ZOMBIE CITIES:

Post-Apocalyptic Science Fiction and the Metropolis

Submitted by Robert Anthony Yeates, to the University of Exeter as a thesis for the degree of Doctor of Philosophy in English, July 2016.

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Abstract

This thesis looks at how cities are portrayed in British and American post-apocalyptic science fiction, from the rise of the modern city to the present day. Conceptualized as "zombie cities," the thesis suggests these are locations caught between life and death, in which humanity is at risk of being eaten away. Uncanny doubles haunting the contemporary, ordered, and modernized city, such fictional projections frequently present manifestations of contemporary urban concerns. The four historical sections of this thesis track the shifting focus of urban representations in post-apocalyptic science fiction from the threats of reckless modernization and aerial warfare to the hope of radical reinvention of broken cities and even the joyful exploration of their ruins. The project presents this urban fixation as connected to the history of science fiction and the development of media, suggesting that post-apocalyptic science fiction in particular is the ideal form to address the piecing together of the broken and fragmented into the experimental and new. By looking at adaptations, sequels, and re-imaginings it is possible to see that history of urban representations in post-apocalyptic science fiction is connected to a history of evolving urban anxieties. Creating a space of contact between urban studies, the study of ruins, the uncanny, science fiction studies, apocalypse studies, academic study of the zombie, and media history, the thesis proposes the value of the new term of zombie cities to each field, and aims to initiate further endeavours that follow similar methods.

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Illustrations

- Fig. 1: A comparison showing the player-character moving "behind" (from the player's viewpoint) isometric walls in *Fallout* (left), and the inability to do so with the flat 2D buildings in *Wasteland* (right). Copyright: *Fallout*, Interplay, and *Wasteland*, Interplay.
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Introduction

There is no shortage of apocalyptic warnings for the future. The *Bulletin* of the Atomic Scientists's "Doomsday Clock," a barometer of existential threats to humanity, is set in 2016 at three minutes to midnight, cautioning that nuclear weapons and climate change "threaten the very existence of civilization" (Mecklin 4). Oxford University's recently established Future of Humanity Institute is made up of what one journalist refers to as "students of the apocalypse," and assesses such dangers as artificial intelligence and overpopulation (McBain). The USA's Centres for Disease Control and Prevention even have resources available on "Zombie Preparedness," an initially tongue-in-cheek campaign that has "proven to be very effective" in conveying real-world threats to public health ("Zombie Preparedness"). Alongside such scholarly research, assessments, and forecasts, preparations are being made for the post-apocalyptic world. Large-scale endeavours such as the Svalbard Global Seed Vault insure against the possible loss of ecosystem diversity. On an individual level, a growing number of people referred to as "doomsday preppers" stockpile supplies in bunkers for the end times: annual events such as the American National Preppers and Survivalists Expo, and respected institutions such as The New York Times (Feuer) and National Geographic Channel ("Doomsday Preppers"), disseminate advice for those hoping to survive a catastrophic event. With speculations on the end of the world so readily available, the twenty-first century has seen apocalyptic themes raised in fiction with a staggering quantity and diversity, making critical studies of the origins and consequences of these themes all the more urgent.

Any study of the wide-ranging role of the apocalypse in historical and contemporary culture must of necessity be incomplete, and accordingly this

thesis makes no claim to being exhaustive. The thesis instead places its focus on the history of representations of the post-apocalyptic city since the early nineteenth century, a history that connects closely to the developing genre of science fiction and the development of the media forms in which the genre appeared. In their depictions of the afterlives of fallen cities, post-apocalyptic science fiction texts show how the most intensely modernized and concentrated forms of human settlements might precipitate their demise in their very foundations. Profound and cataclysmic change is enacted viscerally in postapocalyptic fictions of the modern city, showing in physical destruction the literal downfall of the built environment with the fall of civilization itself. In their postapocalyptic afterlives, the cities of these texts allow their characters and audience the imaginative potential for the reconstruction or repurposing of the urban environment, permitting a radical and revolutionary encounter with the familiar spaces of contemporary urban life. Utilizing the most cutting edge media forms of their times, often in imperfect states of experimental development, science fiction creators push at the boundaries of imaginative speculation on the future of the city in a genre that is itself comprised of an assemblage of previous and existing forms. The post-apocalyptic city is thus an image that is created from a disassembly and repurposing of the urban environment, media technology, and established genres of fiction. The purpose of this thesis is to provide a means of reading such texts through the idea of these post-apocalyptic urban locations as "zombie cities," caught between life and death. Over the following eight chapters this thesis demonstrates the usefulness of these locations in understanding the relationship between the genre of science fiction and contemporary urban concerns, tracing this

relationship from its formulation in the early nineteenth century to the present day.

Since the publication of a number of high-profile histories of the genre, central among these being Brian W. Aldiss's Billion Year Spree (1973, rereleased as Trillion Year Spree in 1986), science fiction has been shown to be not merely a popular form of fiction but also a field of texts warranting interdisciplinary academic study, with the capacity to act as a barometer of societal concerns. 1 Beginning with the meeting of gothic fantasy and scientific knowledge in Mary Shelley's *Frankenstein* (1818), critics such as Mike Ashley demonstrate how the genre came to prominence alongside the rise of fictionfocussed magazines, initiated by Blackwood's Edinburgh Magazine in 1817. Science fiction and the magazines grew together gradually over the nineteenth century, and the relationship befitted the meeting of experimental narrative content and form. The fragmented form of serialized magazine publication and the myriad composition of the individual issues became an ideal place to house a genre that was still indistinct and finding its identity, composed as it was of the conventions of gothic, detective, and adventure stories. Reflective of its development into a separate and identifiable genre, as well as its growing popularity, science fiction eventually found its home in a number of dedicated magazine publications beginning with 1926's Amazing Stories. Since these origins, science fiction continues to be one of the first genres to appear in new media forms as well as in established media forms at the introduction of new

¹ Also referred to in academic study as "sf," science fiction is distinct for its focus on scientifically plausible scenarios in a world modelled upon our own. This is as opposed to, for example, Tolkein-esque fantasies which create new worlds of unique flora and fauna, and feature the possibilities of magic. The genre, as Kingsley Amis quips, prompts "the kind of definition that demands footnotes" (11). For examples of further reading on the definitions of science fiction, see the opening chapters of Aldiss's *Billion Year Spree*, Amis's "Starting Points" (1976), Robert Scholes's "The Roots of Science Fiction" (1976), Darko Suvin's *Metamorphoses of Science Fiction: On the Poetics and History of a Literary Genre* (1979), and James Gunn's "Toward a Definition of Science Fiction" (2005).

technologies. Early films such as Georges Méliès's *La Voyage dans la Lune* (1902) and *Frankenstein* (J. Searle Dawley 1910), as well as later groundbreaking feature-length pictures such as *Metropolis* (Fritz Lang 1927), *2001: A Space Odyssey* (Stanley Kubrick 1968), and *Avatar* (James Cameron 2009) allowed filmmakers to test the limits of the media through fantastical narratives grounded in the realities of scientific possibility. This same association between science fiction and experimentation with emerging media forms can be seen with early comic strips such as *Mr. Skygak, From Mars* (1907-17), in radio with the infamous Orson Welles broadcast of *The War of the Worlds* (1938) and series such as *Quiet, Please* (1947-49), in television series such as *Tales of Tomorrow* (1951-53) and *The Twilight Zone* (1959-64), and early videogames such as *Spacewar!* (1962) and the pioneering arcade game *Computer Space* (1971).

Post-apocalyptic science fiction is a subgenre of science fiction.² These are fictions in which a fundamental change has taken place: a widespread and typically global upheaval which renders humanity forever changed. These upheavals are evidenced in the texts through hyperbolic imagery, with depictions of the actual, tangible devastation of the physical environment of the world. Stories which are classified under this title present a vision of our world, or an image of what our world might have been, in a state of comprehensive ruination. In most cases this world will have lost almost all of its living inhabitants to some profound catastrophe, with its civilization's institutions and

² Post-apocalyptic fiction more generally includes stories which would not fit under the mantle of science fiction, such as tales of religious and supernatural end times. Such narratives have their origins in the very earliest stories created by humanity, and continue since the rise of science fiction with, for example, the Christian Rapture-inspired *Left Behind* novels by Tim LaHaye and Jerry B. Jenkins (1995-2007). For studies incorporating a history of these stories, see Frank Kermode's *The Sense of an Ending: Studies in the Theory of Fiction* (1967), David Ketterer's *New Worlds for Old: The Apocalyptic Imagination, Science Fiction, and American Literature* (1974), and Elizabeth K. Rosen's *Apocalyptic Transformation: Apocalypse and the Postmodern Imagination* (2008).

infrastructure only memories. The catastrophe in question can be any event following the rules of our material universe as currently understood, such as a global war or pandemic, a celestial occurrence such as the impact of a meteor, or the invasion of an alien species. In pathetic fallacy, these texts present their protagonists, and humanity itself, having fallen in tandem with the built environment. In contrast with apocalyptic or eschatological science fiction, all or most of the narrative is focussed on the experience of characters living after the catastrophe has already occurred. Among the ruins of the pre-apocalyptic world the protagonists of post-apocalyptic science fiction struggle to find a new place for themselves in a once-familiar environment newly hostile to human life. With both the characters and setting in extremis, creators of these texts are enabled the opportunity to examine the fundamental motivations and desires of their protagonists and antagonists, in settings unshackled from the restrictions of civilization and society. Recent examples range from Cormac McCarthy's unforgiving, poetic novel *The Road* (2006), the hugely popular Young Adult *The* Hunger Games novels (2008-10) by Suzanne Collins and their film adaptations (Gary Ross and Francis Lawrence 2012-15), and the charming, humorous animated film WALL · E (Andrew Stanton 2008). Permeating all forms of media, post-apocalyptic science fiction stories are now so well established as to be enjoyed around the world across generational and other demographic boundaries. As I write in the twenty-first century, this subgenre seems to be even better suited than other forms of science fiction to experimenting with emerging media forms. In testing the capabilities of new representational technologies and in anticipating the undetermined composition of their audience, storytellers create worlds that are similarly disassembled and partially reconstructed into an unconventional and yet familiar form. As such these postapocalyptic worlds symbolize both the genre of science fiction and the media forms on which it is produced and received, for both are the result of the reimagining of a combination of previous forms.

Concurrent with the early development of science fiction was the expansive industrialization, modernization, and urbanization of nineteenthcentury Britain and America. As a result, early science fiction and particularly apocalyptic and post-apocalyptic science fiction frequently addressed concerns over technological developments and the rise of the modern city. Anxieties over the dangers of new technology, overcrowding, pollution, globalization, wars, terrorism, municipal government and law enforcement, damage to the environment, dependence on infrastructure, the increased speed with which diseases could be transmitted, and the coming together of groups divided by race, class, gender, and sexuality, all find expression in British and American post-apocalyptic science fiction from the inception of the modern city to today. With the increase in populations of the urban centres of these two countries, as well as the development of areas surrounding the cities, these kinds of fictions expressing the anxieties of their historical periods have only grown. In creating their post-apocalyptic worlds these fictions draw on such anxieties, following them to their potentially catastrophic conclusions in global apocalypse, and seeing them re-emerge with the early development of post-apocalyptic urban settlements. This thesis tracks these British and American urban anxieties, in order to establish the role played by the subgenre in rehearsing the fears of urban populations from the nineteenth to the twenty-first century.

Ruins as Doubles

The city is a rewarding site for study due to its tendency to incorporate the extremes of modern technology, industrialization, and architecture, as well as the coming together of a wide diversity of human beings from across the globe. Studies of the city can thus be a means of assessing changes beginning to germinate in society more broadly, and offer a concentrated case study of contemporary attitudes and issues. Studies of urban spaces tend to be interdisciplinary endeavours. Broadly speaking, urban studies can incorporate:

the study of urban areas (such as urban anthropology, urban economics, urban geography, urban history, urban politics, urban psychology, urban sociology), professional fields such as architecture and urban planning, and other fields such as art, literature, and photography that are situated within the built environment. (Hutchison xxv)

In addition to these areas, any study of the urban is also in dialogue with analysis of other human spaces such as the suburbs, and is defined in contrast to studies of natural or rural spaces. Given the breadth of urban studies as a whole and its many points of convergence with other fields, this thesis narrows its critical pool to works of urban studies which are contemporary to the time periods assessed, and to later historical studies which are of good critical standing. For instance, the history of London at the turn of the twentieth century in Chapter 1 is informed both by Georg Simmel's "The Metropolis and Mental Life" (1903) and by Stephen Inwood's *A History of London* (1998). The thesis also keeps its focus primarily on studies of the "modern city," understood as the ordered, modernized, and industrialized urban environments which emerged in Britain and America from the early nineteenth century.

In contrast to earlier literature and art which presented Romantic elegies on the transformation of the built environment into timeless ruins, postapocalyptic science fiction presents the abrupt devastation of the modern city as what Nick Yablon describes as "untimely ruins": the premature crumbling of recently constructed architectural forms. 3 As several scholars of architecture and urban studies note, the construction of modern cities is a process laced with violence; structures then contain dormant violence, and they will ultimately meet with a violent end. Urban theorist and historian Lewis Mumford notes in The City in History (1961) that the spectre of ruin is a result of the violence inherent in the creation of architecture. As Mumford writes, all historic civilizations begin with "a living urban core, the polis," and end in "a common graveyard of dust and bones, a Necropolis, or city of the dead: fire scorched ruins, shattered buildings, empty workshops, heaps of meaningless refuse, the population massacred or driven into slavery" (City 53). Simmel, in a 1911 essay on the urban environment titled "Ruins," argues that destruction is "not something senselessly coming from the outside but rather the realization of a tendency inherent in the deepest layer of existence of the destroyed" ("Two Essays" 382). Recent urban theorists, such as Bernard Tschumi and Terry Smith, express similar ideas: as architecture is an expression of humanity's perpetual, often violent struggle to master the natural world, architectural spaces will be ultimately reclaimed if the struggle is not constantly upheld. This necessitates a constant effort to rebuild and renovate in an endless cycle of

³ For works of urban studies incorporating a general history of writers' and artists' fascination with ruins, see Rose Macaulay's *Pleasure of Ruins* (1953), Christopher Woodward's *In Ruins* (2001), and Brian Dillon's *Ruin Lust* (2014).

⁴ It has also been pointed out that the city is formed of the "eradications, even the ruin, of the landscape from which it rose" (Solnit 150). In this way the building of a city could be seen as the creation of ruins of the natural environment, as well as the preparation for the future ruination of the built environment.

modernization, in essence a demonstration of creative destruction as outlined by Karl Marx and Friedrich Engels:

a great part not only of existing production, but also of previously created productive forces, are periodically destroyed. [...] Society suddenly finds itself put back into a state of momentary barbarism; it appears as if a famine, a universal war of devastation, had cut off the supply of every means of subsistence; industry and commerce seem to be destroyed; and why? Because there is too much civilisation, too much means of subsistence, too much industry, too much commerce. (42)

More than simply falling into ruin, these theorists demonstrate that the city possesses a need for dissolution, a compulsion towards destruction that can be compared to what Sigmund Freud labelled the "death drive." First put forward in *Beyond the Pleasure Principle* (1920), Freud's theory aims to explain the motivations of actions beyond the pursuit of pleasure, and particularly of the revisiting of traumatic events. His suggestion that the human mind seeks to return to an earlier state of non-existence, and thus precipitates the inevitability of death, has clear relevance to the urban theories outlined above, and will be revisited in detail in Chapter 7. Whatever the causes of destruction of the city, ruins are the fulfilment of the destinies of built spaces. With examples of urban ruins such as the abandoned town of Pripyat in Northern Ukraine and the economically suffocating city of Detroit, Michigan standing as visible reminders of the potential for modern cities to fall into decay, the ruined city is not just a plausible image, but an inevitable one: it is not a case of "if," but "how." The

⁵ For a recent study of the ruins of Detroit, see Dora Apel's *Beautiful Terrible Ruins: Detroit and the Anxiety of Decline* (2015). Following Detroit's economic crisis, low property prices have initiated some

ruined cities of imagined future or alternate-history post-apocalyptic science fiction worlds are extensions of these examples taken to their plausible extremes. These ever-present visions of destruction operate as uncanny doppelgangers, or doubles, which haunt the contemporary, living city.

Architecture's in-built annihilation is aptly described by the uncanny, which, according to Nicholas Royle, "entails another thinking of beginning: the beginning is already haunted" (1). The double in particular, "having once been an insurance of immortality" in the age of primitive humanity in the creation of images of the "immortal soul," now "becomes the uncanny harbinger of death," a projection of future destruction and annihilation (Freud, *Uncanny* 142). The double has "become an object of terror" (143). The uncanny double is not just a terrifying vision of a possible world that is the opposite of our own but the herald of a world already germinating in the present. Leo Mellor writes that the urban ruins realized by bombsites contain "absolute doubleness," being "inherently both a frozen moment of destruction made permanent [...] yet they also act as a way of understanding a great swathe of linear time previously hidden or buried, offering history exposed to the air" (6). Brian Dillon writes similarly that "ruins allow us to set ourselves loose in time, to hover among past, present and future" (6). Urban ruins are examples of the inevitability of destruction and decay, and reminders of the feared double of the healthy, living city.

An uncanny effect is generated "when the boundary between fantasy and reality is blurred, when we are faced with the reality of something that we have until now considered imaginary" (Freud, *Uncanny* 150). Science fiction has long been associated with this kind of technique. The estrangement effect common to science fiction is, as Matthew Beaumont suggests, especially potent in works

that infer that the apparently solid structures of the present are, incipiently at least, already different (230). Post-apocalyptic fiction in particular often engages closely with these methods, following present day concerns to their potential conclusions in apocalypse, and presenting this possible future world as a warning to the present. Seeing our familiar cities in post-apocalyptic ruination resists the habitualization and automatized perception of modern urban life in the process of defamiliarization described by Victor Shklovsky. The commonplace fears of everyday life are raised and enacted on representations of the city so that "perception is impeded and the greatest possible effect is produced through the slowness of perception" (Shklovsky 25). As Shklovsky argues of art in general, I suggest that post-apocalyptic fiction "exists so that one may recover the sensation of life; it exists to make one feel things" (24). Internalized and suppressed urban anxieties can thus be confronted and interrogated by the ruins of recognizable worlds in post-apocalyptic fiction.

The fictional environment of the post-apocalyptic city is rarely a dead space of uninhabited ruins but rather an undead, or zombie-like, space. The apocalyptic event itself usually leaves these spaces devoid of life and at least partially destroyed, but physical structures can still operate as, at the very least, shelter or landmarks. Plant life may reclaim dominance over the land while humans and other animals move in to acquire territory and build new communities. After its initial death, the post-apocalyptic city is thus revived from the dead to serve further purpose. Nonetheless, the city does not return to its former self. Though the physical space is given new life, something of its essential city-ness is not revived and is still lost: its infrastructure, culture, economy, governance, and so forth. The post-apocalyptic, ruined city, therefore, is not really dead, but nor is it living. This aligns the space with typical

definitions of the zombie, a monster of Haitian folkloric origin which has entered scholarly discourse for its liminal form of existence. Reanimated corpses set to toil endlessly in slave labour, zombies are caught between the worlds of the living and the dead. In their seminal essay on the zombie's usefulness as a theoretical term, Sarah Juliet Lauro and Karen Embry write that "the zombie's irreconcilable body (both living and dead) raises the insufficiency of the dialectical model (subject/object)" (87), having become "animate, but wholly devoid of consciousness" (89). The zombie is unusual among monsters for this quality, being as it is trapped between subject, the living person, and object, the corpse. Making a connection between the zombie and the city has its precedents, as the physical form and function of architectural and urban space is commonly compared with the form and function of the human body, such as in analogies between the transportation system and the circulatory system, or between a building's steel framework and the human skeleton. Such connections, however, have not yet been extended to speak of the "zombie city."8 This new critical approach of analysing the post-apocalyptic city through the lens of the zombie will be the guiding principle of this thesis.

