Environmental Catastrophe Risk as Factual Entertainment Television in *Perfect Disaster*

1. Introduction

According to some accounts, disasters, both man-made and natural, have been increasing in frequency in recent decades.[1] Research into the media's role and representation of environmental issues in general and natural disasters more specifically has tended to focus on two discrete areas. First, there is research concerned with performance evaluations of news media coverage of natural disasters.[2] Second, and unrelated both in terms of disciplinary and analytical approaches, is a small body of research within film studies that examines the distinctive cycles of fiction films dubbed disaster movies.[3] The category of "factual entertainment" television programmes, dealing with catastrophes and natural disasters, however, has been ignored by researchers.[4] This study explores this category through examining a single six-part series about environmental disaster risks, *Perfect Disaster* (UK/USA, 2005). Produced by Impossible Pictures, the company behind the incredibly successful *Walking With Dinosaurs* series for the BBC/Discovery, the series is an example of the increasingly extensive use of computer-generated imagery in factual programming, a trend foregrounding issues of realism and spectacle in factual entertainment.[5] It is also a good example of a particular oeuvre in the representation of environmental issues which journalists have labelled "weather porn."[6] Unlike most other examples of "weather porn", however, this series does not discuss or depict natural disasters that have already occurred. Instead, under the tagline "this is not

science fiction, this is science prediction," the programme imagines a series of disasters in major cities around the world. This provides opportunities to see how the series chooses to frame its hypothetical disasters, and which representational traditions it draws on.

2. Natural Disasters and the Media

In attempting to understand the series' representational construction, it is important to identify the dominant tropes in related media content, specifically: news media coverage of natural disasters; disaster movies; and lastly, "weather porn". Identifying the key components of these types of media content, will provide an analytical framework within which to appraise *Perfect Disaster*.

2.1 News Media and Natural Disasters

Disaster researchers characteristically hold rather paternalistic views as to the role of the news media, typical of many scientists, viewing them "as management tools that have the potential to change people's preparedness behaviours as well as their response to natural disasters."[7] Perez-Lugo argues that the focus of disaster researchers is such that the mediation of a disaster event (the "impact" phase) is essentially ignored, in favour of a focus on the other phases of disasters where the media are typically seen as serving a singular function "as transmitters of official information"[8]. Within this simplistic normative framework:

> [T]he media are portrayed negatively: as writing sensation-seeking, enlarging anecdotic stories, especially on who is to blame; being in the way of rescue

2

workers; repeating the same images… over and over again; [and] separating physical and mental health consequences of the disaster (with no attention paid to the latter).[9]

Perez-Lugo's study of media audiences in disaster impact areas, however, found that people use the media for different purposes at different stages of the disaster process, such as using them for emotional support in the impact phase to mitigate the isolation that comes from localised destruction.[10]

Miles and Morse, categorise these kinds of uses as functions of "social utility", arguing that "by making the same information available to all, mass media enables common social experience in heterogeneous societies."[11] They also identify the role of the media in creating "media hypes," the "social construction" and, potentially, the "amplification and attenuation" of risk (366-7). The latter consequence is seen as potential product of another key role of the media, and one of importance here- their "linking events into narratives" in their "framing" of disasters (366). This is a product of the specific selection, interpretation and representational strategies of news media which may "cast the available actors as villains, heroes and victims," and serve as "a variation of the folk narrative and provide familiar entry points through which the public maps disasters onto preconceived mental models." (366) The same could be said about factual entertainment, and has been argued in the context of factual entertainment programmes about palaeontology.[12]

2.2. Disaster Movies

Whether linked to explicit historical events or purely fictional, disaster movies have been identified across the history of fiction film.[13] Three features of disaster movies are of particular relevance here. First, the consensus around such films is that they "carry ideological signs of the times in which they are made" (14). In the 1970s, for instance, films such as *Earthquake*, and *The Towering Inferno*, carry an underlying social class critique, evident in the differentiation of protagonists in the films by "their jobs, status or standing in society" (14). In this regard, 1970s films are labelled as politically and morally conservative, whereby the framing of survival is "usually moralistic, and the films advocate corporatist solutions whereby an elite of leaders, usually professionals or technocrats, enable groups of people to survive through co-ordinated, even obedient action."[14]

