had just witnessed the sorry end of the Nixon administration and the first

presidential resignation in history, we had been resoundingly defeated in Southeast Asia, and we were grappling with a host of domestic problems, from the troubling question of abortion-on-demand to an inflation rate that was beginning to spiral upward in a positively scary way (King 1981/2012: 447–448).

While the 1970s did see a steep rise in localised disaster films in the wake of the highly successful *Airport* (1970), these – which might or might not have been expressions of a sublimated fear of nuclear war – had exhausted themselves come the 1980s (Broderick 1991: 36, Sanders 2009: 14). Early in the new decade, Noel Carroll observed that horror and science fiction film (some of which was, of course, apocalyptic and post-apocalyptic) were “the reigning popular forms of the late seventies and early eighties”, and that this popularity had much to do with the social and political context:

The present cycle, like the horror cycle of the thirties and the science fiction cycle of the fifties, comes at a particular kind of moment in American history – one where feelings of paralysis, helplessness, and vulnerability (hallmarks of the nightmare) prevail. If the Western and the crime film worked well as open forums for the debate about our values and our history during the years of the Vietnam war, the horror and science fiction film poignantly expresses the sense of powerlessness and anxiety that correlates with times of depression, recession, Cold War strife, galloping inflation, and national confusion. (Carroll 1981: 16)<sup>16</sup>

Looking at the fluctuations in the database as a whole, this observation seems to have some validity also for the apocalyptic and post-apocalyptic disaster narratives, as it is relatively clear that many of the works considered to be important in the genre are from periods of anxiety, economic recession, and social and political unrest. Disregarding all the potential factors of error, and allowing for some degree of speculation, one possible explanation for these fluctuations is that apocalyptic and post-apocalyptic stories have little appeal for, or at least have little impact on, readers and viewers at times of both real crisis and calm – such as the world wars or the 1990s – and that the large number of memorable works in the genre produced in the 1930s, the 1950s, and the 1980s reflect a surging interest in these stories among both producers and consumers during the build-up to an anticipated crisis, such as the Second World War, The Space Race and the Cuban Missile Crisis, the so-called Second Cold War of the early 1980s – and in the 2000s, perhaps, terrorism, climate change, and financial collapse.

## Conclusion

The aim of this study is to analyse the historiography, canonisation, and historical fluctuations of Anglophone apocalyptic and post-apocalyptic disaster narratives in literature and film through an elementary statistical analysis of previous surveys of the field. Even though there are many uncertainties involved and one should be wary of drawing too far-reaching conclusions from the thirteen surveys used, it is still possible to discern some interesting patterns in the resulting database. Besides

basic facts such as more than half of the database consisting of novels, that female writers and directors stand for less than a tenth of the entries, that more than half of all the stories were written or directed by US authors and directors (and less than a third by British), that almost half of the 35 most mentioned works were about nuclear war, and that many of them were published or released in the 1950s, there are also some intriguing fluctuations, probably having to do with the historical, cultural, medial, social, and political contexts of the stories.

Looking at the database as a whole, it is in fact possible to discern four distinct periods or high points for Anglophone apocalyptic and post-apocalyptic narratives. These are the early 1800s, when an anonymous translation of Jean-Baptiste Cousin de Grainville's *Le Dernier Homme* (1805) was published in English, and inspired not only a number of British Romantics to write about the last men on earth and the end of the world, but also Mary Shelley's much more secular novel *The Last Man* (1826); the inter-war UK, especially the Depression years of the early 1930s, which saw an unusually large number of memorable apocalyptic and post-apocalyptic novels; the post-war UK in ca. 1950–1975, coinciding both with the heyday of the so-called cosy catastrophe, a subgenre instigated by John Wyndham, and the dismantling of the British Empire; and, finally, the post-war US, with a steady output from the early 1950s on, but culminating during the so-called Second Cold War of the early 1980s, with a large number of memorable novels and films. To these can be added a fifth, the post-9/11 wave of ca. 2000–2015, much of which consists of zombie narratives in various media, but also of dystopic YA and literary fiction. (Notable periods of general decline were both world wars, and most probably the 1990s, although there were also a few country- and media-specific slumps.)

Through the years, a number of different explanations have been suggested for the attraction of stories about cataclysmic events. They range from Susan Sontag's remark in her classic essay "The Imagination of Disaster" (1965), that in apocalyptic films "one can participate in the fantasy of living through one's own death and more, the death of cities, the destruction of humanity itself", and that they are "concerned with the aesthetics of destruction, with the peculiar beauties to be found in wreaking havoc, making a mess" (Sontag 1966: 212–213), and J. G. Ballard's existential assertion that they represent "an attempt to confront the terrifying void of a patently meaningless universe by challenging it at its own game" (Ballard 1977: 130), to Jo Walton's suggestion about the so-called cosy catastrophes, that "their enduring appeal is to the adolescent, who [...] just naturally wants to see the adult world go up in flames and build it again, better" (Walton 2005: 38). Combined with the fact that many elements in apocalyptic and post-apocalyptic narratives in general – such as depictions of hostile environments, adult dishonesty, strong emotional content (love, loss, fear, and hatred), and questions of loyalty, friendship, rivalry, and chosenness – would seem to cater to the adolescent mind, this might explain their enormous popularity among teenagers over the last decade. Besides there arguably being something almost inherently narcissistic about stories about the end



of the world (focusing as they often do on the chosenness of a certain individual, group, or at least generation), there is no denying that many apocalyptic and post-apocalyptic narratives deal with subject matter that is related to some of our deepest emotions, anxieties, and fears – of death, powerlessness, separation, and abandonment – but also to fantasies of belongingness, fellowship, and survival, or even sadistic desires and feelings of guilt (Sontag 1966: 223, Wagar 1982: 66–85). As most of these stories include some form of recovery, reconstruction, safe haven, or even utopia, there is also the often exhilarating fantasy of a fresh start, a release from the responsibilities and chores of modern life, and of having the whole world for oneself (Sontag 1966: 215, Wagar 1982: 71–75, Nicholls et al. 2012a, 2012b, Pringle et al. 2013).

While these stories often seem to serve a cathartic function, a purging of emotions neutralising tensions and assuaging fears (Sontag 1966: 225), it would be advisable to distinguish between different types of apocalyptic and post-apocalyptic narratives when discussing their lure; even if some forms of attraction can be pinpointed in specific texts, and perhaps even analysed in relation to a particular audience, the range and variation in the narratives dealt with in this study is so wide that speculations about the appeal of the whole corpus risk arriving at blunt generalisations. Different scenarios and threats address different fears (directly or symbolically), and there are also major differences in style, tropes, and reader interest between stories of post-apocalyptic survivors rebuilding a society long after plagues or nuclear wars have run their course, and stories where the protagonists experience virus outbreaks, alien invasions, or zombie apocalypses. In fact, the latter is probably one of the most aberrant types, as it often focuses on gruesome bodily injuries and the dissolution of the individual subject in “the horrifying and disintegrative process of massification” (Luckhurst 2012: 78). Nevertheless, zombie narratives have become one of the most widespread types in recent years, perhaps, as Jeffrey Jerome Cohen has suggested, because they are an “incarnation of collective anxieties” (Cohen 2012: 401) that challenges both our sense of belonging and of staying in control (as a society, an individual, or a species, even). Besides offering “a permissible groupthinking of the other” and serving as legitimate outlets for aggressions and reminders of our own mortality and the frailty of our bodies, they are, like all monsters, “metaphors for that which disquiets their generative times”, and over the past decade these fears have ranged from terrorism and immigration to financial crisis and climate change (Cohen 2012: 402–405).

Whether or not there is any clear connection between the proliferation of important and memorable disaster narratives and a widespread need for these kinds of stories, it would seem that their lure is far from constant, at least when it comes to novels and films original and/or popular enough to make a lasting impression in the minds of the critics and scholars of the genre. To conclude, then, if the frequency of memorable works or even classics in the genre is somehow indicative of the popularity of or the need for these stories in a society (which isn’t necessarily the

case), we seem to need these stories primarily in anticipation of and preparation for conflicts rather than during actual wars or emergencies, and occasionally as symbolic trauma treatment in the first years following a national or cultural crisis. They seem to function best as pressure valves during periods of build-up to expected conflicts or crises, for letting off emotional steam, and perhaps as a way of mentally preparing for an even bleaker reality which many fear will soon be imminent.

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### Notes

<sup>1</sup> It could well be argued that these stories make up a genre of their own; as I. F. Clarke has emphasised, “[t]hese histories of the catastrophe-to-come are quite distinct in mood and intention from all other accounts of coming things. They have their own dedicated roles and separate evolutionary patterns within the tale of the future [...]” (Clarke 2002: xx). The main difference between the apocalyptic and the post-apocalyptic disaster story would seem to be that the former depicts an ongoing scenario (such as a viral outbreak or a zombie apocalypse) while the latter focuses on the aftermath of a widespread catastrophe, such as a nuclear war. Confusion is rife, however, and the lines are frequently blurred, which often makes it both difficult and unnecessary to make any strict distinctions between the two types.

<sup>2</sup> As the surveys are all relatively brief, however, it has not been possible to make distinctions on the importance assigned to individual works based on relative space given in the surveys (as in Williams 1997 and Nordlund 2005).

<sup>3</sup> The thirteen surveys are Ketterer 1974: 133–148; Ash 1977; James 1994: 89–92; Clute 1995: 70–71; Clarke 2000; Booker & Thomas 2009: 53–64; Mousoutzanis 2009; Bould & Vint 2011: 29–31, 90–94, 152–154; Seed 2011: 105–110, 113–116; Nicholls et al. 2012a; Nicholls et al. 2012b; Stableford 2012; Pringle et al. 2013. The last four are the most relevant entries in *The Encyclopedia of Science Fiction*, and are lightly revised versions of the entries in the 1993 print version (Clute & Nicholls 1993). As most of them are written by slightly different constellations of critics and scholars, they have been regarded as separate surveys.

<sup>4</sup> For an introduction to the term consecration, see Bourdieu 1996.

<sup>5</sup> The other print category contains epics and religious texts (which weren’t literally printed at the time they were conceived), but also things like graphic novels.

<sup>6</sup> The figures when it comes to YA fiction are really too small for any accurate statistics, but it could be mentioned that half (4 out of 8) of the children’s and YA writers are female, which I suspect does reflect a larger number of female writers in that part of the genre, especially in recent years.

<sup>7</sup> This is perhaps especially the case with the opinions and tastes of the most active readers of the genre (often so called *fans*, loosely organised in a *fandom*), although with the added complication that a substantial part of the reading audience doesn't necessarily share the ideals and convictions of the most active readers, sometimes resulting in bestsellers and blockbusters perceived as emanating from outside the field being frowned upon within the community.

<sup>8</sup> It should be noted that the statistics are not normalised to accommodate for the fact that the surveys are from the period 1974–2013 (although eleven of the thirteen surveys were written or revised in the 2000s), nor for the fact that the number of books published and films released grew significantly over the course of the twentieth century. Such normalisation might well be possible to achieve, but would ultimately be of relatively little use as my main interest is in the sudden variations between the five-year periods rather than the relative growth of the genre over time.

<sup>9</sup> It is possible that publishers or studios refrained from publishing or releasing these kinds of stories, as well. The BBFC, for instance, banned the import of horror films to the UK in 1942–1945 (Hill 1958: 9), and very few horror films were made in the UK during WWII.

<sup>10</sup> Interestingly, the only memorable pre-WWII film, *Deluge*, was from 1933, in the same five-year period which saw the largest number of memorable pre-WWII novels.

<sup>11</sup> One explanation for the large number of novels from the 1980s is the fact that there were many memorable apocalyptic and post-apocalyptic book series published, which skews the figures slightly.

<sup>12</sup> Although more than half of the 80 films are from the latter part of the decade, almost all the memorable ones – such as *The Road Warrior (Mad Max 2)* (1981), *Le Dernier Combat* (1983), *The Terminator* (1984), and *Mad Max Beyond Thunderdome* (1985) – are from the first half, perhaps lending some weight to the argument made above that the memorable titles are often the ones most in tune with the fears and desires of their time.

<sup>13</sup> Broderick also connects these films to the politics of their time, and concludes his study by stating (in the early 1990s) that "it is difficult to expect films exploiting survivalism to proliferate with the apocalyptic vigor of the neo-cold war '80s" (Broderick 1993: 379).

<sup>14</sup> The term 'cosy catastrophe' was coined by Brian Aldiss in *Billion Year Spree: The History of Science Fiction* (1973).

<sup>15</sup> On Wyndham and the British Empire, see for instance Aldiss 1973: 294; Priest 1979: 195, and Luckhurst 2005a: 130–131.

<sup>16</sup> Interestingly, Carroll's introductory claim that "the Western and the crime film were the dominant genres of the late sixties and early seventies" suggests that analyses like the one attempted in this study should ideally be made on several genres simultaneously (Carroll 1981: 16).

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## On the Representation of an Early Modern Dutch Storm in Two Poems

By Katrin Pfeifer

### Abstract

On 19th December 1660, a severe storm raged over the Dutch isle of Texel, causing severe damage. It proceeded to destroy parts of the city of Amsterdam. Both the sailor and merchant Gerrit Jansz Kooch and the priest Joannes Vollenhove wrote a poem about this natural disaster, presumably independently of each other. The poets perceived the storm differently: Kooch, an eyewitness of the storm, matter-of-factly portrays the calamity and details a feud between his son-in-law and a colleague to commemorate the day of the disaster. In contrast, Vollenhove personifies the winter storm and struggles to understand it. Their poems are valuable sources for a cultural historical analysis. After a brief review of historical severe storm research, I will analyse these poems from a cultural historical point of view. I will shed light on how this severe storm was represented poetically in the Early Modern Period.

**Keywords:** Environmental history, cultural history, the Netherlands, Early Modern Period, natural disaster, storm, perception, poetry



## Introduction

This article presents two recently rediscovered poems about the severe storm of 1660, which raged over Northern Holland. The poems were written by the sailor and merchant Gerrit Jansz Kooch and by the priest Joannes Vollenhove. Vollenhove and Kooch had contrasting agendas, and comparison of their poems indicates that these two men used the calamity as an excuse to draw attention to their own social and political ends. Material presented by Kooch and Vollenhove in their poems portrays events that they considered to be significant enough to put into verses. I will compare the two poems on different levels, addressing the following research questions: Which events during the storm are mentioned? What are the underlying motives of the authors and functions of the poems? How do the poetics of the two poems differ, specifically with respect to the use of symbols as rhetorical figures? This article contains the first English translation of the poems.

Although historical research on natural hazards is becoming increasingly popular (see, e.g., Mauch & Pfister 2009; Pfeifer & Pfeifer 2013a; Steinberg 2006), research on historical severe overland storms is still in the early stages of development. This research gap stands in stark contrast to historical storm floods (e.g., Gottschalk 1977; Jakubowski-Tiessen 1992; de Kraker 2013) and storms over sea (e.g., Wheeler 2003, 2005), as both types of disaster have been investigated thoroughly. The meteorologist Jan Buisman (2006), for example, has been writing an extensive history of weather in the Netherlands, including severe overland storms. However, storms in the Netherlands are explored principally by the *Koninklijk Nederlands Meteorologisch Instituut* (KNMI; e.g., van Engelen, Buisman & IJnsen 2001). Pfister et al. (2010) investigated the impact of the storms *Marcellus* and *Prisca*, which raged through Switzerland in the year 1739. Storms were and are primarily investigated by natural scientists, and such debates are centred upon climate and weather conditions. The ways in which affected persons dealt with natural disasters and their aftermaths has been more or less ignored. This aspect is, however, essential for the present article. Storms that raged in Austria are surveyed by the *Zentralanstalt für Meteorologie und Geodynamik* (ZAMG; e.g., Matulla et al. 2008; for Austria see also Pfeifer 2014; Hauer & Pfeifer 2011). In the rest of Europe storms are researched, for example, in the wider area of Great Britain by Hubert Horace Lamb (1991; see also Pfeifer & Pfeifer 2013b), in the Czech Republic by the geographer Rudolf Brázdil and his group (University of Brno; e.g., 2005, 2010), and in Spain by the meteorologist Miquel Gaya (2011). The atmospheric physicist Nikolai Dotzek (Dotzek et al. 2000; Dotzek 2001), who died before his time, did pioneering work—notably in European tornado research—in Germany (*Deutsches Zentrum für Luft- und Raumfahrt*, Oberpfaffenhofen). Moreover, he initiated the *European Severe Storms Laboratory* in 2002 with the goal to advance research on severe storms and extreme weather events on a European level (see Dotzek et al. 2009).

So far, the severe storm of 1660 and the two poems have remained more or less absent from storm literature in general and in works on Dutch history in particular.

### **Storm poetry by Kooch and Vollenhove**

The sailor and merchant Gerrit Jansz Kooch presumably started writing poetry in 1655 at the age of 57 when his beloved daughter Stijntgen succumbed—most probably—to pestilence (van Eeghen 1966a: 37; van Eeghen 1966b: 2-3). Kooch did not need to make extra money and we have no evidence that he ever worked on commission. Rather than complying with restraints on poetic content imposed by a financier, Kooch instead wrote poetry when he was inspired to do so. Thus, it can be assumed that his literary work was neither influenced nor warped by backers, and does not display typical attributes of financed art, such as exaggerations and understatements. Kooch was interested in natural phenomena in general. He wrote about natural disasters: the storms of 1660 (see Appendix) and 1674 (see Pfeifer 2014), and the floods of 1625, 1633-1634, and 1675. He wrote in retrospect about the first two floods and noted events that had remained indelibly etched in his memory (van Eeghen 1966c: 79).

Joannes Vollenhove's father worked as a lawyer, and made sure that his son received a good education (Dibbets 2007: 24). Thus, Joannes Vollenhove attended a Latin school in Kampen before studying law, history and philosophy as a preparation for his theological studies at the University of Utrecht (Dibbets 2007: 28-32). Later he studied theology at the University of Groningen (Dibbets 2007: 38). Vollenhove then dedicated his life to God, working as a priest. From 1655 to 1665—the time during which the events in question occurred—Vollenhove lived and worked in Zwolle (Dibbets 2007: 47). Like Kooch, he wrote poetry, not on commission, but was in a position to choose the moment when he was inspired to compose his texts.

I will now focus on two poems about the storm of 1660 written by Kooch and Vollenhove.

### **A storm and two poems about it**

In the night from 18th to 19th December 1660, a severe storm raged over the Dutch isle of Texel. Both the sailor and merchant Gerrit Jansz Kooch and the priest Joannis Vollenhove wrote a poem about this natural disaster (the complete Dutch originals and their translations are given in the Appendix). There is no evidence of any influence between both authors, so both poems were most likely written independently of each other.

Kooch and Vollenhove described the storm damage on the island Texel—houses were destroyed or demolished. Some families lost all their belongings and were made homeless. Ships were cut loose of their anchors and floated into the sea. In

addition to this, houses, churches, and trees in the city of Amsterdam were affected by the storm. Given the divergent backgrounds of the authors, it is obvious that both perceived the natural disaster differently. Kooch's poem is very special as it consists of three coherently written pieces: Firstly, Kooch describes not only the aftermath of the storm but also a feud between his son-in-law Gerrit Steemann with one of Steeman's colleagues, the notary Joris de Wisje. Secondly, this notary—Joris de Wisje—wrote some verses, in which he makes fun of Steeman. Kooch incorporated them into his account and, thirdly, wrote a paragraph in his son-in-law's defence. In contrast, Vollenhove's poem is more of a sermonising lamentation. His poem is clearly theologically motivated and written in a spiritual manner. Furthermore, he works excessively with the stylistic device of personalization. The personalization of the winter storm can be interpreted as a mental coping strategy.

We do not know when the poems were written. Kooch signed his poem twice with "G I Kooch" but did not date it. Despite intense archival research, the handwritten original of Vollenhove's poem could not be found; it is likely that it no longer exists (Pfeifer 2014: 66). Kooch suggests in the first lines of his poem that he wrote it during the storm. However, he could only have completed it after the storm, as he chronicles the aftermath of the disaster. Vollenhove, on the contrary, does not indicate when he wrote the poem.

### **Gerrit Jansz Kooch's view**

Gerrit Jansz Kooch's poem "The great storm of 1660" has the subheading "About the cock's flight and the cross' fall from the Jan Roodepoorts-Tower onto the notary's house." The rhyme scheme of the first part of the text starts with an alternate rhyme, continues with two consecutive couplets, and concludes with six alternate rhymes. At the end of his text, Kooch included a tail-rhyme stanza on the damage inflicted to Gerrit Steeman's house, who was his son-in-law. Kooch had lived together with his daughter Aeltje and her second husband, the notary Gerrit Steemann, in a house on the north side of Jan Roodepoortssteeg since 1657. They lived in an alley next to the Singel or Rounaanse Kai. Today their house has the address Torensteeg 8 in Amsterdam (van Eeghen 1966b: 3).

The family experienced the storm of 1660 together. They were not only eyewitnesses of the natural disaster that had occurred in the morning of 19th December 1660, but were also its victims: their house was damaged. Kooch begins to describe vividly the storm's severity in the first lines of his poem:

When water and air came  
to battle the earth and to ensure  
that about 100 great ships drifted onto  
the sand and banks of stream Texel  
and sank down to the bottom of the sea  
and a number of people died

the thunderstorm partly damaged our house  
I composed these verses to commemorate this day;  
the severest wind was early in the morning,  
before the day broke.

Kooch points out that he intended to write the poem “to commemorate this day” and he notes that the “severest wind” raged before the day broke. This means the storm began early in the morning but before dawn when it was still dark. Not only the noise of the strong wind, but also the fact that the storm occurred during darkness, must have been particularly frightening.

In the following lines Kooch depicts the horror the storm caused. People were scared, houses were robbed of their roofs, and ships were capsized. Damage to the isle Texel was extreme: “many houses were flattened to the ground” and “trees were blown down.” Kooch was in Amsterdam when the storm raged. He witnessed the natural disaster and describes the occurrence as follows: “It seemed as if air and earth became one.” Even the Ropoorts-Tower “had to bow the wind”: the cock was blown away and the cross fell on Steeman’s house. It broke the roof into pieces, the gable-chimney fell down with a crash and Kooch explains that he and his family were happy that no-one had to suffer “a worse trial.” Humorously, he explains that he was sitting together with his family under the cross (which was lying on the remaining roof) and he “[t]hought if the cross had to torment us, it was better on the house than in the house.” Steeman was married, Roman Catholic, and had no children. His circle of friends and acquaintances wondered and speculated about why such a devout and yet well-off man was childless. Would it not have been in his own interest to bequeath his name and possessions to his offspring? The reason for his childlessness remains unclear. During the storm the cross from the Ropoorts Tower—not the cock—fell directly onto Steeman’s house. Because of that, Joris de Wijse, who likewise was a notary, quickly composed the following verse:

The cross from Ropoorts Tower fell exactly onto Steeman’s house. Why? There are reasons for that. Because he [Steeman] loves the cross very much! But why wasn’t the cock blown there too? The cock did not want that because his [Steeman’s] cock did not want to crow.

There are two points of irony in these verses. On the one hand, the cross, which symbolises Christian belief and Steeman’s religious devoutness, is itself the object which damages his house. On the other hand, de Wijse comments on the cock, a symbol of fertility. The cock did not want to fall on Steeman’s house because “his [Steeman’s] cock did not want to crow.” This can be read such that de Wijse believed Steeman to be impotent. In what relation Steeman and de Wijse stood remains unclear. It is possible that they were involved in a legal battle or that they were rivals. However, we can trace back that de Wijse worked as Lodewijk van Alteren’s (1608-1657) bailiff and was involved in van Alteren’s immoral relationships. Although bailiffs were moral authorities and seen as role models, both

men were—independently of each other—in a sexual relationship with Clara de Graeu, a married woman (see Wagenaar 2011: 735).

De Wijse's verse spread immediately among high-class circles, and they teased Steeman a little. Kooch composed the following verses to stop them:

Don't scold because the cross  
fell on Steeman's house  
and the cock did not want to rest there;  
the cock does not accept his own kind,  
he shuns Steeman's house,  
because he flies away to other shores;  
although the cross broke the roof tiles  
while the cross rests upon the roof  
people live happily in the house.

Still, it seems Kooch and his family coped well. Kooch points out that only the roof—not the interior of the house—was damaged and that he and his kinsmen quickly returned to everyday life.

The cross fell down because it was very heavy. The cock flew away, no one knows where to. He stood loosely on the cross but was not tied to it. The cock flew away and was never found.

Kooch's explanations that the "cross fell down because it was very heavy", and that the cock did not "fl[y] away" because it "stood loosely on the cross but was not tied to it", are rational. Kooch offers neither religious nor allegoric interpretations. He might have done this to refute de Wijse's saucy symbolic interpretations. It remains unclear where the cock flew.

### **Joannis Vollenhove's view**

Joannis Vollenhove's poem about the severe storm of 1660 is entitled "About the terrible night storm [which occurred] in the winter month of the year 1660" and written in rhyming couplets. He starts his poem with a quote from the first book of Virgil's *Aeneid*: "Moved by the winds the waves drove the ships apart and destroyed them." In this quote, Vollenhove refers to a storm that Juno sent with the help of the wind god Aeolus to Aeneas, when he headed in the direction of Italy with the Trojan fleet. The fleet drifted apart because of the winds; only seven ships made it to Carthage's shore. Virgil highlights the destructive potential of strong winds. Choosing Virgil's *Aeneid* as an epigraph to his storm poem, reflects Vollenhove's classical education. Moreover, the epigraph is consistent with the poem, as both texts embrace common themes including divine intervention, *pietas* (meaning "duty", "religiosity", or "devotion"), and destructive forces of nature.

Vollenhove personified the winter storm ("Terrible night power, oh wind! How could you rage so terribly?"). Natural disasters—respectively nature in general—

were often personified in the Early Modern Period (see also a poem about the rockfall of the Salzburgian Mönchsberg in 1669 described by Hauer (2009: 78-79)). The personification of the winter storm can be conceived as a first step towards coming to terms with the calamity because it transforms the unintelligible calamity into something concrete. The latter enhances psychological processing of the events.

A fundamental issue of environmental history is how nature—through time—enters the picture of historical development. Is nature presented in a passive way or as a participating agent? Do we have to ascribe nature “agency?” In historical contexts “agency”—the ability to act—is mostly assigned only to humans (see Winiwarter and Knoll 2007: 131). I do not deal with the ontological question of whether nature “acts” in this paper. Nevertheless, it is interesting, from a cultural historical point of view, that Vollenhove seems to ascribe the storm agency because he asks the storm directly the indicting question “how could you rage so terribly?” Intentions are usually the basis of actions. Vollenhove not only asks the storm which intentions underlie his action, but also why he raged so terribly: “Why have you increased so furiously?” And also:

What incited your displeasure so wretchedly,  
that you seemed to stir up all your gusts to our ruin;  
that you sank a ton of gold into the sea;  
with keels drilled into the bottom [of the sea],  
that you plundered and ruined the stock market?

It seems that Vollenhove cannot understand why the wind, which he describes as “a friend of our country’s commerce,” could transform into a violent storm and by doing so into an opponent. The Netherlands of the 17th century were a nation of sailors and tradesmen, and therefore dependent on favourable wind. Vollenhove notes:

In all the corners of this world  
where our ships buy the world and sell it again.  
From coast to coast, where Holland’s flag  
sails past the sun and the day  
to fatten our sea-lion  
with the earnings from so many regions.

Here, “sea-lion” refers symbolically to the Netherlands and the Dutch economy. The national symbol of the Netherlands is a lion. The “sea” refers here to seafaring; the “lion” is regarded as the king of animals and represents energy, power, and strength. Vollenhove attributes these qualities to the Netherlands. He seems to view the storm as a national attack. The poet describes a two-sided relationship between the Netherlands and the wind, consisting of a positive side (trade) and a negative one (devastation).



Vollenhove seems to personify the event to illustrate the extent and impact of the calamity. He also states:

This all shattered the merchant's hopes.  
Which guarantor, which maritime insurance  
will cover the damage?

Vollenhove is unsure about how the storm can be dealt with. Maritime insurance was quite common in 1660. Claims could be asserted in seafaring, but damages over land were not normally reimbursed (see Go 2009).

The isle Texel usually acted as a buffer against water and wind; it shielded the rest of the country. However, the isle could not stop the storm of 1660. Vollenhove describes this as follows: “[The isle] Texel now can't fend off threads: the country's throat is open.” An “open throat” prompts a picture which metaphorically associates the form of the Netherlands with the sagittal section of a scull: The Zuiderzee represents the throat. Such a metaphor might have easily been drawn from anatomical works as by Andreas Vesalius.

Vollenhove personifies the three most economically important rivers of the Netherlands: Maas, Waal, and IJssel. He also considers them to be victims. The storm shook them out of their dream and the poet accusingly asks:

Where can you house all the water, shy rivers,  
since you are used to pouring softly your network of streams  
from your full water pitcher  
into the swollen ocean's belly?  
This plague of the sea comes to torment your streams,  
to conquer them and to chase them from their beds.

Vollenhove presumably decided to work with the rhetorical device of personification to show that the storm not only brought misery to men, but also to nature itself. This rhetorical device serves to mentally cope with the impact of the storm. They now had a scapegoat. The damage the storm had caused was enormous: parts of the country were flooded and the transport networks via rivers were made impassable. Dams and pile works could not prevent this. Whole dikes were “wiped away,” ships sank:

The North and South Sea was full of wrecks,  
masts snapped off, crates and packages,  
and money and property were hurled around,  
and washed ashore along the lifeless coasts  
together with their owners  
who had remained at that place. [...]  
The sea rages and goes its way. [...]  
Yes, the sea [...]  
it howls, and foams, and consumes, and rapes.

Vollenhove asks:

Are wind and weather possessed by hate,  
bitterly furious with our conceit?  
And the wild power of the sea rages  
to avenge itself, it knows how to gain ground,  
in its passage and in its roaring. [...]  
Does the sea seek to repay the Dutch for the  
harm they did by altering the laws of nature without shame?

The poet refers here to dike building. Dikes were used to protect low-lying areas from inundation. Moreover, the Dutch tried to reclaim more and more land. They had altered the borders between land and sea. Vollenhove felt that the Dutch people had lost all respect for nature: his rhetorical questions suggest that he believed this to be the cause of the storm. Vollenhove works with the stylistic device of exaggeration to show the extent of the catastrophe:

In the same way the golf boils among the Indians,  
from the raging of the fierce hurricanes:  
the roaring of the sea, which chases every single ship  
onto banks and cliffs.  
Thus plunged the storm from the clouds,  
so that Latium, with its stones, buildings and peoples,  
and all Sicily were torn apart,  
embattled by the power of two seas.

Neither “the golf among the Indians” nor Sicily were hit by the storm of 1660. To this day Sicily was not “torn apart” by a natural disaster. Vollenhove most likely wants to show with the help of exaggerations that throughout the world storms can destroy countries or tracts of land and their people. He asks: “Whose hair is not bristling in mounds, when the thunderstorm is blowing in?” And he explains that stones were “shattered to dust by the wind,” buildings were torn down and trees uprooted. Furthermore, he explains

“The sun went up more slowly as it became day  
on its trembling wagon  
became very pale in its face.”

These lines show that not only the sun’s but also the Dutch people’s self-assurance was shattered, also with respect to the destruction the storm had caused. Vollenhove notes “the sun took fright and was shy in the light” and then focuses on the storm’s aftermath:

the hand-wringing, fishing for people,  
bellowing of the voiceless cattle,  
the villages submerged in a stormy sea  
drowned pasture by pasture,  
as if the world had sunk away.

The storm victims were weakened (by hunger), soaked to the skin, and stiff from the cold. In order to save their skin they had fled up trees and onto roofs.

Vollenhove addresses the night directly:

Oh night, which grants no beds  
their night's rest, too woeful and anxious,  
we will remember you many a year.

Normally, the night is as a period of rest from the exertions of the day. This night was an exception and full of horrors. That is why, as Vollenhove explains, it will be remembered for a long time.

