Urban Disasters: visualising the fall of cities and the forming of human values

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Abstract

Cities have long made it possible to think about human identity and society. Likewise, the destruction of cities through various means, the consequence of divine wrath or human frailty, has given historical and narrative form to diverse and often opposing values governing ethical conduct, individual desires and collective responsibilities. Recently, a spate of films in which cities are destroyed by natural disasters have counterpoised documentary images entailing the collapse of the Twin Towers and the destruction of Baghdad, tsunami devastated regions of Southeast Asia and the inundation of New Orleans. Both fictional and documentary accounts of disaster are mutually reinforcing. They not only invoke, though fail to encompass, the immensity of suffering accompanying the fall of one or the other building, town or city. They are also highly evocative and symbolic, representing (equivocally, no doubt), the end result of a series of causes and effects for which no one person is likely responsible, on the one hand, and a call for fortitude in the face of great adversity, on the other. Disasters can transform cities in the scene for final judgements and the triumph of the human will. Taking its cue from the popularity of a film like *The Day After Tomorrow*¹ this article will consider how the portrayal of disaster serves as a vehicle for questioning our seemingly precarious relationship with nature. It will draw on longstanding traditions, biblical, allegorical and Victorian sources for moralising about fallen cities to cast this phenomenon as uniquely modern and emblematic of contemporary concerns.

Introduction

The appearance of recent disaster films like *The Day After Tomorrow* (2004) or *The Core* (2003) and *Volcano* (1997) parallels what might justifiably be described as a period of remarkable uncertainty in the world. However, observing one or the other catastrophe from the comfort of the cinema or lounge room, audiences today occupy a seat that was prepared for them a long time ago. Historical and fictional sources for contemplating various meanings *of* disaster have reinforced the longstanding availability of the city as a stage *for* disaster. In a way the cinematic destruction of New York and Los Angeles by special effects in 2004 (**Figure 1**) was preceded by the mythical obliteration of Sodom and Gomorrah by divine wrath in that both sets of episodes have been the cause of finger pointing and at times, moral condemnation.

This article emphasises the significance of biblical and classical, literary and allegorical sources for moralising about fallen cities as these begin to account for the narratives of disaster films today by engendering expectations that cities have, and will continue to fail – sometimes spectacularly so. It is proposed that over the course of the nineteenth century reflection on the meaning of urban disaster acquired an environmental cast. This was so given the rise of environmental and particularly evolutionary sciences which were to stress the mutual engagement of living creatures and their surroundings and also because, simply, a greater portion of populations in the West came to inhabit cities and suburbs during this period. Subsequently the form of cities, no less so representations of their destruction, have provided a means for thinking about human identity, society and values, the potential for and limitations of human capabilities for manipulating nature.

Some commentators have cast the visual effects of films like *The Day After Tomorrow* and its precursors in 1970's blockbusters like *The Poseidon Adventure* or *The Towering Inferno* or catastrophe films, more generally as overwhelming narratives typical of 'classical' cinema.² Some have bemoaned the death of cinema along with the fictional obliteration of thousands, if not millions of human beings on the screen. These arguments, like the finer discriminations often made by film theorists between disaster and science fiction films are of limited interest here.³ Rather, the article is inspired by a broader narrative accompanying the expansion of empirical science in Western thought, no less so given its fictionalisation. This narrative relies on perception of the uniform unfolding of time, of causes and effects, actions and reactions derived from a particular understanding of the natural world and our dependence on it. By and large it is this narrative which directors manipulate in environmental disaster films for spectacular effect.

Vanquished cities

Ancient and biblical sources have left a legacy of ideas and physical remains for contemplating the fate of cities. Resonating between these varied accounts is the warning that without 'the city' one would left to wander in the wilderness or confront barbaric lands, face the dissolution and ultimately the chaos of the self. Abstracted from all reference to historical and political circumstance accompanying the destruction of cities, representations of urban disaster commonly depict the necessity *and* tenuousness of city life. Judeo-Christian traditions offer stories detailing the destruction of cities and the dispersal of entire peoples as manifestations of divine justice – assertions of a stark divide between right and wrong and between causes and effects of a certain, moral kind (**Figure 2**).

This can be seen by comparing the biblical account of Sodom with that of Babel. Sodom and Gomorrah, places long associated with licentious behaviour and human failings, prefigure associations that have been formed at times in the past between urban living and corruption. The opposition of civilisation and wilderness features most prominently in the story of their fall. In the book of Genesis (Chapter 19) Lot, when confronted with the prospect of the cities' destruction, begs God to spare a small town nearby lest he be forced to flee to the hills where he would surely die. It was not Lot's physical life that was threatened by the prospect of wilderness, but his very 'soul.' Significantly, following the destruction of the places of wickedness, Lot's incestuous liaison with his daughters occurs as he leaves the small town and social intercourse behind entirely and takes up residence in a cave in the woods.⁴ Babel, by contrast, was not so much destroyed as were the ambitions of its builders thwarted; however, it was equally a site of divine intervention in the lives of humankind. Babel, being first and foremost a city and a tower, was a manifestation of human agency - an innate ability to effect change, to use and transform the material of the natural world.