Second, "disaster movies are peopled by archetypes who react to the given situation in function of their sex, class or profession and not in function of any individual identity. What is more, the archetypes are extended by the known personality of the star playing the part."[15] Sometimes dismissed as superficial star-vehicles where the stars never die, Keane notes that in fact this isn't true, stars sometimes dying, thus offering messages of heroic sacrifice and repentance.[16] Third, the re-emergence of disaster movies in the 1990s paralleled the emergence of photo-realistic CGI allowing for, perhaps paradoxically, a greater potential for spectacle and verisimilitude.[17] Since then, the increasing use of CGI in television has seen disaster narratives increasingly present in contemporary television fiction,[18] providing a persistent presence of disaster movies frames in the contemporary media landscape (and one which has also been ignored by researchers).

2.3 Factual Entertainment: The Rise of 'Weather Porn'

The increasing presence of CGI in factual television also, is arguably evidence of the changing international television market with more intense competition to attract audiences to factual entertainment.[19] Again, three trends are of particular relevance here, in their combining to produce what journalists have dubbed "weather porn."[20] First, although nominally providing more platforms and a wider audience for factual programming, the intrinsic high cost of science programming has meant that current financial resources for science programmes are arguably tighter and more thinly spread across a number of international co-producers. Thus film-makers have begun to look for cheap sources of content, for instance "innovations in home-video technology… mean that many more people can now capture… disasters for posterity and for our delectation."[21] Natural disasters can result in a lot of cheap news and amateur footage, and a rash of such programmes in the last decade, with titles like *Savage Planet* and *Wild Weather*, have appeared constructed primarily from this second hand material.

Second, the needs of international producers and markets are well served by weather-based programmes due to the ease with which a programme can be "re-versioned" for different markets, for instance by each partner company recording a localised narration for their local market, and re-editing a programme to suit local markets.[22] Furthermore, Robins suggests, re-versioning "is only possible for subjects such as the weather, which are culturally neutral and have a big international market. Indeed, some television executives are starting to wonder whether the technique may produce a concentration of politically safe programming."(13)

Third, and again well reflected by recent weather-oriented factual television programmes, is a shift away from the representation of science in terms of cutting edge discoveries, debates, controversies, and analysis, and towards a greater focus on entertaining stories and spectacle.[23] One reason for this is providing content that is not bound to a specific place, time and political context, allows programmes to be easily repeated across many international networks.[24] Weather porn's eschewing politically sensitive content, however, consequently puts the focus on "a cracking story, vividly told, heroic and moving in its action, and awesome in its evocation of the sheer scope of elemental violence"[25]. Patterson explains further:

> From the safety of the couch the similarities between stuff like this and hardcore porn are self evidence. Nothing matters but the bump'n'grind of weather systems destroying man's hard work. Forget the dialogue; gimme the close-up, gimme the money shot.[26]

3. *Perfect Disaster*

All six episodes of the series are structured in the same way, offering some interesting consonances and dissonances with the elements identified above in other media formats, and in so-called weather porn. The analysis will look first at all at formal components, before examining the representational tropes of the series and how they relate to extant natural disaster media frames.

In terms of formal components, the series combines numerous elements in terms of audio and video that cut across the formal characteristics of conventional documentary, and the conventions of disaster movies. There are four main documentary conventions in evidence: First, an omniscient, and unseen narrator; second, "talking heads" sequences where various scientists, and other specialists (such as doctors, emergency services figures, and the occasional journalist and politician) are presented offering their expert knowledge; third, the use of highly simplified, pseudo-wireframe style CGI, to illustrate the underlying natural forces at work in each case (such as illustrating how a solar storm impacts the earth's magnetic field in 'Solar Storm', or how an ice storm results from warm air overlying very cold air in 'Ice Storm'); and fourth, the use of archive news/amateur footage of previous disasters (although this is often integrated into the programmes' narrative without explicit acknowledgement, and is evident more from a differential quality of image to the other sequences).