Singular natural disasters were often interpreted in a symbolic-theological manner in the Early Modern Period, e.g. as God's punishment. Concerning the cause of the storm of 1660, however, Vollenhove, leaves it open who or what—he thinks—initiated the storm. God is only mentioned in the last stanzas when the poet addresses the grassland and free region, symbols standing for the Netherlands:

Blessed grasslands, free region,  
do not be too proud now of walls or fortresses  
or of houses built high up in the sky;  
even if gold is pouring onto your lap,  
even if all seas and waters  
cheer your fleets, so that they ring with laughter,  
even if you—who is well versed with each stream and canal—look in others' maps;  
and fear neither water curse nor robbers,  
a wind, God's breath, is stronger than you.

Vollenhove directs his last lines towards the Dutch. He warns them not to be too proud and points out that they are successful, good with their hands, affluent, and fearless. God, however, is stronger than they are. These lines can also be read as a preventive management strategy. Vollenhove seems to assume that a change in behaviour can avoid further damage and minimise the risk of future catastrophes. In previous lines he refers to the Dutch's arrogance, their plan to subdue the nature and to claim more and more land. It seems that Vollenhove intends to encourage the Dutch nation with his poem to think over their interaction with nature.

### **Concluding remarks**

Comparing the two poems, we see that Vollenhove seems to ascribe the storm a personality he does not understand, whereas Kooch describes the storm in a rather matter-of-fact and demystified way. Vollenhove perceives the storm as an acting agent and tries to conceive it and its severity. As a theologian and priest he knows how to hint at the classics and incorporated spiritual aspects in his poem by including various personifications in his poetics. Vollenhove's poem can be seen as a reminder to people to live a pious life, and by doing so, to attempt to prevent future calamities.

By contrast, the seaman and merchant Kooch describes the storm damages and the feud between his son-in-law and the notary Joris de Wijse, in which he comes to his son-in-law's defence. Construction of his son-in-law's defence, as well as coming to terms with the storm, were important motivations for writing the poem. Moreover, these motives explain the main functions of the poem: defending his son-in-law and coping with the severe storm. Unlike Vollenhove's, Kooch's view is not spiritual but rather secular.

Both Vollenhove and Kooch describe the storm damages. Their description of the storm damages makes it possible to classify the storm with the help of a modern meteorological wind scale, the Fujita scale. It ranges from F0 to F5, which corresponds to 64–116km/h and 419–512km/h, respectively. This scale was designed for classifying tornadoes, but it is also used in standard meteorological procedures to estimate wind speed. According to the damage indicators of the 1660 storm, the wind speed was most likely in the upper F1 range, around 180km/h (Pfeifer 2014: 65).

Finally, it should be mentioned that December 1660 had been a stormy month outside the Netherlands. Johann Conrad Knauth (1722), for example, describes a severe storm in the *Alt Zellischen Chroniken*. It raged in Roßwein near Nossen (administrative district Meißen, Germany) on the second Sunday of Advent and damaged churches, houses, and barns. Moreover, it destroyed gardens and uprooted trees. Knauth states that he had heard that other parts of Germany had also been affected by that storm in December 1660. Christian Lehmann (1747) reports on a severe storm which had raged in several places in Saxony also on the second Sunday of Advent in this year. Churches, houses, barns, and stables were destroyed, more than 100 sheep were battered to death, and approximately 2,000 trees were uprooted. Kooch and Vollenhove do not refer to these calamities.

Apart from their repositories of memory, the severe storm of 1660 has not entered into the cultural memory of the Dutch people. Until now, Torensteg 8 in Amsterdam boasts no commemorative plaque to Kooch and/or the storm damages.

The storm of 1660 was not the most severe in Dutch history. In 1674, for example, a severe storm raged over the Netherlands, which tore down parts of the city of Utrecht, including the nave of the cathedral. With the help of storm damage descriptions in the source material, we can now say that the storm of 1674 most likely obtained a level of F2 or F3, involving wind-speeds ranging from 184–256km/h to 256–335km/h, respectively (Pfeifer 2014: 122). It was thus more severe than the storm of 1660. The cathedral's nave has never been rebuilt. Gerrit Jansz Kooch, who was 76 years old at that time, wrote a poem consisting of 139 stanzas about this storm. Interestingly, Kooch refers to the storm of 1660 in the seventh stanza (my translation):

When Ropoorts-Tower's weather cock—driven by the wind—had begun to fly and  
the strong winds threw the cross from above onto our house, it seemed that we  
would lose our lives.

The fact that Kooch refers again to the weather cock, the damage done to his house, and to the experienced fear of dying indicates that these were most significant aspects of the storm of 1660 for him. They had been etched on his memory.

Both poems by Kooch and Vollenhove demonstrate impressively how they perceived the severe storm of 1660. Consistent with their different backgrounds, the authors produced secular and spiritual disaster narratives, respectively. Thereby, both texts illustrate early modern representations of a natural disaster. Finally, work on historical representations of natural disasters in general helps to remember previously forgotten, or neglected, major events of the past, and thereby allows them to re-enter cultural memory. This article is a first step towards re-remembering the severe storm of 1660.

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## Appendix: The two poems

### Gerrit Jansz Kooch: Grootte sto[r]m 1660

*Van de haene vlucht en de kruijs val van Jan roode poorts tooren opt huys van de notaris  
G. Steeman*

*Als waeter ende Lucht het aertrijck quam bestrijen  
en op de texsel stroom wel hondert scheepen groot  
op sant of plaeten dreef oock na de grond dé gyen  
en over groot getal van menschen bleeven doot  
en dat t on weer ons huijs ten deele oock quam krenke  
steld ick dit vaers int schrift om op dien dach te denke  
den hartsten wint die men doen sach  
was smorgens vroech recht  
voor den dach*

*decembers negenthiende dach  
van sestien hondertsestich Jaren  
een grooten storm men doen sach  
dit meenich mens brocht in beswaren  
veel huijsen van haer dack ontbloot  
veel scheepen voor de stadt omwayde  
de scha int texsel over groot  
veel weeu en weesen dat beschreijde  
veel schoorstenen vielen ter neer  
verschajde huysen plat ter aerde  
veel boomen waeijden oock om veer  
t scheen lucht en aert tsamen vergaerde  
al stont de roopoorts tooren hooch  
de wint die deed het opperst bucken  
men weet niet waer de haen al vlooch  
het kruijs dat brack ons dack an stucken  
de geevel schoorsteen met gedruijs  
quam alles neer als donder slagen  
daer saeten wij doen ondert kruijs  
t waer goet leet niemant swaerder plaegen  
Ick was ontstelt in mijn gemoet  
maer doen ick mijn wel ginck versinnen  
ick docht alst kruijs ons quellen moet  
t is beeter opt huijs als daer binnen*

G[.] I[.] Kooch

*het kruijs van de tooren op de notaris gerrit stemans huijs gevalle sijnde en hij  
rooms gesint geen kinderen hebbende en smorgen op het stadt huijs koomende  
maeckte Joris de Wijse meede notaris metter vlucht dit vaersie*

*'t kruijs van Jan roopoorts tooren vil juijst op Steemans huijs waer om dat heeft sijn  
reen want hij hout veel vant kruijs maer waer om vil de haen daar oock niet op door  
t waeijen de haen en wou niet want sijn haen en wou niet kraeijen*

*also dit vaersie datelijck wat ginck onder al de prachte luys daer meede sij hem wat  
te quellen namen so hebben hem tot syn verschooning geassisteert met dit onder  
staende vaersie*

*Aen de quel geesten van de haene vlucht en kruijs val*

*spot niet om dat het kruijs  
neer viel op Steemans huijs  
de haen daer niet wou rusten  
de haen geen weerga lijdt  
dies Steemans huijs hij mijdt  
en vliecht naer andre kusten  
oft kruijs de pannen brack  
daert kruys blijft buijten t dack  
leeft men in huijs met lusten*

*T kruijs is gevallen want het was heel swear de haen is gevlogen men weet niet waer  
hij stont los opt kruijs en was ongebonden hij vlooch wech en is niet weer gevonden*

*G[.] I[.] Kooch*

## **Gerrit Jansz Kooch: The great storm of 1660**

(English translation by the author)

About the cock's flight and the cross' fall from the Jan Roodepoorts Tower onto the notary's house

When water and air came  
to battle the earth and to ensure  
that about 100 great ships drifted onto  
the sand and banks of stream Texel  
and sank down to the bottom of the sea  
and a number of people died  
the thunderstorm partly damaged our house  
I composed these verses to commemorate this day;  
the severest wind

was early in the morning,  
before the day broke.

On the nineteenth day of December  
of the year sixteen hundred and sixty  
people saw a great storm  
that got some of them in dire straits,

it robbed many houses of their roofs,  
toppled many ships before the city  
the damage on [the isle] Texel was extreme  
many widows and orphans mourned  
many chimneys fell down  
many houses were flattened to the ground  
trees were blown down  
Even if the Ropoorts-Tower remained aloft  
it too had to bow to the wind  
none knows where the cock flew  
the cross—it broke our roof into pieces—  
the gable-chimney fell with a crash  
there we sat under the cross  
it was good that no-one had to suffer a worse trial  
I was shocked  
then I thought it over.  
I thought if the cross had to torment us,  
it was better on the house  
than in the house.

G. I. Kooch

Because the cross had fallen from the towers onto notary Gerrit Steeman's house, who was Roman Catholic and had no children, Joris de Wisje, who likewise was a notary, quickly composed this little verse after Steeman had come to the town hall that morning.

The cross from Ropoorts Tower fell exactly onto Steeman's house. Why? There are reasons for that. Because he [Steeman] loves the cross very much! But why wasn't the cock blown there too? The cock did not want that because his [Steeman's] cock did not want to crow.

So this verse spread immediately among the better circles, which is why they teased him a little. To help him we have composed the following verse.

To the tormentors about the flight of the cock and the cross' fall

Don't scold because the cross  
fell on Steeman's house  
and the cock did not want to rest there;  
the cock does not accept his own kind,  
he shuns Steeman's house,  
because he flies away to other shores;  
although the cross broke the roof tiles  
while the cross rests upon the roof  
people live happily in the house.

The cross fell down because it was very heavy. The cock flew away, no one knows where to. He stood loosely on the cross but was not tied to it. The cock flew away and was never found.

G. I. Kooch

## Joannis Vollenhove: Op den Gruwzamen Nachtstorm

*In Wintermaant des jaars 1660.*

*Disjecitque rates, evertitque æquora ventis.*

*Afgrylsyk nachtgewelt, o wint!  
Hoe valtge aan 't stormen dus ontzint?  
Hoe dus verbolgen opgesteken  
Uit den Noortwesten, en die streken?  
's Lancs koopfortuin had u te vriend  
Met een' voorwint en spoet gedient  
Van alle winden, waar ons zeilen  
De werelt kopen en weer veilen.  
Van kust tot kust, en Hollants vlag  
De zon voorby zeilt en den dag,  
Om onzen zeeleew vet te mesten  
Met d' inkomst van zo veel gewesten:  
Toen quam uw gunst al 't lant te sta.  
Wat hitste nu deze ongena  
Zo schendig op; daarge al uw buien  
Tot ons bederf scheent op te ruien;  
Daar tonnen gouts, in zee gesmoort,  
Met kielen in den gront geboort,  
De Beurs uitschudden en bederven?  
Dit slaat des koopmans hoop aan scherven.  
Wat borg, wat zeeverzekeraar  
Staat voor dees shade in? geen gevaar  
Stopt Tessel nu: 's lants keel staat open.  
Maar och een vloot, eerze uit kon lopen,  
Legt in den schoot van 't Vrye Lant  
Vergaan, verdreven en gestrant.  
De Noort- en Zuidtzeë dryft vol wrakken,  
Gekerfde masten, kist en pakken,  
En gelt en goet, dat onder een,  
Langs al de dootsche kusten heen,  
Geslingert, los komt aangedreven,  
Met eigenaars met al gebleven.  
O Maas, en Waal, en Ysselstroom,  
Wat nachtstorm wekte u in den droom?  
Waar bergtge al 't nat, verlege vlieten,  
Gewoon uw stroomnat zacht te gieten*

*Uit uwe volle waterkruik  
In 's oceaans gezwollen buik?  
Dees zeeplaag komt uw dromen plagen,  
Veroveren, en ten bedde uit jagen.  
Uw vruchtbare akkers leggen blank.  
De zeeplas bruischt, en gaat zyn' gangk.  
(Geen dam noch paalwerk houdt nu tegen)  
Ja gaat met hele dyken vegen,  
En huilt, en schuimt, en scheyt, en sloopst.  
Waar 't vetsfte kleilant onder loopt.  
Zo ziedt de golf by d' Indianen,  
Op 't bulderen der dolle orkanen:  
Een zeedruis, dat schip by schip  
Te berde jaagt op bank en klip.  
Zo stortte 't onweer uit de wolken,  
Dat Latium, met steen en volken,  
En gansch Sicilje scheurt van een,  
Met kracht bevochten van twee zeen.  
Zyn weer en wint, van haar bezeten,  
Op ons verwaantsfceil fel gebeten?  
En woedt het woeste zeegewelt,  
Om zich te wreken, en weet velt  
Te winnen, in zyn' vaart en bruizen,  
Te no gestuit met magt van sluizen,  
Met wint en molens uitgemaalt?  
En poogt de zee heur scha betaalt  
Te zetten aan de Nederlanderen,  
Die haar natuurwet stout veranderen?  
Noch schut geen zeescha 't lantverdriet.  
Wien ryzen al de haren niet  
Te berge, ais 't onweer aan komt snuiven,  
Dat stenen aan hun stof verstuiven,  
Dat want en gevelspits en dak  
Van boven tuimelt, krak op krak;  
Geen' boom alleen rukt van zyn' wortel,  
Maar kerk en toren klinkt te mortel;  
En trest den aardboom met een' schrik,  
Als voor den jongsten ogenblik?  
De zon rees trager op in 't dagen  
Op haren sidderenden wagen,  
Gedootverft in heur aangezicht:  
De zon verschrikte en schroomde in 't licht  
t'Aanschouwen zo veel jammernissen;  
Dat handenwringen, menschevissen,  
  
Dat loejen van het stomme vee,  
De dorpen in een bare zee  
Gedompelt, wei by wei verdronken,*



*Als waar de werelt wechgezonden;  
Den Iantzaat, styf van kou, doormat,  
Van honger flaw, van arbeit mat,  
Op dak, of boom, om zich te redden,  
Gevlucht. O nacht, die gene bedden,  
Hun nachtrust gunt, te droef en bang,  
Gy zult ons heugen jaren lang.  
O stormwint, die elx hart vervoerde,  
En zo verwoedt uw vinnen roerde,  
Uw les quam ons te dier te staan,  
Om haastig in den wint te slaan.  
Gezegent weiland, Vry Geweste,  
Nu draag geen' moedt op muur, of veste,  
Of huizen, hemelhoog gebout;  
Al regent u de schoot vol gout;  
Al juichen alle zeen en wateren  
Uw vloten tegen, datze schateren;  
Al zietge, op ieder stroom en vaart  
Bedreven, andren in de kaart;  
En vreest voor watervloek, noch rover.  
Een wint, Godts adem, mag u over (I).*

### **Joannis Vollenhove: About the terrible night storm (1660)**

(English translation by the author)

About the terrible night storm [which occurred] in the winter month of the year 1660.

Moved by the winds the waves drove the ships apart and destroyed them.  
Terrible night power, oh wind!  
How could you rage so terribly?  
Why have you—[coming] from north-west and these regions—  
increased so furiously?  
You [wind] had been a friend of our country's commerce,  
served by a favourable breeze and haste.  
In all the corners of this world  
where our ships buy the world and sell it again.  
From coast to coast, where Holland's flag  
sails past the sun and the day  
to fatten our sea-lion  
with the earnings from so many regions:  
then your favours for the whole country came to an end.  
What incited your displeasure so wretchedly,  
that you seemed to stir up all your gusts to our ruin;  
that you sank a ton of gold into the sea;  
with keels drilled into the bottom [of the sea],  
that you plundered and ruined the stock market?

This all shattered the merchant's hopes.  
Which guarantor, which maritime insurance  
will cover the damage? No chance of that. [The isle]  
Texel now can't fend off threads: the country's throat is open.  
But, alas, before a fleet could sail  
it lay in the free country's bosom  
bygone, expelled, stranded.  
The North and South Sea was full of wrecks,  
masts snapped off, crates and packages,  
and money and property were hurled around,  
and washed ashore along the lifeless coasts  
together with their owners  
who had remained at that place.  
Oh Maas, oh Waal, oh IJsselstrom [these are rivers]  
which night storm awoke you from your dream?  
Where can you house all the water, shy rivers,  
since you are used to pouring softly your network of streams  
from your full water pitcher  
into the swollen ocean's belly?  
This plague of the sea comes to torment your streams,  
to conquer them and to chase them from their beds.  
Your fertile fields are flooded.  
The sea rages and goes its way.  
(No dam or piles can hinder it now)  
Yes, the sea wiped away whole dikes,  
it howls, and foams, and consumes, and rapes.  
There the rich clay-land is flooded.  
In the same way the golf boils among the Indians,  
from the raging of the fierce hurricanes:  
the roaring of the sea, which chases every single ship  
onto banks and cliffs.  
Thus plunged the storm from the clouds,  
so that Latium, with its stones, buildings and peoples,  
and all Sicily were torn apart,  
embattled by the power of two seas.  
Are wind and weather possessed by hate,  
bitterly furious with our conceit?  
And the wild power of the sea rages  
to avenge itself, it knows how to gain ground,  
in its passage and in its roaring.  
In such great distress will it be stopped  
by the might of locks, of windmills.  
Does the sea seek to repay the Dutch for the  
harm they did by altering the laws of nature without shame?  
And still no vessel can contain the country's distress.  
Whose hair is not bristling in mounds,  
when the thunderstorm is blowing in,

stones are shattered to dust [by the wind],  
walls, gable tops, and roofs  
plunge down from above, breaking and crashing;  
not only trees tear at their roots,  
but also churches and towers shatter;  
and hit the ground with horror,  
as if at the end of the world?  
The sun went up more slowly as it became day  
on its trembling wagon  
became very pale in its face:  
the sun took fright and was shy in the light  
upon seeing so many misfortunes;  
the hand-wringing, fishing for people,  
bellowing of the voiceless cattle,  
the villages submerged in a stormy sea  
drowned pasture by pasture,  
as if the world had sunk away;  
denizens, stiff from the cold, soaked [to the skin],  
weakened by hunger, tired of work,  
fled onto the roof or tree,  
to save their skin. Oh night, which grants no beds  
their night's rest, too woeful and anxious,  
we will remember you many a year.  
Oh stormwind, who seduced everyone's heart,  
and so madly moved your flippers  
we had to pay dearly for your lesson,  
to get rid of it quickly.  
Blessed grasslands, free region,  
do not be too proud now of walls or fortresses  
or of houses built high up in the sky;  
even if gold is pouring onto your lap,  
even if all seas and waters  
cheer your fleets, so that they ring with laughter,  
even if you—who is well versed with each stream and canal—  
look in others' maps;  
and fear neither water curse nor robbers,  
a wind, God's breath, is stronger than you

# Avatar in the Amazon – Narratives of Cultural Conversion and Environmental Salvation between Cultural Theory and Popular Culture

By John Ødemark

## Abstract

In 2010 the *New York Times* reported that ‘[t]ribes of Amazon Find an Ally Out of “Avatar”’, James Cameron. The alliance was against the building of Belo Monte, a hydroelectric-dam in the Xingu River in Brazil. Cameron made a documentary about Belo Monte, *A Message from Pandora*. Here he states that *Avatar* becomes real in the struggle against the dam. This appears to confirm U. K. Heise’s observation that the ‘Amazon rainforest has long functioned as a complex symbol of exotic natural abundance, global ecological connectedness, and environmental crisis’. This construal, however, downplays the ‘symbols’ cultural components. In this article I show that the image of an ecological ‘rainforest Indian’ and a particular kind of culture constitutes a crucial part of the Amazon as ‘a complex’ cross-disciplinary ‘symbol’. Firstly, I examine how an Amazonian topology (closeness to nature, natural cultures) is both a product of an interdisciplinary history, and a place to speak from for ethno-political activist. Next I analyze how Amazonian cultures have been turned into ‘ethnological isolates’ representing a set of grand theoretical problems in anthropology, not least concerning the nature/culture-distinction, and how environmentalism has deployed the same topology. Finally I examine how *Avatar* and one of its cinematic intertexts, John Boorman’s *The Emerald Forest*, is used as a model to understand the struggle over the Belo Monte. In a paradoxical way the symbolic power of indigenous people in ecological matters here appears to be dependent upon a non-relation, and a reestablishment of clear cut cultural boundaries, where ‘the tribal’ is also associated with the human past. Disturbingly such symbolic exportation of solutions is consonant with current exportations of the solution of ecological problems to ‘other places’.

**Keywords:** Avatar, Amazonia, Environmentalism, Narrative and Indigeneity, Cultural Theory

The Amazon is home to hundreds of indigenous communities with traditions of stewardship dating back thousands of years. And yet the Amazon serves an even greater purpose for all life on Earth: it is the living heart of our planet and the heat pump of our global weather system. Without it, our chances of stopping global climate chaos are zero. *For no reason less than the survival of our species*, we need your support to protect the Amazon today.

Amazon Watch (2013a)

## Introduction

In April 2010 the *New York Times* reported that '[t]ribes of Amazon Find an Ally Out of "Avatar"' (New York Times 10/4/2010). The alliance in question was formed between James Cameron, the director of *Avatar*, and indigenous people against the building of Belo Monte, a hydroelectric-dam in the Xingu River, a tributary to the Amazon in the state of Pará, Brazil. Opponents of Belo Monte identify damaging cultural and ecological consequences; deforestation and flooding threatens local biodiversity, as well as the global climate due to massive emission of methane. Moreover, the forced displacement of about 20 000 people will have severe consequences for indigenous cultures (Hall et al 2012).

Cameron made a documentary about his journey to the Xingu to fight the dam, *A Message from Pandora* (2010). Here he asserts that *Avatar* (2009) becomes real in the struggle against the Belo Monte. Further, the film shows how the director and leading actor joins indigenous leaders and 'lives *Avatar*'. For instance, we see how Sheyla Juruna, a leader of the Juruna people, paints Cameron's face and greets him as 'our new warrior' – a sign of alliance and cross-cultural collaboration eminently readable in global public culture.

Such co-authored symbolic actions appear to confirm Ursula K. Heise's observation that the

Amazon rainforest has long functioned as a complex symbol of exotic natural abundance, global ecological connectedness, and environmental crisis in the European and North American public spheres (2008: 91).

Yet Heise's construal downplays a crucial component of the 'complexity' of this 'symbol'; its underlying assumptions about 'tribal culture', and how it is constituted by acts of cross-cultural collaborations based on such assumptions. In this article I shall show that the image of the 'rainforest Indian' and a particular kind of culture constitutes a crucial part of the Amazon as 'a complex' and cross-disciplinary 'symbol'. In the words of Stephen Nugent, the 'iconic forest Indian [...] embody the

*anti-history* of the *ancient tribal isolate* yet also exemplify the survivor of a crushing set of *historical transformations*' (2007: 16, my emphasis). Thus, this iconic figure is placed outside history, in a cultural 'isolate', while he/she simultaneously is a 'survivor' of history (cf. Ramos 1998).

My aim is to examine some salient, cultural and human aspects of the 'complex symbol', and how it is articulated with the paradoxical topology and temporality described by Nugent. I shall be concerned with how different discourses converge around 'the rainforest Indian' and his/her construal of nature, and how particular notions of cultural place and time are mobilized. My main focus will be upon how notions of 'global ecological connectedness' is constructed as a *symbolon* in the etymological sense of the word,<sup>1</sup> namely a token of an alliance, a bond, between 'local' men in the Amazon and 'global humanity', and how certain notions of culture underpin such alliances between 'local men' and the *Anthropos*.

In environmentalist deployments of the 'symbol' Amazonians are construed as local forest keepers for global humanity. In the language of the NGO *Amazon Watch*, for instance, indigenous people are both an instrument for 'our' salvation; as 'the stewards of our planetary life-support systems' they play a global environmental role, and a source of ecological knowledge associated with ancient and indigenous knowledge that 'we' have forgotten: 'The indigenous peoples of the Amazon have long known this simple truth: what we do to the planet we do to ourselves' (Amazon Watch 2014).

This topology (ancient and/or alternative knowledge is found 'there') is also in play in recent cultural theory, not least in attempts to dismantle what is construed as the Euro- and anthropocentric assumptions underpinning the modern nature/culture-distinction. Amazonian perspectivism has, for instance, been a major influence behind the 'so-called ontological turns' (Halbmayer 2012: 9). If based on a different cultural theory than environmentalist 'essentialism', the topology is surprisingly similar; real/new knowledge about nature and culture is to be found, there, in a 'tribal isolate' on the outside of historical time.

A brief tour through the intellectual terrain and the issues associated with perspectivism as a cross-cultural alternative to 'our' notions of nature and culture both illustrates the power of the topology I am concerned with, its 'survival' in high theory, and it offers a set of categories that can be used to analyze the notion of the 'indigenous isolate'. Vassos Argyrou claims that environmentalism has produced a shift in cultural interpretation. He asserts that the exemplary anthropological problem was how to interpret 'natives'' disregard for the demarcation that separates nature, culture and the supernatural – without falling back on evolutionary ethnocentrism (2005: 64-65). The solution was to produce thick descriptions in which the informant's statements about animistic nature were converted into symbolic statements about society (magic was 'really' a social-symbolic event, not an attempt to cause changes in nature). Thus, the demarcation between nature and culture is re-



stored in the anthropological discourse, and the ‘native’ is freed of charges of making category mistakes (constructing an anthropomorphic nature). If, however, it is admitted that indigenous peoples have real insight in ecology, this kind of cultural translation becomes redundant. Now, natives ‘mean what they say and much of what they say is true’ (ibid: 65). As ecology the ontology of others can be taken at face value. Nevertheless, Argyrou claims, the ‘green primitive’ is still seen as a link to past forms of thought that ‘we’ have forgotten: ‘[n]ative populations are once again used as key building blocks in the latest Western constructs – the environmentalist vision of the world’ (ibid: 72).

Amazonian perspectivism could be seen as a case in point. According to Eduardo Viveiros de Castro, its main advocate, Western multiculturalism – i.e. the assumption that the world consist of different cultures that construe the same nature differently, the objective world of the natural sciences – is reversed in Amazonian cosmology. Here the original state of all beings is culture, not nature. All beings have soul and share the same cultural project, values and categories; they just perceive their external bodily shape (nature) differently. While the Jaguar may seem (to us) to be sipping the blood of his prey, he is ‘really’, from his own perspective drinking manioc bear. Thus multiculturalism is turned into multi-naturalism. If we turn to one of the ethnographic influences behind Amazonian perspectivism, Kai Årheim’s ‘Ecosofía Makuna’, we actually find that the anthropological and the environmental registers are fused. According to Årheim, the ‘integrated system of ideas’ of the Makuna and the ‘values and practices’ underpinning it, constitutes a ‘shamanistic ecosophy” that is comparable to the eco-philosophy of Arne Næss. This is so because both ‘systems’ invest nature with value (Årheim 1993: 122). Therefore, the shamanistic eco-philosophy, found ‘elsewhere’, provides a lesson in sustainable living for the secular and industrialized world (ibid).

Orin Starn has observed that perspectivism is based upon ‘the idea of discrete and bounded cultures’, along with ‘the treatment of “other” cultures as a kind of laboratory’ and ‘the complete absence of any reference to history’ (2012: 193-94). Moreover, Alcida Ramos has attributed this a-historic essentialism to an heritage from structuralism: ‘perspectivism replicates structuralism [...] without the latter’s ambitious quest to arrive at a universal human mind frame’ (2012: 483). Not least this is due to the fact that perspectivism is based upon a structural comparison of distinct cultural wholes, a cross-cultural topology, that turns out to be perfect inversions of each other in respect to how they construe the nature/culture-relation, the key distinction in ‘high-structuralism’ (Turner 2009).

Despite the absence of a concern with the history and the networks behind the production of this global comparison between Western and Amerindian ontologies, Bruno Latour views Amazonian perspectivism as a ‘bomb’ undermining the cleavage he associates with the modern demarcation of the relation between nature and culture. Moreover, Latour praises perspectivism as the beginning of ‘a bright new period of flourishing [...] for [...] anthropology’, and relates this to a situation of

ecological peril: the bomb is about to go off ‘now that nature has shifted from being a resource to become a highly contested topic, just at the time [...] when ecological crisis [...] has reopened the debate that ‘naturalism’ had tried prematurely to close (2009: 2). In a time of ecological crisis, then, there is an Amazonian foreshadowing of a rupture with ‘the modern constitution’ (parallel to the one taking place in theory). In this ‘constitution’ science is deemed not to be a social product but to be derived from a sphere of nature that existed apart from humans. This demarcation, however, is merely a fact of theory. If we turn to socio-cultural practice, we find processes of translation and mediation that constantly interlink the two domains; all objects are essentially nature/culture-hybrids. These mediations are further balanced by processes of purification that aim to clean up categorical confusions by re-establishing the borders between autonomous nature and the human products of culture. In our context it is highly relevant that the modern dichotomy of nature and culture lies behind the asymmetrical distinction between ‘us’ and ‘them’. Thus, while we shall be critical to the clear-cut topology that enables Latour to prioritize the ‘hybrid’, he also furnishes us with a workable description of the indigenous as a projection or inversion of the ‘ideal self’ of the ‘moderns’:

In order to understand the Great Divide between Us and Them, we have to go back to that other Great Divide, between humans and nonhumans [...]. In effect, *the first is the exportation of the second*. We Westerners cannot be one culture among others, since we also mobilize Nature. We do not mobilize an image or symbolic representation of Nature, the way other societies do, but Nature as it is [...] (1993: 97).

It is this export/import-system, then, that creates the anthropological object, cultures that do not uphold the division between nature and culture. Moreover, we could also say that it also creates the need for the importation of cultural wholeness and ecological salvation, or ‘bombs’, imported from other places. Besides, there is also a long history of mobilizations of ‘traditional cultures’ to establish symbolic reconciliation between nature and culture in the aesthetic realm (*Avatar* being a late case in point). Richard Bauman and Charles Briggs have been concerned with such mediation. They argue that

Latour’s formulation [...] left out two of the key constructs that make modernity work and make it precarious! We can refer to them in short hand as language and tradition (2003: 5).

According to these authors, the textualization of oral culture and tradition played a key role in the construction of modernity (2003, cf. Grossberg 2010: 88-89). The textualization of ‘others’, however, they explained with reference to Latour’s notion of mediation and purification: Texts accounting for ‘pure, traditional cultures’ had to be cleansed for traces of the cross-cultural contact that were their empirical enabling condition, so that a pure ‘other’ could be represented.

In the following I examine such processes of cultural mediation and purification between nature and culture, tradition and modernity, in different discourses and

cultural genres. I first examine how a shared Amazonian topology (closeness to nature, natural cultures) is both a product of an interdisciplinary history, and a place to speak from for ethno-political activist. Next I examine the manner in which Amazonian cultures have been turned into metonyms for a set of grand theoretical problems in anthropology, not least concerning the nature/culture-distinction. Finally I return to *A Message from Pandora* and examine the use of *Avatar* as a narrative model and metaphor to understand the Belo Monte case. *Avatar* quotes John Boorman's *The Emerald Forest* (1985), filmed in the Xingu and dealing with the conflict between ecologically rooted cultures and techno-industrial modernization. In a paradoxical way, then, the symbolic power of the eco-cultural bond here appears to be dependent upon a non-relation, and a reestablishment of clear cut cultural boundaries, where 'the tribal' is also associated with the human past. Disturbingly such symbolic topographies are consonant with current exportations of the solution of ecological problems to 'other places' – an exportation that makes possible the continuation of "our way of life, for instance through a carbon capitalism often rejected by indigenous peoples (e.g. *The Amazon fund*).