For the ancient Greeks, the city represented both the manifestation of civic virtue and the means for propagating it. To the Greeks, we owe the weight of words to describe specific forms of behaviour as though the identity of a particular city could stand in for the moral character of its inhabitants, be they Spartan, Cretinous or Sybaritic. It stands to reason that the fall of the *polis*, a common enough occurrence in a world of city-states and rival trading powers, would come to represent an event of historical and moral significance as profound as the destruction of a Sodom or Gomorrah. Given the legacy of ancient Greek and Roman civilisations and the spread of their ancient monuments and remains of public

works across Europe, it is no wonder that the rise and fall of cities like Sybaris (510 B.C.) or Selinunte (250 B.C.), then Pompeii and Herculaneum (79 A.D.), like the gradual decline of Rome itself, have long fascinated historians. Equally, the discovery of ancient sites has inspired at various times in the past new thoughts on architecture and urbanism, design and interior decoration.

It would be misleading to consider urbanity as a state manifest only by urban forms or likewise the opposition of tower and plain (Babel) or civilisation and chaos (Sodom) to be represented simply by images of devastated cities. Writers and artists have called upon other images of disaster to depict the vulnerability of human society. Théodore Géricault's painting of *The Raft of the 'Medusa'* (1819) is a case in point. Portraying events following the foundering of a ship off the West African coast in 1816, it depicts passengers and crewmembers struggling to survive on a makeshift raft with little to sustain them but a few drops of wine and notoriously, human flesh. In Géricault's painting, suffering, madness and death were part of the natural world for nature, like the sea, was imagined to be a formless and potentially malevolent entity. William Strutt's painting of a cataclysmic bushfire in the Australian outback, entitled 'Black Thursday' (1851) is not only composed in an equally spectacular manner, but tells a similar story. The bush is not only indistinct and threatening like an immense ocean where fire rolls across the plain in an all consuming wave, it represents a space that is opposed to civilization and must ultimately be confronted and (hopefully) conquered.

Domestic disasters

The remarkable growth of the modern metropolis was, paradoxically, a catalyst for thoughts on humankind's dependence on the natural world and concern arising from disruptions to the orderly fabric of that world wrought by urban expansion itself. Evidence suggests that the increasingly widespread experience of life in Victorian era cities and suburbs, houses and gardens became a vehicle for environmental awareness during a period in which terms such as 'environment' and 'ecology' had only recently been coined.⁵ Given the popularisation of science through works of domestic economy and fiction, the home became a compartment of organic nature, at once familiar and evocative of other worlds – a place of wonder, suspense and even fear. Anxiety generated by familiarity with nature's elements in the domestic sphere and the myriad of organisms sharing domestic space with its human attendants, obliged the inhabitants of the city to organise their daily lives within environments that ranged in scale from the local to the global. Experience of earth, air and water close at hand in the house and garden was extended by more broadly-scaled studies whereby nature's impact upon urban forms and spaces was cast in atmospheric, geological or hydrological terms.

An empirical understanding of the chemical and physical properties and behaviour of the soil allowed for a more nuanced appreciation of the organic properties of what had formerly been merely 'humus'. This was followed by a more complex view of the understanding of the contribution of soil to plant, animal and human nutrition.

Urbanisation brought particular problems like the need to accommodate increased housing densities and rehabilitate farmland and wilderness, wetlands and rubbish yards for building purposes. These brought urban residents into ever closer proximity to sites of potentially dangerous 'exhalations' from the ground or so-called 'dangers from beneath' arising from

porous soils, coal seams or decomposing vegetable matter, cemeteries, abattoirs and tanneries.⁶

As with the earth, science drew the attention of the Victorian householder and urban resident to the air and water in new ways. With a fuller knowledge of the composition of former – one part oxygen, four parts nitrogen, with a small quantity of carbonic acid and a ‘considerable proportion of aqueous vapour’ according to one popular account in 1856 – fears of its impurity could be grounded in empirical terms.⁷ Domestic spaces and large public buildings were particularly apt to serve as registers of the quality of air, whether moisture-laden or foggy, malodorous or filled with dust and soot. London, given its great libraries, train sheds, public halls *and* bad weather, features in many period accounts which reveal the novelty and apprehension inspired by a burgeoning city. One account describes conditions inside Sidney Smirke’s domed Reading Room of the British Museum (1857) in which darkness descending from the intrusion of sooty fog made it difficult for readers to see the books upon the shelves.⁸ Another, in terms evocative of a horror film, records the movement of vapour within the vaults of Westminster Abbey relative to the dome of St. Paul’s Cathedral, while a manual of household economy of the same time encouraged householders to ‘fortify’ their living rooms against the intrusion of fog and filth with weather-stripping made from felt carpet or oil-cloth.⁹