⁶ For example, Raymond Gozzi, Jr. describes how "zombie computers" emerged as a term to refer to machines taken over by hackers, Gina Kolata reports in *The New York Times* that reanimated "junk" DNA is being described as "zombie genes," and "zombie economics" is coined in John Quiggin's *Zombie Economics: How the Dead Still Walk Among Us* (2012) to describe discredited but persistent economic ideologies.

⁷ See, for instance, Elizabeth Grosz's Architecture from the Outside: Essays on Virtual and Real Space (2001), Body and Building: Essays on the Changing Relation of Body and Architecture (2002) edited by George Dodds and Robert Tavinor, and Laura Colombino's Spatial Politics in Contemporary London Literature: Writing Architecture and the Body (2013).

⁸ Architectural scholar John McMorrough has, however, briefly used the zombie to discuss architecture's "postideological (post-Post-Modern) turn," a time in which he believes the disciplinary argument has ceased to be of use and greater freedoms can be exercised: "If the ruin is the inert figure adequate to the representation of architecture in decline, then perhaps the zombie is the mobile figure of architecture, disciplinary continuity in the form of nonorganic self-organization and emergent intelligence" (168).

Monstrous Cities

Many other monsters of folklore and fiction which are not zombies have been raised from the dead, and these have also been applied in studies of urban space. The "ghost town," for instance, is an abandoned town which has lost its essential town-ness and is no longer populated. There are many examples of former industrial Soviet towns in Eastern Europe and gold-rush towns in the Western United States which are now ghost towns. These sites, abandoned after their economic necessity has passed, have not housed human life in decades. The post-apocalyptic city of fiction is, however, different to ghost towns in its reanimation (its repurposing by survivors), which aligns it much more closely with the reanimated corpse of the zombie than the ethereal remnant of the ghost. Just as the built environment is encoded with the fate of its eventual ruination, so zombies are a reminder of "the inanimate end to which we each are destined" (Lauro and Embry 90). Living haunted by the inevitability of death, Lauro and Embry suggest, "we are all already zombies" (90). This manifestation of repressed, monstrous decay becomes one of the central themes of the Walking Dead zombie franchise, analysed in Chapter 8, in its refrain by living characters of "we are the walking dead." Respectively, in its application to architectural lives, it is an idea recurring throughout representations of the post-apocalyptic science fiction city.

In the process of dying and being reanimated, the zombie loses something fundamental to human subjects. Kevin Boon writes: "zombies do all share a common characteristic: the absence of some metaphysical quality of their essential selves. This may be the soul, the mind, the will, or, in some cases, the personality. But every zombie experiences a loss of something essential that previous to zombification defined it as human." Writers throughout

the twentieth century have attempted to explain this absence. For example, Boon terms the lost quality "volition" ("Rise" 7), W. B. Seabrook describes the zombie as "vacant [...] not only expressionless, but incapable of expression" (101), Zora Neale Hurston writes that the zombie are "bodies without souls" (179), and Mark Jancovich notes that since the rise of George A. Romero's cinematic zombie they are presented as being "only motivated by repetitive and compulsive forms of behaviour" (Horror 91). What has certainly become prevalent in representations of the zombie is a loss of empathy and emotions, a loss of reason and civility, and a move towards mechanical, instinctual, selfserving activities, and particularly the consumption of human flesh. The zombie is a creature which cannot engage in constructive or benevolent activities and functions only as a danger to others. Again, this raises the uncanny, which "can be a matter of something gruesome or terrible, above all death and corpses, cannibalism, live burial, the return of the dead," originating as it does in "the return of the repressed, the constant or eternal recurrence of the same thing, a compulsion to repeat" (Royle 2). The zombie is an uncanny human being, which is not "tame, associating familiarly with humans; [...] domesticated, [or] friendly" (Freud, *Uncanny* 126). Accordingly, the post-apocalyptic city is a place newly dangerous, hostile to humans, a place of barbarism, savagery, and the primitive. As the zombie consumes human flesh, so the zombie city consumes human life, eating away at people's humanity. Referring to the effects of the modern city in these terms has its precedents in works of urban studies. Responding to the rise of urban modernity in the early twentieth century, German historian Oswald Spengler notes that the city has the potential to become a ravenous monster:

The wheel of Destiny rolls on to its end; the birth of the City entails its death. [...] Long, long ago the country bore the country-town and nourished it with her best blood. Now the giant city sucks the country dry, insatiably and incessantly demanding and devouring fresh streams of men, till it wearies and dies in the midst of an almost uninhabited waste of country. Once the full sinful beauty of this last marvel of all history has captured a victim, it never lets him go. (102)

Fictions that portray a ruined urban space of the future inevitably include dormant reminders of lost civility or humanity. The England of Richard Jefferies's *After London* (1885) is one of murderous roaming tribes; John Wyndham's *The Day of the Triffids* (1951) depicts an England returned to a Darwinian struggle between man and nature; in the *Fallout* videogame series (1997 to present) the cities of the future are built in the ruins of past cities, and have as their essential civic activities drug addiction, prostitution, religious fundamentalism, celebrity worship, gambling, and killing anyone who gets in the way; and the television series *The Walking Dead* (2010 to present) explores whether there is intrinsic meaning to the dichotomy of law and criminality. The post-apocalyptic city witnesses the death of the modern and supposedly civilized moral order and gives way to the emergence of a dehumanized and amoral disorder. The struggle that takes place in these spaces is frequently an attempt to resist this new, amoral landscape and to reclaim a past social and moral equilibrium.

This being said, what do we gain by viewing representations of the postapocalyptic city through this critical lens? Quintessentially, as mentioned earlier, science fiction's implication that its visions of the future have already begun to come about makes it a vital source for detecting social anxieties. Postapocalyptic zombie cities show the present-day concerns that are always already present in urban space and to which the creators of these fictions wish to draw our attentions. The potential futures presented in these fictions are zombie cities populated by human and other bodies but lacking in human compassion and civility, or are places otherwise hostile to human life through radiation or pollution. These depictions illuminate what is already problematic in city life, as well as allowing speculation on the dangers of leaving these things unchecked. The fear of the zombie and of one becoming a zombie is connected to the fear of the city becoming a zombie city, too. The zombie double is a necessary spectre haunting the city, a spectre built into the city from its inception, which in its different manifestations can teach us of anxieties affecting city life. The dire warnings of post-apocalyptic fiction, however, are also coupled with a strong sense of hope: they are usually concerned with survival as much as they are concerned with destruction. The espousal of human compassion and solidarity also points towards the creators' ideas of what we must not let ourselves lose, the qualities which differentiate the living from zombies and which are our defence against the dangers of modernity and urban life. As the characters of these fictions confront the post-apocalyptic city, we can see how humanity might respond to catastrophe, how dangers might be overcome, and potentially how the city might be redeemed.

STATE OF THE FIELD

Though "apocalypse" and "post-apocalypse" have become popular words in literary criticism, their application to works which deal specifically with the end of the world or the end of humanity is currently rather limited. Far more common is

the use of these words to describe symbolic endings, such as ends of eras or styles. Frank Kermode is a central critic in the use of the words in this way, and his works most often look to modernism, particularly in The Sense of an Ending: Studies in the Theory of Fiction (1967). James Berger, in After the End: Representations of Post-Apocalypse (1999), and Teresa Heffernan, in Post-Apocalyptic Culture: Modernism, Postmodernism, and the Twentieth Century Novel (2008), have built on the work begun by Kermode, applying his principles to postmodernism and describing works such as Don DeLillo's White Noise (1985) as post-apocalyptic. We are all, these writers claim, living in a postapocalyptic world: "we live in a time after the apocalypse, after the faith in a radically new world, of revelation, of unveiling" (Heffernan 6). The use of the term in this way is suggestive of attempts to assess the process of history, such as Francis Fukuyama's The End of History and the Last Man (1992), Jacques Derrida's Spectres of Marx (1993), and McKenzie Wark's Molecular Red: Theory for the Anthropocene (2015). It also reflects a wider trend in fiction of a fascination with endings in the ages of humanity, which has clear relevance to post-apocalyptic literature. While these books, then, do have a relevance to truly post-apocalyptic texts, they are not as closely applicable as works like W. Warren Wagar's Terminal Visions: The Literature of Last Things (1982) or the work of critics of science fiction such as Paul K. Alkon, William Lomax, and Robert Plank, which focus on texts in which the apocalypse manifests in the cataclysmic change of the physical world. Building on the work of these critics, as well as texts on ruins and urban decay, 9 the zombie and the double, 10 and

⁹ Such as Mike Davis's *Ecology of Fear: Los Angeles and the Imagination of Disaster* (1998), Yablon's *Untimely Ruins: An Archaeology of Urban Modernity, 1819-1919* (2009), and Paul Dobraszczyk's "Petrified Ruin: Chernobyl, Pripyat and the Death of the City" (2010).

¹⁰ Such as Jamie Russell's *Book of the Dead: The Complete History of Zombie Cinema* (2005), Lauro and Embry's "A Zombie Manifesto: The Nonhuman Condition in the Era of Advanced Capitalism" (2008),

the history of science fiction in emerging media forms, ¹¹ this project proposes post-apocalyptic science fiction as a meeting point between these complementary fields and a means of reading contemporary urban concerns. Placing these fictions within the contexts of their time of publication, as well as their re-publications and adaptations, the thesis aims to provide a means of reading the construction of post-apocalyptic worlds as instructive projections of potential future catastrophe.

Wagar's *Terminal Visions* is currently the only book-length work to comprehensively address the history of nineteenth- and twentieth-century apocalyptic literature. The book looks, however, primarily at eschatological literature (which depict apocalyptic endings themselves rather than *post*-apocalyptic worlds), concentrates almost exclusively on print sources (with some mention of major films such as *Dr. Strangelove, Or: How I Learned to Stop Worrying and Love the Bomb* [Stanley Kubrick 1964]), and is disadvantaged by having been published prior to the end of the Cold War and the dramatic increase in apocalyptic fiction of the 1990s-2010s. With far more narrow focus, recent studies such as Claire P. Curtis's *Postapocalyptic Fiction and the Social Contract: "We'll Not Go Home Again"* (2010) offer means of reading this kind of fiction but stop short of situating it within its historical contexts. ¹² Besides these, there are many essays and a few collected volumes of essays on apocalyptic literature, but of those with a post-apocalypse focus

and Kyle William Bishop's American Zombie Gothic: The Rise and Fall (and Rise) of the Walking Dead in Popular Culture (2010).

¹¹ Such as Susan Sontag's "The Imagination of Disaster" (1965), Sam Moskowitz's *Science Fiction by Gaslight: A History and Anthology of Science Fiction in the Popular Magazines, 1891-1911* (1968), and Mike Ashley's *The Time Machines: The Story of the Science-Fiction Pulp Magazines from the Beginning to 1950* (2000)

¹² Other recent texts include Mary Manjikian's *Apocalypse and Post-Politics: The Romance of the End* (2012), Peter Szendy's *Apocalypse-Cinema: 2012 and Other Ends of the World* (originally published in French in 2012, English translation published 2015), Motoko Tanaka's *Apocalypse in Contemporary Japanese Science Fiction* (2014), Marcin Mazurek's *A Sense of Apocalypse: Technology, Textuality, Identity* (2014), and Majid Yar's *Crime and the Imaginary of Disaster: Post-Apocalyptic Fictions and the Crisis of Social Order* (2015).

there are far fewer, and post-apocalyptic cities fewer still. ¹³ Carl Abbott's essay "Light on the Horizon: Imagining the Death of American Cities" (2006) is one of only a handful of examples of these, but is limited to brief analysis of a few works of American literature. This thesis addresses this gap, by looking at trends in representations of post-apocalyptic cities in the UK and US since the early nineteenth century, as well as taking specific key texts as case studies. Rather than limiting the project to literature, the thesis takes in film, comics, and videogames, and particularly focusses on where there is a conversation taking place through adaptations which may help illuminate changes in urban concerns over time. Showing that this is a trend not limited to a subgenre of printed science fiction literature, this thesis provides a broad cross-section across UK and US sources, arguing that urban concerns manifest in the portrayal of zombie cities in a wide variety of media venues and for a diverse range of audiences.

PARAMETERS OF STUDY

The research is split into four parts: early science fiction literature and the magazines, 1890-1914; post-Second World War literature, radio, and film, 1945-1963; late Cold War literature and film, 1975-1989; and the recent upsurge in apocalyptic television, comics, and videogames, 1990-present. In each case these date boundaries are not fixed and unyielding but offer a means of connecting texts to historical concerns, and represent where the majority of focus is placed. For instance, though the videogame *Blade Runner* was

¹³ Recent examples of collected volumes include *Small Screen Revelations: Apocalypse in Contemporary Television* (2013) edited by James Aston and John Walliss, *Visions of Apocalypse: Representations of the End in French Literature and Culture* (2013) edited by Leona Archer and Alex Stuart, *Apocalyptic*

Discourse in Contemporary Culture: Post-Millennial Perspectives on the End of the World (2014) edited by Monica Germanà and Aris Mousoutzanis, and Apocalyptic Projections: A Study of Past Predictions, Current Trends and Future Intimations as Related to Film and Literature (2015) edited by Annette M.

Magid.

released in 1997, it has more in common with the film original of 1982 (Ridley Scott) than it does to another game released in 1997, Fallout. As such, Blade Runner the film and videogame (along with the source novel released in 1968) are assessed in Part 3 (1975-89), whereas Fallout is assessed in Part 4 (1990present). The date boundaries of these parts are largely modelled on Paul Boyer's cycles of interest in nuclear war as outlined in his cultural history By the Bomb's Early Light (1985), 14 as well as being influenced by Wagar's cycles of science fiction featured in Terminal Visions. 15 As these critics and others have demonstrated, these date ranges feature the greatest concentration of imaginative apocalypses and post-apocalyptic worlds, and therefore offer the most opportunities for fruitful examination. Attention has intentionally been diverted away from the years 1915 to 1944 and 1964 to 1974: these are eras which would warrant an entire project of their own, though one rather different from this. In each case these are years in which the collective attention of the UK and the US was on World Wars One and Two, the Vietnam War, and their aftermaths. Because of this there was (generally speaking) decreased cultural production of fantastical science fiction apocalypse stories. Rather, postapocalyptic fantasies tended to flourish in times of relative peace, when there was an extent of psychological distance from the realised adversity of wartime, as well as the time and space required for imaginative rumination on the potential for future catastrophes. Key influential texts from these eras, such as Metropolis, Things to Come (William Cameron Menzies 1936), and Do Androids Dream of Electric Sheep? (1968), are nonetheless drawn upon in this project for

¹⁴ The first cycle extends from August 1945 to the early 1950s, the second from the mid-1950s to the Cuban Missile Crisis and the Limited Test Ban Treaty of 1963, the third, named "the 'Reagan round'" (xi), encompasses most of the 1980s, and in an epilogue appended in the early 1990s Boyer speculates on a fourth round following the fall of the Berlin Wall in 1989.

¹⁵ These are roughly assigned as the pre-Wellsian era prior to 1890, the first Wellsian generation of 1890-1914, the second Wellsian generation of 1914-45, and the postwar era until the publication of *Terminal Visions* in 1982.

their influence in the history of post-apocalyptic science fiction. Rather than neglecting altogether the years 1915-1944 and 1964-1974, therefore, the thesis merely places its concentration on the eras which provide the richest rewards for close study.

The thesis also covers a range of geographical locations. As a whole, the intention is to follow the development and modernization of Anglo-American urban centres westward, beginning with London, which experienced significant urban growth in the mid nineteenth century, moving to New York City, New York, which grew significantly in the late nineteenth century, and ending with Los Angeles, California, which was largely built around the needs of automobile transportation in the early twentieth century. In so doing, the thesis suggests that the cities addressed can be viewed as representative "global cities," a term introduced by Saskia Sassen, defined as urban locations of heightened relevance in Anglo-American culture. While the focus largely follows this trajectory over the course of the thesis, however, it is not a rigid system: for instance, Chapter 2 addresses a novella set in San Francisco, and Chapter 8 looks at locations in the Deep South of the US. Similarly, there are certain non-Anglo-American texts which are addressed, as leaving them out would neglect the influential role they have played and create discontinuity in the relationships between the Anglo-American texts analysed. These include, but are not limited to, the French short story "The Eternal Adam" (1910) by Jules Verne, the German film Metropolis, and the Ukrainian videogame series S.T.A.L.K.E.R. (2007-10). While the thesis makes the argument, therefore, that the concentration in UK and US science fiction generally followed this trajectory westward, it does not neglect the attentions placed by major and influential

writers on cities that fall outside of this trajectory. Reasons for the focus on these cities are given in the relevant chapters.

In addition to being transhistorical and transnational, the project is also transmedia. Throughout the thesis focus is directed towards the production and consumption of post-apocalyptic science fiction in some of the most immersive, popular, and cutting-edge media forms of each historical era, largely moving from novels to magazine publishing to film to radio to videogames. This trajectory also resists simply moving in one direction, as media forms undergo declines and resurgences in popularity, are revitalized by new technology (such as with the recent popularity of 3D and IMAX movies), and cross-media franchises often utilize both new and more established media forms. Naturally, assessing texts from multiple media sources side-by-side raises several difficulties, particularly when they may wildly differ in terms of their complexity, their purposes, and their critical and popular reception. For instance, some texts might be produced to raise awareness of the threats affecting the city, while others may be utilizing these concerns as a popular stylistic choice that is expected to gross large profits. In some cases texts may be utilizing the theme of urban destruction as a conscious comment on the state of contemporary cities, while in other cases these issues may arise in texts and be well received only because they are ingrained in the popular consciousness of the times. As these distinctions are not exclusive, however, something of each assertion may be said of a single text. As a result, the potential for these variables to be present in each text is borne in mind in this thesis. In each case media-specific criticism has been utilized to be appropriate to the text addressed, whether

print,¹⁶ celluloid,¹⁷ audio,¹⁸ or digital.¹⁹ Likewise, where comparison of texts of different media forms is appropriate, such as with novel-to-film adaptations or with transmedia franchises, a combination of complementary criticism is used.

The selection of texts is primarily influenced by their appropriateness as representative samples which reflect the contemporary urban anxieties displayed in many other texts of the time. In drawing both from what might be described (perhaps archaically) as "highbrow" and "lowbrow," texts have also been selected on the basis of their contemporary popularity (such as with the TV show The Walking Dead) or later canonical status (such as with the film Blade Runner), though in some cases texts are selected which were unpopular and received mixed reviews, usually on the basis of the oeuvre of the individuals involved (for example, the commercial and critical failure Slipstream [Steven Lisberger 1989], a film featuring some cast and crew from the renowned Star Wars series [George Lucas et al 1977-present]). While many appropriate texts might have been used, the focus is always either on approaching familiar, iconic texts from a new critical perspective, or looking at less well known texts by influential and prominent figures in their field. The consistency of the analysis across the diverse texts selected provides further evidence, the thesis argues, that the importance of the location of the postapocalyptic zombie city transcends the traditionally accepted boundaries between the highbrow and lowbrow, the popular and the literary, the

¹⁶ Such as Ashley's *The Time Machines*, George Bornstein's *Material Modernism: The Politics of the Page* (2001), and Robert Scholes and Clifford Wulfman's *Modernism in the Magazines: An Introduction* (2010).

¹⁷ Such as Sontag's "The Imagination of Disaster," Friedrich A. Kittler's *Gramophone*, *Film*, *Typewriter* (1999), and Richard Koeck and Les Roberts's "Projecting the Urban" (2010).