### **Cultural Topology and Amazonian Ecology**

Marilyn Strathern (1991) has suggested that particular culture areas are transformed into common places where particular research topics must be dealt with by anthropologists (e.g. Australia= kinship). In line with this we could say that Indigenous Amazonia has served as a topos for the inquiry of the nature/culture-distinction. Not least, this was a consequence of structural anthropology and, as sketched above, the work on Amazonian perspectivism reworks an old locus (Turner 2009). To Strathern's notion of a geographical distribution of research themes, we should add that topics in anthropology both come from, and are translated back into, popular culture, as we shall see below in the case of *Avatar* and *The Emerald Forest* (Nugent 2007).

Furthermore, indigenous people in the Amazon have successfully mobilized notions of ecology and culture to form intercultural bonds with NGO's and celebrities like Cameron. In the wording of Beth Conklin and Laura Graham, a 'shifting middle ground' has been 'founded on the assertion that native's peoples' views of nature and ways of using natural resources are consistent with Western conservationist principles' (1995: 696). Hence, notions of conservation have served as a cross-cultural common ground constructed upon the assumption that respect for nature is an intrinsic part of the culture of 'the Ecologically Noble Savage' – a new version of an older primitivist ideal of 'people dwelling in nature according to nature, existing free of history's burden and the social complexity felt by Europeans' (Berkhofer quoted *ibid*).

The struggle over Belo Monte testifies to the continued relevancy of Conklin and Grahams' conceptualization. Tracy D. Guzmán has observed that 'opposition

[to Belo Monte] is articulated more frequently in relation to economics and the environment than it is in relation to indigenous human rights' (2013: 172). Nevertheless, notions about ecological insight in 'tribal' zones ultimately hinge upon Western notions of indigenous culture and cultural history that are also reemployed in eco- and ethnopolitical discourses. One case in point is the occupation of Belo Monte in July 2012 when more than 300 people from 21 indigenous villages and 9 different ethnicities occupied the construction site (Amazon Watch 6/12/2012). On the demonstrators' website, *Ocupao Belo Monte* (Occupy Belo Monte), we find a moving request for political support along with a self-presentation, which also marks cultural contrasts:

We are people who live in the rivers where dams are being built. We are Munduruku, Juruna, Kayapo, Xipaya, Kuruaya, Asurini, Parakanã, Arara, fishermen and riverine. The river is our supermarket. Our ancestors are older than Jesus Christ (Amazon Watch 2013).

The slogan 'Occupy Belo Monte' inscribes the protestors in a global struggle against neo-liberalism. At the same time, indigenous activist are claiming a differential cultural identity within the 'global series' of protest (Occupy Wall Street etc.). The cultural contrast is made with reference to forms of subsistence and religion: indigenous religion is deeply rooted in the land; it outdates the Portuguese and Christian colonization. Further, the river about to be dammed is an equivalent of 'your supermarkets'. These contrasts underscore the closeness – and dependency – of a way of life upon a particular habitat. Moreover, they indicate that claims for cultural difference through ancestry and indigeneity, a deep history in a particular habitat, are premises for claims about conservation.

Even if the shifting middle ground is, precisely, 'shifting', many of the cultural assumptions it is based upon belong to a cultural topology – locating 'tribal isolates' outside historical time – with a long *durée*. Nugent, however, also underscores that 'essentialist features of Amazonian Indians have contributed in vital ways to the defense of the modern Indian and some improvement of life chances (2007: 59). More generally, Anna Tsing has warned that scholarly fear of 'simplistic representations of wild nature and tribal culture' may lead to the dismissal of 'some of the most promising social moments of our times', namely alliances between 'tribal' peoples and environmentalist NGO's (2008: 409 and 392). Tsing, however, also recognizes that empowering 'green development fantasies' (2008: 393) are conceived in Western language and based upon stereotypical conceptions of tribal cultures: '[O]ne must have a distinctive culture worth studying and saving' to enter international eco-cultural alliances (ibid). Thus, particular notions of cultural distinctness and authenticity serve as both a model *of* the real (there *are* authentic tribal cultures), and as a normative model *for* the formation of the eco-cultural bond between indigenous peoples and NGO's (alliances *should be* formed with 'pure cultures' worthy of aid). To have a distinct culture involves living up to standards imported from abroad. Regularly this also implies erasing long histories of contact and

prior ethnographic translations. For many ethnopolitical projects that also implicates translating oneself into the conceptual schemes of the ‘West’ (ibid) – or, as Manuela Carneiro da Cunha asserts to pass from being ‘culture in itself’ to having ‘culture for themselves’, i.e. turning ‘culture’ into a category of self-identification. This, however, ‘is a double-edged sword, since it constrains its bearers ostensibly to perform their culture’ with reference to imported criteria (2009: 3). In the next part I examine how Amazonian Indians has been turned into a figure for basic anthropological patterns – patterns that have been reemployed in the shifting middle ground. Then I turn to some formal similarities between the construction of the anthropological and environmentalist symbolon.

### **Ethnological Isolates between Evolution and Devolution**

We can use what Michel de Certeau calls ethnological form to analyze the conversion of local topology into a global symbolon. Using a culinary metaphor, de Certeau identifies a particular modern model for producing cultural theory by creating bounded ethnographic places, isolates, and then transforming these into figures for the human in general:

Using the imperatives that punctuate the steps in a recipe, we could say that this theorizing operation consists of two moments; first *cut out*; then *turn over*. First an ‘ethnological’ isolation; then a logical inversion. The first move cuts out certain practices from an undefined fabric, in such a way as to treat them as *a separate population*, forming a *coherent whole* but *foreign* to the place in which theory is produced. [...] The second move turns over the unit thus cut out. At first obscure, silent, and remote, *the unit is inverted to become the element that illuminates theory and sustains discourse* (1984: 62).

de Certeau uses Freud and Durkheim as examples; both reads a universal structure and their own theoretical keywords (The Oedipus-complex, totemism) into and out of ‘isolates’ (the ‘primitive horde’, the Arunta). Local details thus become instantiations of anthropological principles. Through the explanation of that which at first seems inexplicable, theory becomes ‘panoptic’, it ‘sees everything, explains everything’ (ibid). Likewise, Amazonian cultures were ‘cooked’ in Claude Lévi-Strauss’ work on myth. Here Amazonians were first assigned a cultural place foreign to ‘ours’, next they were turned into ‘a metonymic figure of the whole species’ (the Anthropos) by furnishing the local ‘reference myth’ from which the anthropological inquiry of the nature of mythical thought departed (ibid). Bororo myth served as an instantiation of the nature of human mind, and the idea that myth, like the ‘modern constitution’, was founded upon a distinction between nature and culture, which it sought to mediate by creating hybrid entities that traversed the space between the binaries. Essentially, the empirical reference myth illuminated the theoretical premise it was cut out to exemplify in the first place.

Concomitant with this structuration of part and whole in scientific structuralism, a temporal poetics of otherness was at work. Lévi-Strauss despaired over ‘the cannibalistic’ nature of the historical process, and how indigenous peoples have been trapped in ‘our mechanistic civilization [...] like game birds’ (quoted in Silver 2011). His sense of loss is brutal in his comparison of present informants with the past. Living Amazonians were ‘enfeebled in body and mutilated in form’, and not more than ‘a handful of wretched people who will soon, in any case, be extinct’ (quoted in Rabben 2004: 37). Thus, the ‘isolated population’ of the ethnographic present is timed – it is only a ‘fallen’ fragment of the former culture doomed to disappear. This notion of inevitable loss binds Lévi-Strauss’ scientific anthropology to a Rousseauian sentiment significantly older than structuralism (Derrida 1976: 107-144, Williams 1973). To conceptualize this temporal sensibility, we can generalize what Allan Dundes – commenting upon the tacit assumptions of folklore studies – has called the devolutionary premise. Dundes refers to an assumption of a temporal nature: The present state of cultural items and in some cases whole cultures is a mere fragment of the authentic artefact and/or cultural past.<sup>2</sup> As in Lévi-Strauss loss is inevitable, ‘[a] change of any kind automatically moved the item from perfection toward imperfection’ (1969: 8). This notion of devolution assumes that certain cultural items and types of culture are doomed to ‘decay through time’ (ibid: 6). Figures like ‘[t]he noble savage’ and ‘the equally noble peasant’ were destined to lose their authentic culture ‘as they marched ineluctably towards civilization’ (ibid: 12). Devolution, then, in this Romantic version, is actually a side-effect of evolution and modernization seen as normative and inevitable temporal processes bound to uproot ‘tradition’. Accordingly, devolution is only in play when a valued cultural item (a folktale) or cultural whole (indigenous cultures) comes into contact with the ‘cannibalistic’ historical process. This assumption of inevitable cultural devolution leads ethnographers to seek for ‘ethnological isolates’ comparable to those involved in the culinary poetics of cultural knowledge described by de Certeau. However, it also lies behind a preference for ‘isolates’ assumed to be ancient, and strategies of purification similar to the ones described by Bauman and Briggs. To seek for “pure” precontact cultural data, [s]tudents of the American Indian’, Dundes states, ‘would often write up their field data as if the Indians had never been exposed to or affected by acculturative European influences’ (ibid: 8). The mutual dependency of evolution/devolution, modernity/tradition actually furnishes an explanatory context for Nugent’s paradoxical topology where the ‘iconic forest Indian’ simultaneously ‘embody the anti-history of the ancient tribal isolate yet also exemplify the survivor of a crushing set of historical transformations’. We shall see some example of such temporal purification in the filmic constructions of an eco-cultural symbolon in the next part, and relate them to some paradoxes concerning eco- and ethnopolitical agency.



## The Past as Salvation

In environmentalist discourses on indigenous cultures in the Amazon the ‘separate population’ living in a ‘foreign place’ is not only an empirical ‘isolate’ where cultural theories are tested. As we saw in the introductory quotations from *Amazon Watch*, indigenous people, the ‘ethnological isolate’, play a vital role for planetary survival. A salient case in point from the Xingu is the intervention of Sting in rainforest politics in the 1980’es. On the webpage of the *Rain forest foundation*, and in a text that could be read as its charter myth, it is underscored that Sting’s intuitive understanding of the link between man and forest has been corroborated by climate science. Here the eco-cultural symbolon is already in place:

Twenty years ago, Sting went into the Xingu region of Brazil for the first time. He observed the deforestation of the Amazon first-hand, seeing vast stretches of barren land that had once been forest. He had the intuition then that the forest was important, and that those who lived there would best protect it. Today, scientists are recognizing that intuition as true, especially in the context of global warming (Rainforest Foundation n.d.).

A bond between people living ‘there’ and global humanity is formed. The survival of local cultures, in a particular environment, safeguards against global warming, while indigenous peoples, ‘those who lived there’, serve as mediators between life and death by preserving the forest, a life-sustaining force, and thus opposes barrenness and death.

The presence of indigenous peoples is of vital importance not only for the local eco-system, but for all men, the whole planet. In the vocabulary of narratology, we could say ‘those who lived there’ are turned into an actant of ‘helpers’ in a global drama (Rimmon-Keenan 1989: 34ff). Indigenous Amazonians illustrated general theory in the text of anthropology, and even furnished, through anthropological mediation, a ‘bomb’ that could shatter ‘our’ constitution. A symbolon between local culture and global humanity is formed also here: Now, however, it is ecological survival on earth that is at stake, not the epistemic bond between ‘natural men’ and the common cultural constitution of humanity. The role as stewards of the rainforest is linked to notions of Amazonians living close to nature, but even if planetary and panhuman future depends upon indigenous people living ‘there’, the foreign place is simultaneously associated with the past of humanity. The sign associated with human origins, the lost past that Lévi-Strauss mourned, is ‘turned over’ and converted into a hope for the future. Sting makes the temporal translation thus:

We are paying homage to our primeval history. We have stepped back to the Stone Age [...]. In some ways Western man is in reverse evolution, we’ve forgotten our real potential. The Xingu can remind us of what we really are (quoted in Oakedal 2005: 25)

This notion of cultural time could be construed as an example of what Johannes Fabian has called the ‘denial of coevalness’, namely a ‘tendency to place the refer-

ent(s) of anthropology in a Time other than the present of the producer of anthropological discourse' (1983: 31). Thus Fabian refers to how the informant (the *Xinguanos*), with whom the travelling anthropologist/environmentalist necessarily shares time, is delegated to the past in the text that accounts for the encounter (a travel in space is converted into a travel in time, to the Stone Age). In the eco-cultural middle ground, however, there is symbolic capital associated with the appropriation of what Fabian mainly sees as an asymmetrical form of 'othering' – based upon progress as the yardstick. But it is precisely the 'survival' of a link in indigenous culture to a forgotten wisdom that furnishes many ethno-political moments with a recognizable place to speak from: 'Our ancestors are older than Jesus Christ'. Moreover, as Sting states, Xingu is a place where 'we' are 'reminded' of a human essence that we have forgotten. This illustrates nicely another facet of the premise of devolution: If devolution and evolution really are co-dependent historical temporalities, this 'struggle' also occurs inside 'the moderns' who loose contact with their fundamental humanity as a consequence of the 'civilizing processes'.

I shall now turn to how such conception of culture, time and ecological salvation are calibrated in popular culture. The point of departure for this is Cameron's documentary about the struggle in the Xingu, *A message from Pandora* (2010), and how this film cites *Avatar*.

### ***Avatar* and the Shifting Middle Ground**

The message of the documentary comes from a fictive place; Pandora. In *Avatar* (2009), Pandora is the name of a planet colonized by humans in need of natural resources (in Greek myth, it connotes both destruction and hope). On the one hand, *Avatar* serves as a model for understanding the Belo Monte conflict. But on the other, Belo Monte is also inscribed in the cosmological plot of *Avatar*. By being inserted in the DVD special features edition of *Avatar*, the story about the dam, we could say, becomes an embedded tale from the real. This also furnishes contemporary eco-political relevancy to the fictive film. Moreover, the cast of *A Message from Pandora* includes Sigourney Weaver and Joel Moore, who played characters that joined forces with the endangered indigenous people in *Avatar*. Intriguingly, Weaver and Moore thus serve as a kind of meta-avatars; even if they are casted as themselves, they also carry with them the symbolical power of the film and the narrative functions of the characters in the actant of 'good white men'.

In contrast to the tight plot of *Avatar*, *A Message from Pandora* has but a soft narrative structure. It begins with a sequence of images of global, environmental degradation. These introductory images – related by a common theme, global destruction – are accompanied by Cameron's voice over, an autobiographical account of his ecological awakening. Next we see footage from the journey to the Xingu and the fight against Belo Monte. The documentary ends with Cameron asserting that 'we' cannot live as the indigenous people of the Amazon, and that they, in any

case, do not want us there. What *we* have to do to live sustainably is to merge the tribal with the technological, and thus create a global techno-culture saturated by tribal insights. *Avatar* could actually be seen as an example of this, for here a tribal and ecological message is produced with the aid of particularly advanced visual technology, but as we shall see, the story of *Avatar* actually takes us in the opposite direction.<sup>3</sup>

Let's turn to some of the plot features in *Avatar* that might lie behind the assumed equivalence between the fictive film and the Belo Monte struggle. Applying the language of metaphor-studies, we could call the domain to be illustrated the target domain (Belo Monte) and the domain used to illustrate the source domain (*Avatar*) (Kövecses 2002: 15ff.). A synopsis of the plot, seen as a source domain, could go as follows. In 2154, Pandora is colonized by humans backed by military might and corporate power. The aim: to extract a mineral (ironically) called unobtainium. This causes a threat to the indigenous people of the planet, the Na'vi, who live in harmony with nature. Avatars, external techno-bodies modelled upon Pandoran bodies, are developed to study the nature-culture of Pandora in an atmosphere hostile to human biology. Grace Augustin, a xenobotanist, leads this research, while Jake Sully, a former marine confined to a wheelchair, is recruited as a fieldworker. By controlling the avatar with his mind, Jake can move among the natives. In the process of the investigation, however, Jake and Grace 'go native'. This change of allegiance is due to their disgust with the ruthless use of power of the colonizers, an increased understanding of the Na'vi's ways, and, in Jake's case, a romance with Neytiri, a native woman.

Starting with its very title, *Avatar* stages a mind/body-split routinely associated with the 'modern constitution'. This split is reconciled at the end, when Jake becomes a Na'vi, and is able to walk again. Becoming indigenous, then, also heals Jake's injured body. After a healing ritual invoking the maternal goddess, Jake leaves his damaged biological body behind. The conversion is irreversible; the avatar now becomes his permanent body. It is significant that a trace of the colonizing techno-culture will remain on Pandora, even after the colonizers have returned to earth and the original eco-cultural harmony is restored. As mentioned, *A Message from Pandora* ends with a hope; that 'we' can develop a 'techno-tribal' culture 'at home' and stop the intrusion in the Amazon. The end of *Avatar* appears to be an inversion of this. The film deploys advanced technology to reconstitute a 'pure' tribal culture at the end of the film. Thus, the role of cinematic technology, and the avatar in the plot, is to save and re-purify an authentic tribal zone threatened by eco-cultural destruction. To be a source of values and an eco-cultural example 'to us', the 'tribal' apparently have to be situated in an isolated elsewhere; a space different from the one in which theory and movies are produced.

## **Ethnological Isolates, Ecological Connections**

In 2154, Gaia has already been turned into a wasteland by forces similar to the ones now afflicting Pandora.<sup>4</sup> In the narrative logic of *Avatar*, the ecological devastation on earth leads to the export of an unsustainable regime of extraction to space. Thus, the (future) colonization of Pandora is construed as a repetition of environmental disaster on earth.

If *Avatar* is lived out as reality in the Xingu and other asymmetrical contact zone where extraction meets tradition, this implies that the fictive chronology is synchronized with the real time of Belo Monte. The complexity of this narrative and temporal conjuncture is underscored by the way the concrete threat of Belo Monte for people in the region is associated with the mythical and cosmological generality of *Avatar*. The plot of *Avatar* is developed in the tension between the animistic life force of natural cultures and a death producing culture of extraction. On Pandora, it is a planetary nature-culture, not a 'mere' local, cultural adaptation to a particular environment that is threatened. The use of *Avatar* as a narrative model thus appears to underscore the role of the Amazon as a scene where a struggle of global importance is played out.

The documentary is obviously produced after *Avatar*, but with reference to the fictive time frame of *Avatar* – where the devastation of Gaia has already occurred – it is implied that the chain of events leading to the destruction of earth is at work 'now' in the Xingu. Stopping Belo Monte, therefore involves, in this logic of narrative embedding, preventing the destruction of earth. This turns what could be construed as a 'mere' local struggle into a struggle of cosmological proportions: Making a narrative inference that blends the time scales of fact and fiction, we could say that stopping Belo Monte would stop the regime, the actant, that eventually will result in the colonization of Pandora. Thus, the narrative merger of *Avatar* and Belo Monte inscribe local indigenous cultures in a cosmological drama similar to the one the *Rain Forest Foundation* and *Amazon Watch* outlined to spell out the consequences of deforestation; it is not only about the people living in the forest, it is also about 'us' and the very future of the Anthropos.

## **Indigenous Culture – Importing the Export/Import-System**

The notion of 'Avatar happening here' hinges upon the assimilation of the Na'vi with the indigenous people of the Xingu. The Na'vi has a range of positive traits routinely associated with indigenous cultures: They live close to nature, treat nature with animistic respect. On the negative side, the Na'vi becomes victims of modernization and 'development' schemes that destroy the complex eco-cultural whole in which their traditional forms of life ways are embedded. Thus, they also share an identity with other 'victims' of the cannibalistic historical process, as objects of the actions of the actant of modernity.

Critics have noted that the image of the Na'vi is a stereotype, an inversion of the 'modern culture' and 'rationality' that defines 'us'; that they are depicted as 'irrational' and 'retarded', as 'plain Indians in sci-fi drag', and based upon 'exotic tropes and colonial paternalism' (Benjaminsen & Svarstad 2010: 11, Starn 2012 179, Clifford 2011: 218). The point about the inversion is formally true, but it misses the content of the romantic counter concept of noble savages and ecological Indians, notions that are the cultural conditions for the ecological middle ground. The Na'vi are also 'consistent' with Western notions of conservation, and they are never construed as childish animists with 'irrational' beliefs about nature. On the contrary, real communication takes place between man and nature on Pandora.<sup>5</sup> This positive stereotype is certainly also constructed through inversion, but the Na'vi does not (only) represent the basic human building blocks that 'we' have evolved from, they also evoke what 'we' have lost; how a certain evolution has caused cultural and natural devolution by estranging man from nature.

The traits listed above could be seen as a product of Latour's 'export/import system' (the Na'vi does not distinguish between nature and culture) and thus just a function of this modern machine for making otherness. The cultural traits in play in both *Avatar* and *A message from Pandora*, however, are also similar to the ones used as contrastive markers of identity in the *Occupy Belo Monte* blog and other instances of eco- and ethno-political activism. And in the case of the equivalence between *Avatar* and the Belo Monte, an Indigenous leader in the Xingu, Arara, is reported to have confirmed it, using the movie as a narrative middle ground: "What happens in the film is what is happening here", while the Achuar leader Luis Vargas also saw it as a good narrative example of relations between the state, corporate power and indigenous people in Ecuador (New York Times, 10/4/2010, Adamson 2012).<sup>6</sup> Hence, we should not (simply) accuse Cameron for 'representing' others in a stereotypical way; he might actually also be *quoting* Indigenous people who has made the same cultural distinction long before the arrival of *Avatar* in the Amazon.

Indigenous activists, it seems, have imported the export/import-system and reemployed it for their own purposes – to export an image that can be calibrated with 'Western notions' of the tribal. To some extent such importation explains how the eco-cultural middle ground is constituted as a co-authored space. But through such importation and the concomitant exportation of an image of 'distinct cultures', indigenous people have in practice also moved out of the binary structure of the 'modern constitution', as well as the binary that grounds the discourse on perspectivism. For in this shift 'culture' has become a category of self-identification, as well as a vital rhetorical resource. Suzanne Oakdale relates an anecdote that can serve as example: In a bus, on the way to the Earth Summit a leader of the Kayabi-people from the Xingu indigenous park advised his compatriots to take off all Western clothing and don garments that would indicate authenticity. By presenting themselves in traditional gear, he proclaimed, they would also be received as carriers of a distinct indigenous '*cultura*'. Thus, the Portuguese word was imported to

re-conceptualize Kayabi heritage from a culturalist perspective through an act of 'self-purification' (2002).

### **A Tale of Cultural Conversion**

Cameron has stated that there is 'some heritage linking it [Avatar] to "Dances With Wolves"', most importantly the motif of 'a battered military man who finds something pure in an endangered tribal culture'. Moreover, he goes on

You see the same theme in [...] 'The Emerald Forest,' which maybe thematically isn't that connected but it did have that clash of civilizations or of cultures. That was another reference point for me. [...] I just gathered all this stuff in and then you look at it through the lens of science fiction and it comes out looking very different but is still recognizable in a universal story way (Los Angeles Times 14/7/2009).

The use of *Avatar* to target Belo Monte evokes a set of filmic intertexts and tales 'recognizable in a universal story way'. Firstly, *Dances with Wolves* (1990) that tells the story of a lieutenant (Kevin Costner) who leaves the army to go living with the Sioux. Secondly, *The Emerald Forest*, John Boorman's Jungle Book-like film about a white boy who grows up with native people in the Brazilian rainforest. Underneath the particular way of narrating these films there is something similar to a narrative deep-structure (Rimmon-Kenan 1989: 11ff.) The struggle over Belo Monte must, if it is *Avatar* turned real, resonate with this narrative pattern.

I shall now turn to *The Emerald Forest* as a part of the intertextual source domain used to target Belo Monte. What interests me is the theme of cultural conversion that marks the end of the movie; a return to tribal harmony accomplished through the cultural conversion of the white hero, how this sheds light on the end of *Avatar*, and the narrative constraints around the shifting middle ground. The conversion-as-end is the resolution of a state of conflictive cross-cultural coevalness; the happy end is a return to a prior cultural stage, before 'contact' and the forces of coeval evolution/devolution were set in motion. This manner of constructing a narrative end could be seen as a resolution of the tensions inherent in the figure of the 'iconic forest Indian [who] embody the anti-history of the ancient tribal isolate yet also exemplify the survivor of a crushing set of historical transformations', and consequently also as a purification that re-establishes a clear cut distinction between the tribal and the modern. Clearly such a resolution is impossible in the case of Belo Monte.

Once again I turn to de Certeau to find an analytical point of entry into what I will call the conversion tale: de Certeau identified an ethnological 'primary scene' in Jean de Léry's account of his life among the Tupinambá in *L'Histoire d'un voyage fait en la terre du Brésil, autrement dit Amérique* (1578). The scene took the form of a narrative about a passage from 'over here' (Geneva) to 'over there' (Brazil) – and back again with a symbolic prize, a 'literary object, the Savage, that allows him [Léry] to turn back to his point of departure'. Moreover, the 'story [of this passage] effects his return to himself through the mediation of the other' (1988:



213). The Tupinambá are already the ‘ethnological isolate’ populated with exotic figures that will illustrate the nature of the sinful human condition for the Calvinist. In the conversion tales, the hero do not return to ‘over here’, but returns to himself by joining the other, going back to a tribal state before the fall.

*The Emerald Forrest* (1985) was filmed in the Xingu. As in *A Message from Pandora*, the construction of a hydroelectric dam is the cause of the conflict. The plot is set in motion when Bill Markham, a North-American engineer, moves to Brazil to work on a hydroelectric dam that will result in massive deforestation. This move from the North to the South introduces the narrative conflict, and as in *Avatar* it is the destructive capability of the techno-modernity that will make indigenous peoples visible.

Bill brings his wife and children to Brazil, but during a picnic on the edge of the jungle, the little boy, Tommy, is abducted by a tribe called the Invisible people. The picnic takes place in the liminal space between the construction site and the forest; the space where the struggle between life and death takes place in the film, as in the later charter myth of the *Rainforest Foundation*.

The ‘chief’ of the tribe is a wise old man who eventually will become the boy’s adoptive father. Expressing his views with natural metaphors – undoubtedly to illustrate a primitive, ecological mind – he declares that he decided to abduct the boy to save him from a life in the land of ‘termites’, at the world’s end. This combined eco-cultural judgment, then, lies behind the first turning point in the plot.

The boy grows up in the rain forest, in play between two fathers; for his engineer father never stops searching for the boy. Tomé (as he is called in the jungle) will save the Invisible people from destruction. First he secures a fresh supply of the sacred stones that make the people invisible, and through this ensures the persistence of a traditional way of life. Next, he rescues the young women of the tribe from captivity in a brothel, and thus secures fertility and the social reproduction of the tribe. As we shall see, he also brings down the dam of the termite people with shamanistic techniques. After the initial action, the turning point associated with the abduction, Tomé will be the agent producing the events.

To rescue the abducted women, Tomé seeks the assistance of a group of male *caboclos*; Amerindians who have left the rain forest, dresses as whites, and live impoverished in the liminal zone between the jungle and the city – a space structurally similar to the one in which Tommy was taken (between the jungle and the construction site). Towards the end it is foreshadowed that these *caboclos* will marry the rescued women, and return to the forest. Hence, the film ends with a prefigured romance. Romance in the form of marriage to native women is, indeed, a powerful trope of conversion here as well as in *Avatar*.<sup>7</sup>

The character Tomé has a narrative function similar to that of Jake Sully. In the beginning of the story the hero forms a part of the actant of modernity, the ‘opponent’ of tribal culture; the narrative force that brings tribal people into a conflictive but also coeval, narrative time. In the middle of the tales a change of alliance occurs.

Gradually the hero becomes a helper that safeguards the survival of the tribe. Between beginning and end, then, the hero shifts actantial position, the 'opponent' turns into the 'auxiliary', and at and as the end, he is fully assimilated.

As a result of the upbringing in the jungle, Tomé becomes 'territorialized', a local best suited for cultural life in a particular rainforest habitat. When he finally finds him, even the engineer father (himself at home both in the city and the jungle), acknowledges that the boy will have to remain 'over there'. To salvage his son and the natural habitat he has adapted to, Bill decides to blow up the dam – another shift of actant – but his explosives fail to do the work. Fortunately, magic turns out to be more efficient than the arts of the modern engineer. Tomé, who has been initiated as a shaman, destroys the dam with the aid of his power animal, and makes nature itself (torrents) bring down the dam. Even in the field of magic it is white man who creates events. Except for the abduction scene – which turns around the Invisible people's compassion for 'us' and the recognition of human purity (even) in a white boy – narrative agency is attributed to characters associated with intruding modernity; both destruction and salvation are in 'our' hands.

## Conversion and Anthropological Mediation

In both films, the entrance to the foreign cultures is through a kind of participatory observation; we could call it an anthropological mediation. Particularly in *The Emerald Forest*, the choice of the narrated events is indebted to anthropology.<sup>8</sup> We look upon the white hero Tomé as he goes through a series of rites of passages: initiation into manhood and shamanism, marriage and a mortuary rite. Thus, the events are also woven together with a well-known anthropological theme as a constant; the production of a culture-specific person through a ritual process. Jake's conversion in *Avatar* is also gradually accomplished through ordeals and rites of passages, through which he learns the green technology of the Na'vi. In *The Emerald Forest* the white hero learns to live in the jungle from boyhood. Conversion here, then, is the more gradual process of a white, *Jungle Book*-like child who never loses his innocence – not that of a 'battered military man' searching for purity in a lost, tribal paradise.

In both films, the narrative end is a return to the past and harmonious state of nature where autochthonous rites again become the sole markers of time. With reference to Bauman and Briggs, we could say that the mediations that necessarily characterize a story of a 'clash of civilizations or of cultures' here are purified infra-textually, in the plot about the hero's conversion (and not by the anthropologist wiping out external presences of history when writing up of the text). Certainly, the conversion tale resembles other narrative forms – like the cowboy variant about good gringos saving Mexican villages from bad Mexicans but leaving when harmony is restored. In our films, however, the notion of the entity to be saved, 'distinct tribal cultures', is imported from cultural theory.

## ‘Culture’ as Narrative Conversion

Conversion to the other culture leads to the end in both films – the hero stays ‘over there’. A consequence of this is that the narrative closure also serves as a cultural boundary marker; there is no return ‘over here’. Typical for this narrative of conversion is that the hero, one of ‘us’, leaves his own culture, and, in the logic of the plot, it is this transfer that leads to the salvation of a ‘*pure, endangered tribal culture*’. Obviously, narratives must end, but this particular kind of ending might actually be conditioned by the theological pre-history of the concept of culture.

Frank Kermode has examined ‘the sense of an ending’ as a cultural phenomenon. At the end of a story we expect the narrative equivalent to the *tack* of the clock that gives shape to the unit of time that begun with the initial *tick* (1967). The end, then, is charged with a cultural function; it is the place for resolution of narrative conflicts or the conclusion of an argument, the *tack* that gives closure, and hence form, to the work (ibid, cf. Becker 1979). Moreover, Kermode underscores that expectations of endings are deeply informed by Judeo-Christian cosmology and the apocalyptic notions of a final closure that gives narrative form to salvation history as a whole; and, in the last instance transport the saved back to Eden.

In our films, the salvation of a ‘doomed’ nature-culture only occurs through the cultural conversion of the male hero. It is easy to see that the mediation of Jake Sully and Tommy/Tomé has a Christ-like character; they offer salvation from collective death, and through this intervention traces of Eden remain. Unsurprisingly, critics have argued that *Avatar* is a variant of the ‘White Messiah Fable’, constructed upon the implicit, patronizing assumption that natives need ‘white heroes to come and rescue them’ (Grabiner 2012: 101). However, the conversion story is more complicated. Firstly, the hero is needed to save ancient wisdom that ‘we’ have lost through ‘our’ cultural and human devolution. Secondly, in the environmentalist narrative that the films are intertextually related to, the ‘saved’ natives turn out to be our ecological saviors.