Mediating between a sense of the body and the rooms and public spaces it might occupy, such observations were paralleled by a more complex understanding of ‘atmospheric phenomena’ as the century advanced. Of increasing interest were the interactions between topography, temperature and air movement, barometric pressure and humidity, and related physical, magnetic and electrical phenomena.¹⁰ Such relations

imparted, among other lessons, a heightened sense of connectedness, for better or worse, between cities and their inhabitants based on the climate.¹¹

Literature, whether serving practical aims or obviously fictional ones, heightened the evocative capacity of one or the other of these phenomena. In Esther Copley's *Catechism of domestic economy* (1851) the sources of death and decay and around the house were many, being: 'whatever occasions bad smells, or in any way vitiates the air, such as stagnant ponds or ditches, privies, dung-heaps, or the neighbourhood of manufactures or trades in which noxious substances are prepared or employed.'¹² Records of public inquiry, often sensationalised in period newspapers, were equally effective in this regard. They issued amongst other warnings that the houses of the poor, typically built over common sewers or in low-lying areas, were particularly vulnerable in the defensive space of public sanitation and hygiene. Privy's and holes in floor not only allowed sewer gases to enter, but rats – sometimes 'twenty at a time' – forcing residents to maintain a constant vigil.¹³ Such, supposedly factual accounts not only furthered a sense of the connectedness of nature's departments and humankind's dependence upon them, but fostered a sense of the vitality of both built and natural environments making the boundary between these domains less a fixed, obvious one, but rather a realm of discrimination and discernment.

This vitality was to prove both a measure of humankind's "interference in the operations of the natural world" as George Perkins Marsh would have it in the 1860's *and* the force that would reclaim cities after humankind was gone.¹⁴ In its irresistibility it was akin to another force, the force of a divine nature, that would reclaim Babylon (another city fallen city from the bible), making it a place where "marmots shall have their lairs..desert owls shall dwell and he-goats shall gambol."¹⁵ This vitality animates August Doré's *London: A Pilgrimage* of 1872 which dramatises

and illustrates the artist's tour of the metropolis with now iconic images of Victorian grandeur and squalor, scenes characterised by the people living and working in them and by particular ambient qualities which, somehow, impacted upon the inhabitants of these places (**Figure 3**).¹⁶ In some literary works the close scrutiny of nature associated with empirical science was itself dramatised. Doré's portrayal of a city struggling with an excess of humanity is mirrored in reverse by Richard Jefferies' *After London, or, Wild England* (1885) in which a mysteriously de-populated countryside is found languishing, suffocating under the weight of nature's fecundity and uncontrolled floral growth that reclaims lands that were once inhabited and cared for. Both of these works oppose human culture to nature, representing the city as a domain of both human enterprise and potential neglect and form a remarkable backdrop for recent films of environmental catastrophe which rely on urban settings for a similar effect.

Environmental change and catastrophic risk

Ever since and partly due to representations of the organic character of life in the city, as these became increasingly common from the second half of the 19th century onwards, observations of the fast pace of change in both natural and built environments found there have been coupled with assessments of risks arising from one or the other of these domains. Conversely, the communication of danger has relied upon awareness of the pace of change and required means of representing or measuring it (**Figure 4**). In terms reminiscent of one, particularly 'scientific' guide to agriculture and home economics from the Victorian era, the things one saw in the suburban house or garden were overshadowed by the innumerable things one failed to detect. These latter, "hidden mysteries" could be only be known by "the results they produce" as the guide's author advised the reader.¹⁷

In everyday circumstances views of water bubbling up from a drain, cracks forming across a sheet of ice or birds flying south – all portentous events in *The Day After Tomorrow* - seem fairly harmless. In the disaster film, however, these phenomena occur on a vast scale, are witnessed out of season or otherwise appear unexpectedly along with other, equally ominous occurrences. They are clues drawn from the natural world that something is about to go terribly wrong with nature itself. They signal not so much diurnal, seasonal or annual rhythms, but moments portending the end of cyclical time altogether out of which new patterns of interlinked causes and effects presumably will appear, though perhaps no one will live to recognise them.