¹⁸ Such as J. Fred MacDonald's *Don't Touch That Dial! Radio Programming in American Life, 1920-1960* (1982), John Dunning's *On the Air: The Encyclopedia of Old Time Radio* (1998), and Richard J. Hand's *Terror on the Air! Horror Radio in America, 1931-1952* (2006).

¹⁹ Such as Lev Manovich's *The Language of New Media* (2001), McKenzie Wark's *Gamer Theory* (2007), and Ian Bogost's *Unit Operations: An Approach to Videogame Criticism* (2008).

mainstream and the niche. Rather, the zombie city has been a constant spectre since the inception of science fiction, always already present throughout the cultural output of modern British and American cities.

In approaching the analysis itself, the thesis is directed towards drawing a connection between the presentation of the physical environment of the postapocalyptic city in science fiction texts (its material composition of ruined buildings and hazardous substances) and the lives of the characters of these texts within or around the city. A symbolic reflection of the real-world relationship between citizens and their urban homes, this connection is a recurring feature of post-apocalyptic science fiction portrayals of cities. Beyond the text itself, the chapters situate texts within the historical moments of their creations and reappearances, and where appropriate establish connections with contemporary urban issues that may influence or otherwise interact with the content of the texts. The thesis also endeavours to connect the presentation of these ruined cities and the potentially connected contemporary issues to the development of science fiction in emerging and developing media forms. In approaching analysis in this way, the intention is to show that these postapocalyptic cities are brought into being by creators and for audiences who are exposed to and engaged with the immediate and pressing concerns affecting urban environments, and to show that this is evident in the ways these texts are put together and received. The specific ways in which this analysis manifests in the thesis is outlined in the chapter breakdown below.

One of the ways in which it is possible to reconstruct the historical concerns of creators and audiences is through archival materials such as unpublished work, production notes, and diaries. Accordingly, while the majority of research for this thesis has been undertaken in university libraries and online

repositories, it is also significantly informed by unique archival collections. In particular the project draws heavily from the Jack London Papers at the Huntington Library in San Marino, California, the John Wyndham Archives at the University of Liverpool's Special Collections and Archives, and various Academy of Motion Picture Arts and Sciences collections available at the Margaret Herrick Library in Beverly Hills, California. Utilizing the materials of these archives, it is possible to draw more convincing connections to contemporary issues and concerns. While these collections contain extensive materials such as correspondence, financial records, and authors' notes, they are incomplete, as of necessity all archives must be. Additionally, while the personal documents contained within these collections offer unparalleled opportunities for insight into the creative process and the historical context of certain texts, they do not, of course, offer full and authoritative access to contents of these creators' minds. It is always necessary to be aware that authors may be conscious of their archive in even their private notes, and that correspondence in particular is calculated with a very specific audience in mind. Being cognizant of these inevitable gaps and limitations, archival research has been supplemented by digital sources, communication with other libraries, and discussion with archivists. Viewing unedited documents and early drafts outside of their original context, diligence is paid to interpreting archival sources according to the best information available, and assessing their usefulness with care.

CHAPTER BREAKDOWN

The first part of this project tracks the rise of apocalyptic science fiction in and alongside the magazines, as the modern city we know today was coming into being. Of principle concern here is literature produced around the time of intense industrialization of London but prior to the First World War. In these representations the very features of the city's modernization lead to its ruination and destruction, as opposed to later works which tend to focus on a threat posed by external forces. Fiction produced during these years reflects the intensive industrialization of London in its fascination with the perils of smog and overpopulation. In an era which saw the introduction of Greenwich Mean Time, the industrial workday, and a commuter culture, the magazines rose to prominence as a popular venue for fiction. Magazine readers, often workers seeking entertainment on daily commutes, were the best placed audience for writers engaging with anxieties over urbanization. The combination of works depicting a broken and fragmented built world being pieced back together, and the uncertainty of where to position these post-apocalyptic texts (published in low- and high-brow periodicals, and in the form of novels) produces the ideal petri dish for the formation of science fiction as a genre (produced from the fragmenting and rebuilding of various forms including detective, adventure, and gothic, and seeking its own place alongside these established genres). The fragmentation and rebuilding of the physical structures of the cities in these works acts as a metaphor for the ways in which these writers navigate this new terrain of fiction. Post-apocalyptic science fiction produced during these years was, therefore, both a product and critique of the processes of industrialization and urbanization, and an emerging genre highly suited to the readership of the magazines, who were living on the front lines of these issues.

Chapter 1 looks broadly from Mary Shelley's *The Last Man* (1826) until the establishment of *Amazing Stories* in 1926. While Shelley is generally credited as the originator of early science fiction, her apocalyptic three-volume novel The Last Man has received much less critical attention than her earlier Frankenstein (1818). It is, however, arguably the first science fiction story to depict the post-apocalyptic city, and is accordingly essential to any study of this kind. Beginning with analysis of the relationship between Shelley's novel, the "last man" theme, and *Blackwood's Edinburgh Magazine*, the chapter also looks at an early illustrated magazine tale "The Doom of London" (1892) by Robert Barr, H. G. Wells's *The War of the Worlds* (1897), E. M. Forster's "The Machine Stops" (1909), Jules Verne's *The Eternal Adam* (1910), and Arthur Conan Doyle's *The Poison Belt* (1913). The key text here, however, is Wells's *The* Time Machine (1895). While Wells's stories have received thorough critical treatment already, they are seldom discussed in the context of the evolution of magazine science fiction, or with sustained attention paid to their portrayals of the destruction of the urban environment. Placing them alongside the work of contemporary writers of speculative fiction allows for these themes to be brought into sharper focus. The Time Machine is an interesting case study of an early science fiction story that struggled to find a suitable place among contemporary writing. Five major versions of this story precede its final publication by Heinemann, although the simultaneous London and New York editions of the book (both published in 1895) also contain several differences. Serialized in the Science School's Journal (1893), National Observer (1894), and The New Review (1895), the narrative underwent several fundamental changes, reflecting the changing contexts of its publications, and the unsteady footing of the new genre. The work itself deals closely with ideas of doubles and Galbreath describes as perhaps the first instance of a writer associating devolution with the end of the world. As modernity and the fast-paced, industrialized city revolutionized life and work for its inhabitants, literature reflected this transition in the reassembling of genres for a new fiction that focused on fantastic futures, with *The Time Machine* as a prime example. The chapter shows how each of these apocalyptic and post-apocalyptic stories established a space to discuss concerns regarding the rapid changes affecting London towards the end of the nineteenth century, and by incorporating both well-known and lesser-known texts demonstrates that a similarity of themes can be seen in texts of diverse origins and readership.

Chapter 2 focuses in-depth on Jack London's *The Scarlet Plague* as a case study of a US science fiction work which appeared in multiple venues. A critically neglected short story by a hugely popular writer who published widely in magazines of the time, *The Scarlet Plague*'s depiction of post-apocalyptic San Francisco received mixed responses from publications due to varying impressions of its contemporary connotations. In this case the novella was published first in the UK in the *London Magazine* in 1912, in the US in the *American Sunday Monthly Magazine* supplement in 1913, then as a book in 1915, and later saw republication in several magazines including *The Red Seal Magazine* in 1922 and *Famous Fantastic Mysteries* in 1949. Drawing connections between *The Scarlet Plague*, another apocalyptic story titled "The Unparalleled Invasion" (1910), and London's non-fiction writing, the chapter argues that post-apocalyptic science fiction operates for London as a means of expressing his suspicion over urban modernization and globalization, and that

the republication of his stories extends their relevance to the changing contexts of world events such as pandemics and World Wars.

Part 2 looks at the influence on representations of the city of both World Wars, the awareness of the potential for global warfare, and the new concern of nuclear weapons. The major themes analysed in the science fiction of this era are the effects of area bombing on urban populations, paranoia and fear of the Other, and the insecurity of white masculinity in the postwar years. Fiction during this era shows increasing awareness of the potential threat posed to the city by the wider world, and an end to the notion of the city as citadel. With the city an increasingly besieged and threatened location, many residents with the economic means abandoned the inner city for the suburbs, and apocalyptic literature accordingly relocates from urban centres to semi-rural communities.

Chapter 3 looks at the new media of radio and film, and their relationship with science fiction. Works analysed in the chapter show the effects of bombing campaigns in making the city a newly vulnerable place, but the levelling of cities in these works also offers a sense of regeneration. Martha Bartter writes of this idea as "urban renewal through nuclear war": the destruction of the old city along with its centres of knowledge is a necessary step towards purifying humanity so it can begin again. The city in these works is a place of corruption and sin, which must be extirpated and remade from scratch for humanity to have a future. This chapter continues the media history of Part 1, with focus on influential radio adaptations such as Orson Welles's *The War of the Worlds* (1938), which brought its audience into the fiction of an apocalypse unfolding in real time and left them at its close in a post-apocalyptic world, and visual representations of destruction such as Jose Clemente Orozco's painting "New York: The Dead" (1931), which starkly depict the physical disarray of urban

devastation. It then concentrates its attention on the adaptations and original dramas of the 1940s and 1950s in the *Future Tense*, *X Minus One* and *Quiet*, *Please* radio theatre series, and on early Cold War films such as *The War of the Worlds* (Byron Haskin 1953) and *The Time Machine* (George Pal 1960). Many of the science fiction works that were made during these years were adaptations from old media, indicating a perceived new relevance to these tales that were translated to a new audience via a new media form. While *The War of the Worlds* is not a typically post-apocalyptic text, its prolonged focus on presenting the destruction of major cities and its post-apocalyptic ending make it a rewarding case study when placed alongside the other texts of this chapter. By analysing these enduringly popular adaptations and original dramas, the chapter demonstrates how the development of media plays a role in assigning new significance to familiar stories.

Chapter 4 takes the novels *The Day of the Triffids* (1951) and *I Am Legend* (1954) as case studies of this trend, as these two works have proven to have a lasting legacy having been adapted many times on the small and big screens. The two film adaptations focussed on here are Steve Sekeley's *The Day of the Triffids* (1962) and Sidney Salkow's *The Last Man on Earth* (1964). Both the novels and films feature a lone white male protagonist fighting against an inhuman threat which has taken over a major city and massacred the population, respectively venomous mobile plants in London and vampires in Los Angeles. The lone male protagonists operate as symbols of postwar suburban/urban masculinity and whiteness in crisis, for while the city in each work is full of other beings, the protagonist is nonetheless profoundly alone. In both texts the characters flee the "dark" cities for the comparatively safe suburbs, though the threat from the city always threatens to encroach on their

sequestered lives. While these texts are often looked at individually as products of early Cold War paranoia, by bringing out the transatlantic link between them in their portrayal of white suburban male attitudes towards women and the racial Other this thesis makes a new intervention in the study of post-Second World War science fiction.

The third part looks at literature and film produced in what Paul Boyer terms the "Reagan round" of nuclear threat. This section is primarily concerned with the final phase of Cold War threat up to the fall of the Berlin Wall, a time in which nuclear holocaust had become a well-practiced and well-understood subject of fiction. Indeed, the threat of total nuclear annihilation had been played out so often by this time that it came to serve as merely a backdrop to the storyline more often than it had before. Humanity having damaged the global ecosystem through wars, scientific experimentation, and industrialization, works produced in this period often posited one of two options for redeeming the city—a return to nature and a pre-industrial sensibility, or an abandonment of these damaged ecosystems altogether for greener pastures elsewhere.

Chapter 5 looks at texts in which such human activity has resulted in desolate wastelands, and which are entered by the viewer well after the apocalypse has taken place. In particular, this chapter focuses on the films *A Boy and his Dog* (L. Q. Jones 1975) and *Slipstream*. The physical structures of cities in such works generally serve as only bleached, irradiated, skeletal landmarks or occasionally shelter, retaining little of their former appearance and purpose. Apocalyptic weaponry or accident has almost obliterated the old world, creating a world of new frontiers and day-to-day survival. In comparison with the works discussed in the previous chapter, these are more easily able to consider morality as a blank slate, though something of the old worlds generally

manages to hold on. The old cities in *A Boy and His Dog* and other movies such as *Le dernier combat* (Luc Besson 1983) are literally covered over in a layer of dirt, though the characters exhume the contents of these urban tombs, and relics are utilized and reinterpreted. This chapter situates these texts within contemporary debates over nuclear weapons and nuclear power, with particular emphasis on the environmental movement, drawing connections with events such as the Three Mile Island (1979) and Chernobyl (1986) disasters.

Chapter 6 looks at texts in which a global war has already taken place but cities are still in the process of falling into decline and decay. The focus is on the film Blade Runner, as well as its source novel and videogame adaptation. In these works global apocalyptic war has triggered the gradual and inevitable disintegration of cities, both physically in their ruined buildings and mentally in the blurring of moral and legal boundaries. The policing of the supposedly deviant behaviour of "replicants" in the film echoes contemporary witch-hunts and demonization of homosexuals during Reagan's crackdown on pornography and cities' sex zones, and the abandonment of citizens to the AIDS crisis. Taking this 1980s context in mind when looking at the novel source and videogame adaptation, it is evident that similar ideas are being presented. Philip K. Dick's original novel is set in San Francisco and was written at a time when the city was perhaps the foremost sanctuary for sexual expression in the US; at the time of the videogame's release, the hangover from Reagan's war on sexual difference was being translated to the production of digital texts in a time when personal computer ownership was still relatively new. While the Blade Runner universe might not at first seem post-apocalyptic, a massive biological and nuclear war has taken place before the text begins. Global decline has been initiated—perhaps the irreversible death of the planet, given that the

conflict is called World War *Terminus* and citizens are fleeing to other planets—and the survivors of the war live out their lives in a darkened environment (literally and figuratively). The eternal night and seemingly constant rain of Los Angeles mixes with the "kipple," the fragmented material of the pre-apocalyptic world, resulting in a hazardous and inhospitable urban location which is beyond repair or redemption. As such, being as the story takes place well after an apocalyptic event in the war-torn ruins of a major city, *Blade Runner*'s Los Angeles is a post-apocalyptic zombie city, though its reanimation offers an environment that is unusually dynamic and energetic when placed in contrast with the other texts looked at in the thesis.

The fourth part concerns the end of the Cold War to the present day, primarily exploring fiction depicting global destruction through political and religious extremism, energy crises and nuclear accidents, and environmental and biological catastrophes. The focus in this part is on the translation of post-apocalyptic science fiction to new and increasingly immersive forms of media and expansive media franchises. These works utilize media in new ways to create elaborate and vast post-apocalyptic worlds which can be explored by audiences, and which reward those who take this exploration the furthest. In allowing freedom to roam these fictional worlds at will and even to take repeat visits to these texts to test different approaches, the creators also turn the exploration of complex moral and social issues into an adventure, offering differing perspectives based on the choices made by readers, viewers, and players. In contrast to earlier parts, works released during this era deploy media to offer unprecedented freedom to explore the issues of urban life in their logical post-apocalyptic conclusions.

Chapter 7 looks at the history of post-apocalyptic cities in videogames, which began with Wasteland (1988). Creator Brian Fargo released the long awaited sequel Wasteland 2 in 2014, though between these two works Fargo also created the first two games of the *Fallout* series, a conceptual successor to Wasteland, which gave rise to several spinoffs and sequels, imitations, and homages. The chapter will be particularly focused on the Wasteland and Fallout series, as well as bringing in the hugely influential Half-Life (1998-present) and S.T.A.L.K.E.R. series, which offer different approaches to presenting navigable post-apocalyptic worlds. The chapter outlines the development of such games from 2D to 3D worlds, assessing how the navigation of virtual visual spaces works alongside the navigation of complex moral decision making in postapocalyptic societies. In so doing, the motivation of play is analysed through the phenomena of "dark tourism," Freud's "death drive," and the attainment of "flow" and "immersion." These connected ideas show how videogames offer a unique and unprecedented ability for their audience to explore fictional post-apocalyptic virtual environments and morality.

Chapter 8 looks at *The Walking Dead* franchise, in its original comics series (2003-present), television series adaptation (2010-present), and connected videogames series (2012-present). A multi-media franchise, *The Walking Dead* creates a vast world for its audience to explore as they choose. While each iteration of the franchise offers a serialized story that stands alone as a complete work, those who consume multiple iterations are rewarded by discovering points of crossover in character arcs, and by being able to better understand the creators' post-apocalyptic world as a whole. A franchise rooted in Atlanta, Georgia, in the Deep South of the US, *The Walking Dead* connects its vision of a future zombie apocalypse with historical issues such as the

American Civil War, contemporary environmental catastrophes, terrorism, postmodern urban planning, and the dissolution of cities into sprawling suburbs and exurbs. Increasingly crucial to each storyline is the possibility of sanctuary offered by the attempt to capture and contain an ideal suburban way of life in gated communities: walled enclaves near the city often watched over by armed guards. The Walking Dead has inspired much critical dialogue, but so far there has been minimal scholarly treatment of the comics and almost no scholarly discussion of the videogame series. Absent too from the critical discourse has been sustained analysis of the role of the various models of human settlements evaluated across the franchise. Arguing that the format of the vast franchise offers singular opportunities for the audience to explore multiple forms of urban, semi-rural, and rural living, the chapter suggests that the gated community is presented as a potential haven in an uncertain and violent world, provided its keepers are able to master the balance of security and liberty. The gated community is thus emblematic of a larger discussion currently taking place in the UK and the US regarding appropriate government measures to respond to contemporary fears of the city. By reducing the issues affecting enormous, sprawling cities to the confined spaces within their walls, these fictional gated communities potentially offer an opportunity to develop a model of how best to manage the violence of the modern world.

Chapter 1:

Urban Apocalypse and the Magazines

In the one hundred years leading up to the publication of the first magazine devoted to science fiction, Amazing Stories (beginning 1926), the emerging genre of science fiction had a close but not always harmonious relationship with magazine publishing. Both science fiction and magazines emerged through an expression of and response to industrialization, modernization, and the growth of urban centres of the Western, Euro-American world. Urban growth was particularly marked in Britain, with the move of populations from country to city at its height in London in the 1820s; this demographic shift occurred in Paris with the increase of migration and the introduction of the rail network in the 1840s, and in New York City with the staggering rise in immigration which peaked in the late nineteenth century. Though this chapter casts a wide net with its one-hundred-year scope, the nucleus of the relationship between modernity, apocalyptic science fiction, and the magazines in Europe and America should be located in the period between 1890 and 1914, due in part to the influence of modernity on cultural texts during these years, advances in the technology afforded to printers of periodicals, and the lead up to the First World War. These factors greatly influenced literature in general, and a recurring theme during these years was the inevitably of the metropolis becoming a necropolis, a nightmare vision of progress gone awry through unchecked overcrowding, the transmission of disease, and the pollution of industry. This was a spectre which haunted representations of the nineteenth- and early-twentieth-century city, though nowhere did this find such vivid expression as in the early progenitors of science fiction within and alongside the magazines.

As the field of periodical studies is still relatively young, it is worth briefly illustrating the advantages afforded by reading works in terms of their original magazine publications, and the methods that will employed. As Robert Scholes and Clifford Wulfman write in their Modernism in the Magazines (2010), one of the most concise and clear expressions of periodical studies in recent years, magazines themselves speak volumes of the times in which they appeared: "journals, as the very word implies, are meant to be timely. They are very much of their moment, addressed to the audience of that moment. [...] An attempt to understand the audience of any journal will lead us to most of the other elements involved in reading a magazine from the past" (144-5). The implied audience and the magazine's relationship with that audience are often identified through a mission statement or more subtly through the magazine's title, the variety of articles and fiction, its advertisements, page design (elements such as paper quality, size, typeface, arrangement of text and pictures, etc.), contributors, and history. As George Bornstein, building on Jerome McGann's concepts, writes: "the literary text consists not only of words (its linguistic code) but also of the semantic features of its material instantiations (its bibliographic code)" (6). Accordingly, the stories and articles contained within the magazine's pages are not isolated texts, but rather interact with the other contents of the issue, taking on new meaning in the contexts of their surroundings in the time and place in which they appear. It is therefore important to read these stories or articles in the context of their appearance in an issue of a magazine, as well as viewing issues in the context of the entire run of the magazine and in relation to similar contemporary magazines.