Nevertheless, the purifications accomplished by the conversion story wrap indigenous cultures up as pure and bounded culture-units, as inaccessible as Eden. If they were opened by the mediations offered by the story of civilizational clash, they become, in the end – and this is the function of the happy end – unrelated to ‘us’, since they now are deprived of the narrative conflict that would make them narratively compelling to ‘us’.

Following Viveiros de Castro’s work on the encounter between cannibals and missionaries in sixteenth century Brazil (and thus the early networks and mediations behind the later generalized perspectivism), we could argue that the anthropological concept of culture actually contains an implicit story of conversion. Not least, this has to do with the religious roots of the concept: The ‘themes of acculturation and social change [...] depend profoundly on a paradigm derived from the notions of belief and conversion’. Changing culture, Viveiros de Castro argues, is construed

as equivalent to a change of confession (2011: 11). On this theological model you either belong to a particular confession/culture, or you don't. A corollary is that cultural change, as secular conversion, is final and thus structured as a minimal narrative, a passage from one state to another. The end of a former identity (state 1) implicates the beginning of a new (state 2). From different perspectives, this passage could be seen as a gain (evolution, the civilizing of 'primitives') or loss (devolution, the loss of authentic culture as a result of contact), but in any case as irreversible:

[O]nce they have been converted into something other than themselves, societies that have lost their traditions have no way back. There is no returning; the previous form has been defaced for good. The most that can be hoped for is an exhibition made of simulacra and false memories, where 'ethnicity' and bad conscience feed on the remains of the extinct culture (ibid: 17).

This finality is 'above all' a function of 'our' belief 'that the being of a society is its perseverance: memory and tradition are the identitarian marble out of which culture is made' (ibid). If the symbolic stuff of identity is lost, culture is doomed and can only be celebrated in an inauthentic mode as heritage. Indeed, this evaluation of cultural change presupposes devolution.. If there is 'no way back', indigenous mastery of modern eco-cultural discourses will always be haunted by a suspicion of inauthenticity, or of indigenous spokesmen being dupes of international NGO's playing out the 'white Messiah fable' – a common enough accusation in Brazil (Conclin & Graham 1996, Prins 2002, Ramos 1998).

### **Closing Texts – Storing Wisdom, Storing Carbon**

In *The Emerald Forest*, there is a closing text immediately after the end of the narrative. We could see this as the wrap up of the film's short documentary frame: Before the beginning of the story, a text states that the film was produced in the rainforest. Immediately before the credits, the film returns to this documentary register. A silent text conveys ominous statistics about the deforestation of the Amazon; 5000 acres of forest disappears each day. Associated with this is the extinction of indigenous people; it is stated that only 120 000 remains of an original four million. Thus, the disappearance of the forest is linked to the disappearance of indigenous people. The forest and its indigenous inhabitants are fused in an eco-cultural symbolon reminiscent of Sting and the charter of the *Rain Forest Foundation*. However, Sting reversed Boorman's more anthropocentric priorities. In the closing text of *The Emerald Forest* the protection the forest gives to humans appears to be most important. For Sting, indigenous people living 'there' are also an obstacle to deforestation. Furthermore, in the context of climate change, the forest not only shelters indigenous people from the death producing tribe of modern termites, it also protects humanity from global disaster by storing carbon.

Regarding the ‘uncontacted tribes’, the closing text states that ‘they still know what we have forgotten’. Here the isolation of ‘uncontacted people’ translates into historical distance; protected by the forest, ‘they’ have retained a wisdom that ‘we’ have forgotten. In the last shot of the film, an inter-cultural bond is simultaneously created and cancelled: For ‘our’ relation to ‘them’ should be a non-relation that keeps ‘them’ isolated and ‘uncontacted’; they should remain ‘invisible people’. Perhaps this is a wise strategy for them, but it also seems that this isolation fulfills a cultural function for humanity, storing an ancient wisdom which we have lost.<sup>9</sup> Storing wisdom, storing carbon; in both cases, a service to humanity.

The conversion stories places ‘us’ in a paradoxical relationship to the indigenous people that shall save us by saving the forest. In the environmentalist story they comprise an actant of ‘helpers’, but to be able to help ‘us’ they must themselves be saved by converted heroes. In the ‘universal story’ played out in the films this ensures a new isolation, a reestablishment of ‘a distinctive culture worth studying and saving’, and thus re-calibrates notions about worthy cultures and participants in the ‘shifting middle ground’.

The films stage tensions between nostalgia for a lost, cultural past and the fear of destruction wrought by ‘modern’ hands. One set of culturally recognized endings, apocalyptic destruction or the softer variant of gradual devolution, is replaced by a return to the beginning – the time before the narrative conflict interrupted harmony in a closed universe: The end of a ‘traditional’ world is postponed, at the end, and as an end. The human figure situated in such a safe space would simply have no need of communicating across an inter-cultural middle ground with ‘moderns’. Thus, such a symbolical division and purification will not help to stop the dam in Belo Monte (now well under way), nor help global nature/culture survive ecological disaster.

The narrative registers of the apocalyptic and the nostalgic can be traced back to Christian salvation history (the fall – the present – the end as destruction *and* final salvation). In the conversion tales ‘culture’ takes the place of man in salvation history. The story of the fall of cultural purity as a consequence of contact is, in the last instance, a story of evolution turned into devolution: people living ‘there’ become uprooted, spread, like the *caboclos*, in the interstices between the city and the rainforest. Eden is perhaps the original ‘ethnological isolate’; it is a place – and a narrative time – ‘foreign’ to our space and time where the pattern of all human history is decided metonymically. Expulsed from Eden, the ancient wisdom is lost, also for ‘us’ who now longer have cultural mediators that can link ‘us’ up with the origin.

On the one hand, such stories of conversion can cause powerful identifications and ‘fantastic collaborations’ around the eco-cultural *symbolon* with imagined ‘pure cultures’. On the other, one can also fear that the clear demarcations between ‘here’ and ‘there’ that the collaborations in some cases are based upon symbolically prepares an outsourcing of ecological problems to a ‘there’ already cleared as a place

for mediations about the relation between human culture and nature – so that culture ‘here’, our daily consumption pattern, can remain the same.

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## Notes

<sup>1</sup> *Symballo*: literally that which is thrown or cast together (Etymology Online 2001-14)

<sup>2</sup> The most salient case in point is perhaps the brothers Grimm who regarded folktales as fragments of ancient Germanic myths.

<sup>3</sup> Cf. Duncan & Fitzpatrick 2010 about the visual technology behind *Avatar*.

<sup>4</sup> Cf. the following description: ‘The Earth is now a decaying world, covered in a haze of greenhouse gasses. Overpopulation, nuclear warfare, pollution, environmental terrorists, significant deforestation, world hunger, ozone depletion, resources depletion, water shortages, and overhunting of what is left of Earth’s very few still living animal species are the main things that are slowly consuming what is left of the once beautiful planet’ (James Camerons *Avatar*.wikia. Earth).

<sup>5</sup> Cf. the following description for instance: ‘The Na’vi believe that Eywa acts to keep the ecosystem of Pandora in perfect equilibrium. It is sometimes theorized by human scientists that all living things on Pandora connect to Eywa through a system of neuro-conductive antennae; this often explains why Na’vi can mount their direhorse or mountain banshee steeds and ride them immediately without going through the necessary steps required to domesticate such wild animals’ (James Cameron’s *Avatar*, n.d. Eywa)

<sup>6</sup> Cf. Adamson 2012 for other examples of the accommodation of *Avatar* by ethno-political activists.

<sup>7</sup> As in Latin-American literature where inter-racial marriage is a foundational trope in national literature, it is a man who marries a native woman (Sommer 1991, cf. Nunes 1996 on Brazil).

<sup>8</sup> Boorman consulted anthropologist before making the movie (Boorman 1985).

<sup>9</sup> The exact content of the lost memory remains undetermined, but with reference to the narrated events in the film, it appears to be ancient forms of thinking, and practices like shamanism. A comment from Boorman relating to his stay in the Xingu points in the same direction: [his] ultimate acceptance by the Kamaira led to long talks with its shaman. ‘Increasingly,’ Mr. Boorman says, ‘I felt Takuma was in possession of a knowledge, a consciousness, that far surpassed my own. I can’t imagine ever seeing things quite the same again’ (New York Times 30/6/1985)

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## Who's Calling the Emergency? The Black Panthers, Securitisation and the Question of Identity

By Peer Illner

### Abstract

This article intervenes in a debate in cultural disaster studies that interprets disasters as *objects*, whose study opens up an understanding of societies' fears, anxieties and vulnerabilities. Widening the scope of disaster studies, it proposes to view disaster not as an object but as an *optics*, a matrix that frames elements of social life as an emergency. Presenting the case of the American Black Panther Party for Self-Defense through a framework of security studies, the article explores the Black Panthers' politics as a process of *societal securitisation* that allowed African Americans to mobilise politically by proclaiming an emergency. It traces a political trajectory that ranged from an early endorsement of revolutionary violence to the promotion of community services and casts this journey as a negotiation of the question of identity and ontological security in times of crisis. Drawing on Black studies and on stigma theory, it suggests finally, that the Panthers' abandonment of violence represented a shift from identity-politics to an engagement with *structural positionality*.

**Keywords:** Black Panther Party, Huey P. Newton, Cultural Disaster Studies, State of Exception, Securitisation, Ontological Security, Stigmatisation, Identity Politics, Positionality, Afropessimism

## Disaster optics

In recent years, cultural studies have come to play a vital analytical role in attempts to understand modern social and political life as constantly threatened by disaster. Cultural studies argues that the way we perceive disaster is shaped by the various cultural practices that create our common sensibility for disasters and, consequently, determine what we see and how we act in a world ravaged by disaster at an ever-increasing rate. Starting from concrete disasters, scholars of cultural and political theory have interpreted the manifold ways in which humans process and make sense of catastrophe. Dominant frameworks currently employed interpret disaster as trauma (Felman and Laub 1992; Caruth 1996; LaCapra 1998; Kaplan 2005) as an image of the apocalypse (Robinson 1985; Zamora 1989), (Williams 2011; Szendy 2012), as a state of exception (Žižek 2008; Honig 2009; Lazar 2009) and as an expression of society's underlying conditions of vulnerability (Klinenberg 1999; Tierney et al. 2006). While different elements of a disaster emerge as areas of research in these frameworks, all these approaches view disasters directly as an *object* of inquiry. The following article argues that disaster is not just an *object* that humans strive to make sense of but also an *optics*, a sense-making paradigm that we use to imagine, frame, problematise, or construct social life *as* an emergency. Rather than being something given that we simply respond to, our sense of disaster is actively produced through various cultural and social practices.

Drawing on the work of Ole Wæver and the emerging field of security studies, the article presents the case of the American Black Panther Party for Self-Defense (BPP) and its chief-theoretician Huey P. Newton to illuminate the performative dynamics of emergency declarations. Building on Wæver's framework of *securitisation* and recent theorisations of ontological security, the argument will firstly be followed that the Black Panthers declared American everyday life a vital threat in order to safeguard a consistent racial identity. The article then presents the Black Panthers' turn towards peaceful community service as a conundrum that cannot be grasped according to the logic of ontological security. Instead, I will suggest that the Panthers' abandonment of armed struggle expressed an insecurity about the feasibility of a politics, based on identity. In conclusion, I will argue that the case of the Panthers highlights an insufficiency in analyses that centre on identity and foregrounds the question of *positionality* as a key issue in the cultural production of emergencies.

## The Black Panthers and the Emergency

We, the people, are threatened with genocide because racism and fascism are rampant in this country [...] And the ruling circle in North America is responsible

(Newton [1970] 2002: 160).

With this, Huey P. Newton, the founder of the Black Panther Party for Self-Defense began his speech at Boston College on November 18<sup>th</sup> 1970. In that year, membership in the Black Panther Party peaked with thousands of enrolled members and established offices in over sixty-eight cities across the U.S. Speaking to a numerous crowd on a cold and clear Wednesday<sup>1</sup> Newton laid out the Panthers' view that African Americans were threatened with extermination inside the United States of America. According to Newton, black Americans were systematically oppressed inside a white supremacist society that had only seemingly broken with slavery. Foreshadowing an argument recently elaborated by Saidiya Hartman (1997), Newton argued that the abolition of slavery in the U.S wasn't followed by freedom, as officially proclaimed, but merely transcribed the non-subjectivity of the slave into the limited subjecthood of the criminal, the Ghetto-dweller and the pauper.<sup>2</sup> In *The Correct Handling of a Revolution*, written in 1967, Newton specified that the founding of the party was to counter this perceived existential threat:

The main function of the party is to awaken the people and teach them the strategic method of resisting a power structure which is prepared not only to combat with massive brutality the people's resistance but to annihilate totally the Black population ( Newton [1967] 2002: 143).

Newton's large audience testifies that, what had begun as a small grassroots organisation, had by 1970 become a nationwide enterprise with considerable public appeal. While the Civil Rights Movement had through peaceful protest abolished the *de jure* segregation in the American South, *de facto* segregation remained operative in the North and West with permanent racial discrimination by housing associations, banks, employers and trade unions (Bloom and Martin 2013). According to the historian Donna Murch, Black Panther membership consisted of the sons and daughters of Blacks from the South "whose families travelled north and west to escape the southern racial regime, only to be confronted with new forms of segregation and repression." (Murch 2010: 6) Contrary to the Civil Rights Movement that had demanded formal citizen rights for America's black population, the Panthers sought to fight the normative stigmatisation of black people that persisted despite formal equality.

Brady Thomas Heiner (2007) summarises the Black Panthers' perception of the threats to their existence as firstly, the view that Blacks constitute an internally colonised community within the U.S and are thus in a situation comparable to other anti-colonial struggles; secondly, that the U.S constitution, its laws and police work as functional agents in the oppression of Blacks; thirdly, that within the context of this intra-national colonisation, black self-defence was synonymous with anti-colonial war and fourthly, that the American prison system played a pivotal role in the criminalisation of black people. Beyond the legal equality granted after desegregation, the Panthers thus diagnosed a structural violence at the heart of American civil society that was set to maintain the normative inferiority of Blacks. Heiner explains



how Newton's first theoretical move lay in unmasking the proclaimed peace in 1960's America, that he recast as a struggle over life and death:

Beneath the law and order of American government, beneath the ostensible peace of the American civil society, a racially fashioned war is being continuously and permanently waged against the black community. The type of peace that American governmental and civil institutions officially prescribe, according to this argument, is not genuinely pacific at all but rather is itself a form of coded warfare (Heiner 2007: 322).

How should we interpret the Panthers' martial rhetoric? What political purpose did the declaration of a hidden civil war serve? Wæver's theory of securitisation allows us to abstract from the immediate content of Newton's declarations and hone in on its performative function that worked both outwards, in relation to whiteness, as well as inwards, in relation to the African American constituency. In *Securitisation and Desecuritisation* from 1995, Wæver asks "what constitutes a security issue today?" Using speech act theory, Wæver argues that something becomes a security issue by performatively declaring it so. Practically, securitisation occurs when a particular issue is taken up and placed within the question of the survival of the state. Traditionally rooted in a state's position of military enmity vis-à-vis another state, contemporary processes of securitisation have expanded to involve issues such as health, drugs, crime or immigration that are all now regularly dramatized as threats to public security. In Wæver's vocabulary, the elevation of an issue into a threat 'securitises' a problem that is dramatically framed as a question of life and death. When performed by a sovereign state, the act of securitisation allows the state to defend itself against the harm allegedly caused by the threat:

By uttering 'security,' a state-representative moves a particular development into a specific area, and thereby claims a special right to use whatever means are necessary to block it (Wæver 1995: 55).

When declared through a securitizing speech act, securitisation institutes a stark binary between *us* (the community that needs to be protected from a threat) and *them* (the unit representing the threat). Initially, Wæver claims, this practice pertained exclusively to the state. Recently however, the power to securitise has shifted to include actors from civil society who engage in a struggle around political issues they elevate into existential threats.<sup>3</sup> Applied to the Black Panthers, we can see that Newton's insistence on an existential threat to the black community represents precisely such an act of *societal securitisation*. For Wæver, the goal of state, as well as societal securitisation processes is to ensure the survival of the unit. While state security safeguards sovereignty, societal security is mobilised to protect the identity of the securitising group:

I have therefore suggested a reconceptualization of the security field in terms of a duality of state security and societal security. State security has sovereignty as its ultimate criterion, and societal security has identity. Both usages imply survival. A state that loses its sovereignty does not survive as a state; a society that loses its identity fears that it will no longer be able to live as itself. There are, then, at the collective

level between individual and totality, two organizing centres for the concept of security: state and society (Wæver 1995: 67).

Wæver's theory of societal security can shed light on emergency politics occurring outside of state sovereignty. The view of securitisation as a performative process allows us to see the power to call an emergency as unequally distributed across the social body. In this process, Wæver recognised a crucial problem that we also encounter with the Black Panthers. While state security has the authority to securitise issues on account of its legal and representative powers, societal security is practically powerless in comparison. It therefore always poses the problem of its own credibility. Lacking in representative powers, social groups have to rely on the persuasive power of their speech acts to make their point. This fact can help explain the rhetorical vehemence with which Huey Newton expressed his claims. According to the securitisation framework, the Panthers were involved in defending their identity against a white supremacist system they perceived as maintaining Blacks in a situation of existential inferiority. Their discourse had to be clear and violent to make their message succeed as a speech act, able to institute societal security. Drawing on Austin and Derrida, Wæver notes that speech acts are always haunted by the possibility of their failure. They put the speaker at risk, since success at credibly conveying securitisation is never guaranteed:

How does a society speak? Society is different from the state in that it does not have institutions of formal representation. Anyone can speak on behalf of society and claim that a security problem has appeared. Under what circumstances should such claims be taken seriously? (Wæver 1995: 69)

In the attempt to credibly securitise the issue of race, Newton used evidence from anthropology and sociology to sharpen his argument of a hidden war against Blacks. In his autobiography *Revolutionary Suicide*, Newton comments on Herbert Hendin's comparative studies of suicide rates in black and white communities (black suicide rates had doubled in the last ten years while white suicide rates remained level). Drawing on Durkheim's famous study on suicide that had fixed social factors as the root causes for suicide above individual, psychological reasons, Newton uses this argument to claim a hidden, deadly mechanism operating at the heart of white America that systematically produced the conditions in which blacks would kill themselves. If, according to Newton, death was what American society had in store for black people, there could be two ways for African Americans to die; either through reactionary suicide or through revolutionary suicide. Reactionary suicide meant to give in to the threatening conditions of the environment by taking one's own life, while revolutionary suicide meant acknowledging the lethal mechanisms that condemned Blacks to social and biological death and rebelling against them. While Newton insisted that this exposed the rebel to a likely death at the hands of the prison system or the police, it was in any case preferable to die a revolutionary death than to give in to the system:

Thus it is better to oppose the forces that would drive me to self-murder than to endure them. Although I risk the likelihood of death, there is at least the possibility, if not the probability, of changing intolerable conditions [...] Revolutionary suicide does not mean that I and my comrades have a death wish; it means just the opposite. We have such a strong desire to live with hope and human dignity that existence without them is impossible. When reactionary forces crush us, we must move against these forces, even at the risk of death (Newton [1973] 2008: 131).

We will see how, rather than being a historical aberrance, the tactic of revolutionary suicide that entails the willingness to die rather than to abandon a constituted identity has historical precedents, among other cases, in the First World War.

## Revolutionary Suicide

Following the argument of securitisation, we can trace how the Panthers politicised their everyday as a fight over life and death by proclaiming white America to be racist and genocidal. For a time, the BPP even began to arm itself for fully-fledged war. Heiner comments on this functional equation of politics and war that was at the heart of Black Panther discourse:

It is precisely on account of this perceived failure of American sovereignty to guarantee and protect black people's very right to live – moreover, on account of its persistent and explicit attack on that right – that the BPP conceived of politics and war as functionally inseparable (Heiner 2007: 325).

The notorious documentation of Panther members patrolling the streets of Oakland with shotguns poised, pictures of Newton posing on an African throne, spear and rifle in hand as tokens of Black Nationalism and the seizure of Attica prison in New York, where imprisoned Panthers held forty-two prison guards hostage can be seen as evidence for the militant equation of politics and war that dominated a certain strand of Panther ideology. This radicalism found admirers in European intellectuals from Foucault to Deleuze, who had started theorising politics on the basis of war after the events of May '68 in Paris.<sup>4</sup> Jean Genet, who visited Newton in California thus defended the Panther leaders' spectacular display of violence with reference to Guy Debord's *Society of the Spectacle*:

Wherever they went the Americans were the masters, so the Panthers should do their best to terrorize the masters by the only means available to them. Spectacle. And the spectacle would work because it was the product of despair [...] Did they have any choice? (Genet 2003: 99)

The doctrine of revolutionary suicide with which Newton commanded Blacks to rather die in battle than keeping an oppressive semblance of peace both confirms and challenges Wæver's insight about securitisation. On the one hand, the Panthers' rhetoric clearly sought to securitise the concept of race in order to build a strong, black constituency against white hegemony. On the other hand, Newton seemed ready to sacrifice the vital integrity of this very same constituency, thus calling into question Wæver's emphasis on securitisation as a means of *survival*. The following

section presents a more nuanced picture of the performative position of the Black Panthers with regard to the black community by elaborating the issue of securitisation within a wider context of the negotiation of identity that in certain cases can become “larger than life”.

### **Ontological Security**

Following Wæver, several theorists working in security studies have elaborated the link between security and identity to shed light on the politics of self-defence. We have seen that for Wæver, the situation of feeling existentially threatened does not need to be imposed from the outside. Issues are performatively elevated to the level of an existential threat by a social group to demarcate the group’s identity in relation to its inside as well as its outside. Originally developed by R.D. Laing in the realm of clinical psychiatry and imported into sociology by Anthony Giddens, the concept of ontological security has recently been appropriated by Jennifer Mitzen (2006) and Brent Steele (2008) to contradict the “survival assumption” that permeates political theory. The survival assumption – legible in thinkers of the state of exception from Carl Schmitt to Giorgio Agamben but also, residually in Wæver – claims that a political unit’s primary goal is necessarily its biological survival. Steele uses Laing’s concept of ontological security to argue that it is the preservation of a unit’s self-identity, rather than survival, that represents the primary motor of social action. According to Steele, political actors acquire a semi-permanent social identity, related to their own self-image, including the values, mores and behavioural patterns they desire to represent, as well as the expectations, the outside world has come to develop in relation to the unit’s identity. An actor’s primary political interest is the unperturbed continuation of this identity, as it is this continuity, which for Steele provides a sense of existential safety or ontological security. While Steele initially develops his theory in relation to nation states, Wæver has demonstrated the increasing importance of security concerns to actors from civil society. This is how Steele frames the debate around ontological security:

The central argument [...] is that states pursue social actions to serve self-identity needs, even when these actions compromise their physical existence [...]. While physical security is (obviously) important to states, ontological security is more important because its fulfilment affirms a state’s self-identity (i.e. it affirms not only its physical existence but primarily how a state sees itself and secondarily how it wants to be seen by others (Steele 2008: 2-3).

Steele outlines how political actors have historically defended their self-identity, often to the point of jeopardizing their own physical integrity. His analysis of the Belgian decision to fight the far more powerful German army in WWI serves to exemplify the ontological security framework. According to Steele, Belgium’s identity had been internationally ratified as politically neutral. Hence, accepting to align itself with Germany without offering resistance – while providing physical

security in the short term – would have compromised Belgium’s acquired identity, thereby threatening the nation’s sense of ontological security. For Steele, the case of Belgium disproves the established survivalist paradigm. While Belgium’s shattering defeat was practically guaranteed from the outset, the small nation still fought to secure its sense of uncompromised self-continuity. We can draw an analogy between Belgium’s behaviour in WWI and the Black Panthers’ doctrine of revolutionary suicide. While fully aware of being crushed by the U.S police in cases of armed confrontation, the Panthers still advocated this confrontational fight, not in the hope of any real political gains but in order to secure their self-identity as a combatant social group. As Steele specifies:

In such cases a state like Belgium ‘gives practical proof’ that in its consideration self-identity was ‘larger than life.’ The existential angst which befalls all social agents is therefore solved through a painful, costly, and tragic, but also emancipatory, action (Steele 2008: 113).

Through the ontological security framework, we can gain a better understanding of the Panthers’ doctrine of revolutionary suicide. Dramatizing a situation of poverty and racist marginalisation into a “civil war against Blacks” sharpened the antagonism between white hegemony and the black community and thus was likely to guarantee group cohesion among African Americans. In the words of Steele, it ensured ontological security by stabilising the black community’s sense of self. However, apart from the aggressions of a racist system, the Panthers perceived another threat to their identity, coming from within the African American electorate; namely the promise of formal integration into the American mainstream, embodied by the Civil Rights Movement. For the Panthers, this threatened to assimilate Blacks and dissolve their constituency into the wider body politic.

## **Peace Anxiety**

Writing on the relation between ontological security and political conflict, the political scientist Bahar Rumelili has presented a binary schema of political identity that we can apply to our case of 1960’s America. For Rumelili, political identity is constructed along a twofold axis. Both inclusively, by a set of practices, behaviours and values “that can possibly be acquired by any state if it fulfils certain criteria” (2007: 38) or essentially, through traits “assumed to be based on some inherent characteristics.” (ibid.) Following this perspective, we can say that prior to desegregation, full American identity was defined in essential terms by white skin colour and in practice-based terms by a capitalist market economy and the values of democracy, individualism and liberalism. In this context, the Civil Rights Movement demanded the abolition of the essential component of American identity *qua* whiteness and an opening of its parameters to include black people in the practice-based

performance of American citizenship. As is well known, white hegemony responded by somewhat attenuating the power of its essential, race-coded identity and admitting Blacks that were capitalist, democratic and liberally oriented.

While providing undeniable legal gains for African Americans in the South, from an ontological security perspective, this inclusion was at the same time threatening to black self-identity, as blackness now became integrated into the American mainstream. This inclusion diluted what had counted as black (the opposition to white privilege) and, in the words of Steele and Rumelili, it therefore enhanced black ontological insecurity by rupturing a continuous black identity. After desegregation, the Panthers took on the difficult task of mobilising politically around race issues in a situation of newly granted formal equality. This was a time when many within the black community had aligned themselves with the American mainstream in the hope of thereby reaching the end of racism. To safeguard a continuous black identity, the Panthers' point of contention had to be that America preserved a disavowed core of essential whiteness that still kept Blacks in a situation of radical exclusion.

It is possible that the continuous black identity the Panthers were advocating was to a large extent defined precisely by the struggle against normative whiteness. Rumelili has provided evidence of how identities become problematically attached to conflict. For her, "protracted conflicts and the habits and routines that states have formed around them generate a sense of ontological security," (2014: 3) as the conflict becomes a narrative of the individual actors' sense of self. The possibility of conflict resolution on the other hand induces ontological insecurity, as it involves actors giving up their well-kept narratives about themselves (as Greek over Turkish or Israeli over Palestinian in Rumelili's examples). Rumelili's research into ontological security can help explain the attachment that political actors form to certain structures of conflict. In our case, it provides an explanation of why the Panthers persisted with their radical politics especially after the pacifying gains of the Civil Rights Movement. Following Steele's example with regard to Belgium, it becomes understandable why the Panthers indeed preferred death to the assimilation into an identity that went against their established sense of self.

In conclusion, the ontological security framework is able to explain the dramatic early phase of the Panthers, in which the party endorsed a position of Black Nationalism and revolutionary violence. Through an aggressive and harsh political rhetoric, it performatively sharpened the identity distinctions between 'black' and 'white' as well as the 'real' Blacks that were opposed to the white mainstream and the 'integrationists' who had abandoned the struggle and assimilated to whiteness. However, the schema doesn't offer an explanation for the Panthers' sudden turn to community service after 1970, when all armed resistance and most overt aggression was dropped. It will now be argued that, in order to understand this political change we need to shift our gaze away from identity and onto the question of *positionality*.



## Community-Building and *Positionality*

While security studies' analysis of the interaction between actors from different identity-groups can provide insights into the Panthers' early position of radical self-defence, the notion of identity-preservation (or ontological security) cannot enlighten us as to why the Panthers suddenly abandoned any talk of blackness in terms of identity. Had they surrendered to the integrationist demands of formal equality? Did they believe they had become a fully integrated part of American society? I suggest interpreting the change of attitude in the Panthers' politics not as a *giving in* to the reformist aims the Panthers had previously rejected. Instead, I propose to read it as a moment of crisis regarding the very notion of identity; or at least, a budding doubt in the feasibility of claims made on the basis of identity. How did this doubt manifest itself for the Black Panthers?

Newton's gradual distancing from the spectacular and identity-building violence he had endorsed in the 1960's and his turn towards a less confrontational politics of community building can be traced most clearly in his dispute with the Panthers' Minister of Information Eldridge Cleaver. While Cleaver wanted to push the Party into full-blown armed warfare, Newton opposed this position. Abandoning his provocations in favour of a more attenuated politics, he argued from 1970 onwards that armed resistance was bound to be overpowered by the military superiority of the American police and that, rather than all-out war, the Panthers should adopt a politics of restrained resistance. In an article from 1967, he claimed:

The Black masses are handling the resistance incorrectly. When the brothers in East Oakland [...] amassed the people in the streets, threw bricks and Molotov cocktails to destroy property and create disruption, they were herded into a small area by the gestapo police and immediately contained by the brutal violence of the oppressor's storm troops. Although this manner of resistance is sporadic, short-lived, and costly, it has been transmitted across the country to all the ghettos of the Black nation (Newton [1967] 2002: 142).

Instead of paramilitary activities, the BPP began to invest strongly into their so-called Survival Programs, a range of over twenty-four different community service programs that the party ran free of charge to benefit the black population. The programs included a breakfast-for-schools initiative, in which breakfast was served to children before the start of the school day; health and dental clinics, where medical services were provided, a sickle-cell anaemia screening program; a buses to prisons service where families were transported to and from prisons to visit their relatives; a clothing program and various cultural activities such as a model school, music, poetry and Black History classes. In a televised interview with William Buckley, Newton explained this shift from an emphasis on armed escalation to an investment in community services:

We realized that it wasn't the principle of revolution or the armed principle of our Party, to take the gun and make the gun the only thing that could fight a revolution. So, it was a strategy that was mistaken [...] The media enjoyed the sensationalism of the gun. In many ways, we set ourselves up for the murder we received... We realized

that we had to treat the issues that the people were most concerned about (Newton [1973] 2002: 276).

While Newton still framed the need for the social programs as stemming from the threat of genocide and the necessity for black survival, he simultaneously highlighted a quality in survival that seems to escape the struggle over life and death through the affective categories of self-respect, dignity and enthusiasm:

A Ten-Point Program is not revolutionary in itself, nor is it reformist. It is a survival program. We, the people, are threatened with genocide because racism and fascism are rampant in this country and throughout the world. And the ruling circle in North America is responsible. We intend to change all of that, and in order to change it, there must be a total transformation. But until we can achieve that total transformation, we must exist. In order to exist, we must survive; therefore, we need a survival kit: the Ten-Point Program. It is necessary for our children to grow up healthy with functional and creative minds...Where there is courage, where there is self-respect and dignity, there is a possibility that we can change the conditions and win. This is called *revolutionary enthusiasm* (Newton [1970] 2002: 160-161).

The Survival Programs were thus destined to elevate the morale of their beneficiaries and make them receptive to the *affect* of revolution. More importantly, they had a strong temporal function, stretching the passive time pending death into the active time of survival, a time of holding out and holding on until the right time for revolution had come. They thereby mark Newton's sustained engagement with what one might call a revolutionary philosophy of time. In the article *On the Defection of Eldridge Cleaver*, Newton highlighted that a dispute around time was at the core of his disagreement with Cleaver. While Cleaver "ordered everyone into the streets tomorrow" (Newton [1971] 2002: 207), Newton knew that "a spontaneous revolution is a fantasy." (ibid.) Rather than provoking a revolutionary conflict in the here-and-now, the BPP's inflection around 1970 inaugurated a sustained investment into resistance and survival. Writing on the differentiation between resistance and revolution, Howard Caygill comments on the temporal difference between a revolutionary acceleration of time and the prolonged effort to extend the capacity to resist:

A capacity is precisely a prolongation in time – thus, the struggle for resistance occupies an extended time horizon, unlike the revolutionary bid for power which thrives on the acceleration of time (Caygill 2013: 10).