Sensitivity to the uniform unfolding of time allows scientific ideas, particularly from evolutionary biology, ecology and the natural sciences to inform literary and cinematic narratives. It is a sense that one event brings another grows out of the view of ‘uniformitarianism’ that came to characterise nature by the time of Darwin and his contemporaries.¹⁸ Manipulation of the speed of this chain of events, beyond all resemblance to reality or ‘nature’ provides the basis for the heightened suspense of environmental disaster films. The use of the city as a setting and means of observing and, in effect, measuring the pace of change accounts for the impact of the spectacular visual effects of these movies.

In writing this paper, controversy came to mind questioning the scientific accuracy of the account of climate change in *The Day After Tomorrow* in which, in the running time of 118 minutes and the fictional time frame of a few weeks or 72 hours (if the film’s title is to taken literally), the world as we know it is more or less destroyed.¹⁹ Giant hailstones bombard Tokyo, enormous cyclones ravage Los Angeles and a terrific tsunami submerges

New York, all, presumably, a consequence of global climate change (**Figure 5**).

Accordingly, some have described *The Day After Tomorrow* as misleading in terms of its scientific inaccuracies, there being little or inconclusive empirical evidence for an accurate account of the scale or pace of climatic events portrayed. Some have pointed out these inaccuracies all the while acknowledging the motives of the film's director to raise environmental awareness.

Coincident with the film and its critics, in the broader political arena, a new class of environmental heretic has appeared in the figure of the climate change denier. This is a shadowy, deceptive character commonly associated with the presidency of George W. Bush and the powerful oil lobby that uses the uncertainties of science to claim that climate change does not exist at all. Whether twisting the facts for cinematic purposes or ignoring evidence of climate change for political ones, there is something that underlies both responses: an attitude towards the unknown. Between the world of film and fact, science and science fiction, is a realm of uncertainty that has, in varying degrees always accompanied the application of science and is most clearly evident in its popularisation.

Conclusion

Recent disaster films do what works of science fiction have always done. They freely mix truths and half-truths for heightened effect and frequently, for moralising purposes. The license to do so is not provided by an exact and timeless standard of objectivity, but rather is based on the exploitation of the element of uncertainty that has always accompanied the expansion of empirical science as a means of explaining things. In this regard, uncertainty regarding the precise cause, scale or duration of cataclysmic natural phenomena is mirrored

by suspension of belief in the viability of human responses to portrayals of urban disaster: the flight of Americans and their values to Mexico (*The Day After Tomorrow*), the voyage into earth's molten core to relieve the pressure there (*The Core*) or the diversion of lava flows into LA's drainage system (*Volcano*).

Such uncertainties, those threatening the city and others holding out promise of its salvation, serve to position us all, the urban dwelling and cinema-goer, as potential victims or heroes. In the end, it is the city that provides a backdrop for a complex view of humankind's relationship to nature. It is a relationship whereby, on the one hand, there appear environs, more or less circumscribed that ultimately determine human character and destiny. On the other hand, nature continues to provide a seemingly limitless realm of natural resources and vitality accommodating the expansion of human enterprise. The likelihood of adapting to one or the other raises questions of the possibilities for and the limits to human autonomy and freedom and ultimately, our ability to control the environment and our own future.

Notes and references

The photographs used in the figures were taken by the author, unless specified otherwise.

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³Maurice Yacowar, 'The Bug in the Rug: Notes on the Disaster Genre', in, Barry Grant, ed., *Film Genre Reader II* (Austin, University of Texas Press, 1995), pp. 261-278.

⁴This particular account is given in the Douay translation of the Old Testament and is cited by Ruth Mellinkoff; see 'Titian's Pastoral Scene: A Unique Rendition of Lot and His Daughters', *Renaissance Quarterly*, 51:3 (Autumn, 1998), pp. 828-863, particularly pp. 828-863.

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⁶James Cameron, *Is My House Healthy? How to find out* (Leeds, 1892), pp. 4-12.

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¹⁴George Perkins Marsh, *Man and Nature* (Cambridge MA, Harvard University Press, 1965, c1864).

¹⁵Isaiah 13:19-22

¹⁶Lynda Nead, *Victorian Babylon: people, streets, and images in nineteenth-century London* (New Haven, CT, Yale University Press, 2000), pp. 212-214.

¹⁷Cuthbert Johnson, *Out House and Garden: What We See, and What We Do Not See In Them* (London, 1864), p. 144.

¹⁸George Levine, *Darwin and the novelists: patterns of science in Victorian fiction* (Cambridge, MA, Harvard University Press, 1988), p. 34-49.

¹⁹George Monbiot, 'A hard rain's a-gonna fall', *The Guardian* (Manchester, Friday, May 14, 2004)