ORIGINS OF THE GENRE: THE LAST MAN

Though apocalyptic tales were nothing new in 1826, they began to take on a new form in the hands of Mary Wollstonecraft Shelley, and her novel The Last Man (1826). Shelley has been credited by many, notably Brian W. Aldiss in his Billion Year Spree (1973), as the foundational figure in the creation of science fiction. Her 1818 novel Frankenstein first broke this ground, wherein a monster is born not of mythic or supernatural forces but through scientific experimentation. Though still a work of gothic horror, Frankenstein's use and critique of scientific methods took gothic fiction in a significantly new direction. This direction would later see it meet the detective story with Edgar Allan Poe, the adventure story with such writers as Arthur Conan Doyle, and scientific nonfiction with H. G. Wells, finally becoming realized as a singular beast in itself, composed of a patchwork of genres (not dissimilar to Frankenstein's monster). Carrying the scientific approach through into her second novel, Shelley's *The* Last Man culminates in the decimation of humanity at the hands of a plague, predating Louis Pasteur's germ theory and the kinds of pandemics afforded by the more globalized world of the twentieth and twenty-first centuries. Begun in 1824, two years after the death of her husband Percy Bysshe Shelley, *The Last* Man was published in three slim volumes in January of 1826 (Bennett 512). Slammed by critics at the time, and out of print from 1833 to 1965, the novel has failed to garner much critical attention, aside from cursory mentions in histories of science fiction and apocalyptic literature, or in referencing its significance as a roman á clef.²⁰ This is unsurprising, since at the time of publication the "last man" vogue was beginning to fall out of fashion, and the uncomfortably long and detailed first two volumes, primarily concerned with the

²⁰ For *The Last Man* as roman á clef, see for example Walter E. Peck's "The Biographical Element in the Novels of Mary Shelley" (1923).

histories and romances of a fictional aristocracy and their serving staff, serve as a significant obstacle for modern readers since its republication. Despite this, the novel is of crucial importance as the first significant connection between post-apocalyptic cities, science fiction, and the magazines, a connection which would only rise in importance over the next century.

The Last Man tells the story of Lionel Verney, a character destined to become the eponymous last man, between the years 2073 and 2100. Verney, an everyman from the north of England, finds himself ushered into the upper classes and into political work abroad. His newfound status and wealth as a diplomat in Vienna, and its stark contrast with his earlier life in the wilds of Cumberland, leaves Verney stunned: "The dazzling light of ornamented rooms; lovely forms arrayed in splendid dresses; the motions of dance, the voluptuous tones of exquisite music, cradled my senses in one delightful dream." Beneath the lustre of this new life Verney discovers shallowness, and he is left feeling hollow and disillusioned by the impersonality of the city: "notwithstanding the thoughtless delight that waited on its commencement, the impression I have of my life at Vienna is melancholy. Goethe has said, that in youth we cannot be happy unless we love" (M. Shelley, Last 26). It is in pursuit of love, politics, and place that Verney's story continues, until a plague which begins on the shores of the Nile slowly spreads across the globe, wiping out all human life but Verney.

During the protracted death of humanity Verney dwells in his sorrow at the fall of southern England in particular, the "late birth-place of excellence and school of the wise[.] [...] Thou, England, wert the triumph of man!" (235). With the abandonment of London the city begins to return to nature, its domestic animals "homeless" and aimlessly roaming the streets, its structures dirtied and

mildewed (241). Most unsettling, however, is the absence of visible ruination: "everything was desert; but nothing was in ruin. And this medley of undamaged buildings, and luxurious accommodation, in trim and fresh youth, was contrasted with the lonely silence of the unpeopled streets" (242). Caught in a state between the fully rural and the peopled, living polis, London's discomfort for Verney seems to be in its liminality. The image of the dead city still standing, a corpse uncannily resembling its former self, it is thus caught in living death. As the plague further ravages humanity, Verney eventually finds himself alone roaming the empty streets of Europe.

Immunized by an earlier infection of the disease, Verney is left to wonder at the reason for his being punished with life, which displays to him the cruel indifference and randomness of the universe, and the inconsequentiality of humanity: "this is the earth; there is no change—no ruin—no rent made in her verdurous expanse; she continues to wheel round and round, with alternate night and day, through the sky, though man is not her adorner or inhabitant" (334). He finds Paris "a desert," "a blank" (272): "its high houses and narrow streets were lifeless" (273). Travelling to Italy, Verney discovers the deserted Venice, a fallen symbol of "man's power," where nature has once again "asserted her ascendancy, and shone more beauteous from the contrast." The neighbouring sea in contrast "rears no monument, discloses no ruin," despite being a "grave" nonetheless (319). The world Verney roams is barren, devoid of all life but him, and yet the futile existence of its undamaged, monumental built structures is an unsettling reminder of what has been lost.

The horror of wandering intact urban centres devoid of humanity raises the dehumanization of industrialized, modern cities in the early nineteenth century, a theme which we will see recur in early science fiction stories. While these constructed spaces remain striking records of the achievements of civilization, they offer no life, no companionship, and no joy for Verney. Rather, they are cruel reminders of his inconsequentiality in the universe, for as the cycles of seasons and tides continue in perpetuity Verney can expect everything he knew to one day be forgotten. It is no wonder, therefore, that several critics draw the connection between the themes of "human isolation, of the ineluctable separateness of the individual being" with Mary Shelley's own life after 1822 (Luke 317), viewing the novel itself a "monument to the life and ideas of her husband" (318). This is particularly the case given the similar deaths of Percy Bysshe Shelley and Verney's few remaining companions, both during a storm while sailing off the coast of Italy.

Shipwrecked on his passage to Rome, Verney considers himself comparable to "that monarch of the waste—Robinson Crusoe. We had both been thrown companionless—he on the shore of a desolate island: I on that of a desolate world" (326). W. Warren Wagar, however, notes that Verney is rather an "anti-Crusoe, conquered rather than conquering, crushed by his solitude, and sure of his defeat" (*Terminal* 17). Despairing at his loneliness, Verney discovers that the wreck has indeed removed him from civilization, symbolized in his shock at his appearance in a large mirror: "What wild-looking, unkempt, half-naked savage was that before me?" (331). Startled by his transformation and his separation from the past world, Verney endeavours to relive the performance of upper-class society by adorning himself in fine clothes, anticipating how he might like to be seen if he discovers another survivor.

Arriving finally in Rome, he takes this tribute to the fallen world further, exalting in the achievements of humanity, and marvelling at the timeless monuments of Roman architecture both ancient and recent: "Among its storied

streets, hallowed ruins, and stupendous remains of human exertion, I shall not [...] find every thing forgetful of man; [...] I entered Eternal Rome by the Porta del Popolo, and saluted with awe its time-honoured space" (335). The Coliseum in particular is a place of light in the city: "The Coliseum, whose naked ruin is robed by nature in a verdurous and glowing veil, lay in the sunlight" (336). George Gordon Byron, the late friend of Mary Shelley, writes similarly of this ruin in his *Childe Harold's Pilgrimage* (1818):

When the light shines serene, but doth not glare,—
Then in this magic circle raise the dead;
Heroes have trod this spot,—'t is on their dust ye tread.

"While stands the Coliseum, Rome shall stand; When falls the Coliseum, Rome shall fall;

And when Rome falls—the World." (173)

The Coliseum in both works is a monument that defies global decline, retaining in stone the history of humanity. The existence in Rome of the Coliseum, the Tower of the Capitol, triumphal arches, and temples has a soothing influence on Verney, exhibiting to him how the ruins of the past can survive and retain the memory of those that built them: "the voice of dead time, in still vibrations, is breathed from these dumb things, animated and glorified as they were by man" (M. Shelley, *Last* 336). Indeed, Sigmund Freud would later use Rome's eclectic ruins, which showcase side-by-side the city's many stages of development, as an analogy for a mind cluttered by memories: "an entity, that is to say, in which nothing that has once come into existence will have passed away and all the earlier phases of development continue to exist alongside the latest one" (*Civilization* 32). The presence of Byron's raised dead and Mary Shelley's

voices of dead time suggest an undead quality to the space, with the recognizable physical form of the Coliseum shorn of its original position in a long dead city of the past: a city now in a zombified form.

The simultaneous positioning of the ruins of Ancient Rome beside the recently living city of Rome also gives the city a sense of being timeless, not beholden to the lifespan of civilization. Adding to the sense of timelessness Verney becomes, as both a living being and the last man, a representative of an undead humanity, a species neither truly alive nor quite dead. Verney finds himself inspired by this idea of timelessness and so, before setting out once more in search of survivors, he writes an account of his life, which he leaves in the city, "this 'world's sole monument[.]' [...] I will leave a monument of the existence of Verney, the Last Man" (339). Rome here serves to show Verney that his story is merely a part of a longer history of life and the universe, exhibited in the cohabitation of ancient and contemporary architecture and art, a history into which he writes himself with his autobiography.

In the "Author's Introduction" to *The Last Man*, Verney's autobiography takes on metafictional significance. In this introduction, the narrator recounts a trip to Naples in which he discovers Virgil's Sibyl's Cave. Contained within this cave are Sibylline leaves and bark written upon in various languages: the prophesies of the *Æneid*'s guide to Hades. The author sorts through and adapts the texts of these leaves, piecing them together as an admittedly "imperfect" "distortion," translated with only his knowledge of the world in 1818, an apt analogy for the science writer herself (4). Crucially, Shelley refers to *The Last Man* itself as "my Sibylline Leaves," indicating that the process of assembling the speculative story is one shared by both the narrator of the introduction and herself (Bennett 508). The piece of writing the narrator creates from these

leaves is the text of *The Last Man*, the reassembled autobiography of Lionel Verney. The framing of the novel in this way allows it to be both futuristic and also not excessively fantastical: while it is set two hundred and fifty years in the future, the narrator of the introduction has only his contemporary experiences and the text of the leaves at his disposal, and so much of the scenery of the novel is grounded in an early-nineteenth-century reality. Futuristic technology is not speculated upon, except in the appearance of a great, winged "sailing balloon," which is shown as the most recent demonstration of human beings' mastery over the elements (M. Shelley, Last 50). 21 Shelley is accordingly saved the trouble of speculation over the world of the future, and likewise the reader does not have this distraction from what is really a tale about fundamental human nature. What is especially interesting about the framing of the text in this manner is its focus on the book as an assembled artefact. The Sibylline leaves which make up this early science fiction novel are as fragmentary as the memories of Verney when he assembles his autobiography, and resemble in no small way the composition of the emerging realm of magazine fiction.

MAGAZINES AND URBANIZATION

As science fiction would become a powerful expression of an emerging urban modernity, with its concentration on the life and death of futuristic cities and its foregrounding of scientific and technological advances, so magazines would

²¹ This would not be the last outing for the balloon as a means of transportation in apocalyptic literature, nor was it the first. The balloon often found a place in tales of future wars, such as in Julius von Voss's *Ini, Ein Roman aus dem ein und zwanzigsten Jahrhundert* (English title *Ini, A Story of the Twenty-First Century*, 1810) and George Griffith's *The Angel of Revolution* (1894), and which perhaps found its most notable use as the means of Bert Smallways witnessing the destruction of Manhattan in H. G. Wells's *The War in the Air* (1908). More on balloons and their role in aerial bombardment will be said in Chapter 3. Shelley's inclusion of wings, however, seems more evocative of the later propelled airships, not successfully developed with engines until the late nineteenth century. Propelled airships naturally saw more use in apocalyptic fiction, as weapons of war in works such as *The War in the Air*, but also as protection from the post-apocalyptic world in such works as E. M. Forster's "The Machine Stops" (1909), of which more will be said later in this chapter.

become the most apt venue for this urban modernity. Of all the many technological advancements made in the nineteenth century, "the golden age of the marriage between educated masses and the popular magazine" is one that periodical historian Sam Moskowitz describes as "almost forgotten but equally wonderful" (16). Magazines such as *The Monthly Magazine* (beginning in 1796), in particular, broke new ground in expanding the emerging magazine format to encompass a great variety of content, anticipating the needs of an urban readership in the throes of the Industrial Revolution. Britain was becoming more connected through the construction of the canal system, but this was still limited and slow moving. Prior to the convenience and speed of the railway network the Industrial Revolution naturally saw a rise in the urbanisation of the British population, and especially in London. In the 1820s and 1830s, whilst Shelley was in London writing The Last Man, urban growth in Britain was higher than it had been before or has been since. In 1801, the urban population of England and Wales constituted 33.8% of the total population. The 1810s saw a population growth in the cities of 23.7%, the 1820s 29.1%, and the 1830s saw a growth rate of 28.1%, with urban populations constituting 48.3% of the total in 1841 (Morris and Rodger 3). Though slowing after the 1820s, the growth rate continued to be high well up until the end of the nineteenth century.

Lewis Mumford later looks back on this period as one of the great decline of cities: "Between 1820 and 1900 the destruction and disorder within great cities is like that of a battlefield[.] [...] Industrialism, the main creative force of the nineteenth century, produced the most degraded urban environment the world had yet seen; for even the quarters of the ruling classes were befouled and overcrowded" (*City* 447). Friedrich Engels presents a similarly pessimistic view of the effect of this rate of urban growth in his *The Condition of the*

Working Class in 1844 (1845). Engels describes what he saw as a depersonalized environment in which "hundreds of thousands of all classes and ranks [...] crowd by one another as though they had nothing in common," and with "brutal indifference, the unfeeling isolation of each in his private interest becomes the more repellent and offensive, the more these individuals are crowded together, within a limited space." In language similar to Mumford, Engels describes the process as "the social war, the war of each against all [...] every man's house in a state of siege, everywhere reciprocal plundering under the protection of the law" (24). Prior to the reforms beginning in the 1860s, this accelerating urbanization and its perceived destructive power was coupled with extensive problems in sanitation, nutrition, and the unchecked spread of infectious diseases which influenced a fear of devastating sicknesses such as that expressed in *The Last Man*. When the character Idris visits London as the plague has taken hold, the contrast created by the dying city and the busy, living London that would be familiar to readers of the novel is striking: "It hardly preserved the appearance of an inhabited city; grass sprung up thick in the streets; the squares were weed grown, the houses were shut up, while silence and loneliness characterized the busiest parts of the town." Despite the desolation of the plague, the remaining inhabitants cling to the old order, "and each one continued to live according to law and custom—human institutions thus surviving as it were divine ones, and while the decree of population was abrogated, property continued sacred" (M. Shelley, Last 220). In the manner of a captain going down with their ship, the city continues to play out its destructive practices until it ceases to exist.

Alongside the crowding of urban centres, advances in literacy expanded the readership of the growing customer base for periodicals. As the magazine

business became more profitable, the progress of rapid industrialization also led to a number of advances in printing that enabled magazines to grow in quality and circulation. The composition of the magazines, made up of short pieces with a variety of subject matters, made them the ideal format for the urban reader, conveying the wide range of material relevant to city life in easily accessible portions. Fiction was not commonplace in the magazines, however, until the emergence of Blackwood's Edinburgh Magazine in 1817, from which point they gradually came to have "a significant impact on the production and dissemination of fiction" (Hadjiafxendi and Plunkett 44). As Mike Ashley explains in The Time Machines (2000), his history of science fiction in the magazines, Blackwood's became the first venue to regularly feature fiction, and its emergence one year prior to the publication of Frankenstein made this a pivotal moment: "Thus we find that magazine fiction and science fiction arose at the same period and were allowed to develop together, albeit slowly" (Ashley 4). When Shelley's *The Last Man* was released towards the end of the next decade the response in *Blackwood's* shows this emerging relationship at work, as well as the friction which accompanied the establishing of a place for science fiction in and alongside the magazines.

THE "LAST MAN" THEME AND BLACKWOOD'S MAGAZINE

The Last Man was published towards the end of January in 1826 to almost ubiquitous critical disdain, though *Blackwood's* remained notably quiet. For want of room their "Monthly List of New Publications" was absent in March and April, and the May volume gives the novel only the briefest of mentions amongst many more descriptive entries: "The Last Man. By the Author of Frankenstein. 3 vols. L. 1, 10s" (613). It was not until January 1827 that the novel received a

critical appraisal, in the form of a comparison with Thomas Hood's Whims and Oddities (1826), which contains a poem titled "The Last Man." Wishing that Hood had published earlier, so that Shelley might have been "saved [...] from the perpetration of her stupid cruelties," the anonymous author remarks that "Mr Hood's Last Man is, in our opinion, worth fifty of Byron's 'darkness,' [sic] (a mere daub), a hundred and fifty of Campbell's Last Man, [sic] and five hundred of Mrs Shelly's [sic] abortion" ("Hood's Whims and Oddities" 54). The other works mentioned here give an indication of the vogue of contemporary "last man" narratives, such as George Gordon Byron's 1816 poem "Darkness," and Thomas Campbell's 1823 lyric "The Last Man." The comparison also shows the tendency in Blackwood's to only discuss Shelley's writing as being "products of a literary community rather than a solitary mind" (Mason 108). The publication of Campbell's work had drawn sharp criticism because of its similarity in subject matter to Byron's poem, leading to a drawn-out controversy over the originator of the idea. By the time of the publication of Shelley's novel, the subject of the "last man" had "come to seem not apocalyptic but ridiculous" (Paley 107). The controversy is itself ridiculous, however, when one considers that Jean-Baptiste Cousin de Grainville had preceded both Byron and Campbell in his iconic poem Le dernier homme as early as 1805 (published in English in 1806 as The Last Man, or Omegarus and Syderia: A Romance of Futurity). 22 The qualitative hierarchy suggested by *Blackwood* also deserves scrutiny, placing the today little-known poem by Hood above the legendary Byron's.

"Darkness," the "mere daub," is a powerful imagining of a world in which the sun is extinguished, and the cities serve only as fuel for the fires which must burn perpetually to produce much needed heat and light:

²² For how Grainville's poem fits into the history of apocalyptic literature, see Paul K. Alkon's *Origins of Futuristic Fiction*, 158-91.

And men forgot their passions in the dread

Of this their desolation; and all hearts

Were chill'd into a selfish prayer for light:

And they did live by watchfires—and the thrones,

The palaces of crowned kings—the huts,

The habitations of all things which dwell,

Were burnt for beacons; cities were consum'd,

And men were gather'd round their blazing homes

All the valued components of the old world immediately lose their importance here through necessity, and both quarrels and friendships vanish with the prioritizing of personal survival. The poem does not, in fact, feature a last man, but two last men, who, in the absence of all love in the world, fight feebly in the darkness of one of the remaining cities. Eventually these men, observing their "mutual hideousness," both acquiesce to die (Byron "Darkness" 95). The pettiness of their squabble compared to the extinction of the species displays the futility of humanity's constant wars upon itself, in the face of inevitable death. The poem concludes with humanity's last relics in decay, and in reverence of the vast, uncaring universe: "And the clouds perish'd; Darkness had no need / Of aid from them—She was the Universe" (96).