The Panthers' Survival Programs exemplify this marked shift from a politics of escalation to a sustained politics of survival. Investing into the physical wellbeing of the people as well as into their cultural education, they opened a sheltered space where the black community could exist outside the immediate pressures of direct confrontation and struggle. Crucially and signalling Newton's distance from the earlier endorsement of Black Nationalism, the Panthers' ceased campaigning around issues of an essential black identity. Their Survival Programs carved out a niche of life that for a time withstood the FBI's counter-intelligence operations of

defamation and criminalisation (COINTELPRO). During this time, Newton carefully guarded against advocating the revolution now, while promoting the belief in the longevity and eventual triumph of the movement in the face of likely death:

I have no doubt that the revolution will triumph. The people of the world will prevail, seize power, seize the means of production, and wipe out racism, capitalism, reactionary intercommunalism-reactionary suicide. The people will win a new world (Newton [1973] 2008: 132).

With its substitution of 'Black' with 'the people of the world' and its endorsement of vaguely formulated political aims such as the end of capitalism, racism and a number of other goals from the portfolio of 1960's counterculture, this statement is miles away from the neatly circumscribed Black revolutionary identity the Panthers had endorsed earlier. Rather than antagonistically building a strong identity around blackness (or black ontological security), I argue that Newton here expresses a deep insecurity concerning the very possibility of a positive black ontology. Instead of a struggle around the relative security or insecurity of an ontological position, around what Martin Heidegger calls 'the ontic', we are here dealing with *ontological* insecurity in the strong sense; with an insecurity about the viability of ontic identity.<sup>5</sup> Formalising this doubt regarding identity-politics, recent work in Black studies has demonstrated that 'blackness' and 'whiteness' are social *positions* before they become invested as *identities* (Patterson 1982; Hartman 1997; Sexton 2008). Writing on the structural relations between Whites and Blacks since the time of the slave trade, Frank Wilderson has argued for an understanding of slavery and segregation as relations of formal domination of one entity (Humans) over a subjugated entity (Slaves). Rather than seeing this conflict as a clash between competing identity narratives, Wilderson recasts it as a struggle around structural domination, regardless of identity. For Wilderson, arguing in Kantian terms, the slave relation forms the condition of possibility for 'black' and 'white' to emerge as identities in the first place. Drawing on Marxism and Psychoanalysis, Wilderson justifies this structuralist view as follows:

I argue that 'Savage', Human and Slave should be theorised in the way we theorise worker and capitalist as positions first and identities second, or as we theorise capitalism as a paradigm, rather than as an experience (Wilderson 2010: 24).

What is at stake here is the difference between fully constituted identities that can be remade or defended at will and the pre-identitarian formal relationality that guarantees the reproduction of systems of power and of domination. Wilderson calls this the *structural positionality* that social actors are born into, and Marx' famous insight about men existing not under "self-selected circumstances" but "under circumstances existing already, given and transmitted from the past" might have served as his model here. Let us now see how the shift from *identity* to *positionality* changes the viewpoint on the case of the Black Panthers.

## Negotiating Stigma and *Ontological Insecurity*

If we abstract from identity and examine the social position of the Panthers vis-à-vis white hegemony as well as the integrationist black mainstream, we gain a more flexible understanding of the shift in the Panthers' politics away from identity. Contrary to identity, the category of stigma is a normative attribution of inferiority that highlights a power relation, in which the stigmatised appear as *pure negativity* with regard to the 'normal'. Rebecca Adler-Nissen has developed a framework that combines Ervin Goffman's theory of stigma with questions of ontological security. She both reflects and contests Rumelili's differentiation between inclusive and exclusive identity aspects by arguing that stigmatisation, i.e. the normative judgement of behaviours as "deviant" or "morally polluted" easily persists even after successful behavioural adjustment. This explains why, after the Civil Rights Movement the stigma of blackness persisted, despite formal integration into behavioural American-ness. Adler-Nissen insists that stigmatisation always induces a binary between "us" and "them" at the expense of the stigmatised, who are deemed less human or often entirely un-human:

A third feature of stigma imposition occurs when social labels connote a separation of "us" from "them". The 'us' and 'them' designation in the stigmatization process implies that the labeled group is slightly less human, or, in extreme cases, not human at all (Adler-Nissen 2014: 147).

This emphasis on the 'inhumanity' of the stigmatised provides another argument for the Panthers' sudden doubt in identity as a political category. Applied to the black case, we can see that in conditions of structural inferiority (or structural stigma), there is no aspect of identity that can be positively invested in the hope of successful de-stigmatisation. Wilderson reflects this point when he asks: "What is a Black? A subject? An object? A former slave? A slave? The relational status, or lack thereof of black ~~subjectivity~~ (subjectivity under erasure) haunts Black studies as a field just as it haunts the socius" (Wilderson 2014: xi). The problem of investing in an identity that is constituted as negative with regard to the norm has also been elaborated in a number of contemporary critiques of identity politics. The bottom line of these critiques is that, if identities are constituted oppositionally in relation to a normative Other, then reclaiming a stigmatised identity in the hope of normative recognition only reinforces the oppressive hierarchy that instituted the stigma in the first place. The stigmatised might be able to change minimally the valence of their social position but they do not enable the conditions for a non-stigmatising sociality to emerge. Because of this, Wendy Brown has framed identity politics as a struggle for the recognition of our "wounded attachments", that masochistically strengthens the system it is trying to fight:

Politicized identity thus enunciates itself, makes claims for itself, only by entrenching, restating, dramatizing, and inscribing its pain in politics; it can hold out no future—for itself or others—that triumphs over this pain (Brown 1995: 74).

This awkwardness concerning identity can serve as an explanation for the Black Panthers' otherwise obscure change of heart regarding the former endorsement of identity-building violence. Apart from laying down their weapons, the Panthers also began to form alliances with diverse women's movements as well as gay rights activists and other formerly rejected marginalised groups, in the spirit of intersectional struggles that are defined by their social position, rather than by their identity. They realised that the stigma placed on them put into question the very idea of their humanity. Foreshadowing recent work in Black studies, their position expressed the extreme awkwardness of existing as the negative pole of the ontological plenitude of whiteness (expressed as having an identity, a subjectivity, a body, a soul). This ontologically thin ground meant that there was indeed no position left that could be positively invested. I have argued that the Panthers' community services testify to this awkwardness without resolving it. Contrary to the Panthers' beginnings, they represent a much more minimal position that remained invested in blackness only as a negative position with regard to whiteness. Rather than bolstering this marginalised identity through armed escalation, the Panthers now merely acknowledged it as a *position* whose occupants' lives were threatened.

## The End of Identity

The case of the Black Panthers documents how an emergency is produced through politics and through rhetoric as *an optics* that frames political positions and identities. Moreover it shows how declarations of emergency occur on a politically contested terrain, constituting a discursive process, whose success centres on its performative delivery. My argument suggested that the Black Panthers engaged in a process of societal securitisation to cast as a disaster, a situation that the U.S had disavowed as normal. Huey Newton's rhetoric was in this context analysed as serving a dual performative function. It sought to secure a radical black identity with regard to white hegemony as well as in opposition to the integrationist demands of the Civil Rights Movement. The analysis of the Panthers' sudden departure from identity-based politics was used to highlight an analytical limit within security studies that was addressed through Black studies' discussion of positionality. In addition, stigma theory was used to show how attributions of inferiority run deeper than identity and touch the social location of a subject in its deep ontological positioning as *negativity pure and simple*.

Referring to Wendy Brown and to Adler-Nissen's work on stigma and humanness, the question that security studies and cultural disaster studies need to address is: Can there be a politics that severs its "wounded attachments" to identitarian integration and instead addresses the structural level at which social positions are allocated? Following recent work in the so-called post-foundational tradition (Lacoue-Labarthe 1990; Lacoue-Labarthe and Nancy 2005; Marchart 2007)<sup>6</sup>, we can suggest this would mean shifting the focus from *politics*, as the arena of the

parliament, of parties and of policies that constitute our political reality as 'politics as usual' to *the political* as the space that constitutes the ground of our social order and firstly enables its normative coding. Methodologically this shift entails detaching disaster research from any already constituted *object* of research and recalibrating it as *an optics* that zooms in on the construction of the political field itself.

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## Notes

<sup>1</sup> The American Records of the Weather Bureau shows a temperature of 40 Fahrenheit (4,4 Celsius) and no rain for this day. See <http://www.archives.gov/research/guide-fed-records/groups/027.html>. (Accessed on 15.11.2014)

<sup>2</sup> In her book *Scenes of Subjection*, Saidiya Hartman reconstructs the transitional period between black slavery and freedom and argues that the legal ascription of subjecthood to blacks served to make African Americans legally accountable for crimes. Against liberal equations of subjecthood and freedom, Hartman argues that full subjectivity only further constrained blacks and controversially calls into question the presumed discontinuity between freedom and slavery.

<sup>3</sup> Wæver's theory of securitisation forms an interesting parallel to other attempts to theorise the performative politics of states of exception. While Giorgio Agamben (Agamben 1998) reserves hardly any room for performativity and instead grounds the state of exception in the formalism of the legal realm, Adi Ophir (Ophir 2010) has theorised man-made disasters as resulting from discursive processes of 'catastrophisation' that, similarly to Wæver's theory of securitisation constitute a practice of framing political life as a disaster.

<sup>4</sup> Brady Thomas Heiner claims that Foucault's preoccupation with war in his lecture series "Society Must Be Defended" originated in an exploration of the racial politics of the U.S and especially his knowledge of the Black Panther Party that he gained through Jean Genet.

<sup>5</sup> With the concept of 'ontological difference', Martin Heidegger (Heidegger 1991) distinguished between the realm of empirical beings or *Seiende* and the domain of being itself, or *Sein*. For Heidegger the sensory reality that offers itself to our experience is the realm of the ontic (*Seiendes*) whereas the foundation, origin or cause of this reality is the ontological (*Sein*) that transcends the ontic and escapes our perception. Applied to politics, the ontic is the empirical reality of constituted identities whereas the ontological is the existential, performative and symbolic, operation through which these identities are differentially constituted in the first place. Heidegger critiques Western metaphysics for always having sought to ground the ontic in a firm ontological principle such as substance, spirit or essence. For Heidegger, metaphysics has thereby failed to recognise the performative dimension of its own grounding operation (ibid: 51).

<sup>6</sup> Oliver Marchart (Marchart 2007) proposes to call this difference between the empirical reality of politics and their enabling conditions the 'political difference'. With this formulation, Marchart effectively distils the paradigmatic theoretical movement of many post-Heideggerian thinkers. The 'political difference' constitutes the main concern of the studies undertaken by Jean-Luc Nancy and Philippe Lacoue-Lacoue-Labarthe at the 'Centre des Recherches Philosophiques sur le Politique', founded at the ENS Paris in 1980. Because the political difference deprives subjects of any foundational identity, Marchart calls the ethics that this difference solicits post-foundational.



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# Multiscalar Narratives of a Disaster: From Media Amplification to Western Participation in Asian Tsunamis

By Sara Bonati

## Abstract

The international recovery system responds differently to disasters with similar characteristics. It answers to specific motivations that are not necessarily connected to the nature of the disaster. The variability of the answers given not only depends on the type of disaster but also, in particular, on the local social structure and on the transcalar narrative of the disaster used to move communities not directly affected to action.

This paper therefore analyses the level of Western involvement in two Asian tsunami recovery plans and the role of the media in attracting Western private donations. To this end, Italian involvement in the two cases is discussed.

Beginning with a literature review to support the argument that the media are crucial in stimulating private participation through ‘spectacularizing’ the disaster, this paper illustrates that, when spectacularization is insufficient, the media additionally adopts the strategy of ‘transposition’, leading to ‘appropriation’ of the event. In particular, during the Boxing Day tsunami of 2004, the transposition became the ‘Westernization’ of the narrative of the disaster. The process of transposition or Westernization, however, did not happen with the same modalities in the narrative of the Tohoku tsunami of 2011. In this case, the focus was more on the technological disaster that followed the natural hazard.

The author concludes that emotional transposition of the disasters by the media played an important role in stimulating private donations and in spurring governmental relief in both the disasters. Foreign governments, however, are mainly moved by other factors such as ‘flag policy’ or what Olsen et al. (2004) identified as the concept of ‘donor interests’.

**Keywords:** spectacularization; humanitarian aid; tsunami; mass media; disasters narrative.

## Introduction

This paper aims to understand Western involvement in the Asian recovery processes following the Boxing Day tsunami 2004 and the Tohoku tsunami in March 2011. It takes Stromberg's words (2007: 200) – “the decision about what to call a disaster and how much relief provided depends on who is suffering” – as a point of departure. It analyses the role of the media in attracting Western attention and private donations, with a particular focus on the Italian response. The Boxing Day tsunami of December 2004 and the Tohoku tsunami of March 2011 are the two most devastating Asian tsunamis of the last hundred years in terms of victims and ecological and social effects. In analysing the media accounts, this paper will use *transcality*, *spectacularization* and *transposition* as key analytical terms. It is a preliminary study on the usefulness of these concepts in disaster narrative analysis. In particular, transcality will be used with the aim of defining the indirect experience of events<sup>1</sup> that can be consequent to the interconnection of places and geographical scales. The concept is useful in understanding how a geo-localized event can also have impacts in other places not geographically contiguous. As a consequence, we can have a perceptive reduction, or loss, of distance. This paper maintains that spectacularizing and transposing events are two communication strategies used to implement this process, which is described further in the next section. Spectacularization means the amplification of information given by media in order to emotionally move the audience, whereas with transposition the author identifies the process of transcalar victimhood that can occur when the audience perceives the disaster, in Ulrich Beck's words (2005), as an “individual experience”.

Kasperson (et al. 1988) states that, when experience is lacking or minimal, individuals learn of risk through other people and information systems:

Most people in a particular society do not experience disasters first-hand. Rather, they learn about disasters through the experiences of others, as told by survivors, expressed by others, or conveyed in a movie or media account. Cultural representations shape a group's understanding of disasters and may influence the way in which that group prepares for, responds to, and recovers from actual disasters (Webb, Wachtendorf and Eyre 2000: 7).

Accordingly, images offered by the media can alter the image of the condition of a place struck by disaster in the minds of those people who have no direct knowledge of said place.

Therefore, “cultural representations of disasters play an essential role in transmitting knowledge between individuals, groups and generations” (Webb, Wachtendorf and Eyre 2000:7). One part of these representations is the narratives of disasters. According to narrative theory, disaster narratives are the result of cultural and individual factors (Daly 2011). In the nineteenth century, they were produced by all popular forms of communications such as narrative fiction, poetry, drama, opera, fine art history and landscape paintings; contemporary forms of disaster narrative

include on-site graffiti, which survivors draw in order to send messages of hope and humour, to provide basic information, or to protest against government recovery processes (see Hagen et al. 1999; Webb, Wachtendorf and Eyre 2000).

Accordingly, the process of making information must pass through several filters (geographical and cultural), all of which shape individual interpretation. The actors involved (directly or indirectly) in a disaster thus have a different image of the event. They perceive benefits and damages (defined “goods” and “bads” in Beck 1992) according to a different range of values that depend on their perception. Public perceptions are identified as the products of “intuitive biases and economic interests” that “reflect cultural values” (Kasperson et al. 1988: 178). Stromberg (2007) recognized a number of central factors that move humanitarian aid, including the historic and cultural proximity of the location, economic and geo-strategic interests, colonial history, geographic distance, and trade values. Indeed, an awareness of the benefits modifies the perception of risk (Finucane et al. 2000). Today, there is a vast amount of literature supporting the hypothesis that international aid is conceived according to more factors than the level of the emergency. Some of these factors are the media narrative of disasters, foreign policy, and economic outlook (Stromberg 2007).

Indeed, as Beck (1992) states, all events (local and global) are also always subjective events. Subjectivity is the tool through which people interpret situations and make decisions. Accordingly, the scientific community talks about “subjective risk” and investigates the role that this dimension plays in disaster risk production and reduction (see Lewis and Kelman 2012). According to Beck (1992), the weight of subjectivity is low in local events because we can ‘touch’ and experience the objective dimension. Indeed, in the face of extreme events, experience reduces the level of concern of people and determines their sensitivity to risks (see Richardson, Sorensen and Soderstrom 1987; Barnett and Breakwell 2001). Thus, “distance” (Beck 1992, 2005) is the new geographical element for defining individual processes of event interpretation. However, distance must be interpreted not only in physical terms but also in cultural terms. We read global events through our own eyes (see Beck 1992), filtered by our geographical identity (see Delage 2003; Bonati 2015) and perception. Thus, subjectivity becomes the tool for interpreting these phenomena due to the absence of experience of the event.

## **Role of Media in Disaster Communication**

The media has a role to play in reducing distances. This paper therefore argues that there are today two ways to “bring a disaster near” to people who have not had direct experience of it. First, through the media telling stories that produce an indirect experience (transcalar narrative). Second, when indirect impacts or extra-border impacts occur and are experienced by members of the same community (transcality of impacts). In the first case, the media usually employs the strategy of

spectacularizing the disaster narrative in order to catalyze attention and obtain an audience. As a consequence of this process, the media have the power to stimulate an audience into action. In the second case, the media adopt the strategy of transposing the disaster, leading to the appropriation of the condition of the 'victim'. All the auditors become victims when a part of their community is involved in a disaster. In particular, during the Boxing Day tsunami, the transposition became the Westernization of the disaster narrative, in accordance with the high number of Western victims. Given global interdependence, all disasters can have repercussions on an international scale, with people living far from the place where the event occurred also becoming victims.

In the context of globalization, the sociological notion of disaster (see Quarantelli 1985) assumes special importance. The social system 'mediates' a physical event, amplifying or containing its consequences. Therefore, according to De Marchi et al. (2001), the global system can decide to ignore thousands of victims in marginal and deprived areas. It cannot avoid concern, however, if the people affected are from the vital centres of the economic and financial world, the collapse of which would inevitably affect the present global system. In this context, the role of the media is central in catalyzing audience opinion.

Etymologically, the word 'medium' (the plural of which is 'media') comes from Latin and has been adopted by the English language with the meaning of "median", "mean", "middle" or "intermediary". In the process of building communication, each transmitter operating as an intermediary alters the original message. This impacts the way people process information (Kasperson et al. 1988). According to Kasperson's considerations, in a humanitarian crisis the media do not report events objectively, but rather in a number of different ways (Robinson 1999). Indeed, in the media's communication strategy, the method of conveying an event is usually adapted to the audience it is directed at. Salience, style and frequency of message are communication strategies that can alter risk perception (Mileti and Fitzpatrick 1992; Tekeli-Yesil et al. 2011). Moreover, dramatization is an important instrument in risk communication (Kasperson et al. 1988). Accordingly, all disaster narratives demand the 'pleasure' of the destruction "of people, poverty, hopes" (Daly 2011: 255). This 'pleasure' may recall both the terror of Aristotelian tragedy and the innate Freudian death-drive. There is a contemporary familiarity, however, with disaster narratives (Daly 2011).

The media therefore appear to play a fundamental role in stimulating private emotional and economic participation (Roseblatt 1996; Olsen et al. 2003) through spectacularization of the disaster. The process of spectacularization involves amplifying information by the media and can also demand a loss of distance (transposition). In Kasperson et al. (1988: 178), social amplification of a risk framework is provided through "the ways in which individuals receive and process risk information and their role in affecting the ways in which risks can be intensified or attenuated". In the system, individuals act as "stations of amplifications"; according



to a psychometric model elaborated by Trumbo, they can be classified as “amplifiers” or “attenuators”.

Moreover, an event is said to be on a global scale when it catalyzes international attention – reaching an international audience through the media, for example – and when it contributes to shaping harbingers of a global culture (Roche 2000; Dansero and Mela 2007). According to the theory of the ‘CNN effect’, the media can influence political decisions and the granting of humanitarian aid (Olsen et al. 2003). ‘CNN effect’ refers to the capability of the media to influence leaders’ decisions, in particular as regards the foreign policies of Western countries. Examples of this have been identified by Robinson (1999) in situations of humanitarian emergency and troop deployment as part of non-coercive operations.

The role of the media, however, appears more important in the production of public stimulation than in governmental action. Over the years, the scientific community has in fact noted a gradual process of declining media influence on politics. Instead, it can be argued that the media today has become mere servants of governmental messages, or impersonal intermediaries between the government and the public (Robinson 1999, Conoscenti 2004). They are interpreted by Conoscenti as political expediencies, used for obtaining the emotional consensus of the population (according to language engineering theory, see Conoscenti 2004). In particular, Conoscenti (2004) argued that the power of the media decreased during the Kosovo, Afghanistan and Second Gulf Wars. Only Iraq-Kurdistan and Somalia appeared as examples of the CNN effect. The instrumental use of information pertaining to wars is only one metaphor of media control, which is vested with governing powers. This does not rule out the fact that some forms of manipulation can be used in the case of environmental emergencies to obtain and provide the desired image or message.

Political forces are not always able, however, to show the image they desire. During Hurricane Katrina in 2005, the situation was out of control and the governmental image in the media was one of weakness, displaying an inability to manage the crisis. In Europe, Katrina was perceived as a reflection of socioeconomic inequality and political incompetence. On the other hand, Hurricane Sandy in 2012 was interpreted as a reflection of global warming (see Bonati 2014). The media created highly different images of the two disasters. Furthermore, it used different elements and event characteristics to arouse a special range of emotions.

The role of the media therefore seems to depend on political interests, as opposed to influencing such interests, until the time when political forces are able to impose their vision. On the other hand, the media loves telling stories that can catalyze mass attention, as discussed above. The selected news must stimulate people’s emotions. The attention focused on disasters decreases if they are unfamiliar or distant to the viewers. As anticipated at the beginning of this paper, the media narrative of disaster can reduce this distance. The reduction of distance can be achieved through the process of transposing the disaster, as analysed below in the two case studies.

## The Case of the 2004 Tsunami in Southeast Asia

One example of the transposition of a disaster is the process of Westernization in the narrative of the Southeast Asian tsunami of December 2004. In this paper, the Westernization<sup>2</sup> of disasters is taken to mean the process interpreting events according to Western culture and experience. This may follow a process of geographical transposition and a Western appropriation of disasters that occurred in non-Western regions, as justified by the high number of Western victims. During the 2004 tsunami, international intervention was officially justified by the consistent number of foreign tourists in the areas engulfed by the disaster. This gave the hazard greater Western media coverage (Keys et al. 2006). The tsunami, which struck during the holiday season, killed many Western tourists and was covered extensively in the Western media. Approximately 9,000 tourists (most of them European, in particular from northern Europe) were killed or went missing. The country worst hit was Sweden: 428 of its citizens were killed and 116 were missing. Sweden was the ninth largest country in terms of international aid in the aftermath of tsunami.

As the tsunami affected a lot of tourists from several countries, it was immediately identified as an international disaster – or, rather, it became a catastrophe for all the countries that suffered directly or indirectly. On January 5, 2005, all EU member countries participated in a day of mourning for the tsunami victims. It was the first time that the European Union officially proclaimed a European day of mourning; it should be noted that it happened in memory of victims who died outside national territories, and not in a war situation. The tsunami tragedy helped create a temporary sense of European citizenship, as was also demonstrated during the recovery process. Immediately after the disaster, all of the member countries sent relief autonomously and in a disorderly fashion. Later on, however, the EU entrusted coordination of the aid to Italy, in accordance with this new sense of common participation in mourning. The internationalization of the disaster was also perpetrated by media propaganda, which “authorized” a number of countries to intervene and make decisions in the recovery process. Foreign countries contributed a total of approximately seven billion US dollars.

The Westernization of the narrative is also the result of telling stories from a ‘Western point of view’. Accordingly, in the aftermath of the Boxing Day tsunami, a number of documentary films were produced in order to tell the disaster: *Tsunami: The Aftermath* (directed by Bharat Nalluri, 2006); *The Third Wave* (directed by Alison Thompson, 2007); *The Impossible* (directed by Juan Antonio Bayona, 2012); and *Hereafter* (directed by Clint Eastwood, 2010, which has among its main characters a French journalist who survived the tsunami). All of these shared similar features: the narrator is from a Western country, the main characters are Western people who experienced the disaster and/or the post-disaster first-hand; and the Asian people appear as secondary characters – both in the roles of innocent victims and saviours. This Western-centrism of the movie narratives could be the result of

the transcalarity of victimism condition, due to the great impact that Western people experienced directly and indirectly. The media attention on the disaster was high; if we adopt the idea that climate change is still a risk<sup>3</sup>, then for the first time since the ‘Great Flood’ and the Ice Age, we have had a natural disaster that was also a transcontinental disaster (directly affecting Asia and Africa, and indirectly, Europe, Oceania and America).

This Western victimhood can be also interpreted as the result of the “unexpected” and of the need to learn from experience. No one in Western countries has expected a similar disaster; this caught them unprepared. It is not a coincidence that Thailand is the country that is most represented in Western post-tsunami narrative. It was the place where the greatest number of tourists died and served as a comparison between the outsider and insider, but it was also presented as an example of the flaws in the relationship of the Western world with nature. In Thailand, many island populations – on the Andaman and Nicobar Islands, in particular – survived the catastrophe because they anticipated the disaster, relying on their traditional knowledge of the area. Other communities – both immigrants and tourists in particular – did not understand the natural signals of what was happening (e.g., Arunotai 2008; Baumwoll 2008; Gaillard et al. 2008; Mercer et al. 2013). These events challenged the excessive confidence in the human capacity to control nature and moved scientists’ attention to focus on the role of indigenous knowledge in reducing the exposure to risks.

### **The Tohoku Tsunami of 2011**

In the aftermath of the Tohoku tsunami, the process of transposition was different; it is only indirectly and partially possible to discuss the Westernization of the disaster. Furthermore, we can talk of the transposition of risk. Western involvement in the Japanese disaster was not as high as it was in the Southeast Asian tsunami of 2004. In the former case, transposition was not justified by the number of victims or by the direct impact on the Western population. The Japanese tsunami introduced the risk of technological disaster (national and international), due to the damage to the Fukushima nuclear power plant, which immediately brought to mind images of Chernobyl. Faced with the risk of radioactive diffusion, an international debate therefore followed and the media focused its attention on that. Accordingly, this disaster had an impact on international policies regarding nuclear power. Germany decided to accelerate the closure of seven old nuclear power plants operating on its national territory; in Italy a referendum said ‘no’ to nuclear energy in the country. Additionally, in Switzerland, a project with three new nuclear power plants was temporary stopped. Additionally, prudence and new controls on national nuclear power plants were requested in France, Russia, China, Taiwan and India.

In the media narrative of the disaster, the Tohoku tsunami was presented as a local disaster, which obtained a global dimension when the risk of radioactivity

diffusion reached an international scale. Indeed, Japanese requests for assistance reached an international scale only after the risk of radiation diffusion became real and the Government of Japan recognized the nation's inability to stop it. Accordingly, the media focused on the international debate on nuclear energy that followed the disaster.

Confirming interest in the nuclear debate, the analysis of three Italian newspapers (*Il Corriere della Sera*<sup>4</sup>, *La Repubblica*<sup>5</sup> and *Il Giornale*) showed that the most frequently-used words in articles about the Tohoku disaster were “(anti-) nuclear” and “radioactivity”. During the period analysed (March 2011–December 2011), the word “nuclear” appeared in association with “disaster” and “Japan” in 49 articles published by *La Repubblica* (source: *Repubblica.it*), 33 of which were published in the first two months after the tsunami. In *Il Giornale*, the words appeared together 33 times (source: *Ilgiornale.it*), while in *Il Corriere della Sera*, they appeared together 60 times (source: *Corriere.it*). A total of 145 articles with a reference to the tsunami in Japan were published during this period in *Il Corriere della Sera* and 142 in *La Repubblica*. Only 44 are the articles published in *Il Giornale* to which it is possible to access on the newspaper website using the key-words “tsunami” and “Japan”. Thus, about one-third of the articles published defined the Tohoku disaster as a nuclear disaster. Moreover, about half of the articles published used the word “nuclear” in association with “tsunami” and “Japan” (e.g. 87 articles in *La Repubblica* newspaper). References to the Chernobyl disaster appeared frequently in the three newspapers. In *La Repubblica*, it appeared 16 times in association with “nuclear, disaster, Japan” (3 times in the title); 19 times in *Il Corriere della Sera* (two times in the title); and 20 times in *Il Giornale* (3 times in the title). Thus, *Il Giornale* associated the disaster of Fukushima and the disaster of Chernobyl in about 50% of the articles analyzed. While some of the articles discussed the differences between the two disasters and disputed possible comparisons, others underlined the possible risks of experiencing an Asian Chernobyl. References to the Ukrainian disaster thus fueled the debate on the safety of nuclear power.

The debate on the topic was confirmed by the contents of the articles published. *Il Giornale* accused the international community of being too focused on the technological risk and ignoring the large number of victims of the tsunami. In an article from March 20, 2011, titled “Japan: The world thinks only of the nuclear and forgets the post-earthquake humanitarian drama”<sup>6</sup>, the newspaper reproached other national newspapers for paying more attention to the risk of a second Chernobyl (according to the article, this was the case in *La Repubblica*) rather than talking about the people who had died in the natural disaster. After these statements, the newspaper was accused of being politically influenced. Indeed, in 2011, the newspaper was being published by the Berlusconi family; Silvio Berlusconi – a supporter of nuclear power at that time – was Prime Minister of the Italian Government at the time. Additionally, the nuclear debate was reaching a peak in Italy: the Italian people had been called to decide on nuclear energy with a referendum in June 2011,

where 94.05% of voters said ‘no’. On June 14, *Il Giornale* published two articles, the first entitled “Nuclear power: Nuclear plants terrify only Italy”, and the second “France and Japan confirm their nuclear choice. Saudi Arabia opens 16 nuclear plants”.

On the other hand, *La Repubblica* affirmed its ‘no’ to nuclear power in several articles: “And Germany speeds up its farewell to nuclear power in May: Only 4 reactors out of 17 in operation”<sup>7</sup>; “Why it’s possible to give up nuclear”<sup>8</sup>; “Chernobyl: After 25 years, risk of tumours in survivors still high”<sup>9</sup>.

Therefore, the process of transposition in the Tohoku disaster was associated with the ‘possible’ condition (the risk) of European people becoming victims. In front of the news and images of Japan, all the Western communities – with or without nuclear facilities – became aware of (or could no longer deny) the risks associated with nuclear power. The process of Westernization that followed was associated with the idea of the risk affecting every country with nuclear power plants, rather than with the disaster and the possible consequences of radioactive diffusion from Japan.

In particular, what emerged in an article published in March 22 in *Il Corriere della Sera* (Maraini,<sup>10</sup> “Human arrogance before nature: Shouting emotional choices in the face of the nuclear makes no sense”) was that all Europeans can become victims of progress; this requires deep reflection on the vulnerable condition of technology in the face of the strength of nature. In conclusion, according to the articles published by the three newspapers, we can say that the Japanese disaster moved from to be a natural disaster, due to earth surface movements, to an anthropic disaster (the nuclear disaster). Thus, it inevitably introduced also the human guilt (the responsibility of humans in producing disasters) that prevailed in terms of effects on the responsibility of nature (the earthquake and the consequent tsunami).

## **Role of the Media and Italian interventions in Asian Tsunamis**

In light what has been discussed up to now, people’s interest appears to be directly linked to communication engineering by the media. Public opinion is mainly driven by media communications; this can have various impacts such as a decrease in tourism or economic investments in the affected area and an increase in people’s attention to the crisis. At the same time, the media can directly or indirectly become an instrument of action, for example moving people to send private donations as demonstrated after the tsunami in Southeast Asia. In contrast, when the media stops talking about an emergency, people’s attention towards the event wanes. Images of disasters are forgotten and regular touristic and economic flows in the affected regions are re-established (Olsen et al., 2003).