Although these elements are markers of the series' claims to factuality, and authenticity, the series is notable in not providing any notion of contention, dissent or controversy in either the omniscient narration or the talking heads sections. Despite the fact that the series is dealing with hypothetical situations, the series nonetheless presents its information as an authoritative account of what *would* happen given certain specific circumstances. Within that authoritative tone, however, there are some notable elisions. The series notably avoids any issues of blame, responsibility, or specifics around consequences. For instance, figures are given for the populations of the cities targeted by the 'perfect disasters', and in some episodes figures are given for death and casualty tolls for similar historical disasters (such as the 1953 flood in

Eastern England, and the 1998 Montreal ice storm). However, the series largely avoids offering estimates of likely death tolls of its predicted disasters, either through its narration or through its talking heads. In fact such figures are only mentioned on two occasions across the whole series, once in 'Super Typhoon' where an estimate of 'thousands dead or injured' is offered, and once in 'Ice Storm' where an unusually specific figure of 30 deaths from house fires and 9 from falling ice is given (perhaps extrapolated from the death toll of the 1998 ice storm). Similarly there is a significant absence, beyond the occasional oblique reference, to causality, particularly how climate change and global warming make certain kinds of natural disaster (such as super-typhoons, and mega-floods) more likely, and more frequent.

Dramatised sequences comprise the rest of the programmes, combining live action and photo-realistic CGI, depicting the period immediately prior to the disaster, and then concentrating on the impact phase. These sequences conform very heavily to disaster movie conventions, with the framing of the events around a small group of protagonists selected according to the stereotypical needs of the narratives being constructed (but not played by recognisable stars). The main protagonists, or "heroes", are typically either scientists, or relevant emergency specialists (like energy engineers in 'Solar Storm' and 'Ice Storm', or fire-fighters as in 'Firestorm' and 'Super Typhoon'). Journalists feature in several of the episodes, often in their stereotypical "villain" role, seeking a dramatic story despite the risk of public panic (as in 'Mega Flood' and 'Solar Storm'), although notably not in 'Ice Storm' where their positive, community cohesion function is fore-grounded (and where a journalist is included amongst the expert talking heads). Other villains appear also, in the form of either protagonists' superiors or politicians, offering the disaster movie trope of a

refusal to recognise the severity of the risk that the heroes do recognise. None of these villains, however, are punished by the disaster in the manner of disaster movies. Indeed, none of the heroes or their families die either, despite their often being deliberately placed in perilous situations such as the power engineer having to drive through transmission lines collapsing in a cascade under the weight of ice in 'Ice Storm', or an emergency officer's wife and son, trapped in a petrol station as a tornado rages outside in 'Super Tornado'. Some of these situations are contrived to allow a return to the documentary components as, for instance, the sequence in which a scientist is trapped by flood water is overlaid by the narrator explaining what happens to the body when drowning in 'Mega Flood', or where an elderly woman begins to succumb to hypothermia in 'Ice Storm' allowing for a CGI thermal-style image of her body. In fact, whilst the series almost revels in its CGI sequences of mass destruction to buildings, vehicles, and landscapes ("built capital"),[27] the dramatic sequences are remarkably devoid of scenes of overt deaths, and dead bodies. Whilst this may avoid the accusation of prurience and intrusion that news media coverage of disasters often receives, it also avoids the scenes of death central to the appeal of disaster movies. In 'Super Typhoon' a brief image of a waterspout over running a couple of people is included (without further comment or mention) and the only explicit deaths occur in 'Firestorm'. This episode's dramatic sequences show an arsonist starting a fire, which leads to the only image anywhere in the series of a corpse (the bloodied hand of a camper on the ground). The arsonist is later shown allowing him to be engulfed by the flames, as his mind flashes back to his victim. This close link between the "natural" disaster and human actions is the closest the series gets to the moral conservatism of disaster movies. Otherwise, there's

something of a false illusion of mass destruction of property without the concomitant mass loss of life.

4. Conclusion

Perfect Disaster is not an exception to factual entertainment dealing with natural disasters, with series like The History Channel's *Mega-Disasters* also using similar combinations of CGI and dramatic scenes to visualise possible future extreme natural disasters. *Perfect Disaster* offers a problematic combination of representational tropes, including standard documentary conventions, whilst at the same time seeming to take the weather porn aspects to a new level, by creating 'perfect disasters' for audiences to enjoy in fully photo-realistic CGI glory, informed by and structured according to disaster movie tropes, but without their spectacles and narrative resolutions of death. Such programmes' complex hybridisation of a variety of representational formats certainly has to be incorporated into appraisals of the communicative landscape surrounding scientific issues. Both media performance and public understanding approaches to science communication have focused so heavily on news media coverage of science, that factual entertainment (and the genre fiction that clearly influences it) have been under-analysed in terms of their contributions to the mediation and communication of scientific topics, and thus perhaps also the wider perceptions and understanding of science in the wider public.