Hood's poem, in lyrical verse, parodies such apocalyptic subject matter without being particularly incisive or humorous. It tells the story of a man who, in the post-apocalyptic, plague-ridden wasteland of May 2001, finds another survivor, a beggar, whom he instantly resents:

Now a curse (I thought) be on his love,

And a curse upon his mirth,--

An' it were not for that beggar man

I'd be the King of the earth,--

But I promis'd myself, an hour should come

To make him rue his birth! (Hood 33)

Travelling with the beggar to a "city great" where all have died of the plague, the man enjoys his freedom to choose from the houses and clothes left by the dead (34). Upon seeing the beggar in fine clothes "His betters were meant to wear," however, he ties up and executes the beggar in a rage, and after a moment of celebration begins to feel the loneliness of knowing he is the last man (35). The poem concludes with the man's contemplation of suicide, and his concern that, should the hanging be unsuccessful, "there is not another man alive, / In the world, to pull my legs!" (38). What the poem seems to suggest is that speculative fiction about being the last man may present a world almost attractive in imagination, its protagonists free from societal, economic, and legal restrictions, but that if such a post-apocalyptic world were realized that same freedom would soon become tiresome—and that accordingly the last man theme, after its initial attractiveness to the reader, soon also becomes tiresome and bereft of imaginative possibilities. The anonymous writer of the *Blackwood's* article, however, does not seem to read the poem in this way:

By the way, what a heavenly calm would fall upon the soul of the Last Man, if we were assured that he had, during the twenty concluding years of his career, been over head and ears in debt!

Not a barn-bailiff on the face of the uninhabited globe! His shoulder now free for ever from touch profane! No occasion now to take the benefit of the Insolvent Act! No such words now, as 'within the Rules.' ("Hood's Whims and Oddities" 54)

And so the writer continues for some time, revelling in the idea of a world free of laws. Rather than having grown tired of the theme, the poem seems to inspire marvel in the writer at the thought of being the last man. Indeed, only the previous March, *Blackwood's* had published its own last man story, also titled "The Last Man."

Appearing a month after Shelley's novel was released, "The Last Man" in Blackwood's has no writer's credit, besides the letters "X B." which appear below the final paragraph. It is a short piece, in which the narrator rises from a long slumber to find the world has perished during his sleep, and that he is met with a "landscape of a desolate and unpeopled world." Far from the joys of freedom of the narrator in Hood's poem, the narrator of "The Last Man" is met with feelings of "despair and dread," and "dark visions of woe and of loneliness [...] the miseries of hunger and of slow decay and starvation, and hopeless destitution—and then the hard struggle to live, and the still harder struggle of youth and strength to die" (286). It is a vision much closer to the misery of Lionel Verney before he arrives in the Eternal City. Indeed, this is not the only similarity to Shelley's novel, for the story also prominently features a cave, "that I fancied had been the scene of some of my brightest joys and my deepest sorrows." Further, the story contains many Romantic descriptions of the natural world similar to those found in the novel, and its narrator wakes into solitude much like Verney does when shipwrecked in Italy (284). The story concludes abruptly with the narrator waking from what been merely a dream into the banality of the everyday, receiving a shaving jug from his manservant: "By his entrance were these visions dispelled, else Lord knows how long I might have lingered out my existence in that dreary world" (286). The brevity of the piece at a mere three pages, its limited plot which provides a sketch of a postapocalyptic world and little more, and its similarities to Shelley's novel make this a curious piece of writing. It may indicate that this was written with the intention of reigniting interest in last man stories, generating interest in Shelley's novel at a time when it was doing very badly, and may even have been written by Shelley herself. Whatever its origin and intended function, however, it is curious that it should appear in the very magazine that criticized her use of the theme in such harsh terms only a few issues later. This lack of consistency betrays both the infancy of the magazine of fiction, and the lack of acceptance of recurring science fiction themes. If Shelley's novel were to have been serialized in the magazines it might have received the more favourable attentions *Blackwood's* reserved for Hood and "X B."

THE GROWTH OF SCIENCE FICTION IN THE MAGAZINES

The interaction here between magazine fiction, Shelley's *The Last Man*, and last man stories in general, is emblematic of the struggles of early science fiction in negotiating a place to be properly expressed and received. It is also the beginning of a relationship between science fiction and the magazines that would eventually find a happier realization with the release in America of *Amazing Stories*. Until that point, many early science fiction stories would navigate a difficult path within magazines which generally published more established genres of fiction.

Magazines themselves, however, were flourishing. As industrialization proceeded through the nineteenth century, the magazines followed. Vanessa Meikle Schulman writes that periodical culture and an emerging modernity became inseparable: "Periodical reading was modern vision. Not only were mass magazines available to larger audiences than ever before, their very

design also incorporated the inherent distraction, multiplicity, and episodic nature of modern life" (10). One of the ways in which this manifested was in response to the need of railway commuters to find entertainment during commutes. The first steam driven railway, the Stockford and Darlington, came in 1825, though the first significant period of railway growth in Britain came in the 1840s, with an expansion of the rail network and the start of a long climb in numbers of railway passengers. As Ashley writes, William Henry Smith (proprietor of W. H. Smith and Sons) secured the right to sell books and newspapers at railway stations in 1849, and with this the production of magazines similarly expanded to meet demand, so that by 1865 there were 544 magazines appearing regularly in Britain and Ireland (5). Magazines were the ideal reading material, containing varying length and content to allow the commuter to pick and choose their reading matter depending on their taste and journey time.

In the United States, a similar process was underway. Edgar Allan Poe, who might be called "the father of the short science-fiction story," was gaining notoriety in publishing his short stories in magazines such as *Burton's Gentleman's Magazine* and *Graham's Lady's and Gentleman's Magazine* (Ashley 17). Poe's strength in writing short, dynamic, imaginative fiction was particularly suited to the venue of the magazine. One tale in particular, "The Colloquy of Monos and Una" (published in *Graham's* in 1841), represents a critique of modern city life within the corpus of a writer whose work would greatly inform the construction of science fiction. In "The Colloquy of Monos and Una" two spirits discuss the condition of modern civilization and its efforts towards "improvement," and how it will lead to "dissolution" (179). Monos declares that attempts at the mastery of nature, and even a turning away from

nature in favour of "the Arts" (180), shows the need for human life to be "born again" (182). The current age is portrayed as "the most evil of all our evil days," an age of humanity's "childish exultation at his acquired and still-increasing dominion over [Nature's] elements," of innumerable "huge smoking cities," "the hot breath of furnaces," and the deformation of Nature "as with the ravages of some loathsome disease" (180). Monos declares that "the Earth's records have taught me to look for widest ruin as the price of highest civilization. [...] [F]or the infected world at large I could anticipate no regeneration save in death. That man, as a race, should not become extinct, I saw that he must be 'born again'" (181-2, emphasis in original). It is in this rebirth in which Monos sees the salvation of humanity in a return to the natural world, the only "fit dwelling-place" for man," away from industry, science, and the arts, the self-congratulatory products of man's mastery over the elements. Though not as direct in ancestry to science fiction as some of Poe's works, "The Colloguy of Monos and Una" focuses on urban modernity and its apocalyptic consequences. Human civilization is presented as having headed down a dark path in its quest for improvement, and the push towards scientific knowledge has obscured morality, with the modern industry of "huge smoking cities" obscuring the beauty and vitality of the natural world. Speculative stories such as this seem an arena for Poe to warn that the uncontrolled, relentless quest for modernization may lead to unintended consequences, a warning which would appear in magazines read by commuters living in these very modernized cities.

Early works of science fiction with a focus on the apocalypse began to increase in popularity in both Britain and the US, with Hermann Lang's *The Air Battle: A Vision of the Future* (1859), Richard Jefferies's *World's End* (1877) and *After London* (1885), William Delisle Hay's *The Doom of the Great City*

(1880), and W. H. Hudson's *A Crystal Age* (1887) among the notable examples. It was often London, however, that was the scene for apocalyptic fiction during these years. The trend followed a growing pessimism in Britain from the 1880s which saw the problems affecting life in London as suggestive of the problems that would come to affect all cities worldwide. It was not really until the 1890s, however, that apocalyptic science fiction really began to increase in popularity, and especially in the venue of the magazines. Much of the reason for this was the advance in printing technology which enabled magazines to carry far more illustrations and yet remain affordable. This especially well suited science fiction stories, in which illustrations aided in both bringing clarity to stories with great imaginative leaps and helping increase the vividness of imaginary or alternate worlds. The transformation these advances had on magazine reading were profound, developing a new visual language for interpreting the immediacy and visuality of urban modernity.²³

Among the magazines to specialize in printing high quality illustrations and photographs was *The Idler* (1892-98). Created by Robert Barr, who coedited the journal for the first three years, the magazine was directed towards a young, male, working, and upwardly mobile readership. The "idler" mentality of the title refers to a readership "momentarily freed from work for a day or weekend" to indulge in escapist reading (Humpherys 237). As such it appealed to a particularly urban readership of clerks and other wage earners. The magazine was instantly successful, and saw within its pages in the first year alone works by Mark Twain, Arthur Conan Doyle, Robert Louis Stevenson, and Rudyard Kipling, with frequent contributions from W. L. Alden, Frank Matthew, J. F. Sullivan, and Barr himself. One of Barr's most popular contributions, "The

²³ The development of a visual focus in the presentation of apocalyptic fiction will be returned to in detail in Chapter 3.

Doom of London," an apocalyptic story of an oppressive smog which suffocates London, appeared in the November 1892 edition. The story later went on to be featured in *McClure*'s in November 1894, and then to be published in Barr's collection of short stories *The Face and the Mask* (1895), a trajectory typical of the peripatetic life of early science fiction stories. In its original inclusion in *The Idler*, however, the story appears between Geo R. Sims's "My First Book: The Social Kaleidoscope," a veneration of the writerly life and the importance of magazine publishing, and "Cupboard Love" by Do Bahin, which begins by foregrounding the role of railway travel in modern life. These two pieces resonate with the major themes of "The Doom of London," emphasizing these within the story, but also displaying something of the editors' perceived idea of the interests of the magazine's readers.

"THE DOOM OF LONDON"

"The Doom of London" begins in the style of a reader's response to an article in the conservative *Blackwood's*. The fictional article to which it responds is by an Oxford professor, titled "Did the People of London Deserve Their Fate?" It soon becomes clear that the setting of the story is in the mid twentieth century, and the article refers to a fictional nineteenth-century event, "the simultaneous blotting out of millions of human beings" in London by a suffocating coal smog, caused by the arrogance of industry in failing to anticipate the dangers of pollution (Barr "Doom" 398). The narrator paints himself as a working man, "unaccustomed to writing," resolutely defending the honour of the people of London against an elitist and condescending opposition (402-3). The framing of the narrative in this way shows a suspicion towards the supposed authority of the academy, but a faith in the democratizing space of the magazines. Despite

this start, however, the piece soon takes the form of a straightforward retelling of events and does not return to this issue of the professor's article. The writer of the response, as part of his job as a clerk at a firm in Cannon Street, is allowed access to a new American machine which produces oxygen and which saves him from the effects of the poisonous fog. As he uses the machine to escape London by train, he witnesses the piles of the dead where they had climbed over each other in an attempt to board crowded trains. A. S. Boyd's illustrations for the story, initially cartoon-like, become ever more inky and macabre, culminating with a vivid image of the piled bodies, with the caption "fought like demons" (407). There is some focus here on the dangers of pollution and the simultaneous value of modern technology, but the focus of the story is primarily on the claustrophobia caused by the urban environment, and a grisly, gothic spectacle of a city of the dead.

The overcrowded streets and the rush towards industrial progress suffocates life in London, both in the crushing of person by person in the crazed crowds and in the poisonous fog that starves them of oxygen. It is a concern reminiscent of Engels's protests about urban overcrowding in 1844, and of the problems which inspired Ebenezer Howard's call to revitalize urban planning in *To-morrow:* A Peaceful Path to Real Reform (1898; later retitled as Garden Cities of To-morrow). The dangers of smoke pollution were also being heavily criticized both by the public and in print. Until the Clean Air Act of 1956, as Darryl Jones writes, there were several significant deadly fogs caused by industrial pollution. The "worst of all London fogs" would have been in recent memory to the readers of Barr's story, occurring in "the winter of 1879-80. The sun did not seem to rise over London on Christmas Day 1879, a day of complete darkness. At its worst, in one three-week period in January-February

1880, at least 2000 Londoners died as a consequence of fog inhalation" (Jones 185). James Stanford Bradshaw suggests that Barr may have been particularly inspired by a conversation with an engineer in 1892, "who had remarked that if ever seven days of fog coincided with seven days without wind or rain, London would be suffocated" (202). Drawing on the concerns of Londoners, therefore, it is overcrowding and industrial waste which brings about the death of the city in this story. The anonymous thousands are buried in unmarked graves, and rare survivors descend into madness and lose an awareness of their own identities. The story displays how the rapid industrialization and modernization of the urban world can lead the loss of individuality, identity, and reason, and yet the narrator defends the Londoners for their mistake, and is only saved himself by both the American machine and London railway network. This ambivalence suggests Barr does not decry the modern city as a whole, but rather the story functions as a warning of how unchecked problems might escalate.

WELLS AND THE TIME MACHINE

Wagar, in his seminal study of eschatological fiction *Terminal Visions*, describes this time as the beginning of the first "Wellsian" generation: "the period [...] was not really 'his," but "no one between 1890 and 1914 published as many major novels and stories of the future, or as many classics of eschatological fiction as [H. G.] Wells" (20). Most of Wells's novels and short stories during this time appeared first in magazines, and one of his best known works, *The Time Machine* (1895), had a particularly close connection to magazines in its development. Five major versions of this story precede its publication in book form by Heinemann, although the London and New York editions of the book form (both published in 1895) also contain several differences. Serialized in the

Science School's Journal (1888), National Observer (1894), and The New Review (1895), the narrative underwent several fundamental changes, reflecting the changing contexts of its publications and the feedback from publisher W. E. Henley.²⁴

In the book publication of the story, the narrator tells the tale told to him by "the Time Traveller" (as he refers to him) over the course of two dinner parties. At the first, the Time Traveller tells his guests about his proposed journey into the future; at the second, he returns from his trip, his face "ghastly pale," "haggard and drawn," to tell of what he experienced (Wells, "Time" 16). As Will Tattersdill suggests, the serialized telling of the story is apt given its initial serialization in the magazines (528). The extraordinary and almost unbelievable nature of the events told by the Time Traveller is tempered to a degree by the namelessness of the characters, the narrator's lack of familiarity with the scientific basis of the event, and the mediation of the account: the retelling can thus afford to lack specificity and to contain dubious scientific details, and to focus instead on what is supposed to have occurred on the expedition to the future.

The descendants of man that the Time Traveller discovers in the year "Eight Hundred and Two Thousand Seven Hundred and One A.D.," the Eloi, are frail and beautiful, and have ceased to be intellectual beings (Wells, "Time" 29). The security acquired by the race in the interim years gave a premium to feebleness, and they live in the ruins of palatial buildings in what has become a

²⁴ For an analysis of the differences between the published periodical versions, see Bernard Bergonzi, "The Publication of The Time Machine 1894-5" (1960). Since the first book publications in 1895, however, there has been continued debate about the definitive edition of the text. For instance, Harry M. Geduld's critical edition *The Definitive Time Machine* (1987) prompted much criticism from David Lake and Patrick Parrinder, in several issues of *Science Fiction Studies* between 1988 and 1990. Geduld responds in the pages of the journal with fury, prompting Lake to quip, "I hope Harry Geduld will now bury the hatchet—and preferably not in my neck" (Geduld and Lake 404). In order to avoid becoming entangled in this debate, references to *The Time Machine* in this chapter refer to the Penguin *Selected Short Stories of H. G. Wells* edition unless otherwise stated.

rich garden in the Thames valley. A divergent species from the Eloi, the Morlocks (originally the lower classes who worked underground), threaten the peace and security of the Eloi, and it is around these that much of the action of the story takes place. The future landscape entered by the Time Traveller is dominated by a white sphinx, emblematic of the trend of Egyptomania, which sees the ruins of Ancient Egypt as the principal symbolic representation of the ruins of empire. Percy Bysshe Shelley's poem "Ozymandias" (1818) represents one of the clearest expressions of this, in which the ruins of an ancient city are discovered in a profound stage of decomposition, yet bearing an inscription ironically proclaiming the empire's eternal greatness. It is also a theme returned to in Mary Shelley's *The Last Man*, as Verney gazes on the poetic ideal of the ruins of Ancient Rome, and finds comfort in the cyclical nature of the rise and fall of civilizations. The trend was particularly strong, however, in the 1890s. As Jones writes, discussions about the cycles of civilization were particularly in the public consciousness during this time: "Empires at their height are obsessed by images of their inevitable decline, and the empires of nineteenth-century Europe proliferate these apocalyptic keys, decoding their own predestined ends," with Karl Marx's Capital volumes I (1867), II (1885), and III (1894) and Max Nordau's Degeneration (1892) among the notable works.

When the Time Traveller eventually leaves the time of the Eloi and Morlocks, he travels far into the future when humanity's descendants have evolved into primitive, tentacled life forms, living on a cold planet beneath the dying Sun. Again this image has its precursors in texts already discussed in this chapter. In Byron's "Darkness" the death of the sun causes the death of any love and understanding between people, ultimately leading to the savage brutality that sees the extinction of human life. In the anonymous "The Last

Man" published in *Blackwood's* the dying sun is expressive of the desolation and loneliness of the post-apocalyptic world, and is a bitter irony when contrasted with the health and youth of its tormented narrator:

His [the Sun's] was no longer the piercing ray, the dazzling, the pure and colourless light, that had shed glory and radiance on the world on which I had closed my eyes—he was now a dark round orb of reddish flame. He had sunk nearer the close of his career, and he too seemed to share with the heaven and the earth the symptoms of decay and dissolution. (286)

William Hope Hodgson's 1912 novel *The Night Land* is another prominent example of this theme, in which the death of the Sun has left the Earth in perpetual darkness, its remaining occupants split into evolved subspecies of humans. In each work the dying sun brings about the unavoidable conclusion of Earth, showing humanity's comparative insignificance at the hands of celestial bodies. It is emblematic of the increasingly secular apocalypse of nineteenthcentury fiction, as advances in science show that humanity is not at the centre of the universe, and that the fate of humanity is inextricably linked with the cycles of the natural world. Wagar cites physicist Hermann von Helmholtz in particular in influencing such portrayals, with his projections of "the inevitable cooling of the sun in a matter of hundreds of thousands, or, in later revised estimates, ten million years" (Terminal 90). While astrophysics has since moved beyond Helmholtz and his theories on the lifecycles of stars, these nineteenthand early-twentieth-century ideas were evidently influential with Wells and other progenitors of science fiction. As Paul A. Cantor and Peter Hufnagel point out too, however, the setting sun also brings to mind the well-known line, "The sun never sets on the British Empire." The catastrophic dying suns of Wells and

others, therefore, suggest "that the sun would someday set on the British Empire with a vengeance" (44). As with Rome in *The Last Man*, the British Empire's demise is presented as inevitable, a natural part of the cycle of civilizations.²⁵

Back at the dinner party, the Time Traveller pre-emptively addresses the unbelievable nature of the story, in a way that could easily be Wells speaking directly to the reader: "Take it as a lie - or a prophecy. Say I dreamed it in the workshop. Consider I have been speculating upon the destinies of our race until I have hatched this fiction. Treat my assertion of its truth as a mere stroke of art to enhance its interest. And taking it as a story, what do you think of it?" (Wells, "Time" 79-80). The story ends with the narrator's words: "I have by me now, for my comfort, two strange white flowers" (originally a gift from one of the Eloi to the Time Traveller), "to witness that even when mind and strength had gone. gratitude and a mutual tenderness still lived on in the heart of man" (83). Despite the inevitable demise of human life, and, before this, the inferred fall at the hands of a division of class, the story shows a tender faith in the goodness of humanity. The way in which the story is told is one of its particular strengths, in that the mediation, and the admitted lack of information the Time Traveller provides, prevent the tale from overreaching in its ability to predict the future in too great detail, and instead focuses on specific possible scenes and the impact on humanity that certain changes might bring about.