According to data from the Italian Foreign Ministry, in an analysis of the ‘wave’ of aid that followed the Boxing Day tsunami, national private donations reached

€43.3 million (the Italian Government and local public administrations donated €15 million). The funds were collected thanks to television spots and newspaper articles. A telephone number for SMS donations was promoted by TIM, Vodafone, WIND, 3, Telecom Italia (the five biggest telephone companies), *Un aiuto subito* (a solidarity committee organized by *Corriere della Sera* and TG5 news), and RAI TV, and was adopted by all the mobile companies operating in Italy. RAI and Mediaset, the biggest national television networks, broadcast the telephone number for two weeks until January 9, 2005, and €28 million was collected. It was the first time in Italy that all of the main national media broadcasters were promoters of a fundraising campaign for an international disaster. Later, the funds collected were turned over to the 'Protezione Civile Italiana' (Italian Civil Protection, the national body of emergency response), which guaranteed the transparency of the fund's use through its website [www.protezionecivile.it](http://www.protezionecivile.it) and the control exercised by the media.

Other funds were collected through other media initiatives. *La Stampa* (one of the most widely-distributed national newspapers in Italy) appealed to its readers in order to fund the *Specchio dei Tempi* foundation, which rebuilt schools and houses in Sri Lanka and a professional school and an orphanage in Thailand, as well as a nursery school in India. The foundation also donated boats and tuk-tuk (a three-wheeled automotive rickshaw) to people who had lost everything in the disaster. And finally, *Il Giornale* decided to fund some NGOs involved in Southeast Asia.

In the aftermath of the Japanese tsunami, fundraisers and the use of the funds were entrusted to CRI (the Italian Red Cross). The telephone number used for the fundraiser was activated by CRI and was broadcast by all national media until the end of operations on March 30, 2011. There are no data regarding the total number of donations collected by the National Red Cross, though there is information regarding the donations to the International Red Cross. The funds were sent to the Japanese Red Cross, however, and used to promote local programmes for assistance to victims, health prevention, and education, and to improve the living conditions of the displaced. The media thus had a secondary role in this disaster compared to the Southeast Asian tsunami, when the Italian media was promoter of the 'wave of aid'. Indeed, in the aftermath of the Tohoku disaster they operated simply as a means through which to collect donations, rather than as promoters.

Comparing the two disasters, the data on the outcomes are clearly different. In the 2004 tsunami, 11 countries were affected and there were about 240,000 victims, while the 2011 tsunami was primarily a national disaster in which 16,000 people died. The characteristics of the disasters, however, are similar in terms of magnitude and depth of the earthquake, as shown in Table 1.



<b>Disasters/Data</b>	<b>Number of Deaths</b>	<b>Number of Countries Affected</b>	<b>Description of the Earthquake</b>	<b>Description of the Tsunami</b>
<b>Southeast Asia, 2004</b>	About 240,000	11	Magnitude: 9.3 Depth: 30 km Distance (nearest coast): 160 km	Max run-up: 27 m  Upthrust of impact: about 10 m
<b>Japan, 2011</b>	About 16,000	1	Magnitude: 9.0 Depth: 32 km Distance (nearest coast): 72 km	Upthrust: 6-8 m

Table 1 – Data on the tsunami disasters in Southeast Asia (2004) and Japan (2011).

A second important difference between the two disasters is the level of development of the countries affected. In 2004, all the countries directly affected by the tsunami were developing countries with poor warning and defence systems, whereas Japan is one of the most well-equipped countries in this respect.

The reaction and role of the Italian government – and of the Italian Civil Protection in particular – were different in the two disasters, as shown in Table 2, and had different justifications.

<b>Interventions of Italian Civil Protection</b>	<b>First phase of intervention</b>	<b>Second phase of intervention</b>
<b>Southeast Asian Tsunami, 2004</b>	<ul style="list-style-type: none"> <li>- Italy intervened for a number of the 4,000 Italians affected.</li> <li>- Sanitary teams were sent to the Maldives, Sri Lanka and Thailand.</li> <li>- Established the first flight bridge (4,308 Europeans aided).</li> </ul>	<ul style="list-style-type: none"> <li>- ICP became coordinator of the European intervention.</li> <li>- €28 million (private donations via SMS) was donated to ICP for post-tsunami recovery.</li> <li>- In Sri Lanka, 24 projects were completed.</li> </ul>

<b>Japanese Tsunami, 2011</b>	<ul style="list-style-type: none"> <li>- ICP intervened in Tokyo to support the Italian Embassy.</li> <li>- ICP was called to monitor the air level of radioactivity in the city.</li> </ul>	<ul style="list-style-type: none"> <li>- ICP intervention was confined to the metropolitan area of Tokyo.</li> <li>- ICP continued to monitor the air level of radioactivity close to the Italian embassy and in the neighbourhoods where Italians lived.</li> <li>- ICP promoted information on radioactivity risks</li> <li>- A pocket guide to radioactivity risk was published and distributed</li> </ul>
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Table 2 – Italian Civil Protection intervention in Asian tsunamis.

In the first phase of the recovery process, the role of the Italian Civil Protection was limited mainly to responding to national needs in both disasters, in accordance with the flag policy<sup>11</sup>. The needs were those of Italian citizens directly affected by the disaster. In the second case, while the role of the ICP did not substantially change in Japan, in Southeast Asia it was extended to assisting local relief and launching reconstruction projects. The difference can be attributed to three conditions present in the Boxing Day tsunami: first, as already discussed, private donations collected by mobile operators and national broadcasters were donated to the ICP in order to promote reconstruction in the affected countries; second, the countries affected immediately asked for international assistance because of their inability to respond by themselves to the emergency and the dimension of the impact, and because of the absence of local coordination; third, the condition of the affected countries – viewed as developing countries – created a feeling of responsibility in Western people (as a consequence of the comparison between the European tourists and the local populations). This was associated with transposition or Westernization of the disaster, which elevated the disaster to a transcalar dimension.

## Conclusion

Ulrich Beck (2005) described the Southeast Asian tsunami of 2004 as a personal/individual experience, according to the different geographical levels of experience people had. The entire international community went into mourning. The number of European victims, the media narrative and the political interests of Western countries, however, transformed the tsunami into primarily a Western catastrophe. It became a collective experience as a consequence of the reduction of distance, which also contributed to spurring the incredible generosity of the European people. According to the statements of the ICP project manager, Dr. Miozzo (Bonati, 2007), media spectacularization of the tsunami in 2004 was the start of a European wave

of generosity; the role of the media in this tragedy was therefore recognized as fundamental. Analysis of donations confirmed that a higher percentage of financial aid came from private donations, which were stimulated by media images broadcast worldwide. The Southeast Asian tsunami led to massive private solidarity, which ‘forced’ Western governments to take action. The initial rescue efforts, however, were completely directed towards recovering European nationals involved in the disaster, in accordance with the flag policy and confirmed through analysis of the Italian case study.

Moreover, the media ‘tsunami’ unearthed several problems that had been experienced in other international disasters. In fact, the international media claim moved a great number of ‘well-wishers’, who would not usually be involved in the recovery process. As a consequence of the great number of stakeholders involved in the disaster, there was confusion and rescue efforts were slowed down (Bonati, 2007).

On the other hand, the Tohoku disaster – which began as a local tragedy – rapidly became a potential international catastrophe. The risk of radiation leaks alerted all of the international communities, and the nuclear risks went from a local level to an international one. At a global level, the situation challenged and impacted the policies of nuclear power. The media became promoters of transposing reflections on the risks of radioactivity, feeding the political debate. An analysis of foreign relief makes it clear that it was mainly directed towards its citizens in the areas affected by the tsunami and by the radiation. The ICP, in particular, was limited to ‘monitoring’ the situation. This was, however, a consequence of Japanese (i.e., local) control of the recovery process – something that did not occur in the Southeast Asian regions.

In conclusion, the disaster narratives were different in the two aftermaths, according to the different images of the role played by humans in producing disasters. In the Japanese tsunami, human responsibility (linked to the inefficiency in managing the nuclear emergency and to the obsolescence of the nuclear plant) overtook the tsunami and the nuclear risk predominated in the natural disaster. Here, man was both a victim of the natural disaster and responsible for the technological disaster. On the other hand, in the Southeast Asian tsunami, man appeared to be vulnerable and powerless in the face of nature. The people that were killed were tourists during the holiday season – innocent victims of the violence of nature.

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## Notes

- <sup>1</sup> In this paper, event is interpreted as a space-time point (see Dansero and Mela 2007).
- <sup>2</sup> The Guardian, 22 June 2015 “New study links global warming to Hurricane Sandy and extreme weather events”
- <sup>2</sup>The word ‘Westernization’ is usually used to designate the process of standardization or globalization of Western culture. Edward Said, in *Orientalism*, argued that Westernization coincided with the process of colonization. In the dictionary, the word is used to define the act of influence with ideas, customs, practices, etc., characteristic of the Occident or of the Western USA. However, in this paper, the word is used in order to identify the process through which the Western world appropriates a disaster that occurred out of the Western geographical borders.
- <sup>3</sup> Indeed, climate change can be responsible for disasters, or rather it is the possibility that a disaster happens, thus it does not fall into the category of disaster as defined in literature
- <sup>4</sup> This is the first newspaper for the number of copies sold in Italy, founded in Milan in 1876.
- <sup>5</sup> This is the second national newspaper, after *Il Corriere della Sera*. Eugenio Scalfari founded it in Rome in 1976. It has always been associated with the Italian socialist movement.
- <sup>6</sup> Giappone, il Mondo Pensa Solo al Nucleare e Scorda il Dramma Umanitario del dopo Sisma
- <sup>7</sup> Published on 21<sup>st</sup> March, 2011, original title “E la Germania Accelera L’addio al Nucleare a Maggino in Funzione Solo 4 Reattori su 17”
- <sup>8</sup> “Perché è Possibile Rinunciare al Nucleare”
- <sup>9</sup> “Chernobyl: Dopo 25 Anni Ancora Alto il Rischio Tumori Nei Superstiti”, Repubblica.it
- <sup>10</sup> L’arroganza umana davanti alla natura. Gridare a scelte emotive davanti al nucleare non ha senso
- <sup>11</sup> The ‘flag policy’ is when a foreign country takes action autonomously and is disrupted by cooperation logic in order to safeguard its interests and recover its dispersed people. It usually produces an uneven and unequal distribution of goods among the people involved. In such cases, local interests are accorded the least priority (see Oslen et al., 2003).

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# Political Communication in Disasters: A Question of Relationships

By Hamish McLean & Jacqui Ewart

## Abstract

Politicians are both a help and hindrance in the provision of information to the public before, during and after disasters. For example, in Australia, the Premier of the State of Queensland, Anna Bligh, was lauded for her leadership and public communication skills during major floods that occurred late in 2010 and in early 2011 (de Bussy, Martin and Paterson 2012). Similarly, New York Mayor Rudy Giuliani was praised for his leadership following 9/11. This is in contrast to the poor performance of political leaders during Hurricane Katrina (Cole and Fellows 2008, Olson and Gawronski 2010). Political actors' lack of credibility and their poor situational awareness contributed to the problems. The involvement of political leaders in disaster communications is also problematic from the perspective of emergency agencies. For example, politicians who move their communication position from supportive to tactical can take over the role of providing official disaster information, such as evacuation warnings, without sufficient expertise, credibility or situational knowledge. This paper builds on the expanding body of research into the politics of disasters by exploring relationships with political actors from the perspective of emergency managers. Drawing on interviews with emergency agencies in Australia, Germany, Norway and the UK, we firstly examine when and what a politician should communicate during disasters and secondly, offer six principles toward a roadmap of involving political actors in the disaster communication process when life and property is at stake.

**Key words:** politicians, communication, disasters, emergency management

## Introduction

Scholars agree that disasters are political events (Olson 2000, Olson and Gawronski 2010, Kelman 2012). Much of the increasing body of research into the politics of disasters has taken a broad-brushed approach. In this paper, we drill into the relationship between emergency managers and political actors in times of calamity. Two key themes arise from a series of interviews undertaken with senior emergency managers in Australia, Norway, the UK and Germany. The first is the need to clearly establish the role and expectations of the political actor during a disaster, particularly during tours of impacted locations and, secondly, the key messages to be communicated during such times. We have established that these issues are important operationally to response agencies, but until now these topics have not received any scholarly attention. In fact, political involvement in disasters, although accepted as an important role by emergency agencies, can be problematic. For example, political actors with poor situational knowledge of the disaster while, at the same time, wanting to show leadership, have become more of a hindrance than help when timely, accurate, credible and relevant information is crucial when lives and property are at stake. Further, politicians, now dubbed ‘flood tourists and welly wallies’ in the United Kingdom (Ingham 2014) can also be a hindrance during the resource-intensive response phase of the disaster. Emergency managers, faced with the demands of saving life and property, have developed strategic ways of delaying ill-timed political requests for visits to disaster locations while protecting their unwritten relationships with their political masters.

## Methodology

This paper draws on in-depth interviews with disaster response agencies which were undertaken in the course of a larger project about disaster communication. The methodology consisted of open-ended, conversational style interviews (Denzin & Lincoln, 1994) to allow for in-depth discussion of the issues associated with the research topic. An interpretative approach to the interviews was taken to explore deeper insights into the complexities of the lived experiences of the interviewee from their own perspectives (Andrade 2009; Schwandt 1994). Both authors have professional backgrounds in disaster and crisis management. They were able to draw on their experiences in managing crises and disasters when developing the guiding themes for the interviews. Interviews, ranging between 30 minutes and two hours in length, were held with a number of senior emergency managers including:

- Anders Aspaas, Communication Advisor, Tromsø Police District, Norway (12 November 2013)
- Kjell Brataas, Senior Advisor, DSB, Norway (4 November 2013)
- Ian Cameron, Media Advisor to the UK National Steering Committee for Warning and Informing the Public (NSCWIP)

- Phil Campbell, Manager Corporate Communications, NSW State Emergency Service, Australia (3 June 2013)
- Anthony Clark, Group Manager, Corporate Communications, New South Wales Rural Fire Service, Australia (3 June 2013)
- Nicholas Hefner, Head of Public Relations, Federal Agency for Technical Relief, Germany (20 November 2013)
- Anne Leadbeater, community development officer, the Murrindindi Shire, Victoria, Australia (3 June 2013)
- Commissioner Ole Bredrup Saeverud, Tromso Police District, Norway (12 November 2013)
- Bob Wade, Emergency Planning Society, UK

Participants were given the option of having their names attached to their comments or to have their comments de-identified. As part of the larger project from which this paper drew data we undertook eight interviews in Norway, the UK and Germany and seven interviews in Australia. The interview with community development officer Anne Leadbeater from the Murrindindi Shire, which was affected by bushfires, known as the Black Saturday bushfires, in Victoria, Australia in 2009, was included because she took on a significant leadership role in the disaster and recovery and in that position had substantial contact with politicians and media. The themes that emerged from the coded interview transcripts provided a pathway to develop six principles of how emergency managers and politicians can best manage their relationships, particularly when lives are at risk and the need for factual, timely and accurate information from a credible source is critical.

## **Literature Review**

The ways in which political actors and emergency agencies interact during the various phases of a disaster has received sparse scholarly attention. For example, the authors were unable to source any research on how, when or why politicians should communicate before, during and after a disaster. An explanation for this may be found in Olson and Gawronski's (2010) observation that political science had been largely ignored until recently by disaster researchers. This is changing, however, with an increasing body of mainstream research into what Olson and Gawronski (2010: 219) describe as 'the politics of disaster'. There is little disagreement among scholars that disasters are political events (Kelman 2012, Olson and Gawronski 2010). Kelman goes as far to say that disasters are inherently political and it is 'naïve to think otherwise' (Kelman, 2012b: 14). Similarly, Wei et al. (2010: 1016) identified that the information provided during a disaster is 'always a political decision'. Cottle (2014: 3) argues that social and traditional media shape disasters 'from the inside out, and outside in, reconfiguring disaster social relations, channeling forms of political control and projects for change, and circulating deep-seated cultural views and sentiments'.

We found scholars take a broad approach to the topic of politicians and disasters. For example Kelman (2012, 2007) examines the question of whether disaster related activities spur diplomatic ties among opposing countries. Drilling down, Olson and Gawronski's (2010) research into the 'politics of disaster' found that disasters often, but not always, evolve into political crises (207). They argue that the way a disaster is managed has significant political repercussions, both positive and negative. Olsen and Gawronski (2010) elaborate:

A well resourced and managed response reassures both victims and the larger public, but a poorly resourced and managed response has the opposite effect. Indeed, how well a government or regime handles any type of large-scale crisis event will instill greater or lesser public confidence in specific political leaders and government institutions, and it can even affect the legitimacy of the regime itself. (208)

Disasters challenge political leadership because nature and society are severely disrupted. In turn, this violates 'all the rules of plot' leading individuals and communities to question who they are, why the world is unpredictable and why order has temporarily ceased (Erikson, 1994: 147). 'Politicisation' of the disaster increases as the impacted community, or at times an entire society, moves from emergency response through to the recovery and reconstruction phases (Olson, 2000: 265). The recovery phase, in particular, has significant implications for politicians. Olson and Gawronski (2010) describe it as a 'special time', where both victims and the public expect a 'diligent' response from the government. They explain (2010):

Public officials who fail to grasp the dynamic nature of public expectations during a disaster and attempt to respond in normal ways create a disjuncture with their publics. That is, publics expect government officials to do their jobs, and to do them well, in times of crisis. (208)

Additionally, failure to adequately respond to a disaster often becomes the focus of media attention. As Olson and Gawronski (2010) observe, social and traditional media cover disasters 'with extraordinary intensity and often in real time' (208). There is intense pressure to fill 24/7 coverage over extended periods as the media perform their sense-making role on behalf of their audience. As observed by Littlefield and Quenette (2007: 29) the media act in the role of a 'judge' as to how the disaster is managed, thus providing the authority for the media 'to assign blame when the situation requires it'. In turn, the public is 'willing to attribute blame and punish incumbents accordingly' (Arceneaux and Stein, 2006: 50). Hurricane Katrina, in 2005, is a useful example of political mismanagement of a disaster. Poor situational awareness by political leaders, combined with media broadcasting of unsubstantiated rumours, diverted the priorities of officials from rescue to law enforcement. As CNN (2005) reported during Hurricane Katrina, Governor Blanco declared that law and order would be restored with battle-hardened troops equipped with 'M16's and they're locked and loaded'. It is not surprising that Maestas, Atkeson, Croom and Bryant (2008: 615) identified that media coverage in the weeks

following Hurricane Katrina focused on blame and responsibility, with much of the criticism leveled at government.

Given the aforementioned issues, this paper turns to two pragmatic questions: when should political leaders engage in public comment during a disaster and what information should their messages contain? We argue this is important because, as discussed, political leaders face unprecedented leadership and communication challenges in a disaster. Furthermore, we have observed at least in the Australian context, political actors are taking an increasingly active role in disaster communication, from three positions - strategic, supportive and tactical. It is the tactical position, however, that is problematic for emergency managers, where boundaries of who should provide what information become blurred. At the supportive and strategic level, in the 2011 floods in Queensland the-then Premier Anna Bligh was lauded for her leadership and inspirational supportive public commentary (de Bussy, Martin and Paterson, 2012) as the scale of the disaster unfolded. Thirty-eight people died in the Queensland floods and three-quarters of the State was declared a disaster zone. In 2014, the current Queensland Premier Campbell Newman, in preparing communities for an approaching cyclone, took on a more tactical role by providing evacuation advice and information about the capacity of buildings to withstand the cyclonic winds (ABC, 2014). We found the role of politicians in providing this sort of information is subject to debate based on source credibility. For example, a New Zealand study on credibility in evacuation messaging using a simulated flood found that evacuation orders issued by disaster agencies, rather than the Prime Minister, were more trusted (Lamb et al. 2012: 278).

## **Findings**

Our paper now turns to the two key questions that emerged from the literature review to explore the perspectives from the interview participants. They are (a) when a politicians should engage in a disaster and (b) how they should shape their messaging. There was consensus from interviewees in Australia, Norway, the UK and Germany, that politicians had a role in disaster communication. What was subject to debate, was how far that role extended in the context of what was communicated, by whom and when. In any event, the interviewees agreed that political actors needed to show leadership and concern for their communities during the various stages of a disaster. For Anne Leadbeater, who led devastated communities through the 2009 Black Saturday bushfires in Australia, political leadership in a disaster is crucial. She explains (interview 2013) '(it) doesn't really matter whether it's the Prime Minister or the local ... councillor. There is a role to be fulfilled in terms of leading by example'. Anthony Clark, Group Manager, Corporate Communications, New South Wales Rural Fire Service argues that disaster and emergency agencies are ultimately 'responsible to the Minister, the Premier and the people. It's not

something I think anyone can just look at and go, ‘We don’t want a politician involved’ (Interview 2013). Interviewees in Norway also argued that politicians have a role in a disaster to support their communities. For example, Anders Aspaas, Communication Advisor, Tromsø Police District, Norway, argues that politicians should be involved to ‘take care’ of the communities impacted by the disaster. This approach resonates with Kjell Brataas, a Senior Advisor with the DSB, Norway’s disaster agency, who notes that politicians need to show ‘that they are in control of the situation or capable of managing it’ (Interview 2013). Brataas points out that this is particularly evident during an election year, when it is ‘even more important for them to show that they are in control and that they care’ (interview 2013).

The theme of political leadership in a disaster also emerged in Germany. Nicholas Hefner, Head of Public Relations for Germany’s Federal Agency for Technical Relief (THW) asserts politicians want to provide leadership by ‘being on the spot’ to show they are ‘worthy’ of being elected and for the public relations benefits. Although emergency agencies in Germany, Norway and Australia agreed that politicians had a role in a disaster, none had developed specific written policies defining how the relationship between them and the politician would be structured and the boundaries of responsibility in what would be communicated to an impacted community. It seems two important aspects of that relationship identified by emergency agencies - when a politician should communicate in a disaster and when they should visit a disaster location – are managed on a co-operative ad-hoc basis. From the perspective of emergency agencies, the timing of political VIP tours of disaster locations is a critical factor. This largely depends on resources being available and perceptions being managed. This second point is a particular challenge for political actors.

Ingham (2014) observes that floods in the UK have given rise to two terms ‘welly wallies’ and ‘flood tourists’, referring to politicians who have ‘appeared sloshing through the waterlogged wastes of the UK’. Ingham points to the tightrope faced by political actors in disaster perceptions – if they do not go to the disaster scene they are ‘lambasted’ for failing to care, while those that do are criticized for exploiting a media opportunity rather than genuinely helping with the relief effort. Ian Cameron, of the UK national warning committee argues that politicians are tending to visit disaster locations without sufficient briefing and advice. He pointed to the example of a Government Minister arriving at a flood without appropriate wet weather gear. He continues:

‘As a result the whole (media) story was about a Minister who was unprepared, who turned up with the wrong gear. And so that was the story. Whatever he was saying was overshadowed’ (interview 2014)

There was consensus across the interviews for this paper that on-the-ground political visits were important, however they should be scheduled after the disaster has transitioned from the response to the recovery phase. This would avoid a scenario that Aspaas, of the Norwegian police, describes as placing officers in the difficult



position of ‘trying to save lives [while] at the same time as we are hosting politicians’ (interview 2013). Police Commissioner Ole Bredrup Saeverud, Tromsø District, Norway, put his position succinctly: politicians should ‘stay away’ during the response phase. He noted, however, that they would not have long to wait, observing that the recovery phase can happen quickly after the impact. It is then, Saeverud argues (Interview 2013), that politicians have a role in the recovery phase to ‘see what happens and what needs to be done’.

A similar position is taken in Australia on the timing of political visits to disaster locations. Philip Campbell, Manager Corporate Communications, NSW SES, argues that the impact phase of a disaster is the least favourable time for such political activity. He finds that politicians generally agree with this, observing ‘politicians very rarely become involved when the weather is absolutely awful and the rain is pelting down’ (interview 2013). In Norway, politicians take a similar approach of stepping back to allow emergency agencies to deal with the disaster impact. Aspaas observes that politicians ‘are really good at keeping their hands off and have an understanding of the work we do’ (interview 2013).

For emergency managers, however, dealing diplomatically with an ill-timed political request to visit a disaster location can challenge their relationship with the political actor. For example, Brataas, of the Norwegian disaster agency DSB, observes:

In the end of course it’s the Minister who decides, and if someone is brave enough to tell him that maybe you should wait two days and then you visit, and he still wants to go, of course he goes, you can’t deny him that, or then you are out of a job probably. (interview 2013)

A similar sentiment is held by an Australian emergency manager, who notes that refusing a political request can result in negative career consequences. He elaborates:

If you just keep on saying no your career is probably going to be a very short one. And I know there’s been plenty of situations where people have just consistently said no, no, no. And you never hear of them again. They become the disaster. Yeah, so providing that alternative is quite often the best tactic (interview 2013).

Rather than bluntly refusing a request, Australian emergency managers paint a picture of the perception which may be gained by the impacted community and the media of an ill-timed political visit and offer an alternative activity, such as a tour of the disaster operations centre. One emergency manager (interview 2013) noted this approach often worked with political actors, and their media minders, keen to avoid an ill-timed disaster tour:

You might think that’s a good idea now, but as soon as one community member finds out that there was a helicopter trip in there with the Minister and the Premier and six cameras in tow, yet you’re not letting someone who has lost their home to a fire or it’s been flooded, you’re not letting that person in there I mean, that’s when you start having issues and when you actually explain that to them, most of the time they get it. (interview 2013)

Another Australian emergency manager argued political tours are inevitable. He explains (interview 2013): ‘you know that inevitably the politicians are going to turn up at some point during a major operational response and that you’re going to need to find those particular resources.’ Clark, of the NSW Rural Fire Brigades, accepts this position and argues disaster agencies do ‘everything possible’ to facilitate political visits to disaster zones when timing is appropriate and resources are available. A request, however, may be declined if ‘it is too early’ for a political visit based on safety and the information and resource needs of the impacted communities. Clark (interview 2013) observes that,

What the people on the ground are actually wanting is information, not just photos in the local papers, for instance. It’s a very simplistic way of looking at it, but that’s a reality of it. Sometimes (for a political visit) it’s just too soon and working in communications you’ve got a pretty good idea of when something is a bad idea.

The impact on resources for a VIP disaster tour is another consideration. Brataas, of the Norwegian disaster agency DSB, recognizes that political leaders require extensive support from emergency agencies. He elaborates,

They come by helicopter and they visit a few places in a day. And of course it’s lots of work just to coordinate and deal with the media. And some of these local communities, or local government agencies, don’t have more than maybe one or a half person to normally deal with communications questions. It’s lots of work, and they are not able to work on the crisis. So that’s another challenge that we have seen. (interview 2013)

Emergency managers in Australia share similar concerns about resourcing VIP visits. For example, one emergency manager describes the pressure in this way:

There are times when (our) media team have felt a little bit like travel agents for the politicians rather than getting on with our role of getting the message out...we also find that operations staff can equally be frustrated that they have to take time out from their day to get senior personnel who are running the operation to spend three or four hours showing around a politician when they really would rather be getting back into what they’re doing (interview 2013).

Cameron, of the UK warning committee, asserts that traditional and social media are a major factor driving politicians to the location of a disaster. He explains:

‘I think they (politicians) always see a chance to be on camera as an opportunity. I think the way that the media is changing is that in the past blue light services and politicians during a disaster were your first port of call as a journalist. The difference now is that social media means that the journalist has access to those victims and their families and people who experienced it first hand and the tales and the stories that they get from them have more colour, are more interesting. And so the politician comes a bit further down the line. And I think the politicians are finding that sometimes they’re not even approached for a comment and so therefore they’re desperate to get on the TV. And therefore they’re desperate to make any comment.’ (Interview 2014)

Hefner of Germany’s THW, argues political visits to the location of the disaster will happen in the response phase at the height of media coverage. Hefner continues,

So if the media are not there, the politicians won't be there. That's why you won't be able to tell them come in the recovery phase. [The] media will be there, and the politicians will be there. (interview 2013)

This reality for Hefner means he plans for resourcing political visits in the midst of a disaster response phase, noting that the political priority is to 'talk to the forces', thus politicians want to be seen with 'the people on the ground with a shovel and pick' (interview 2013). Hefner argues that perceptions about political visits during the response phase need to be carefully managed. It is accepted practice that VIP visits are associated with volunteer responders, and that the visiting politician has the ability and authority to provide resources, to avoid perceptions of creating the kind of self-serving public relations opportunities identified by Ingham (2014). Hefner elaborates,

The tricky thing is on the one hand it's PR, and on the other hand it's important. They [politicians] can be on the spot and they show their empathy to the people and they bring, they always have to have something in their pocket like money, money and [resources]. (Interview 2013)

Hefner notes that political minders sometimes have unrealistic expectations on what can be delivered on the ground in the heat of the disaster. From an operational perspective, Hefner's approach is to examine the political wish list and go 'ok, what's realistic, what's unrealistic' (interview 2013). Australian Black Saturday bushfire community leader Anne Leadbeater argues that there are benefits in providing political actors with appropriate early access to disaster locations. This allows politicians and the media to quickly gain a clear picture of the disaster impact that could result in increasing support for survivors. She asks (interview 2013):

If you don't have your Premier there going, 'oh my goodness, this is terrible', how does he, in good conscious, put the stamp on the form that says you've got an open cheque book? (Interview 2013)

Leadbeater asserts that political support needs to be meaningful and pragmatic. She explains, 'we don't want to hear that we're going to be given millions of dollars to build new community assets, because we don't know where we're going to eat tonight' (interview 2013). Although such statements may be welcome in the later stages of recovery, Leadbeater suggests that the initial post-impact phase the political messaging should be 'we're here for you and our job is to try and help you get what you need to just make it through the first week, the first month and so on' (interview 2013).

The senior emergency managers identified that politicians engaging with the media during a disaster could be problematic. The interviewees for this paper agreed that a fine line exists between tactical operational information, usually in the jurisdiction of practitioners, and supportive and strategic information at the political level. For Brataas of the Norwegian disaster agency DSB, the line can become blurred when political actors open the door to media engagement. Brataas explains it can quickly lead to follow-up questions about operational matters and politicians

delivering ‘advice that maybe police or health officials should be doing’ (interview 2013). Brataas argues that media commentary should be discussed and planned between agencies before a disaster happens. He offers his personal view,

The politicians have a right to and should be talking sometimes, but not about the details, and that’s a very dangerous and difficult situation, because it’s very easy to start answering the detailed questions. They should probably more talk about funding and how the government is supporting the local communities and things like that. (Interview 2013)

For Hefner of Germany’s THW, political communication in a disaster should focus on the supportive rather than operational aspects and they should ‘talk about what they see at the moment, not about the general overview’. He offers this example of a statement that refers to volunteers, rather than operational details on the response to the disaster:

It is good to see ... citizens help citizens in Germany. I am very proud that we have such a wonderful system in Germany. (Interview 2013)

Wade, of the Emergency Planning Society, offers a simple formula for political commentary in the early stages of an unfolding disaster – the three P’s of pity, pledge and praise. Wade (interview 2014), explains the concept:

They can go on camera showing empathy for the victims; they praise the emergency responders, what a great job they’re doing, to reassure the public, get confidence back in the public; and then of course the pledge, “We don’t know what’s caused this but we will leave no stone unturned to find out what it is.” Again, reassure the public that they’re not trying to whitewash it. And I think that still holds.

There are a number of challenges that face those charged with managing disasters including, the involvement of politicians in disasters and the types of messages they provide to various publics and news media during these types of events. This paper has identified a number of key areas for improvement in the unwritten and rather ad-hoc relationships between emergency managers and political actors. We argue that the boundary of who communicates what in a disaster is fragile and alters depending on the situation. Political actors, without sufficient situational awareness or operational expertise, are problematic when engaging with media that are keen to obtain tactical information. As Brataas, of the Norwegian disaster agency, points out, the media will take advantage of the opportunity to delve into operational questions with a politician. Thus, we offer six principles for the effective collaboration between emergency agencies and political actors in the context of a disaster:

- Politicians have a role in disaster leadership and communication;
- Political disaster tours should be undertaken in the recovery phase when resources are more readily available and those tours are part of the operational planning;
- Disaster tours should not be only about public relations opportunities;
- Political actors should embark on disaster tours with the authority to provide additional resources to support response and recovery efforts;

- Communication by political actors should be supportive rather than tactical;
- Politicians should defer tactical questions to operational people in their area of expertise.