Dr Vincent Campbell,

Department of Media & Communication,

University of Leicester,

Attenborough Building, University Road,

Leicester, LE1 7RH, UK

Email: vpc2@le.ac.uk

[1] Peter Vasterman, C.Joris Yzermans, C.J. and Anja J.E. Dirkzwager, "The Role of the Media and Media Hypes in the Aftermath of Disasters," *Epidemiologic Reviews*, 27 (2005): 107-114.

[2] Maria Perez-Lugo, "Media Uses in Disaster Situations: A New Focus on the Impact Phase," *Sociological Inquiry*, 74 (2004): 210-225.

[3] Stephen Keane, *Disaster Movies: The Cinema of Catastrophe* (London: Wallflower Press, 2006).

[4] Richard Kilborn, *Staging the Real: Factual TV Programming in the Age of Big Brother* (Manchester: Manchester University Press, 2003).

[5] Karen D. Scott and Anne M. White, "Unnatural History? Deconstructing the *Walking With Dinosaurs* Phenomenon," *Media, Culture and Society* 25 (2003): 315-32.

[6] John Patterson, "Screen: And the Oscar for Best Actor Goes to the Weather! John Patterson on Why We're All Such Suckers for a Natural Disaster," *The Guardian*, July 14 2000, 6.

[7] Perez-Lugo, *Media Uses in Disaster Situations*, 210.

[8] Perez-Lugo, *Media Uses in Disaster Situations*, 211.

[9] Vasterman et al., *The Role of the Media*, 108.

[10] Perez-Lugo, *Media Uses in Disaster Situations*, 223.

[11] Brian Miles and Stephanie Morse "The Role of News Media in Natural Disaster Risk and Recovery," *Ecological Economics*, 63 (2007): 365-373.

[12] Vincent Campbell, "The Extinct Animal Show: The Paleoimagery Tradition and Computer Generated Imagery in Factual Television Programs," *Public Understanding of Science*, 18(2009): 199-213.

[13] Keane, *Disaster Movies*, 1.

[14] Michael Ryan and Douglas Kellner, *Camera Politica: The Politics and Ideology of Contemporary Hollywood Film* (Indianapolis: Indiana University Press, 1988), 23.

11

[15] Nick Roddick, "Only the Stars Survive: Disaster Movies in the Seventies," in *Performance and Politics in Popular Drama: Aspects of Popular Entertainment in Theatre, Film and Television 1800-1976* ed. David Bradby (Cambridge: Cambridge University Press, 1980), 243-269.

[16] Keane, *Disaster Movies*, 42.

[17] Andrew Darley, A. *Visual Digital Culture: Surface Play and Spectacle in New Media Genres* (London: Routledge, 2000), 109.

[18] Keane, *Disaster Movies*, 88, 105.

[19] Jon Palfreman, "Bringing Science to a Television Audience," *Nieman Reports* 56 (2002): 32-4. Jeanette Steemers, *Selling Television: British Television in the Global Marketplace*. (London: BFI, 2004).

[20] Jane Robins, "Coming Soon to a Screen Near You- Weather-Porn; Digital Television is Poised to Offer Hundreds of New Channels. But What Will They Show?" *The Independent*, August 18 1998, 13. John Preston, "Between Desire and Loathing," *The Sunday Telegraph* April 22 2007, 25.

[21] Patterson, *Screen: And the Oscar for…*, 6.

[22] Robins, *Coming Soon*, 13.

[23] Steemers, *Selling Television*, 161.

[24] Palfreman, *Bringing Science to a Television Audience*, 33.

[25] Martin James, 'To the Ends of the Earth', *Sunday Times*, October 29 2000.

[26] Patterson, *Screen: And the Oscar for…*, 6.

[27] Miles and Morse, *The Role of News Media*, 365.