The changing form of London (for the time machine moves only through time and not through space), from the cosy home of the Time Traveller, to the ruins of museums and cathedrals being overtaken by a rich garden, to a rocky shore completely devoid of the markings of human civilization, shows the

²⁵ For more on the image of the dying sun in Victorian fiction, see Darryl Jones's "Gone Into Mourning ... for the Death of the Sun': Victorians at the End of Time" (2013).

inevitability of the Necropolis. Whether the shore is the result of the collapse of the Thames Embankment or rising sea levels, the ultimate futility of humanity's attempts to resist the natural order is shown in this vision of London's partial submersion. As with the dying Sun, the encroachment of the ocean's shore is evidence that even the supposed might of the British Empire and its seat of power in London cannot achieve permanence. The shore is, rather, a liminal place, of "awful twilight" (78). The sparse animal life in this future is more suggestive of the early forms of life which made the transition from sea to land 430 million years before Wells was writing. Animal life emerging from and returning to the sea, as with the tides of the sea itself, thus evokes the cyclical, eddying rise and fall of civilizations, species, and life itself.

The fact that the descendants of humanity fall into a ruinous state, no longer able to shape their surroundings but living in fear like animals, shows how the fates of the city and humanity are inextricably tied. London becomes a liminal space, between the vitality of humanity at the height of modernity and the decline of life with the cooling sun: an undead city, the Eloi and the Morlocks merely echoes of humanity haunting the ruins. For many of the guests at the Time Traveller's dinner party the story is merely entertainment, but for the narrator it appears to be of more profound importance. Hearing the Time Traveller embark on another journey, the narrator is prepared to "wait a lifetime" for the "second, perhaps still stranger story" (83). Given the manner of his retelling of the story it seems that for the narrator this vision of the dark, undead double of the modern city should be a warning against the conceitedness of humanity, and a demonstration of the transience and mortality of seemingly eternal and mighty cities.

THE TIME MACHINE IN THE MAGAZINES

The earlier magazine publications of the story and the persistent themes tell something of the principle concerns of Wells in writing "The Time Machine." The serialized version published in *The New Review* is the closest to the book publication, but contains three particularly notable differences. The first of these is the number of chapter breaks, which are more frequent and occur in slightly different places in the narrative, and the naming of chapters, which pre-empt the narrative with such titles as "The Story Begins," "A Discovery," and "After the Story." The second is the extension of the initial discussion about time travel between the Time Traveller and his guests, which shows the Time Traveller making such remarks as "Confound Kant! [...] I tell you I'm right" (Review 12.69) 99). The third of these is perhaps the most interesting. In his visit into the far future, the Time Traveller discovers grey, plantigrade animals that resemble a kangaroo or rabbit, and that possesses a "faintly human touch" that perplexes him greatly (Review 12.72 579). These post-human animals have developed feeble forearms, and are at the mercy of three-foot tall centipede-like monsters. The episode presumably shows that the Eloi have evolved into defenceless rodents, and the Morlocks have become fearsome predators, further enforcing the message that humanity's drive towards developing modern comforts, and particularly with the upper classes, could potentially work to its detriment by allowing it to neglect and forget its basic techniques of survival.

The story's prior appearance is as a series of loosely connected articles published in the *National Observer*. The text itself does resemble that of *The New Review* and Heinemann versions, albeit being much briefer. When Henley gave up editorship with the periodical and moved on to *The New Review*, so did Wells. Evidently something of the *National Observer* version appealed to

Henley, and so much of the text was unchanged to any large degree. One notable difference, however, is the ending of the story. Rather than ending with the Time Traveller's disappearance and the poignant contemplation of the white flowers, this version ends in a similar manner to how it begins, with the conversation between the Time Traveller and his guests. Noting the inevitable ruination of life and even the planets themselves, the Time Traveller breaks off to say: "There is that kid of mine upstairs crying. He always cries when he wakes up in the dark. If you don't mind, I will just go up and tell him it's all right" (90). Despite the change in ending, the same mood seems to be evoked here: that no matter how alienating the grand scope of existence can be to the short lives and petty concerns of human beings, there is something in our humanity which transcends the cold and amoral processes of biological and stellar evolution, a comforting voice in the darkness.

DEFERENCE TO SCIENTIFIC AUTHORITY

The content of the story itself also reflects the difficulty of this new breed of speculative fiction in establishing its place, as Wells relies for narration on various characters from scientific and professional spheres to interpret the fantastical claims of the Time Traveller. The depiction of a ruined London in the story, and the re-purposing of the ruins to suit the needs of the Eloi and Morlocks, adds to the feeling that established ideas and conventions were being disassembled and reassembled to reflect the dawning of a new age of civilization and artistic forms. The earlier publication in the *Pall Mall Gazette* of Wells's "The Man of the Year Million" (1893), which contains many similarities to *The Time Machine* in its content, reinforces this issue. Appearing alongside letters and articles, and professing itself to be a "Scientific Forecast" from the

invented Professor Holzkopf of the institute of Weissnichtwo, the essay borrows from and manipulates the codes of non-fiction writing to speculate on how evolution will alter humans of the future in the wake of modern comforts and technology. Indeed, the article appears just one page before another titled "Science Notes," in which the author discusses the damaging effects of London fogs, making this an ideal venue for the meeting of scientific speculation and speculative fiction. Similar to the Eloi of "The Time Machine," the eponymous Man of the Year Million of Wells's article is presumed to develop a large brain and slight body, and to be unable to drink a whole bottle of port—some, worryingly, might not even be able to drink tea. The consumption and digestion of food may both involve technology to a greater degree (a trajectory initiated by the knife and fork). As humans learn to manipulate their environment, animals and plants may die out, with humans merely taking food chemically from dead rocks and sunlight. Beyond this the Earth is destined to cool until life dies out: "Humanity in dismal retreat before the cold, changed beyond recognition." Wells appears to be testing out his theories of the future of humanity here ahead of his development of "The Chronic Argonauts" into "The Time Machine." Wells's philosophy here on speculation of the future is interesting. He presents his article as though it were a review of a book that had not yet been written, remarking that "As Ruskin has said somewhere, apropos of Darwin, it is not what man has been, but what he will be, that should interest us." The great advantage of speculating on the future, he writes, is that these fancies need not be cast in stone, but just allow for contemplation: "the whole of this remarkable book that is not written vanishes straightway in the smoke of his pipe. This is the great advantage of this unwritten literature: there is no bother in changing the books" (3). Structuring his fiction around scientific and journalistic authority

in this way allows Wells the opportunity for greater speculative leaps to imaginative scenarios.

As a further example, Wells's The War of the Worlds (published in Pearson's Magazine April to December 1897) is bookended by the deference to the authority of print news media. In the opening chapter, the narrator notes that the Daily Telegraph is the only newspaper to mention the warning signs of the Martian invasion, but that had more newspapers taken the story the world might have been better prepared. As the threat begins to be taken more seriously, the newspapers do pick up the story, with the periodical *Punch* even making use of the story in a political cartoon. In the penultimate chapter, "Wreckage," the narrator notes the return to normality heralded by the release of the Daily Mail, a copy of which he purchases with a shilling blackened by the war. Returning to his study, he is reminded of the first indications of the war, a memory connected with the purchasing of the *Daily Chronicle*. As Benedict Anderson writes, the ephemeral but regular production of newspapers serves a vital function in establishing imagined national communities, reassuring the reader "that the ceremony he performs is being replicated simultaneously by thousands (or millions) of others of whose existence he is confident, yet of whose identity he has not the slightest notion" (35-6). The authority of print media and its ubiquity in modern life thus operates in *The War of the Worlds* as the most effective indicator of the existence of a robust structure and order underpinning urban experience, and is used by Wells to heighten both the disruption and chaos caused by the invasion and the resilience of civilization at the story's close.

Similar to the authoritative role played by the newspapers, the narrator's friendship with the astronomer Ogilvy, whose warnings were not heeded until it was too late, shows the important role that science ought to play in modern life.

The oft overlooked scientist seems to be something of a fascination for Wells, for the same year The War of the Worlds first appeared in Pearson's Magazine his short story "The Star" was also published, with Ogilvy as its principal character. The story shows Wells concerned with many similar ideas: the folly of humanity's ignorance of science and the environment beyond earth; the tardiness of newspaper people and urban centres (and London in particular) in listening to warnings from scientists; and in particular the long-suffering astronomer Ogilvy's futile attempts to alert humanity to danger. The eponymous star collides with Neptune and forms an uncanny planet, "a world, a sister planet of our earth, far greater than our earth indeed, that had so suddenly flashed into flaming death" (646). The passing of these two conjoined bodies by the earth causes volcanic eruptions, earthquakes, heavy rainfall and landslides, rising sea levels, scorching heat, and widespread death. However, after several months of turmoil the Earth emerges only a little warmer, closer to the Sun and further from the moon. From their sense of unity the survivors gain from the experience a "new brotherhood." Featuring characters only prior to the beginning of the destruction, the story goes on to concern itself only with the bare facts of the phenomenon, viewing the calamity from a distance, and then ends with a strange description of the reaction from Martian astronomers ("for there are astronomers on Mars," Wells writes). Observing the largely unchanged appearance of the earth, the Martians note that the earth sustained little damage, "Which only shows," Wells writes, "how small the vastest of human catastrophes may seem, at a distance of a few million miles" (655). The distantly observed earth of "The Star" and The War of the Worlds, and the cooling earth under a dying sun in "The Time Machine," highlights, in much the same way as explored in Byron's "Darkness," the comparative

inconsequentiality of human concerns in the larger narrative of planets and stars, and the sense of fellowship which can be acquired through unity against the causes of apocalyptic disasters.

URBAN MODERNIZATION AND TECHNOLOGY

The concerns expressed by Wells, especially in "The Time Machine," closely reflect sociological writing regarding the problems afflicting the city during this era. Robert E. Park, writing two decades after the book publication of "The Time Machine," tells of the deeply entrenched segregation which afflicts older cities of Western Europe, particularly with the isolation of whichever is seen as the "sick" part of the city: "In the great city the poor, the vicious, and the delinquent, crushed together in an unhealthful and contagious intimacy, breed in and in, soul and body" (612). The idea here of rigid class distinctions coming to reinforce themselves is highly evocative of the distinction between the Eloi and Morlocks of "The Time Machine." The ancestors of the Morlocks had been segregated into underground chambers to work for the benefit of the upper classes, the ancestors of the Eloi, living above ground, to the point where these two classes become distinct species and are doomed to irreconcilable differences. Looking towards the positive, however, Park notes that the same elements of segregation work to make the city a more exciting arena for opportunity: "The processes of segregation establish moral distances which make the city a mosaic of little worlds which touch but do not interpenetrate. [...] It introduces [...] an element of chance and adventure, which adds to the stimulus of city life and gives it for young and fresh nerves a peculiar attractiveness" (608). Indeed, it is precisely the conflict between the Eloi and the Morlocks, representative of the confrontation between different strains of urban

life, which makes the Time Traveller's adventure so fascinating for his dinner party guests and for us as readers.

A primary reason why such adventures are possible in Park's city is the availability of public transport. Between 1870 and 1914, according to Peter Hall and Mark Tewdwr-Jones, "virtually all British cities rapidly acquired a cheap and efficient public-transport system – first (in the 1870s and 1880s) in the form of horse trams and buses, then (about the turn of the century) of electric trams. and lastly (just before the First World War) in the form of motor buses" (18). Such advances greatly increased urban growth, meaning that more people could live towards the outskirts of the city and still maintain jobs in the centre. As a result, community segregation could continue to become entrenched without individuals being disconnected from the rest of the city. As well as transportation, communication also had an effect on this, especially the telephone, which was still a relatively recent invention. Park, in a passage very reminiscent of Engels's comments on the anonymous crowds of London, writes that transportation and communication both served to bring about an increased number of contacts between individuals, but that at the same time these moments of contact were becoming less intimate, that people were "meeting but not knowing one another" and substituting "fortuitous and casual relationship for the more intimate and permanent associations of the smaller community" (607-8). A similar view is brought up in Georg Simmel's seminal essay "The Metropolis and Mental Life" (1903), which speaks of the metropolitan citizen in language associated with machinery and mathematics. The domination of the money economy, writes Simmel, means that the metropolitan citizen has become intellectualized and rationalized, with their emotions dulled in order to survive the onslaught of the external milieu. The problems of modern life result

from when this leads to the "resistance of the individual to being levelled, swallowed up in the social-technological mechanism" (11). These concerns voiced by Park and Simmel of a dehumanized, depersonalized urban community, and the role of technology in this, all feature prominently in another apocalyptic story from this era, by E. M. Forster.

TECHNOLOGY AND "THE MACHINE STOPS"

Forster's "The Machine Stops," appearing in a single issue of *The Oxford and* Cambridge Review, depicts a futuristic "utopia" gone awry. Thousands of years in the future humans live in underground cities, never moving from their armchairs and only communicating with each other through voice-messages and video conferencing, via a worldwide mechanism named the "Machine." The story focuses on Vashti, who is happy to be entirely dependent on the Machine, and her son Kuno, who, after researching the history of Wessex, wishes to escape to the surface of the earth. Inhabitants of this world live in identical small rooms overseen by the Machine, "hexagonal in shape, like the cell of a bee," evoking both the lack of identity of the drones within the hive and the round-theclock surveillance of a prison (83). Years of living in climate controlled rooms has left the vast population unable to breath air above ground, and travel is rarely necessary, so that the air-ships left over from the previous age travel back and forth across the planet empty of passengers. The surface of the world itself is a wasteland composed of mud and dust dotted with the ruins of past cities. Within these ruins vomitories mark the location of contemporary underground cities.

Oswald Spengler's *The Decline of the West* (1918) would later project a similar world to this: "I see, long after A.D. 2000, cities laid out for ten to twenty

million inhabitants, spread over enormous areas of country-side, with buildings that will dwarf the biggest of to-day's and notions of traffic and communication that we should regard as fantastic to the point of madness" (101). The cities are indeed vast in "The Machine Stops," though it is likely Spengler had not imagined these to be located underground. It is, however, a close approximation of Forster's world, and a powerful dystopian vision of the future for Spengler, one which has its seeds already germinating in the cities of the early twentieth century, which he sees "insatiably and incessantly demanding and devouring fresh streams of men, till it wearies and dies in the midst of an almost uninhabited waste of country (102). Humans are indeed consumed by the Machine, not just in their time which is given over entirely to completing their daily duties, but even in their humanity: the needs of humans are appeared at the push of a button by the Machine, so that emotions are unnecessary and counter-productive. For instance, after speaking with Kuno, who requests unsuccessfully that she visit him, Vashti feels, for "a moment," lonely. Unaccustomed to this feeling, she generates the light in her room, and the "radiance [...] studded with electric buttons, revived her" (87). 26 Despite the Machine's creation by humans and the original intention to abandon religion and superstition, humans come to worship the machine, and the master-servant relationship is reversed: "Humanity, in its desire for comfort, had over-reached itself. It had exploited the riches of nature too far. Quietly and complacently, it was sinking into decadence, and Progress had come to mean the Progress of the Machine" (114). In contrast, Kuno's impression of the natural world above ground is centred on historical Wessex, representative of independence and

²⁶ The need for a technological remedy from emotions is something to recur frequently in dystopian science fiction, perhaps most famously with the drug "Soma" in Aldous Huxley's *Brave New World* (1932), the "telescreens" of George Orwell's *Nineteen Eighty-Four* (1949), and the "Penfield Mood Organ" of Philip K. Dick's *Do Androids Dream of Electric Sheep*? (1968), a novel which will be the focus of Chapter 6.

natural freedom. The "low colourless hills" he witnesses "commune with humanity in dreams. Happy the man, happy the woman, who awakes the hills of Wessex. For though they sleep, they will never die" (106). The Machine, to Kuno, is an unruly force, which "has paralysed our bodies and our wills, and now it compels us to worship it. [...] We only exist as the blood corpuscles that course through its arteries, and if it could work without us, it would let us die" (107). For Kuno, independence from the Machine, as with the independence of Wessex from Danish occupation in the tenth and eleventh centuries, requires a struggle to reclaim ownership of the rural landscape for its English inhabitants.

As Wells depicted in the Eloi and the Man of the Year Million, physical weakness has come to be considered a virtue, so that exploration outside becomes next to impossible:

these days it was a demerit to be muscular. Each infant was examined at birth, and all who promised undue strength were destroyed. Humanitarians may protest, but it would have been no true kindness to let an athlete live; he would never have been happy in that state of life to which the Machine had called him. (99-100)

Kuno, however, begins to exercise, and grows in strength, determined to visit the surface. His efforts at exercise are aided by the long tunnels of the abandoned underground railway network, a sign of the liberating effects of public transportation, if in an indirect way. It is through these tunnels that he eventually escapes, hearing as he goes "the spirits of those dead workmen who had returned each evening to the starlight" (101). Kuno's ancestors, both the Anglo-Saxons of rural Wessex and the railway workers of industrial London, are timeless undead voices in the manner of Shelley's and Byron's depictions of the

Eternal City of Rome. Caring only of the "rise of Wessex" and not its end (105), Kuno denies time its tyranny over the demise of civilizations, seeing the history of humanity as unassailable.

Once Kuno visits and returns from the surface the narrative moves towards its apocalyptic conclusion. Humanity's utter dependence on the Machine is shown when the "Mending Apparatus" falls into disrepair, and with nothing to fix it the Machine begins to stop: "man who had once made god in his image, and had mirrored his strength on the constellations, beautiful naked man was dying, strangled in the garments that he had woven" (121). The clothing imagery here is important to the message of the story. Kuno, in his undesirable, even "savage" physicality, his inexpressible connection to the spirits of his ancestors, his fascination with interpreting the constellations of the stars, and his drive towards escaping the underground cities, shows the inevitable return of humanity from industrialization and technology to the natural world (104). He struggles with expressing this when talking to Vashti:

I felt that humanity existed, and that it existed without clothes.

How can I possibly explain this? It was naked, humanity seemed naked, and all these tubes and buttons and machineries neither came into the world with us, nor will they follow us out, nor do they matter supremely while we are here. (102)

Technology for protecting humanity from the elements has reached the point of suffocation, clothing humanity whilst also smothering it. When the Machine shuts down and everyone is exposed to the poisonous air outside Vashti and Kuno meet again, and as they die in the open air Kuno remarks, "we have recaptured life, as it was in Wessex" (122). Liberation from the trappings of

modern technology, despite resulting in death, becomes a kind of freedom for the populations of the underground cities.

The publication of "The Machine Stops" in *The Oxford and Cambridge* Review indicates that a shift has taken place in the first Wellsian generation. Where before stories that would later be termed science fiction had either flopped, like Shelley's The Last Man, or been published in publications geared more towards entertainment, such as *The Idler*, the vast quantity of works appearing between the years 1890-1914 and their emergence onto the austere pages of more educated and serious periodicals denotes the first great rise of the science fiction story. That these works often feature urban apocalypse as a central concern is no great surprise in retrospect, as these were also the years leading to the rise of Modernism, that great movement in literature rooted in the urban modernity and technological revolutions of the turn of the twentieth century. These matters were at the forefront of readers' minds during these years, and not least because so many readers were now themselves living in highly concentrated metropolises such as London, Paris, and New York. Two further works of urban apocalypse from this era demand attention here, for their authors are closely connected with the magazines, and essential to any history of science fiction in the lead up to *Amazing Stories*. These are Jules Verne's "The Eternal Adam" (original title "L'éternel Adam," 1910) and Arthur Conan Doyle's *The Poison Belt* (1913).