## Conclusion

This paper examined two key questions: when a politicians should engage in a disaster and how they should shape their messaging? This paper has found that politicians should refrain from engaging in disaster tours during the response phase when resources are needed to save lives and property. Instead, political actors should be actively involved in the preparation and recovery phases. Secondly, that political messaging should be shaped using a supportive narrative rather than operational narratives. We argue that this paper contributes a hitherto unexplored area of disaster politics. Further research would be useful from the perspective of political actors to explore how they see their role in disaster communication. This would build a more comprehensive picture of how both emergency managers and political actors can collaborate in the effort to save life and property during a disaster. It would also help prevent many of the mistakes we have seen in the recent past.

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# Towards an Integrated Approach to Emergency Management: Interdisciplinary Challenges for Research and Practice

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## Abstract

This article presents an interdisciplinary vision for large-scale integrated emergency management that has been inspired by the transition from platform centric to integrated operations in the oil and gas fields, which uses remote emergency control centres collaborating virtually with local responders. The article discusses some of the most salient research challenges for integrated emergency management, including the role of mobile technology, human-centred sensing, citizen participation and social media, and the socio-cultural determinants of disaster management. The purpose of this article is to frame an integrated emergency management approach that adopts a multi-disciplinary approach, including human computer interaction, information systems, computer science, development studies and organization science employing different methodologies. Most importantly, we need to better understand the socio-cultural determinants of how people prepare to, respond and perceive disasters, in order to evaluate whether and what kind of information and communication technology (ICT) support is appropriate. There is need for more research as to why in some regions local people ignore official orders to evacuate, and rather follow the advice of local leaders, elders or religious leaders. In other instances, disasters are seen as 'acts of God' thus shaping disaster preparedness and response.

**Keywords:** Disaster, disaster perception, disaster vulnerability, social media, emergency management, integrated operations, information and communication technology, human-centred sensing, ad hoc networks, smart phones, virtual collaboration, Integrated Operations

## Introduction

Large scale emergencies require response and management under circumstances disrupted by the disaster itself (Simpson and Hancock 2009). When indigenous systems have been disrupted, emergent groups that often do not share common practice and experiences must be coordinated. On site conditions may have been adversely affected and the lack of integration across phases and organizations, together with exhaustive stress impairs the response quality (Turoff et al. 2010). Experiences with Integrated Operations, pioneered in the Norwegian offshore oil and gas fields, suggest a different model – an Integrated Emergency Management approach. This is a promising approach for emergency management and is a realistic goal in the next ten years.

Most important, mobile phones are spreading rapidly, with soon reaching one mobile phone subscription per person creating new opportunities to realise Integrated Emergency Management (International Federation of Red Cross and Red Crescent Societies 2013). Even if technological solutions, such as smart phones, are available underpinning an Integrated Emergency Management approach, for instance to warn populations at risk, it is not clear how local communities can effectively use them and be involved in managing the disaster (Drabek 1999). Moreover, do solutions developed for environments with sophisticated and well-functioning infrastructure, also work in emergencies and regions with poor technological infrastructure and lack of technological awareness? Furthermore, cultural differences may make it difficult to apply solutions that are developed for and in industrialised countries that may not work in a different cultural setting in countries, where religious and spiritual beliefs dominate.

Notwithstanding, ongoing activities in early alerts, collaborative decision making systems, situation room technology, integration of physical data, remote sensing, geographical data and social media information for emergency management can be viewed as emergent components for Integrated Emergency Management (IEM). This article proposes four major research challenges for creating a future IEM approach, discusses its strength and weaknesses, by focusing on the socio-cultural aspects of Integrated Emergency Management.

## Making Integrated Operations Relevant for Emergency Management

In an Integrated Operations approach, teams in onshore control rooms, working in three to four time zones around the globe, virtually collaborate with a local offshore workforce to handle oil and gas operations. Since different oil and gas companies implement Integrated Operations in different ways there is no common description of the Integrated Operations concept. However, all Integrated Operations solutions share the following generic properties: 1) Use of ICT and a digital infrastructure to

enable new work practices; 2) increased capture of offshore performance data; 3) use of real-time data to monitor and manage operations across geographical and organizational borders; 4) use of collaborative technology to link different actors in a closer, more efficient way; 5) access to expert knowledge (Albrechtsen and Besnard 2010). Integrated Operations implementations include processes for all stages of emergency management in oil and gas platforms. A serious test of emergency management using Integrated Operations has not yet occurred since there have been no recent major accidents in the Norwegian offshore operations. However, Albrechtsen (2010) argues that Integrated Operations is an enabler for new practical approaches to risk assessment and management; that risk assessment may be improved through use of real time data; and that it provides better risk visualization and facilitates effective safety support. While Integrated Operations is relevant for Integrated Emergency Management as it employs ICT infrastructure to react quickly and appropriately to unforeseen events, emergencies involve a large array of actors and victims, who are not part of the same organisation, using different modes of communication, and having divergent societal and cultural backgrounds and identities.

### **First challenge: Enabling Infrastructure-less Communications**

Today, worldwide cellular networks are the fundamental infrastructure for communications among citizens. However, such an infrastructure is vulnerable in large-scale emergencies. Even in small-scale emergencies, e.g. the storm in west Norway in December 2011, thousands of people can lose network connectivity for weeks (Nyfløt 2011). Although a satellite-based infrastructure will still be operational after natural disasters, handset prices of around USD 500-1,700 and high subscription fees restrict citizens' use of satellite phones. Therefore, improving the resilience of infrastructure-based mobile systems by enabling infrastructure-less ad hoc communications is a paramount theme for emergency management. Thus, availability, reliability, robustness, coverage, and energy efficiency are essential topics for building and deploying ad hoc networks in emergency areas. Future research work concerns enhancing network connectivity by introducing redundancy to infrastructure-based mobile systems using ad hoc networks. Network connectivity can be improved by using easily deployable ad hoc networks to provide redundant links (Egeland and Engelstad 2009). However, current works fail to propose concrete strategies on how to combine partial static topology with dynamic links. Furthermore, the performance of such strategies needs to be evaluated through mathematical analyses, simulations and test-beds. Moreover, in an emergency, mobile base stations must be rapidly deployed to emergency areas. A promising approach is to integrate ad hoc networks with infrastructure-based communication systems using mobile base stations and mobile devices. This could form a standalone network,

e.g., as a citizen-to-citizen, or rescue team-to-rescue team network, or a combination of both. This network could also form an easily deployable temporary wireless network, connecting to other infrastructure networks such as satellite or cellular systems. In such context, a light-weight mobile base station or gateway will be an optimal alternative. In order to ensure effective first response to emergencies, reliable and robust communications over large areas for rescue teams and affected citizens must be established. Considering link instability and topology of ad hoc networks, a bi-connected topology has been proposed for reliable communications (Ogier and Spagnolo 2009). However, this imposes strict requirements on high node density, which is unrealistic in emergency scenarios. Another approach is to develop new Media Access Control (MAC) mechanisms and routing schemes for low density ad hoc networks in order to provide peer-to-peer reliable communications in emergency scenarios. Lastly, lifetime of communication networks need to be extended in an emergency situation. Recent research (Jung and Ingram 2011) demonstrates that per-hop transmission range can be extended by cooperative transmissions of neighbouring nodes towards a common destination. In this way, an energy-constrained node can survive over longer periods, resulting in improved network lifetime. Here work could focus on designing energy-efficient mechanisms to extend network lifetime.

## **Second Challenge: Human-Centred Sensing**

Recently, “human-centred sensing” has been introduced for emergency management, using humans as information collectors (Jiang and McGill 2010). By taking advantage of smartphone based sensor technology, human-centred sensing offers the potential for remote sensing and information fusion in an emergency (Schade et al. 2012). Mobile wireless devices such as mobile phones and smartphones are widespread, including developing countries, and are often equipped with advanced sensor technology, including accelerometer, digital compass, gyroscope, global positioning system, microphone, and camera. Consequently new types of smart phone applications that connect low-level sensor input with high-level events are emerging (Lane et al. 2010). These applications can involve individuals, groups of users, and even entire communities. An example is the automatic classification of a smart phone’s environment by using its microphone (Lu et al. 2009). By combining the smart phone's accelerometer with GPS, the owner’s movement patterns, e.g. walking, running, or cycling, can be determined (Zhang et al. 2010). Interaction between multiple smart phones provides further possibilities. For example GPS data collected from large user groups can identify the places frequented by different subpopulations. Consequently users can receive targeted recommendations on evacuation paths, emergency equipment, and nearest hospitals, fire brigades and police stations, etc., based on the behaviour of the subpopulation that best fits the user's own movement patterns. Another example is using smart phone sensor technology

to determine how the actions of large groups of users cause different types of environmental pollution (Mun et al. 2009).

However, human-centred sensing also implies a number of research challenges. Firstly, human-centred sensing in emergency situations with ad hoc networks implies a plenitude of fragmented information, collected and propagated in an opportunistic manner through locally formed “communication hubs” (Hall and Jordan 2010). Also, different emergency response agencies will have their own interpretation of what is important data, and their own storage formats. Furthermore, crucial data may be provided even by citizens and victims of the emergency, in an ad hoc manner (Jiang and McGill 2010). The resulting data heterogeneity and huge amounts of data, introduces several research challenges (Tomaszewski et al. 2007). Integrating different formats using a common information model, and the intelligent routing of the data constrained by limited communication resources, are great challenges in human-centred sensing.

Distilling pertinent cues from collected information in order to obtain situational awareness at the individual, local, and global level of an emergency, forms a formidable data fusion problem (Hall and Jordan 2010). Such fusion includes context dependent hazard forecasting, damage and risk estimations, and statistical analysis. The problem must be solved in a decentralized manner, as dictated by the resource constrained computing and communication devices involved. Moreover, spatio-temporal aggregation of information fragments is required since information from geographically related sensing devices may also be used to recognize and track evolving local and global emergency patterns. Additionally, conflicting or even contradictory information, typical in the early emergency phase, requires harmonization, and methods are needed to discriminate between erroneous, misleading, and awareness-bringing information.

Opportunistic mobile phone sensing requires privacy preservation (Kapadia et al. 2008). In some emergency situations, e.g. terrorist attack, shared information could be abused posing significant risks. Information sharing may also lead to the spread of false information. To prevent hostile attacks, human-centred sensing should ensure information integrity and guard against information misuse. An ability to interpret sensor readings so that a threat picture may be formed is central to IOs. Furthermore, a comprehensive picture can only be formed when the sensor measurements from several devices are taken in context (Hall and Jordan 2010), possibly in combination with information from involved authorities.

### **Third Challenge: Citizen Participation and Social Media**

In recent years our society has seen huge advances in information technologies resulting in marked changes in the way that individuals interact and communicate. The emergence of the smart phone and other ICT has given us mobile access to web services, such as social networking sites, which encourage sharing and exchanging

information. Through these ICT developments, citizens are now playing a much more active role in providing information to emergency managers. Recent large-scale emergencies, such as the Haiti Earthquake in 2010 gave rise to an unprecedented surge of citizen involvement where humanitarian workers tried to cope with massive amounts of information provided by citizens through web portals, platforms, and new social networking media, such as SMS feeds, Twitter, etc. (Dugdale et al. 2012). Such is the increase of citizen participation that current information systems for emergency management, e.g. the SAHANA Open Source Disaster Management System and the crowd-sourcing platform Ushahidi, now purposely provide ways to incorporate information sent by citizens through social media and SMS.

Emergency response may be viewed as an integrated socio-technical system where citizens play a key role in shaping the response through information provision and action (Palen et al. 2010; Palen and Liu 2007). However, this vision has not been realized in practice. IEM should incorporate as an essential element a citizen participation component. Despite the well-documented advantages of citizen participation, e.g. in organizing public action and improvising rescue efforts (Qu et al. 2009), providing practical help with temporary housing and food (Palen et al. 2007), providing eye witness accounts and images to help rescue recovery (Cowan 2005), etc., challenges remain in integrating citizen participation into IO, as well as into IEM. The first concerns the sheer volume of information that emergency managers receive. Additionally, there are difficulties in processing information in a non-standard format from different sources and in various languages. One solution was to use a globally dispersed, virtual community of humanitarian volunteers to filter and process the information. This solved some problems but it proved difficult at a macro level to manage these communities (Koeppinghoff 2011). There are also problems with the validity and value of the information, e.g. 80% of reports of people trapped in rubble received via SMS by rescuers from citizens in the Haiti earthquake were incorrect (Koeppinghoff 2011). The same applies for disaster warnings: if disaster warnings are unclear or not precise, people affected may interpret the information received to minimize their perception of risk making them more vulnerable, as Drabek argues (Drabek 1999). However when the information was aggregated it became useful at an area level, highlighting general search locations. In addition archiving and summarizing of information is required if we are to benefit and learn from past mistakes (Starbird and Stamberger 2010).

#### **Fourth Challenge: Putting Emergency Management into the Socio-cultural Context**

Emergency management is context specific, and this is key to all previous research challenges. Even if human-centred sensing is promising to provide useful data, it



only can work in societies where public and private sectors work together in a synergistic way. Citizen participation is important but as mentioned, linguistic and cultural common codes need to be established to improve the sense-making of relevant information. Moreover, to what extent emergencies affect people depends on socio-political circumstances (O'Riordan 1999). Historically, disasters have always shaped human society and its interactions with nature for centuries. For example, the poor response of the Pakistani leadership to the Bhola tropical cyclone in 1970 played into the hands of those seeking independence of East Pakistan, leading to today's country of Bangladesh (Reilly 2009). More recently, and in terms of disaster impacts, the year 2011 was one of the most damaging years in human history: 302 disasters claimed 29,782 lives; affected 206 million people and caused damages of an estimated USD 366 billion, according to the United Nations (EM-DAT 2012). This, of course, is partly due to the devastating tsunami in Japan, and most of the economic and human loss occurred in Asia. Figures show that some countries are capable and well trained to respond to hazards such as Norway and Cuba, while others, such as Myanmar and Bangladesh are poorly prepared and ill-equipped to withstand hazards. Today, every country, rich or poor, risks experiencing a hazard or emergency. Yet, the physical, economic and human impact of hazards and emergencies vary greatly.

Poor communities are affected by hazards and emergencies to a far greater extent. While the majority of economic damages (82 percent in 1977-97) occurred in the developed world, the gross of the fatalities (87,4 percent in 1977-97) occurred in the developing world (Alexander 1997). For instance a single event, a tropical cyclone hitting Bangladesh in April 1991 caused 145,000 deaths alone (Alexander 1997). Another, more contemporary example is the Chilean earthquake of 2010 that was far stronger than the Haitian one in 2010, though it affected far less people. The death toll in Haiti, a country with a 20 times smaller Gross Domestic Product compared to Chile, was 500 times larger compared to Chile (Mutter 2010). The increased disaster risk in poor countries is a function of the natural hazard and vulnerability (Alexander 1997). Vulnerability refers to the capacity to be wounded, argues Hans-Martin Füssel, and this is a good starting point (Füssel 2007). This definition implies that vulnerable societies are already weakened and therefore more sensitive to external stress, such as tropical cyclones or seismic events (Webersik 2010). The vulnerability concept is important as it includes issues of marginalisation, past losses, susceptibility to future damage, race, gender, culture and other socio-economic factors.

Moreover, there is also the need to better understand the long-term impact of hazards on development, measured in mortality and fertility rates, and other human development indicators. For instance, re-population and recovery of essential social amenities, such as schools and hospitals, were much slower in poorer neighbourhoods of New Orleans compared with the wealthy parts of the city following the 2005 hurricane Katrina (Mutter 2010). Previous research confirmed this notion that

disasters can push poor communities into long-term poverty. Drawing on data from the three-year drought in Ethiopia in the 1990s and Hurricane Mitch in Honduras in 1998, research shows that the lowest wealth groups needed more time to rebuild their lost assets compared to wealthier groups. Further, the lowest wealth groups tended to settle on a low equilibrium and then do not grow in terms of capital assets (Carter et al. 2007).

However, in a rather provocative article, entitled "Do natural disasters promote long-run growth?", Skidmore and Toya (2002) argue that higher frequencies of natural disasters correlate with higher rates of human capital accumulation, more specifically economic growth. Their article examines the long-term impact of natural hazards on economic growth. The long-run aspect makes their research interesting. Most disaster studies examine the immediate economic and physical loss natural hazards cause. For instance, the risk to lose economic income due to drought is particularly high in sub-Saharan Africa, but little is known about the long-term impact of drought (Webersik 2010).

Skidmore and Toya's underlying assumption is as follows: disaster risk reduces physical capital investment but at the same time provides an opportunity to update capital stock and thus fosters the adoption of new technologies. A good example is the 2011 earthquake and tsunami in Japan. It has been argued that the reconstruction of destroyed Japanese neighbourhoods offers an opportunity to create sustainable cities with an emphasis on green public transport, low-energy housing and the use of renewable energy for power and heating, just to name a few areas of intervention.

The authors use a sample of 89 countries and find a robust and significant positive relationship between climatic disasters and economic growth (Skidmore and Toya 2002). Though this finding gives the impression that disasters are actually good for development, this approach does not take into consideration the great differences in income within countries. This notion is captured by the term vulnerability, an important concept in disaster studies. This stands in contrast to authors who argue that natural disasters cause heavy losses in capital assets, disruption of economic and social infrastructure, affecting supply chains and hence production processes, thus undermining the capacity of affected people to cope with such a disaster. In addition, natural disasters "not only cause heavy losses to capital assets, but also disrupt production and the flow of goods and services in the affected economy, resulting in loss of earnings" (Ahrens and Rudolph 2006: 208). In the Philippines, agricultural crops, including those used for biofuel production, are frequently destroyed by tropical cyclone activity (Stromberg et al. 2011). Even where there is no physical damage, important infrastructure, such as ports, shut down when a certain wind speed threshold is passed, with negative economic consequences (Esteban et al. 2010).

More specifically, disasters do not affect people equally, even within societies. This for instance applies to gender. Neumayer and Plümper examined the impact of disasters on life expectancy and how disasters affect women differentially from

men (Neumayer and Plümper 2007). The authors find that in societies where the socioeconomic status of women is low, disasters will kill more women than men. This can be explained with socially constructed gender roles. In these societies, for example in Sri Lanka, women were less likely to learn how to swim or more likely to wear clothes that hinder them from swimming. In events of flooding, or during the 2004 tsunami, they are less likely to escape. The authors argue that it is the "socially constructed gender-specific vulnerability of females built into everyday socioeconomic patterns that lead to the relatively higher female disaster mortality rates compared to men" (Neumayer and Plümper 2007: 551). This as well supports a vulnerability approach to disaster studies. Other studies show that younger persons are quicker in responding to disasters (Drabek 1999).

Once an emergency unfolds, the focus is on top-down relief and emergency management. Yet, the knowledge and capacity of local communities to prepare for and to respond to emergencies is greatly underestimated. Local communities are often well aware of their immediate environment and its associated risks; they have developed adaptation strategies to cope with hazards, such as selling off livestock in a drought situation or human migration to diversify incomes. Informal exchange networks, livelihood diversification and supporting networks are key coping strategies as noted by Hewitt (Hewitt 1997). This especially applies to countries with poor technological infrastructure, lack of trust in government institutions and lack of resources. In a nutshell, where local communities cannot rely on the state or private insurance schemes.

However, when a hazard turns into a disaster, risk perceptions of affected populations will influence how a disaster is managed, prepared for and mitigated. This depends on the cultural context, hence affecting the immediate disaster response and strategies to prepare for a disaster. Disaster warnings are often neglected and a first response in many cases is denial, as Drabek argues. Moving beyond denial, then a social process of debate is initiated in processing disaster warnings (Drabek 1999). In poor countries with large, poorly educated populations, communities often consider disasters as "acts of God" or attribute them to spiritual powers, thereby affecting the way these communities prepare and respond to disasters. (Misanya and Øyhus 2014) This should not mean that communities in poor countries act irrational while in industrialised countries, rational decisions dominate the assessment of disaster risk. Globally, all disaster risks should be placed in a social context, rather than seen as an independent outcome of a natural hazard or human erroneous behaviour. As Hewitt puts it: "[Disasters] depend primarily on the social order, rather than climate or, say, weapons potential. They express a success or failure in the shared responsibilities and expectations of public life." (Hewitt 1997: 360). Yet, it is important to recognise differences in belief systems relevant for disaster management, to make ICT solutions work in different contexts. Chester et al. argue that faith-based explanations of disaster occurrence can be found in most African societies. In Eastern Africa, some communities attribute earthquakes to the dead

(Chester and Duncan 2009). In Eastern Uganda, landslides on the slopes of Mount Elgon have killed a few hundred people and displaced several thousands (Misanya and Øyhus 2014). The empirical findings of this study show several explanations for this landslide disaster: Excessive rainfall, volcanic activities, deforestation, and religious and indigenous explanations. The latter two cite the impact of local rain-makers, the Womaniala, and God's power causing the disaster. While others claim that disasters repeat themselves in regular cycles. Bearing the religious and indigenous explanations in mind, it becomes clear that this will affect the way, local communities respond to the disasters, including prayers, anxiety and misbelief, and community meeting. The lack of formal education may explain part of the non-scientific explanations, as local residents felt that their environmental impact was not strong enough to cause the landslides (Misanya and Øyhus 2014).

In addition, local people, in the very communities that consider disasters as “acts of God”, proactively relocated and engaged in tree-planting and improved farming methods. This makes it clear that disaster victims are not purely passive victims but also have knowledge, agency and capacity to adapt and to cope with natural hazards and their associated risks, such as droughts, floods and landslides. Considering vulnerability as a “passive” concept as Alexander proposes, perhaps misses the point that local communities have agency and deliberately take risks, rather than being passive victims of extreme weather, poverty, or political arbitrariness (Alexander 1997). And the answer to how to prepare, to respond and to manage disasters is linked to the active participation of those who are directly affected by natural hazards. As Hewitt puts it: “Reasonable and effective response will always incorporate understanding of the conditions of those at risk, or otherwise directly involved (Hewitt 1997: 358).

It is important to note that the answer to the question as to why a natural hazard turns into a disaster is very complex. In all societies, in addition to objective disaster risks, imaginaries of disasters form the way we understand, prepare for and respond to disasters. For instance the media, including the emerging importance of social media such as Twitter, has created and maintained disaster myths, such as the claim that chaos and panic rules in the aftermath of disasters, and rational social behaviour is the exception rather the norm (Kverndokk 2014; Tierney et al. 2006). A good example is hurricane Katrina featured in Tierney's article (Tierney et al. 2006).

Still, local knowledge is key, for instance for search and rescue missions. Research demonstrates that real-time information on disasters and response measures can be coordinated with the use of social media (such as Facebook and Twitter). Following the 2011 earthquake in New Zealand, first responders and local communities used a Google tool named “Person Finder” (Garcia 2011). This also applies to community-based early-warning systems. Friends and family members living in different time zones are able to warn and inform affected relatives and friends of a looming emergency using social media. The use of mobile communications devices is spreading rapidly, most notably in developing countries. Here, communities

adopt technologies, such as the use of mobile and smart phones for banking (like in Kenya), without using a personal computer in the first place. Also in Eastern Uganda, local communities developed early warning signs, ways to interpret them and to alert government authorities of excessive rainfall, volcanic activities and cracks on the mountain. As Misanya and Øyhus state “Community leaders in Nametsi Parish acknowledged that in the digital age the most viable means of communication is through telephone calls. However, it is vital to note that use of telephones may lead to the demise of local communication systems such as drums and person-to-person networks involving physical contact.” (Misanya and Øyhus 2014) Alexander argues along these lines by stating that “a fine balance must be struck between respect for local practices, without venerating them, and introduction of outside innovations, without exalting these” (Alexander 1997). This notion of leap-frogging, jumping one or several stages of ICT, is an important trend in developing countries (Bjørke 2011). Yet, poor countries often lack the appropriate infrastructure to implement ICT solutions for disaster preparedness and management. And even when resources and infrastructure are available, they need to be cultural transferable to make them work (Alexander 1997).

Moreover, to better understand where ICT are most needed and best suited to guide emergency management on the local and national level, a key issue is mapping vulnerable regions. Hot spot analysis using Geographic Information Systems (GIS) can help to guide policy makers to identify areas of intervention. Here, natural hazard risk mapping combined with spatial and temporal socio-economic indicators, such as population density, infant mortality rates, and economic activity can help to better understand where the use of ICT tools is most needed and most appropriate. With regard to climatic hazards, future projections of the impact of climate change, such as sea-level rise and changes in intensity and frequency of sudden-onset hazards, will amplify these existing social vulnerabilities. Recent research demonstrates that patterns of El Niño/Southern Oscillation (ENSO) are associated with a higher risk of armed conflict in the tropics in the past 50 years (Hsiang et al. 2011). Given developing countries’ climate-sensitive economies and low adaptive capacity, they are at greater risk to be adversely affected by natural hazards and man-made accidents, such as chemical spills, as well as other types of large-scale emergencies. This idea is not new, vulnerability is the key determining factor, turning a natural or technological hazard into a disaster (Oliver-Smith and Hoffman 1999). However, the risk of conflict in the aftermath of a disaster is small, as chaos, looting, and other criminal behaviour hardly occur (Thomas and David 2003). One of the reasons why social violence tends to be in the focus in the aftermath of disasters is due to the role of the media. In the aftermath of hurricane Katrina for instance, the media reported incidences of looting and lawlessness creating disaster myths of social violence (Tierney et al. 2006). Likewise, the Norwegian media reported on chaos and violence in urban areas affected by hurricane Katrina, following disaster narratives shown on American television. (Kverndokk

2014). Natural hazards are one of the many challenges, people in developing countries face, and as Hastrup argues often do not appear as something extraordinary (Hastrup 2011).

### **Towards an Integrated Operations View on Emergency Management**

The fundamental design premises that address the above shortcomings and challenges were discussed in a paper on the design of Dynamic Emergency Response Management Information Systems (DERMIS) (Turoff et al. 2004). The DERMIS design premises, objectives and requirements are applicable to all types of crisis and emergency situations, whether natural, man-made, industrial or humanitarian. It is precisely the lack of situation dependency that makes an emergency response system such a powerful tool. Turoff et al. (2004) further argue that any supporting databases, containing information such as the location and availability of specific resources, hazardous materials, buildings, etc. can be located anywhere. The only prerequisite is that local responders are aware of them and know how to use them if needed given the very different cultural contexts.

Confronted with the realities of global emergency response, emergency management stakeholders should rethink the role of ICT support and seriously consider an IEM approach. The design, development, use and evaluation of such systems must take a prominent place on the agenda of stakeholders worldwide (Van de Walle and Turoff 2007). Effective IEM will require mobilizing stakeholders and resources from several locations enabled by different forms of ICT support. The challenges of virtual collaboration across geographical, cultural and organizational boundaries include developing a shared understanding of the problems, establishing effective mechanisms for communication, coordination and decision-support, and managing information (Dubé and Robey 2009; Powell et al. 2004). The ad hoc nature of emergency management also poses challenges in building trust among participants, overcoming issues of denial, the imprecision of information and other social constraints (Drabek 1999). For instance, local communities can assess risk of natural hazards and man-made disasters (United Nations International Strategy for Disaster Reduction 2012) but distrust local government. Public goods are instead provided by the private sector or non-governmental organisations. The involvement of local communities and governance in emergency planning and management is therefore paramount. Whilst different stakeholders and local communities may bring relevant experience, the unique nature of emergency situations requires a different configuration of participants, many of whom have little or no history of working together, and with different cultural backgrounds. This requires 'swift starting virtual teams' (Munkvold and Zigurs 2007), that are capable of immediately structuring their interaction through sharing information on the background and competence of the



team members, discussing actions and deliverables, defining roles and responsibilities, and agreeing on the preferred communication media. For global IEM operations, cultural diversity (national, organizational and professional) and the cultural context may also represent a challenge for communication, decision-making and role understanding (Munkvold 2006). Overall, virtual collaboration boundaries should be understood as being dynamic, having different consequences in different virtual work contexts (Watson-Manheim et al. 2012). This again implies the need for a flexible collaborative IT infrastructure (Evaristo and Munkvold 2002).

A key challenge in Integrated Operations is developing functional methods for analysing the large volume of real-time data from different human and non-human sensors and process control systems. This involves providing advanced support for data management, visualization and analysis, and defining a functional collaborative work environment. Finding the optimal design of operation centres requires experiential learning. For example, ConocoPhillips, an Integrated Operations pioneer, is moving away from centres that use large, shared data screens focusing common awareness, to rooms with individual work stations in smaller clusters. Similarly, IEM centres will need to be configured to support awareness and effective data processing of the data received both from rescue operations and from citizens (Palen et al. 2007; Palen and Liu 2007).

As with research on both virtual collaboration and Integrated Operations, IEM research should adopt a multi-disciplinary approach, including human computer interaction, information systems, computer science, cultural studies, behavioural psychology and organization science. This also implies a multi-method approach, combining case studies (Zook et al. 2010), experiments (Tyshchuk et al. 2012), action research (Harnesk et al. 2009; Meum 2014), design-oriented research (Palen et al. 2010; Turoff et al. 2004), and research in regions that need effective emergency management the most: the poor and underprivileged.

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# Resilience and Complexity Conjoining the Discourses of Two Contested Concepts

By Rasmus Dahlberg<sup>1</sup>

## Abstract

This paper explores two key concepts: *resilience* and *complexity*. The first is understood as an emergent property of the latter, and their inter-relatedness is discussed using a three tier approach. First, by exploring the discourse of each concept, next, by analyzing underlying relationships and, finally, by presenting the Cynefin Framework for Sense-Making as a tool of explicatory potential that has already shown its usefulness in several contexts. I further emphasize linking the two concepts into a common and, hopefully, useful concept. Furthermore, I argue that a resilient system is not merely robust. Robustness is a property of simple or complicated systems characterized by predictable behavior, enabling the system to bounce back to its normal state following a perturbation. Resilience, however, is an emergent property of complex adaptive systems. It is suggested that this distinction is important when designing and managing socio-technological and socio-economic systems with the ability to recover from sudden impact.

**Keywords:** Resilience, robustness, complexity, emergency management, Cynefin Framework.



## Introduction

Resilience has gained remarkable popularity over the last decade, after the 2005 Hyogo Framework for Action adopted the concept as a core element in its strategy for global disaster risk reduction (Dahlberg et al. 2015). Countries adopt “resilient strategies” in emergency planning and disaster preparedness (Cabinet Office 2011; National Research Council 2012; Rodin 2015) to a degree that in just a few years has elevated ‘resilience’ to buzzword-status. For instance, following the 2004 national plan in the USA, even critical infrastructure (CI) was subjected to resilient strategies meant to imbue CI “with a particular agency that literally breathes life into what was once deemed inanimate” (Evans & Reid 2014: 19). Resilient communities and cities are wanted and needed everywhere (World Bank 2008; Ungar 2011; Walker & Cooper 2011: 144). Further, corporations as well as individuals need to be resilient, and able to not only accept but also cope with the stress and shocks of modern-day society (Kupers 2014; Rodin 2015). Resilient citizens thus become subjects who “have accepted the imperative not to resist or secure themselves from the dangers they face (Evans & Reid 2014: 42). Unsurprisingly, a Google Ngram search shows an increase in the use of the word ‘resilience’ in English-language publications during the last two decades.<sup>2</sup>



**Figure 1.** Google Ngram showing the percentage of publications in English with the occurrence of “resilience” (case sensitive) 1800-2008.