CYCLES OF CIVILIZATION IN "THE ETERNAL ADAM"

Verne, who has been credited as "the first great progenitor" of science fiction (Amis 24), published his novels regularly in the magazines. Initially this was with magazines such as *Magasin d'éducation et de recreation*, which, as Ashley

writes, was "a direct literary precursor to the science-fiction magazine," but Verne's connections soon also made him familiar to a British and American readership in such venues as the *Boy's Own Paper* and *Our Young Folks* (8). "The Eternal Adam," however, falls outside of Verne's history with the magazines, as it was dictated from Verne's death bed and only released later in a collection of stories in 1910. Nonetheless it features the influence of magazine publishing strongly as part of its plot. The story opens on the philosophical contemplations of archaeologist Zartog Sofr-Aï-Sr, who, it emerges, is a descendant of modern man. The future humanity to which he belongs has not yet discovered Neptune, and believes the earth is 400,000 years old. Despite this, however, they have retained the concept of Adam and Eve (or Hedom and Hiva, as they are now called). In the opening passages the great advances in knowledge and technology that have been rediscovered are celebrated: coal and steam power, mathematics, chemistry, electricity, and alongside these, and most important of all, printing:

[Sofr's species] had found a method of spreading the written word far and wide in an endless number of copies by the aid of a block cast once and for all. It was really from this invention that all others had sprung. [...] Already that mysterious agent [electricity] had transmitted the written thought over incalculable distances; tomorrow it would transmit sound; and next day, no doubt, the light. (Verne 14-5)

It is the advances of new media that are of vital importance to the progression of knowledge and technology. Indeed, written texts are the basis for the story itself. On an archaeological dig, Sofr discovers an aluminium case containing several documents written in a now extinct language (French). As Sofr

deciphers the surviving pages, we are presented with a story within the story.

Appropriately enough to its own publication in a posthumous collection, the story is presented, like Shelley's *The Last Man*, as a found text.

The documents turn out to be the journal of a man who, with a few of his dinner guests, survived an apocalypse in which all the world's land fell into the sea. Wandering the oceans aboard the "Virginia," they visit the sites of cities now submerged under the ocean looking for land and mourning a lost civilization: "Here, this was Moscow ... Warsaw ... Berlin ... Vienna ... Rome ... Tunis ... Timbuctoo ... St. Louis ... Oran ... Madrid ... I felt my heart was being torn out. That the universe might be swallowed up, well and good. But France my France!—and Paris, which symbolized her! [...] We sailed above London, whose liquid tomb was saluted by the whole crew" (36-7, ellipses in original). They eventually come across a barren, black landmass in the middle of the Atlantic, and, struggling to survive on its surface, manage to make a trip further into the new continent, and discover the remains of a civilization which could only be the lost Atlantis. As the remaining survivors begin to die and a new generation is born, the man notes with discomfort the inevitable fall into barbarism and the loss of knowledge that has occurred with the end of their world: "I can almost see them, these future men, forgetting all articulate language, their intelligence extinct, their bodies covered with coarse fur, wandering about this sad wilderness" (46). Without the ability to pass on knowledge to this generation through written texts, human beings are destined to regress.²⁷ Sofr notes that from the language of the journal this lost human civilization had been of much greater standing than his, just as they had said

²⁷ An uncannily similar idea is put forth in Jack London's *The Scarlet Plague* (1915), written the same year as the release of the collection containing "The Eternal Adam." In *The Scarlet Plague*, scholar James Howard Smith, after attempting to impart his knowledge to his savage grandsons, leaves a library of books and a key to the alphabet in a cave for future generations to decipher.

the same of Atlantis, Ancient Egypt, and the Babylonians. Verne presents an uncompromisingly cyclical history—civilizations literally rise and fall into profound ruin through the complete indifference of plate tectonics. Sofr is dismayed by the realization: "his heart overflowed with pity. Bleeding from the countless wounds from which those who had ever lived had suffered before him, bending beneath the weight of these vain efforts accumulated throughout the infinity of time, Zartog Sofr'-Aï-Sr gained, slowly and painfully, an intimate conviction of the eternal recurrence of events" (48). The story offers a daring mixture of apocalyptic narrative, detective story, and future history, for a sombre reflection on the inevitable repetition of history.

THE POISON BELT AND TOURING THE "DEAD" CITY

The second of Doyle's Professor Challenger novels, *The Poison Belt* was first published in the high quality *The Strand Magazine*, appearing simultaneously in the UK and the US, and featuring powerful illustrations by Harry Rountree. The story depicts a global catastrophic event that appears to have ended all animal life above the microscopic level. Challenger, Professor Summerlee, Lord John, and the narrator, Edward Malone, gather at Challenger's home in the Sussex Wealds with a supply of oxygen to occupy the "four front seats of the stalls at the last act of the drama of the world" (Doyle 44). The catastrophe itself, described by Challenger, involves the passing of Earth through a belt in space which poisons the ether. The poison belt is described frequently in terms of a "tide": it comes upon people as though they were "bathers" up to their shoulders "in water (20), who suddenly are submerged by a rolling wave" (41), and even the planet itself is described as having "swum" into the band of poison (24). The emphasis on the tide-like, cyclical nature of the disaster foregrounds a later

conversation between Challenger and Summerlee about the regeneration which might follow the crisis. Challenger insists that the full cycle of history is to repeat, and that the "roots of growth" will give rise to humanity once again in the future (57). Summerlee, on the other hand, decries this as the solipsism of human beings and argues that the regeneration need not take the same form: "man may have been a mere accident, a by-product evolved in the process" (58). The conversation here is particularly reminiscent of the conclusion of "The Eternal Adam," and Sofr's speculation that perhaps the trajectory of humanity is destined to play out in perpetuity.

Determined to discover the extent of the calamity, the characters travel to London via motor car (horses have also been immobilized by the poisonous ether, rendering horse-drawn cabs useless). In the wasteland of London, they discover that continued life in the city is impossible, and so escape by car back to the sanctuary of Challenger's country house. The role of the car here as a liberating piece of modern technology evokes its use in "The Eternal Adam," in which the survivors only escape the apocalypse by driving their car uphill until the waters cease to advance. The narrator concludes his tale considering how long this humbling experience will be remembered by humankind: "Never can one realize how powerless and ignorant one is, and how one is upheld by an unseen hand, until for an instant that hand has seemed to close and to crush" (82). As the characters contemplate their own future "skulking like jackals among the graves of the human race," the "dead" suddenly wake from what Challenger determines to have merely been a cataleptic state (66).

Despite the temporary effects of the apocalypse, isolated disasters still occur in the story: the four characters watch a passenger train "driven and freighted," as they believed, "by the dead," crash and set ablaze (47); Brighton,

Orleans, and New York are destroyed by fire, and there are suspicions that Chichester or Portsmouth may have suffered a similar fate; and when the characters visit London during the world's cataleptic state, they witness "A ship blazing brightly [...] and the air [...] full of drifting smuts of a heavy acrid smell of burning" (76). Consequently, it is the countryside that offers sanctuary from forces beyond the control of humans, and not the city. In fact, the city of London is an especially uncomfortable environment for the characters, as the frequently ignored Mrs. Challenger shows in her eagerness to return to Rotherfield: "Another hour of this dreadful, silent City would drive me mad" (81). The presentation of London itself as a city of the dead is very reminiscent of Barr's "The Doom of London," and the more so for Rountree's illustrations. Captioned with quotations such as "the stillness and the silence of universal death" (frontispiece) and "the dead outnumber the living" (31), the images present, in the style of peaceful watercolour landscapes, scenes of motor traffic accidents, burning buildings, and vast numbers of bodies strewn about in the streets. The eventual awakening of the world offers a rare chance for the ruinous double of the modern city to be witnessed by characters on a temporary basis, and the narrator's imploring for humanity to learn from the experience shows Doyle's intention for the portrayal as a cautionary tale, and an opportunity to contemplate the importance of scientific discovery in securing a safe future.

CONCLUSION

There is a clear pattern in how the texts looked at here represent the life, death, and living death of cities. Supporting the ideas of historians and sociologists like Engels, Park, Simmel, and Spengler, these early science fiction texts see the problems of the modern city as centred around depersonalization,

dehumanization, and the segregation of the classes. While the living cities might be dazzling and exciting places for unique opportunities, they also appear shallow and indifferent to their inhabitants, lacking in the kind of moral grounding these writers attribute to pre-modern or more rural communities. With the overcrowding caused by a sharp rise in population, and with the pollution caused by modernization and industrialization, metropolitan centres seem to risk strangling and suffocating the innovation and development they strive to advance. Often through plague, toxic fumes, or fire, the apocalyptic texts released between 1826 and 1926 imagine these factors contributing to the demise of cities, and even of humanity as a whole. Navigating these urban graveyards, the surviving characters are also unsettled by the stillness of the post-human city. Verney, the Time Traveller, and Challenger's cohort in particular find the barren post-apocalyptic city to be deeply unsettling, and wish to find a world somewhere between the extremes. Rarely does the postapocalyptic city seem to represent the end of the story, however: referencing the fallen empires of Rome, Egypt, and Atlantis, and utilizing the language and imagery of the setting sun and the tides, early science fiction adapts the Romantic fascination in the rise and fall of cultures to include modern urban ruins. It seems that although on a human level these are tales of catastrophic destruction and violence, they nonetheless see hope in the timelessness of human goodness and literary art, and in the necessity of the creative destruction wrought by death to make way for future generations. These were the years in which humanity's solipsism, narcissism, and hubris was undermined by advances in evolutionary science, palaeontology, and astrophysics, and early science fiction accordingly strove to recalibrate our position in the universe through the scope of the stories we tell each other.

The utilization of conventional or more established genres in the works examined here is emblematic of the patchwork assembly of science fiction:

Shelley's novels and Poe's tales incorporate the gothic, Barr's "The Doom of London" and Wells's stories borrow from journalism and scientific writing,

Verne's "The Eternal Adam" uses aspects of the detective story and future history in relaying its narrative, and Doyle's *The Poison Belt* (1913) tells an end-of-the-world narrative as part of a trilogy of adventure stories. Each of these works uses established modes and genres to devise new ways of thinking about the possibilities of the future, and focus principally on scenes of urban destruction or apocalypse in the process. The positioning of such patchwork texts in the magazines seems highly appropriate, as these composite items so effectively answered the needs of the modernized, bustling urban centres of the Western world. 1926 saw science fiction popular and recognizable enough to fill out a whole periodical with the publication of the first magazine devoted solely to the genre, Hugo Gernsback's *Amazing Stories*.

Each of these texts sits at a crucial point in the formation of science fiction. As modernity and the fast-paced, industrialized city disrupted tradition and established conventions, literature reflected this transition in the reassembling of genres for a new fiction that focused on fantastic futures. With the advent of Greenwich Mean Time, railway schedules, industrial workdays, and new technology like the wristwatch, temporality became of crucial interest in fiction concerned with alternate presents and futures. Indeed, as Stephen Kern writes, science fiction came into vogue precisely because of the fascination with temporality in Europe and America in the years 1880-1910, "indicating that the future was becoming as real to this generation as the past

had been for readers of the Gothic novel and historical romance" (94). ²⁸ Only the narratives enabled by the Time Traveller's time machine or the future historians of Poe's, Barr's, or Verne's stories, therefore, could reassemble the fragmented histories of a modernity still being constructed and understood. As novels and stories of science fiction struggled to negotiate a place for themselves, established modes had to be compromised and pieced back together in new ways, to allow a new mode of speculative writing. Wagar asserts in his essay "The Rebellion of Nature" (1983) that the ratio of natural to man-made catastrophe in stories prior to 1914 that ratio was at two-to-one. As exemplified in the stories examined here, however, where humanity is responsible through a drive towards modernity and an abandonment of the natural world, it is the cities—the cornerstones of civilization—which crumble.

²⁸ For a detailed analysis of the relationship between modernist temporality and urban ruins, see Shannon Lee Dawdy's "Clockpunk Anthropology and the Ruins of Modernity" (2010).

Chapter 2:

Jack London's "Future Stunts"

On the morning of Wednesday, April 18, 1906, an earthquake measuring 7.8 on the Richter scale hit Northern California. Awakened by the tremors at 5:14am, celebrity literary couple Jack and Charmian London rode on horseback up to their rented ranch in order to determine what had occurred. Both forty miles south in the direction of San Francisco and fifteen miles northwest in the direction of Santa Rosa, the Londons observed vast pillars of smoke from the already raging firestorms triggered by the quake. Moved immediately to apocalyptic imaginings by the sight, London allegedly exclaimed to Charmian, "I shouldn't wonder if San Francisco had sunk. That was some earthquake. We don't know but the Atlantic may be washing up at the feet of the Rocky Mountains!" (C. London, Book 125).²⁹ Indeed, the magnitude of destruction and the loss of life caused by the earthquake and fires make the event one of the most significant natural disasters in the history of the United States. Though Collier's Weekly would later claim that they had initiated the trip, it was rather the Londons' own journalistic instincts and connection with the area that led them to immediately travel to the affected cities and assess the extent of the devastation.³⁰ After visiting Santa Rosa, they secured passage to San Francisco that same evening via Oakland. Charmian later recalls, in similarly apocalyptic language, that the scenes they witnessed "proved our closest to realizing a dream that came now and again to Jack in his sleep, that he and I were in at the finish of things—standing or moving hand in hand through chaos

²⁹ The witnessing from California of seismic activity dragging North America under the sea is strikingly evocative of the apocalypse of Jules Verne's *The Eternal Adam* (1910), dictated on Verne's deathbed only a year prior to the San Francisco quake.

³⁰ The editor's introduction to Jack London's piece for the magazine, as well as the subsequent introduction to the reprinted story in *A Cavalcade of Collier's* (1959), states that *Collier's* wired London with instruction to visit San Francisco and write a story, and that upon their direction he set out at once.

to its brink, looking upon the rest of mankind in the process of dissolution" (127). Gradually forced out of the city by the advancing flames, London and Charmian returned home the following day after a night spent witnessing the horror of a devastation which engulfed the city. The fires raged for four days before finally being brought under control, leaving around 3,000 dead. The city's ubiquitous and vulnerable gas mains, the instability of the city's foundations which were raised for the purposes of installing sewage systems and covering landfills, and the overreliance on modern communications and transportation, meant that the "very technologies that were to safeguard it from common hazards (epidemics, overcrowding, smoke pollution) ironically combined to precipitate a greater catastrophe" (Yablon 198). The severity of the disaster was thus exacerbated by the modernization of the city itself.

Having witnessed the fall of San Francisco first-hand, London was "averse to undertake the compressing of his impressions" (C. London, *Book* 129): "I'll never write a word about it. What use trying? One could only string big words together, and curse the futility of them" (127). He was compelled to make the attempt, however, after receiving a wire from *Collier's Weekly* offering 25¢ per word, the highest he was ever to obtain, for an account to appear in their May 5 issue. ³¹ London's hesitation at reducing the extent of the catastrophe to the confines of language comes across in his piece, as he limits himself to recording the personal experiences and impressions of his movements through the city, reluctant to encapsulate the event in estimated data: "An enumeration of the buildings destroyed would be a directory of San Francisco. An enumeration of the buildings undestroyed would be a line and several addresses. An enumeration of the deeds of heroism would stock a library and

³¹ The article was republished less than a month later for a specifically local audience, in the June 2, 1906 issue of the *San Francisco Argonaut*.

bankrupt the Carnegie medal fund. An enumeration of the dead—will never be made" (115).32 Returning to the ruined cities to work on his account and take photographs, London found that even the significant paycheck he was to receive fell short of the time and effort he expended in chronicling the disaster. Peter L. Fradkin goes so far as to assert that "London's main concern was the drain of money that 'this damn earthquake' was causing him" (8, emphasis added). It may be in part that for both of these reasons, his inability to fully express the horror of witnessing the consequences of the San Francisco earthquake and his inability to fully make use of the material he collected, that the themes of the *Collier's* article recur in London's fiction in the following years. His daughter, Joan, contends that the scenes witnessed "reappeared with telling effect" as a direct influence on The Iron Heel (1908) and The Scarlet Plague (1915), both of which tell of the fiery destruction of US cities (308). It could be argued, however, that the specifically apocalyptic terms in which London interpreted the sight of his hometown of San Francisco in ruins gave rise to a general tendency in his fiction from 1906 onwards towards fantastic tales of possible future catastrophes.

JACK LONDON'S SCIENCE FICTION

London came to a genre of fiction which would now be called science fiction early in his career. London cites H. G. Wells as a defining influence with regards to his speculative stories concerning cities. Indeed, his 1903 account of the poverty of Whitechapel in East London, *The People of the Abyss*, was titled after Wells's phrase: "*The people of the abyss*—this phrase was struck out by

³² As discussed in Chapter 3 with regards to accounts of the destruction of cities during the Second World War, devastation personally witnessed by even the most gifted of writers seems frequently to resist satisfactory documentation.

the genius of H. G. Wells in the late nineteenth century A.D. Wells was a social seer [...] Wells speculated upon the building of the wonder cities, though in his writings they are referred to as 'pleasure cities'" (*Iron Heel* 180-1, emphasis in original). Charmian writes that she and London would read Wells aloud to each other, for "Jack read rapaciously—both of the meatiest and the trashiest. He must know 'what the other fellow is doing'" (*Book* 123). Dale L. Walker speculates that Arthur Conan Doyle, Jules Verne, and M. P. Shiel (*Alien* 15), Mary Shelley's *The Last Man* (1826), and Richard Jefferies's *After London* (1885) may all have influenced London's science fiction (31), and critics such as Jeanne Campbell Reesman (225) and Earle Labor (*Jack London* 109) suggest Edgar Allan Poe as a key influence. London himself writes highly of Poe's "terrible and tragic" fiction in 1903, suggesting that the genre lacked an adequate magazine venue:

editors of magazines have very good reason for refusing admission to the terrible and the tragic. Their readers say they do not like the terrible and tragic, and that is enough, without going farther. But either their readers prevaricate shamelessly or delude themselves into believing they tell the truth, or else the people who read the magazines are not the people who continue to buy, say, the works of Poe.

Consequently, he writes, magazines dedicated to such a genre should be introduced, "about which there shall be nothing namby-pamby, yellowish, or emasculated, and which will print stories that are bids for place and permanence rather than for the largest circulation" ("Terrible and Tragic" 64). While London's science fiction writing is still very rarely discussed his interest in the genre's progenitors and their place within the contemporary literary

landscape is well documented, and a number of works by London which first appeared in magazines might easily be described as early examples of science fiction.

As with many of the works discussed in Chapter 1, London's science fiction stories tended to struggle to find their place in print. Often facing repeated rejection, when published the stories were serialized and reprinted in a wide variety of magazines and newspapers, or were bundled together into disjointed collections in book form, and frequently attracted the contempt or confusion of critics. Richard Weiderman (14) and Dale L. Walker (Alien 1) cite London's first published story "A Thousand Deaths," written in 1897 and published in the magazine *The Black Cat* in 1899, as one of the earliest examples of London's interest in fantasy with a scientific focus. As Weiderman's list of London's science fiction shows, however, the number of works published after 1906 shows a marked upsurge in the author's interest in the genre.³³ As London notes in a letter to Robert McKay of March 28, 1907, "Just now I've got the future stunts on the brain" (Labor, Leitz, and Shepard 680). Unequipped with the term "science fiction," London himself would call these works "Future stories" (686, with a capitalized "F") and "pseudo-scientific" stories (Hendricks and Shepard 301). The particular future stunt London had been pitching to McKay was a short story titled "The Unparalleled Invasion," which imagined the extermination of the entire Chinese population by biological weapons. McKay rejected London's story, as did Roland Phillips (London's contact at the

³³ Weiderman's list of London's science fiction (22) is as follows: "A Thousand Deaths" (1899), "The Rejuvenation of Major Rathbone" (1899), "A Relic of the Pliocene" (1901), "The Minions of Midas" (1901), "The Shadow and the Flash" (1903), *Before Adam* (1907), "Goliah" (1908), *The Iron Heel* (1908), "The Enemy of All the World" (1908), "A Curious Fragment" (1908), "The Strength of the Strong" (1911), "The First Poet" (1911), "Babylonia" (unpublished), *The Scarlet Plague* (1915), *The Star Rover* (1915), and *The Red One* (1918). London was also planning further science fiction works, including "a series of past and future novels," and two apocalyptic stories called "The Farthest Distant" and "The Far Future" (C. London, *Book* 218-9).

magazine *Cosmopolitan*) in 1909. In desperation, London asked Phillips for an explanation: "I thought, when writing 'The Unparalleled Invasion,' that I was making an interesting pseudo-scientific yarn. Can you tell me just what is wrong with it? Is it a good idea poorly handled, or is it an idea that in itself is of no value to magazine publications?" (Labor, Leitz, and Shepard 830). London's bewilderment here encapsulates the uncertainty with which science fiction writers were attempting to find a venue in the early twentieth century. The story would eventually find publication in *McClure's* in July, 1910, before being collected in London's *The Strength of the Strong* (1914). It has since divided critics, however, on whether it should be read as an ironic comment on world politics or as part of London's wider musings on the dangers of the "yellow peril."