The term resilience has been widely used over the last decade to describe man-made systems’ ability to recover from sudden impact. This widespread use has in fact led to the concept’s origins in ecological systems theory to be sometimes forgotten. A basic distinction that is both useful and necessary when working with the concept of resilience is the distinction between what one of the founding fathers of the concept, Canadian ecologist Crawford Stanley Holling, has termed *engineering* and *ecological* resilience (Holling 1996). On the one hand, engineered ecological, economical, or technological systems are governed by an equilibrium steady state, and in such systems resilience denotes the ability to “bounce back” to this steady state

after a shock. On the other hand, in natural ecosystems and complex adaptive systems, instabilities can flip the system into new stable domains with very different inner functions: “There is strong evidence that most ecosystem types can exist in alternative stable regimes, for instance lakes, coral reefs, deserts, rangeland, woodlands, and forests” (Brand & Jax 2007).

The meaning of resilience has been transformed over the last decade and a half. Before the early 2000s resilience was primarily defined as a descriptive concept that in itself was neither perceived as good nor bad. An ecosystem may be highly resilient, but unwanted by humans, and some of the most feared and hated social systems such as terrorist networks and organized crime can be extremely resilient and therefore difficult to eradicate. Brand and Jax (2007), however, identified a general movement towards a more normative view of resilience that followed the introduction of the concept into a much broader spectrum of disciplines around the turn of the millennia. They suggested that resilience was becoming a “boundary object”, rather than a well-defined scientific concept, providing scholars from many disciplines with a crosscutting theme with common vocabulary that could enhance cooperation and coordination. This however happened at the cost of losing the practical value in a more precise ecological definition. More recently, Davoudi updated this analysis by asking in the title of a paper if resilience was “a bridging concept or a dead end” (2012).

How to measure resilience is a question that has occupied researchers from many disciplines over the last several decades, and one which continues to do so. With regard to measurement, the above-mentioned distinction also proves useful: while engineered resilience can be thought of in terms of *elasticity* – resilience is exactly what provides such systems with the ability to absorb a shock and return to their steady state, and that which can be observed and measured – ecological resilience is more difficult to grasp. Holling states of ecological resilience, “In this case the measurement of resilience is the magnitude of disturbance that can be absorbed before the system changes its structure by changing the variables and processes that control behavior” (1996: 33).

In other words: if an engineered resilient system bounces *back*, an ecological resilient system bounces *forward* to a different state. These introductory remarks on the concept of resilience lead into a more historical approach to its development.

### **A Brief History of Resilience<sup>3</sup>**

Resilience is a contested concept with a long and winding history, and numerous definitions or resilience exist – scholars have identified as many as 46! (Tierney 2014: 162). It is not my aim to provide the reader with an exhaustive conceptual history of resilience (for such reviews, see Folke 2006, Brand & Jax 2007, Walker & Cooper 2011, Davoudi 2012 and Alexander 2013), rather I wish to highlight important milestones and definitions.

First of all, resilience must be differentiated from resistance, which is “the extent to which disturbance is actually translated into impact” (Adger 2000: 349). While a system’s resistance protects it from an agent of threat by deflecting the shock, resilience is what enables the system to absorb and bounce back from the impact. In his etymology of resilience, David Alexander demonstrates that the concept originates from Latin (*resilire*, “to bounce”), and that resilience was first used in a somewhat modern sense by Francis Bacon in 1625. Historically, the term developed from literature and law through scientific method in the 17<sup>th</sup> century, and entered the language of both mechanics and child-psychology in the 19<sup>th</sup> century. The engineers of the Industrial Revolution thought in terms of resilience when they added redundant strength to structures such as buildings and bridges. In general, the concept retained the original core meaning of “bouncing back” regardless of the system being mechanical or psychological. It was not, however, until the second half of the 20<sup>th</sup> century that resilience found its way into ecology and the social sciences (Alexander 2013).

Overall, resilience denotes a system’s ability to withstand shock through absorption and adaptation. Traditionally, engineering, economy, and ecology viewed technological, financial, and natural systems as being able to return to equilibrium (a “normal state”) after subjection to a sudden, violent disturbance. From this ability arose robustness of such systems. The turning point came in 1973 when C.S. Holling in a seminal paper defined resilience as “a measure of the persistence of systems and of their ability to absorb change and disturbance and still maintain the same relationships between populations or state variables” (Holling 1973: 14). This idea of “resilient homeostasis” (dynamic equilibrium) became highly influential in the following decades of integration of the concept into social science and climate studies, even if it was debated if it could be “transferred uncritically from the ecological sciences to social systems” (Adger 2000; Gallopín 2006: 299). Holling’s original ideas eventually matured into the Resilience Alliance, established in 1999 as a multi-disciplinary research organization providing advice for sustainable development policy and practice.

The modern multidisciplinary understanding of resilience also has its foundations elsewhere. In the middle of the 20<sup>th</sup> century, Austrian economist Friedrich A. Hayek laid out the foundations for the Austrian school in Neoliberalism with his thoughts on self-organizing economies. Hayek “understood that shocks to economic systems were caused by factors beyond our control, hence our thinking about such systems required systems of governance that were premised upon insecure foundations” (Evans & Reid 2014: 31). Rejecting the stable equilibrium sought by Keynesian economists, Hayek argued that markets exhibit such complex behavior that no government or other regulating body could ever hope to predict or control them. At the same time, markets themselves “have proven to be among the most resilient institutions, being able to recover quickly and to function in the absence of government” (*ibid.*: 35-36). Walker and Cooper point out that Holling and Hayek

worked in very different fields and were inspired by very different political concerns, but that their contributions nevertheless “have ended up coalescing in uncannily convergent positions” (2011: 144).

Around the time Holling wrote his 1973-paper, the term resilience was also picked up by psychologists (via anthropology) as the discipline’s substitute for robustness (Kolar 2011). By the turn of the millennium the term continued its transformation, when the relationship between social and ecological resilience was developed into a broader understanding of community resilience (Adger 2000). The Hyogo Framework for Action (an UNISDR-initiative), adopted by 168 UN members in 2005, placed resilience on the international agenda by focusing on the concept of *resilient communities* – such as cities, neighborhoods, and networks – as a corner stone in future humanitarian development. And in recent years both the UK and US governments have taken on a “resilience approach” to Disaster Risk Reduction/emergency preparedness (Cabinet Office 2011; National Research Council 2013).

Although different disciplines and traditions still disagree on the exact meaning of the concept of resilience, a broad and commonly accepted definition today would be along the lines of “the capacity of an individual, community or system to absorb and adapt in order to sustain an acceptable level of function, structure, and identity under stress”. Note the emphasis on adaptation: what makes a complex adaptive system resilient is its learning and transformational capabilities, not its ability to merely resist a shock. As phrased by Folke: “[R]esilience is not only about being persistent or robust to disturbance. It is also about the opportunities that disturbance opens up in terms of recombination of evolved structures and processes, renewal of the system and emergence of new trajectories” (2006: 259).

## Complexity

As with resilience, ‘complexity’ has permeated the scientific and, to a lesser degree, public discourse over the last few decades, addressing the still tighter coupling and growing interdependencies of modern societies: “As technological and economic advances make production, transport and communication ever more efficient, we interact with incrementally more people, organizations, systems and objects” (Heylighen et al. 2007: 117).

Pioneered in the 1880s by Henri Poincaré, who showed that deterministic systems need not be predictable, the understanding of complexity was propelled forward by Edward Lorenz and his famous “Butterfly Effect” in the 1960s. Complexity science in its purest form originated in general systems theory and cybernetics in the second half of the 20<sup>th</sup> century. Complexity science is, however, “little more than an amalgam of methods, models and metaphors from a variety of disciplines rather than an integrated science” (ibid.), but it nevertheless offers fundamentally

new insights into the properties and functions of man-made as well as natural complex systems.

Central to complexity science is an anti-reductionist approach. Contrary to the basic approach in Cartesian, Newtonian, and Laplacian science, complex systems cannot be fully understood by taking them apart and studying each of their parts individually. This is due to the “emerging properties”: synergies that are created through interactions and interdependencies within the system in an unplanned way. An aircraft or a cruise ship is a highly complicated, but predictable system, where you can tell exactly what will happen if you press a button or pull a lever. Insert operators and place the system in an environment with fuzzy boundaries (e.g. an airspace with other planes or a busy shipping lane), and performance variances that no designer ever thought of are bound to happen eventually. Emergence is thus key to understanding complex systems (Perrow 1999; Dekker et al. 2011).

Unpredictability is not only a property of complex technological systems. Large social systems such as organizations, communities, and institutions also exhibit complex behavior due to many interactions between agents and subsystems. Such systems are therefore unpredictable and uncontrollable – something that often comes as a total surprise to economists, city planners, legislators, and regulators. Consequences are usually expensive and often also fatal. The failure of risk management in the late Industrial Age may be seen as the outcome of continuous application of linear predictive methods on unpredictable complex systems. Such misinterpretations and misapplications have produced disasters such as Bhopal, *Challenger*, *Deepwater Horizon* and *Costa Concordia* (Dahlberg 2013b).

In the Industrial Age, accidents and failures were understood as “a disturbance inflicted on an otherwise stable system” (Hollnagel et al. 2006: 10), exemplified by Heinrich’s Domino-model (1931) representing the linearity of a technical system with chains of causes and effects. From this perception of systems came the hunt for “The Root Cause Effect” and an overall reductionist focus on broken/weak components. The late Industrial Age saw the rise of complex linear accident models such as James Reason’s Swiss Cheese Model (1990), adding more contributing factors in the form of “holes” in the barrier layers – but still based in error-trajectory.

A much more non-linear approach to understanding performance and safety in complex systems was taken by the Resilience Engineering movement founded in 2004 by Erik Hollnagel, David D. Woods, and other safety researchers. While Charles Perrow’s Normal Accident Theory (first published in 1984, see Perrow 1999) represents the pessimist approach to complexity and adaptive systems, Resilience Engineering took from the outset an optimist’s stand, assuming that “an adaptive system has some ability to self-monitor its adaptive capacity (reflective adaptation) and anticipate/learn so that it can modulate its adaptive capacity to handle future situations, events, opportunities and disruptions” (Hollnagel et al. 2011: 128).

## Resilience and Complexity

The Resilience Engineering movement investigates socio-technological systems in which predictable technological processes interact with unpredictable human behavior. Together they form complex adaptive systems that are dynamic (ever changing) and able to adjust to conditions that cannot be built into the system at the design-phase. The movement's definition of resilience reads: "The essence of resilience is therefore the intrinsic ability of an organization (system) to maintain or regain a dynamically stable state, which allows it to continue operations after a major mishap and/or in the presence of a continuous stress" (Hollnagel et al. 2006: 16). David D. Woods, however, noted in the same publication that *all* systems adapt, even though some adaptation processes are very slow. Therefore, resilience in his view could not simply be the adaptive capacity of a system, prompting him to reserve the term to a system's broader capability of handling performance variations. Failure, either as individual failure or performance failure on the system level, was seen by the founding fathers of Resilience Engineering as "the temporary inability to cope effectively with complexity" (ibid.: 3). Following from this, David D. Woods argues that "organizational resilience is an emerging property of complex systems" (ibid.: 43), thus connecting the two concepts explicitly.

It follows from the above that an up-to-date understanding of resilience is more or less synonymous with what Nassim Nicholas Taleb, author of *The Black Swan*<sup>4</sup> (2007), recently has termed "the antifragile": systems that not only survive disturbance and disorder but actually develop under pressure. In his usual eloquent style, Taleb in a footnote addresses the relationship between his antifragility concept and resilience: "the robust or resilient is neither harmed nor helped by volatility and disorder, while the antifragile benefits from them" (Taleb 2012: 17). But in this he confuses the terms in viewing resilience and robustness as synonymous: "Antifragility is beyond resilience or robustness: The resilient resists shocks and stays the same; the antifragile gets better" (ibid.: 3).

Taleb's understanding of resilience is pre-Holling, and therefore somewhat undermines Taleb's otherwise interesting aim to "build a systematic and broad guide to *nonpredictive* decision making under uncertainty in business, politics, medicine, and life en general – anywhere the unknown preponderates, any situation in which there is randomness, unpredictability, opacity, or incomplete understanding of things" (ibid.: 4). He sees complex systems as weakened, even killed, when deprived of stressors, and defines the fragile as "what does not like volatility" in the form of randomness, uncertainty, disorder, error, stressors, etc. (ibid.: 12). However, he underlines that complex systems are only 'antifragile' up to a certain point. If the stressor is too powerful, even the most resilient system will be unable to absorb and adapt. The result, then, is catastrophic (ibid.: 69).

If the resilience of complex systems cannot be designed (as it is an emerging property), it can, however, be exercised and cultivated. The principle of "hormesis",



known by the ancients and (re)discovered by modern scientists in the late 19<sup>th</sup> century, states that a small dose of poison can stimulate the development of an organism (ibid.: 37). Hormesis, on the social scale, means “letting people experience some, not too much, stress, to wake them up a bit. At the same time, they need to be protected from high danger – ignore small dangers, invest their energy in protecting themselves from consequential harm. [...] This can visibly be translated into social policy, health care, and many more matters” (ibid.: 163). Hormesis can be likened to what Evans and Reid call “endangerment” of agents in social systems which “is productive of life, individually and collectively” (Evans & Reid 2014: 64). Erik Hollnagel and David D. Woods also note the need to provoke complex systems in their epilogue to Resilience Engineering movement’s first publication: “Resilience requires a constant sense of unease that prevents complacency” (Hollnagel et al. 2006: 355-56). This exact formulation also connects the resilience discourse with High Reliability Organization theory, as formulated by Karl Weick et.al, with its emphasis on chronic unease, fear of complacency, and attentiveness to weak signals (Weick & Sutcliffe 2007).

The point is that for complex systems, disturbances, performance variations, etc. are beneficial. As Taleb points out: “machines are harmed by low-level stressors (material fatigue), organisms are harmed by the *absence* of low-level stressors (hormesis)” (Taleb 2012: 55. He also lists the most important differences between the mechanical (non-complex) and the organic (complex) (ibid.: 59). While the mechanical needs continuous repair and maintenance, dislikes randomness, and ages with use, the organic is self-healing, loves randomness (in the form of small variations), and ages with disuse.

While fully accepting the need for constant endangerment of agents in complex systems in order to cultivate resilience, Evans and Reid also deliver a critique of what they identify as a Neoliberal strategy of governance:

Rather than enabling the development of peoples and individuals so that they can aspire to secure themselves from whatever they find threatening and dangerous in worldly living, the liberal discourse of resilience functions to convince peoples and individuals that the dream of lasting security is impossible. To be resilient, the subject must disavow any belief in the possibility to secure itself from the insecure sediment of existence, accepting instead an understanding of life as a permanent process of continual adaptation to threats and dangers which appear outside its control. (Evans & Reid 2014: 68)

In their view, the Neoliberal discourse, stemming from the theories of Hayek and Friedman, has been the main force driving resilience to its current omnipresence: “‘Resilient’ peoples do not look to states or other entities to secure and improve their well-being because they have been disciplined into believing in the necessity to secure and improve it for themselves”, they write. “Indeed, so convinced are they of the worth of such capabilities that they proclaim it to be fundamental ‘freedom’” (Evans & Reid 2014: 77).

Another characteristic of complex system is “hysteresis” – a consequence of emergence among entities connected by nonlinear relationships. If a linear, predictable system shifts from one stable state to another, it can be switched back by reversing the process, Newtonian-style. This is what happens when you change gears back and forth in your complicated, but (usually) predictable car. In complex systems, however, “if a system is to return to its original configuration, it must take a different path” (National Research Council 2007: 26).

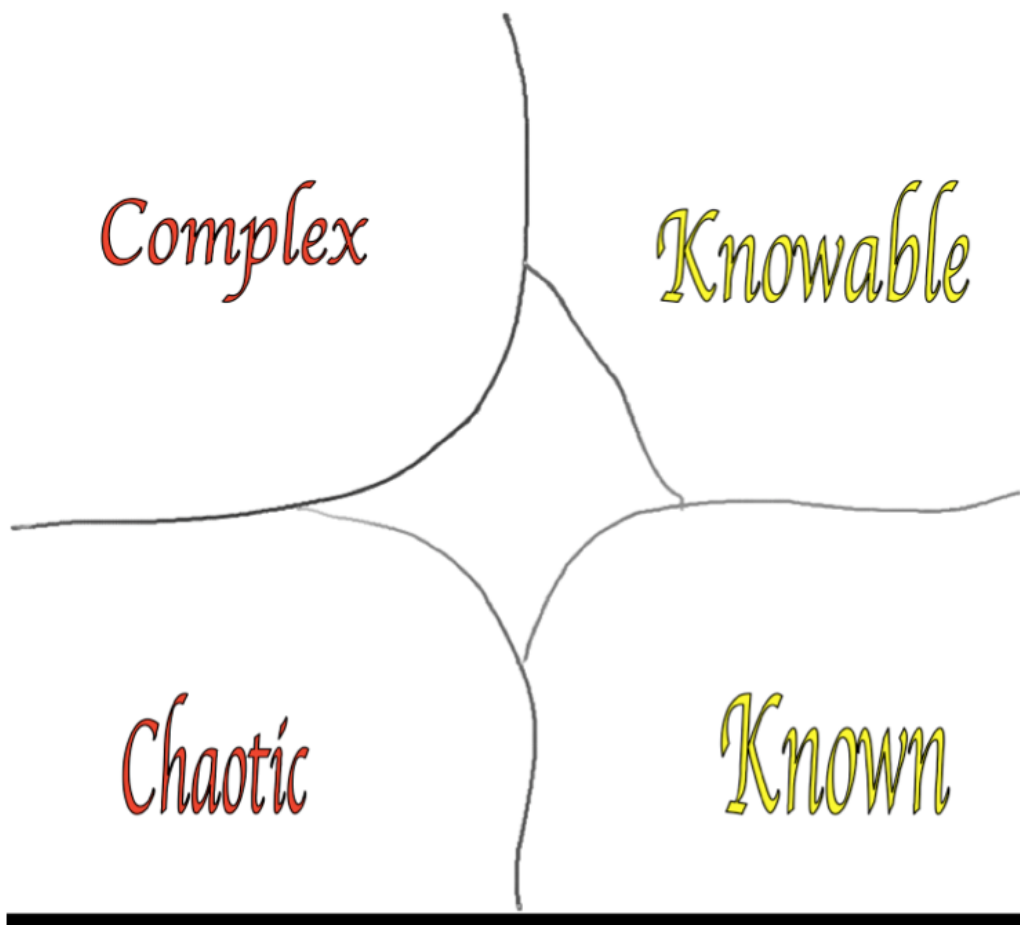
A complex system, however, not only depends on its current inputs, but also on its history. Hysteresis contributes to the irreversibility of complex systems, and renders the “Best Practice”-approach to problem-solving in organizations and societies virtually useless, as the multitude of historical factors in any socio-economic system create vastly different initial states, even if they look similar on the surface. The path-dependency of complex systems forms the basis for what could be called the mantra of the turn towards resilience in emergency management: “Stop planning – start preparing.” We may predict that catastrophic events will unfold in the future, but it will always be different from last time. A resilient approach to emergency planning and crisis management is based less on rigid contingency plans than on heuristics and adaptability.

## Introducing the Cynefin Framework

Complexity is not absence of order – rather it is a different form of order, of un-order, or emergent order. While ordered systems are designed, and order is constructed top-down, un-ordered systems are characterized by un-planned order emerging from agents and sub-systems to the system as a whole. The Cynefin Framework developed by David Snowden offers a useful approach to sense-making by dividing systems and processes into three distinct ontologies: (1) Order, (2) un-order and (3) chaos. Order and un-order co-exist in reality and are infinitely intertwined. Separation of the ontologies serves only as a sense-making tool at the phenomenological level, as assistance in determining the main characteristics of the situation you find yourself in, thus guiding you towards the most useful managerial and epistemological tools for the given ontology (Snowden & Boone 2007; Renaud 2012).

In the ordered ontology, there is a correct answer, which may be reached through observation or analysis. In un-order, multiple right answers exist, but their nature defies observation and analysis. The three ontologies are divided into five domains. Two of them are in the ordered ontology: while the *simple* domain is characterized by obvious causalities that may be immediately observed and understood, the *complicated* domain requires expert analysis – yet still yields an exact answer after reductionist scrutiny. The un-ordered ontology is home to the *complex* and *chaotic* domains in the Cynefin Framework. In the complex domain, analysis fails due to feedback: any diagnosis is also an intervention that disturbs the system. Emergent

order may be facilitated, but is difficult to design, and impossible to predict. The chaotic domain is characterized by the lack of perceivable causality rendering any form of planned intervention useless – here you can only act and hope for the best, because chaos has no right answers at all as there is no relationship between cause and effect. There is also a fifth domain, namely that of disorder which is impossible to label and make sense of (Kurtz & Snowden 2003: 468).



**Figure 2.** The Cynefin Framework, reproduced by permission from Cynthia Renaud. The known/simple and knowable/complicated domains are in the ordered ontology while the complex and chaotic domains belong to the un-ordered ontology. The domain of disorder is found in the middle.

The complex domain is characterized by weak central connections and strong distributed connections (ibid.: 470), meaning that agents interact directly instead of being controlled by an omniscient puppeteer like in the ordered domains. Lacking the common traits of order (i.e. structures, procedures, rules), the complex domain is governed primarily by co-operation between agents, mutual goals and interests,

and competing forces. It is from these infinite interactions and dependencies that un-order emerges. “Most crises arise as a result of some form of collapse of order, most commonly from visible order” (Snowden 2005: 51). The boundary between the ordered and the chaotic domains is strong, meaning that after a “fall” from order to chaos there is no easy way back other than moving through complexity. Falling over the boundary is also known as “Asymmetric Collapse”:

Organizations settle into stable symmetric relationships in known space and fail to recognize that the dynamics of the environment have changed until it is too late. The longer the period of stability and the more stable the system, the more likely it is for asymmetric threats or other factors to precipitate a move into chaos. (Kurtz & Snowden 2003: 475)

Right at this boundary we find catastrophes such as the *Deepwater Horizon* incident, a disastrous sudden transition from order to chaos produced by the “atrophy of vigilance” (Freudenburg & Gramling 2011). When the offshore semi-submersible drillrig exploded on April 20 210, a delegation from the company was on board to award the rig management a certificate for being the safest installation in the Mexican Gulf because seven years had passed without Lost Time Incidents on the *Deepwater Horizon* (Dahlberg 2013). A strategy of resilience may be seen as a countermeasure to exactly this fallacy: “To be resilient is to insist upon the necessity of vigilance in relation with one’s surrounding” (Evans & Reid 2014: 16).

The Cynefin Framework does not imply a differentiated value between the domains. Some systems perform very well in the ordered domain, while other systems benefit from operating (perhaps only momentarily) in the un-ordered domain. Only in the ordered domain, however, does a focus on efficiency through optimization of the separate parts of the system make sense. The reductionist approach to a complex system will never bear fruit. Likewise, traditional command and control-style management approaches are impossible to implement in the complex domain. Instead, complex systems are best managed by setting boundaries and adding or removing path-forming attractors (i.e. fixed points in the time-space of possible states). Constant monitoring and probing through small-scale experiments facilitate continuous development of the complex system towards a desired outcome (Snowden & Boone 2007). This resonates well with Holling’s comments on how to manage resilient ecological systems (Holling 1996: 38-41).

Taleb identifies two separate domains: one where prediction is to some extent possible, and one where it is not (the Black Swan domain): “Social, economic, and cultural life lie the Black Swan domain, physical life much less so” (Taleb 2012: 137-38). These are more or less comparable to the ordered and the un-ordered domains in the Cynefin Framework: “There is, in the Black Swan zone, a limit to knowledge that can never be reached, no matter how sophisticated statistical and risk management science ever gets” (ibid.). The unpredictability of the complex domain is primarily produced by human collaboration. The “superadditive functions” of people working together to innovate and create is impossible to forecast

(ibid.: 233), just as complexity arises in complicated systems when “they are opened up to influences that lie way beyond engineering specifications and reliability predictions” (Dekker et al. 2011: 942). Erik Hollnagel also notes the limits to prediction in the complex domain: “It is practically impossible to design for every little detail or every situation that may arise, something that procedure writers have learned to their dismay” (Hollnagel et al. 2006: 16).

The ordered domain is home to Gaussian curves and “statistical confidence”, while the complex domain is haunted by black swans and fat tails. In the ordered domain, normal distributions of height, for example, enable us to predict how tall the next person is likely to be – if we have a large enough sample for measuring the mean. Fat tails are somewhat synonymous with Black Swans in the sense that they constitute “high impact, low probability events”.

The so-called fat tail distributions found in the complex domain defy prediction: instead of convening around a mean, these samples consist of large numbers of not-very-surprising cases and a few extreme outliers: “In the past decade or so, it seems like fat tails have been turning up everywhere: in the number of links to Web sites and citations of scientific papers, in the fluctuations of stock-market prices, in the sizes of computer files” (Hayes 2007: 204).

The Italian economist Vilfredo Pareto discovered fat tails in the distribution of wealth in the early, industrialized societies, where a limited number of very rich people were balanced by a huge number of workers with a modest income. Paradoxically, a larger sample size provides less useful information about the distribution among the majority of the cases, as the probability of including additional outliers increases.

The shape of a probability distribution can have grave consequences in many areas of life. If the size and intensity of hurricanes follows a normal distribution, we can probably cope with the worst of them; if there are monster storms lurking in the tail of the distribution, the prospects are quite different. (Hayes 2007: 204)

Taleb even argues that the famous 80/20 rule coined by Pareto in the beginning of the 20<sup>th</sup> century (that 80 % of land in Italy was owned by 20 % of the population) is outdated: Today, in the network society, we are “moving into the far more uneven distribution of 99/1 across many things that used to be 80/20” (Taleb 2012: 306). Such a development towards increased complexity constitutes an ever-growing challenge to the epistemological strategies we apply. History seems to drive a clockwise drift in the Cynefin Framework, while the Future exercises a counter-clockwise force upon the systems in question. It seems to be natural for people to seek order, for societies to convene towards the simple domain: “This phenomenon of grasping at order is common in people, governments, academia, and organizations of all shapes and sizes” (Kurtz & Snowden 2003: 476). And then disaster strikes and sends us plummeting over the fold into chaos.

## Concluding Remarks

The Cynefin Framework was designed by Snowden to be a sense-making device, and as I have demonstrated in this paper, it is an effective lens to view and understand the concept of resilience through. The framework offers an arsenal of useful dynamic strategies that may be executed in the different domains. Many negative performance variances in our modern societies may be seen as the result of people, agencies, and governments trying to solve complex problems with solutions from the ordered toolbox – or vice versa. Instead, we should perhaps focus our efforts on *planning for the predictable* and *preparing for the unpredictable*. And this is exactly what the turn towards resilience in emergency planning and management is about.

Resilience is the ability of a complex system to adapt to disturbances and changing conditions, and resilience should be understood as an emergent property of the complex domain. This complies with recent developments in safety science according to which safety itself is “an emergent property, something that cannot be predicted on the basis of the components that make up the system” (Dekker et al. 2011: 942). Instead of looking for broken components in the causal chain that leads to an accident or disaster, a complex approach to safety science accepts competing truths and multiple explanations. From this follows that an accident might very well be no-one’s fault – but merely a negative outcome of unpredictable behavior among tightly coupled interdependencies.

Resilience enables the system to cushion the effects of unforeseen disturbances by absorbing the shock and adapting to changing conditions, thus bouncing not back but forward to a more advanced level better suited for future hazards. Instead of focusing on the vulnerability of a socio-economic or socio-technological system, resilience addresses its potentials (Gallopín 2006: 294). Emergent order does exactly this: Distributed agents of change work together to solve problems and face challenges, and out of their combined efforts emerges a new un-order capable of coping with the perturbation in question. But cultivating resilience means stopping clinging to plans and beliefs in predictive capabilities:

Disasters do not follow preordained scripts. Even in situations where there is extensive disaster experience, those seeking to respond invariably confront unforeseen situations. One counterproductive way of dealing with the unexpected is to adhere to plans and procedures even when they are ineffective or offer no guidance in the face of unfamiliar challenges. (Tierney 2014: 208)

Should all planning then be abandoned? No. Many processes and systems, technical as well as socio-economic, exhibit complicated or even simple behavior, and for those we should develop and rehearse plans which can be executed in case of emergencies. But at the same time we must accept the unpredictability of complex systems and prepare for the unknown future by cultivating resilience.



For instance, a well-rehearsed method in emergency planning is scenario-building. Most agencies tasked with national emergency preparedness create and maintain registers of risk framed as most-likely scenarios, i.e. earthquakes, flooding, train crashes, industrial accidents (European Commission 2014). While scenario-building and comparable methods work well in the ordered domain with its knowable facts and right answers, they are of limited value when dealing with complex systems. Complexity is the realm of “unknown unknowns”, to paraphrase Donald Rumsfeld, and here the shortcomings of methods developed for the ordered domain become evident. How would it, for instance, be possible to construct a scenario to prepare for an emergent calamity that has not yet revealed itself? How can one assess the probability of an event that has happened only once or perhaps never before? No analysis, no matter how thorough, will be able to identify the pattern of such a hazard before it actually manifests itself – because a pattern does not yet exist.

A consequence of such applications of ordered epistemological tools on un-ordered ontologies is 20/20 hindsight, which – unfortunately – doesn’t lead to foresight. Taleb calls this the “Lucretius problem”: humans have a tendency to prepare for the future by reviewing the past, but are not expecting anything worse than has already happened to happen (Taleb 2012: 46). Improvisation, creativity, and imaginative capacity are key elements in resilient strategies: “The challenge is understand (sic.) when a system may lose its dynamic stability and become unstable. To do so requires powerful methods combined with plenty of imagination” (Hollnagel et al. 2006: 17). The understanding of risk is challenged by complexity as no other concept. Defining risk as likelihood  $\times$  consequences” of a future event, presupposes our ability to predict and assess the probability of the event in question, but this is much easier to do in the ordered domains than in cases of un-order. Uncertainty must be re-installed in the concept of risk from where it has been largely absent since Frank Knight established the distinction between uncertainty and risk (seen as measurable uncertainty) in 1921 (Jarvis 2011).

Resilience cannot be created – and it does not have to be, as it is already present as an inherent, emerging, property of all natural as well as engineered complex adaptive systems. But it may be facilitated, nudged, exercised, and cultivated, unleashing strengths and resources hitherto hidden from linear-minded planners, controllers, and predictors. Even when faced with clearly complex problems that undergo fundamental changes while being solved (“diagnosis equals intervention”), these heirs of the Enlightenment insist on reductionist thoroughness in hope of full knowledge and perfect prediction. But, as Evans & Reid note (2014: 201): “Reason imagines nothing. It cannot create and thus it cannot transform. [...] It is not made for opening up new worlds, but enabling us to survive present ones.”

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## Notes

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<sup>2</sup> Note also the historic increase in usage of "resilience" in books published during the 1880s. This is probably due to the many publications on engineering, shipbuilding, bridges, etc. of this time - which was the apex of the age of engineering: "The first serious use of the term *resilience* in mechanics appeared in 1858, when the eminent Scottish engineer William J.M. Rankine (1820-72) employed it to describe the strength and ductility of steel beams" (Alexander 2013: 2710).

<sup>3</sup> This section is an elaborated version of Dahlberg (2013a).

<sup>4</sup> The "Black Swan" is a metaphor for unforeseen events with great consequences that in hindsight look like something that could have been predicted (i.e. the 9/11 terror attacks in the U.S.). The origins of the concept can be traced to Roman antiquity, and the term was common in London in the 1600s as an expression of something most unlikely. In western discourse only white swans existed until 1697 when a Dutch explorer found black swans in Australia. Later, John Stuart Mill used the Black Swan metaphor when he described falsification in the 19<sup>th</sup> century: If we observe 1,000 swans that are all white and from these observations state that "all swans are white", we fall victim to the *inductive fallacy*. The observation of a single black swan would falsify our claim. Lately, the Black Swan metaphor has also entered professional risk discourse (Aven 2014).

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