"THE UNPARALLELED INVASION" AND "THE YELLOW PERIL"

Told as a future history, "The Unparalleled Invasion" is footnoted: "Excerpt from Walt Mervin's 'Certain Essays in History" (281). The opening of London's story reads in a very similar manner to the opening of H. G. Wells's *The War of the Worlds* (1897): "The world awoke rather abruptly to its danger; but for over seventy years, unperceived, affairs had been shaping toward this very end" (270). Substituting an enemy from Mars with one from China, London paints a coming threat with the same creeping, incremental inevitability as does Wells. In fact, the cultural differences between the West and the East serve as similar binaries for London: "The fabrics from their [the Chinese] minds were woven from totally different stuffs. They were mental aliens" (271). London depicts a vision of 1970 in which China has developed a powerful and fearsome economy due to its strengths in labour, science, and commerce, with a population of a

modest 500,000,000 (rather shy of the actual population in 1970, which was in the region of 800,000,000). Due to the "fecundity of her loins," China begins to expand in all directions to accommodate its rapidly increasing population, arrogantly (in London's presentation) moving into Western colonial possessions in the East (274). The development of China, influenced by the West, takes the form of strong industry, engineering, scientific development, modern machinery, and education through the profusion of newspapers in cities. Responding to China's increasing power and imperial aspirations, Western airships drop glass cylinders of airborne plagues across China, which in six weeks remove almost all trace of the population, though some might still be found: "a few hundred thousand, perhaps, their carcasses festering in the houses and in the deserted streets, and piled high on the abandoned death wagons" (278-9). Once the various plagues that wiped out the entire Chinese population cease to pose a threat, the world moves back in to repopulate the land: "It was a vast and happy intermingling of nationalities that settled down in China in 1982 and the years that followed—a tremendous and successful experiment in cross-fertilization. We know to-day the splendid mechanical, intellectual, and art output that followed" (281). This horrific future history of a xenophobic extermination of an entire people, written and published well before the World Wars, is an unfortunately prescient tale of humanity's ability to wreak destruction and death upon itself.

For Walker, the story's prescience possesses a more literal truth. Walker, in a 1973 book, describes the "Yellow Peril' nightmare" as one "not confined to the first decade of the century. The nightmare continues today" (*Alien* 28). Claiming that London detected an innate aggressiveness possessed by both the Chinese and the Japanese, Walker seemingly sees the actions of the West

in the story as justified in their drive to curtail the warmongering instincts of the East Asian peoples. Given the year of publication of Walker's book this attitude could potentially be explained as symptomatic of the height of opposition to the Vietnam War, a war which saw the largest loss of lives since the Second World War and arguably the greatest defeat of US military strategy in the twentieth century. Thankfully, Walker's opinion is rare amongst London scholars. Labor largely dismisses the story, describing it as "second rate," and a "weird socioscientific fantas[y]" (*American* 245). Reesman offers a more subtle reading. Challenging literal interpretations, Reesman suggests the story should be read as one of "mordant irony," "a sardonic portrait of Western fears of the East that points to a lack of understanding of other cultures as the motive behind such monstrous notions as genocide" (267).

Reesman's generous interpretation, however, neglects the fact that London expressed similarly xenophobic ideas in his non-fiction writing. In a 1904 piece for the *San Francisco Examiner* titled "The Yellow Peril," which bears striking similarity to the descriptions in the story, London suggests that the lack of understanding between the English-speaking and Chinese-speaking worlds is irreconcilable. Chinese characters, he writes, are a "baffling enigma," and the speaker of Chinese can take "a turning which we cannot perceive, twists around the obstacle [of incomprehension] and, presto! is out of sight in the ramifications of the Chinese mind where we cannot follow" (45). "The Unparalleled Invasion" makes near identical assertions, describing Chinese characters as "hieroglyphics" (271) and claiming that the "Western mind penetrated the Chinese mind but a short distance when it found itself in a fathomless maze. [...] There was no way to communicate Western ideas to the Chinese mind" (270). Accompanied by disgusting racial caricatures, "The

Yellow Peril" casts broad aspersions, describing, as though the personality of a single person, the mind of "the Chinese." Hypothesizing that the day of reckoning between the West and the East will be seen in his lifetime, London comforts the reader with the idea that "the western world will not permit the rise of the yellow peril," and that the potential ally of the "yellow," the "brown man," possesses an innate "weakness" that will pose no great threat to white supremacy ("The Yellow Peril" 45). The striking similarities indicate that the piece served as the basis for London's writing of the speculative future history "The Unparalleled Invasion" just three years later. Neither "The Unparalleled Invasion" nor "The Yellow Peril" give any clear indication that they ought to be read as ironic comments on ignorance of other cultures, but rather seem to perpetuate such an ignorance.

While "The Unparalleled Invasion" is a natural result of the ideas put forth in "The Yellow Peril," it also stands as an example of London's belief in the apocalyptic conclusions of the urban development of nations. The piece places specific attention on only one city, the capital then known as "Peking" ("Unparalleled" 275), which is used to describe the unfolding of the genocide on a human level. London uses this depiction of the city to extrapolate about the events taking place across the nation, showing the city's role as a representative example of the modernized country as a whole. Rather than being a story strictly about post-apocalyptic cities, however, "The Unparalleled Invasion" places most of its attention on China's overall industrialization, scientific development, and emergence as a "machine-civilization" (273). Consequently, the story draws on the kind of exacerbated destruction, precipitated by modernization, which was wrought by the 1906 San Francisco earthquake and to which he returns to depict the fall of San Francisco in his *The*

Scarlet Plague. "The Unparalleled Invasion" has since often found republication in short story collections, but its brevity and troubling racial ideas justify Labor's dismissal. Fortunately, London's interest in apocalyptic science fiction results in far more interesting and sophisticated works in the years following.

THE SCARLET PLAGUE IN THE MAGAZINES

In the year of publication of "The Unparalleled Invasion" in *McClure*'s, London wrote a longer apocalyptic story, the novella *The Scarlet Plague*. London accepted an offer of £50 from the British publication The London Magazine to publish the story (Massey, Letter to J. London, 4 Nov. 1911 1), despite complaining to his English agent in the same month that £100 per story would be "far below what I have earned serially in England in the past years" (J. London, Letter to H. Massey 1). London generally insisted that he be able to seek publication in America prior to any English publication, but the six months The London Magazine agreed to wait passed without an offer from an American magazine. The story appeared in the June 1912 issue of The London Magazine and was first serialized in America in *The American Sunday Monthly Magazine*, a supplement to the Hearst syndicated newspapers, between June and September 1913. The reduced payment and London's initial difficulty in securing publication in the United States suggests that the science fiction story, somewhat uncharacteristic of the famed author of *The Call of the Wild* (1903) and White Fang (1906), was not one for which there was high demand. The venues are somewhat typical of the popular newspapers and magazines which published London's work of this era, 34 although it is notable that *The London*

³⁴ For instance, *Burning Daylight* was serialized in *The New York Herald* in 1910, *The Abysmal Brute* was published in *Popular Magazine* in 1911, and *The Valley of the Moon* was published in *Cosmopolitan* in 1913.

Magazine had recently issued a mission statement which makes its inclusion of an early science fiction story like *The Scarlet Plague* effectively inevitable: "A year ago The London Magazine entered on a new phase of its career [...] [and] an entirely new progressive policy was adopted. [...] [A]n attempt was made to deal with the great problems of the day in such a way as to render them interesting and informing to the average reader" ("The 'London' Leads"). While the story confounded many critics, it certainly met the criteria of being an entertaining story which was symptomatic of the issues of the day.

Set in the San Francisco Bay Area sixty years after the "Scarlet Death" all but wiped out humanity in 2013, The Scarlet Plague tells the story of the elderly James Howard Smith imparting his knowledge of the old world to his savage grandchildren. Smith speculates that fewer than forty people remain in the entire United States of 2073, with many of these being family members and neighbouring tribes in the Bay Area. A twenty-seven-year-old professor of English literature at Berkeley at the time of the plague, Smith is now an ineffective relic of a past time, and Hare-Lip, Hoo-Hoo, and Edwin listen to his tales with interest in the improbability of the fantastical world he describes, and confusion at his use of redundant cultural reference points. In this manner, the audience of Smith's story is not dissimilar to the magazine readership of early science fiction stories such as London's, both intrigued by the tales of a world radically altered by a scientific event, and generally unfamiliar with the genre to which they belong. Hare-Lip, who is related to the aggressive and animalistic Chauffeur, responds most negatively, sneering at Smith's vocabulary and at the mere notion of education; the practical and simplistic Hoo-Hoo tends to interrupt out of confusion, in order to ask questions; and the credulous, sensitive Edwin frequently comes to his grandfather's aid in explanation. The differing

responses of the boys thus appears to anticipate varying responses from London's audience, with the most sympathetic being Edwin, the boy who is most receptive to the imparted knowledge and wisdom from the old storyteller. The frequent references to the savagery of all the children, however, clad in animal skins and unable to fully appreciate the world Smith describes, seems to suggest a general disappointment in the imagination of the audience of fantastic tales.

Relaying the tale of the apocalypse, Smith describes the movement of the disease as one advancing west from the Old World to the New: "London, the greatest city in the world, next to Chicago, had been secretly fighting the plague for two weeks" before it moved to New York, "that noblest city of America" (62), 35 to Chicago, and finally San Francisco. The movement from England to the East Coast of North America across the continent to the West Coast evokes the expansion and urbanization of Euro-American civilization, and with the arrival of the plague in the pinnacle of Western civilization, California, Smith is certain the entire world must have fallen: "What happened with us in California must have happened with everybody everywhere" (110). 36 This trajectory also evokes the historic belief in "translatio imperii," "the westward movement of civilisation in pursuit of the sun" (Lawson-Peebles 13). The supposed progress of civilisation from east to west is here translated to refer to industrialization and modernization as a plaque threatening life itself. Speaking of the repopulation of the Earth, however, Smith hypothesizes that the Bay Area tribes will one day "start across the Sierras, oozing slowly along, generation by generation, over the great continent to the colonization of the East—a new

³⁵ With the exception of a single mention of a copy of *The Scarlet Plague* held by Sonoma State University, references to *The Scarlet Plague* refer to the pagination of the 1915 Mills & Boon first edition.

³⁶ The fall of America equated with the fall of the world reappears in Chapter 4 with *The Day of the Triffids* (1951) and *I Am Legend* (1954).

Aryan drift around the world" (143). The assumption is that the white Americans are singular in having survived, and that, in a manner exceedingly similar to the ending of "The Unparalleled Invasion," unpopulated Asia will enable their expansion to the new frontier of the East. In a reversion of *translatio imperii*, white Americans are to expand eastward around the globe in the latest cycle of civilisation.

The trajectory of the white American survivors of the Red Death repopulating the world bears a similarity to the intended trajectory of the savage Hare-Lip, Hoo-Hoo, and Edwin inheriting Smith's library, which he stores in a cave on Telegraph Hill. As Kenneth B. Kidd describes, in late-nineteenth- and early-twentieth-century America boys were permitted and even encouraged to enact their supposed primal and savage instincts through play, with the idea that "the Caucasian boy would leave behind his natural savagery" (16). "Character building" of this kind, which emphasized the independence and resourcefulness needed in adult life (14), saw the formation of organizations such as the Boy Scouts of America, founded in 1910. The ideology connecting immaturity to "savage" pursuits in nature, and maturity to white, Euro-American civilization, is similarly the kind of ideology which supported the colonization of North America and the displacement of Native Americans. As Patrick B. Sharp explains, "Early European Americans saw themselves as superior to the 'savages' they encountered in the new world," and "saw themselves as progressing towards a new type of civilization" (13). Crucially, the presentation of Native American as Other suggests they are "permanently primitive, in contradistinction to the temporarily primitive or juvenile white male self" (Kidd 53). It is perhaps no coincidence, therefore, that the phenomenon which enables the repopulation, a necessary state of affairs in the youth of a new

world order, is termed the *Red* Plague,³⁷ and that London uses terms such as "squaw" (*Scarlet* 129) and "moccasins" (134) in his post-apocalyptic and savage world. The Native American-like traits exhibited by the boys which so unsettle Smith are depicted as a necessary but nonetheless temporary phase in the ascent of white Americans, after which they are expected to return to the stashed knowledge of Smith's library and enter a new era of prosperity and world domination, truly the heirs of humanity now that all other races are eliminated.

Many of Smith's descriptions of the downfall of San Francisco appear to be drawn directly from London's account of the San Francisco earthquake and fire, in which he describes his experience of the disaster as like being one "of the handful of survivors after the day of the end of the world" (117). Scarcely making mention of the earthquake itself, which "smashed" all the "cunning adjustments of the twentieth century," "The Story of an Eyewitness" focuses to a large degree on the "conflagration" which followed (114). As in *The Scarlet* Plague, the destruction is complete, egalitarian, and indiscriminate: "With me sat Japanese, Italians, Chinese, and negroes—a bit of the cosmopolitan flotsam of the wreck of the city. All about were the palaces of the nabob pioneers of Forty-nine. To the east and south at right angles, were advancing two mighty walls of flame" (117). In his *Collier's* piece, the fire renders San Francisco as "like the crater of a volcano" (118); in The Scarlet Plague "San Francisco spouted smoke and fire from a score of vast conflagrations that were like so many active volcanoes" (96). The smoke from the fires in London's account "swayed in the sky, reddening the sun, darkening the day, and filling the land

³⁷ London's inconsistency with the name of the plague is also shown by the naming of an excerpt from the story published in the St. Louis Post-Dispatch as "The Red Plague" in 1915, after both the magazine publications and the publication of the first book edition all bore the title "The Scarlet Plague." The *Red* Plague may also refer to communism, given London's socialist beliefs and the fact that the first Red Scare was to occur in 1919-20.

with smoke" (114), and in his story "the smoke of the burning filled the heavens. so that the mid-day was as a gloomy twilight, and, in the shifts of wind, sometimes the sun shone through dimly, a dull red orb" (84). In these parallel descriptions, London presents the burning city of San Francisco in the grips of an apocalyptic inferno suggestive of Dante Alighieri or the Book of Revelation. The reddened, partially obscured sun also brings to mind several texts analysed in Chapter 1 in which the solar system and humankind fall in tandem, such as Byron's "Darkness" (1816) and Wells's The Time Machine (1895). As with these examples, the image of the sun being smothered in the daytime suggests the setting of the sun on the modern American city, and by extension the human race as a whole. As the "tens of thousands fled before the flames [...] burdened with possessions" in 1906 (115), so the populace of 2013 "fled from the city by millions" (39). While London reports that the government "has the situation in hand," however, protecting the victims of the earthquake and fire from "the slightest possibility of a famine" (118), Smith recalls the plague ridden citizens "starving and pillaging the farmers and all the towns and villages on the way" (74). The story thus presents what might have occurred had the infrastructure of the United States more widely fallen into disarray or been too slow to act, with the city spreading out, disease-like, to corrupt the surrounding countryside.

The plague itself shows the influence of Poe on London's writing, in its similarity with his "The Masque of the Red Death" (1842): both are highly contagious and fast acting, and both manifest with "scarlet stains upon the body and especially upon the face of the victim" (Poe, "Masque" 192). As well as similarities in symptoms, both stories refer to the plague as the "Red Death," and describe the discoloration interchangeably as scarlet or red. Just as in Poe's story Prospero attempts to find refuge in his remote abbey, so London's

plague is exacerbated by the overcrowding of urban centres, and Smith only avoids contamination by quarantining himself in the university. While certainly evoking Poe's Red Death, Reesman suggests the story is strangely prophetic in its use of a worldwide plague, published as it is just a few years prior to the 1918 Spanish Influenza pandemic which killed between 50 and 100 million worldwide (226). London himself, however, had other ideas of the plague's pertinence to the issues of the day.

THE BOOK PUBLICATION OF THE SCARLET PLAGUE

London first pitched the "20,000 word pseudo-scientific story" under the title *The Scarlet Death* to George P. Brett, American president of Macmillan Company, in April of 1910 (Letter to G. P. Brett 1). Brett wrote back with interest, telling London that the description "promises an interesting story and I hope you will let me have the copy of it for my own reading just as soon as it is done" (Letter to J. London 2). Despite this initial interest, when Brett finally read the story in 1915, he wrote to Charmian that "because I was much puzzled as to the appeal of this at the time, I submitted it to our readers and they all speak of it with great praise but they do not quite see its connection with the present situation of the world as closely as I should like" (Letter to C. London 2). London himself suggests that this contemporary relevance should be clear:

It was written a couple of years ago by me and yet it is so apropos of the present great war in Europe that one reading it for the first time now might almost think that I had written it as a satire on the present war in Europe. It is very apropos and I think has some chance of making it as some sort of a book. (Letter to G. P. Brett, 19 Dec. 1914 1)

Brett and London are likely connecting the Scarlet Death with the widespread diseases experienced by soldiers in the insanitary conditions of the trenches in Europe, as well as seeing the pertinence of the descent into barbarism and violence of the desperate population of London's San Francisco under the threat of the plague. Just as the story bore relevance to the San Francisco earthquake and fire, so too did it bear relevance to the violence inflicted on modern European cities in 1915. While disappointed by the reactions of his staff, Brett took London's suggestion that they publish *The Scarlet Plaque* in book form in April of 1915, padding out the short work with illustrations by Gordon Grant. Two weeks before publication, Brett was optimistic for the book's prospects: "it will, I hope, give a good account of itself in the way of sales of the publication" (Letter to J. London, 6 Apr. 1915 2). Short of the contractually required number of books from London for the year, and following the limited success of his recent publications, the publication of the story in book form seems an attempt to reach out to a fading audience by presenting work of a genre atypical of London's oeuvre. Macmillan produced 5,105 copies of the first edition (Sisson and Martens 80), more copies than the longer 1914 collection which contained "The Unparalleled Invasion," The Strength of the Strong (76), though far less than other contemporary works such as *The Star Rover* of 1915 (84). A year later, however, fewer than half of these had been sold (The Macmillan Company 2).

It is perhaps unsurprising, given its appropriateness to the Great War, that the UK edition was both produced and sold in greater numbers. Mills & Boon, who published London's novels in the UK, resumed business in January of 1915 after the outbreak of war the previous summer (C. Boon 1). Charles Boon of Mills & Boon and Hughes Massey, London's English agent, planned a

"boom" of London's work through 1915, "the idea being to keep up the market despite the war and the fact that publishers and the trade in general are mourning the loss of sales, etc." (Massey, Letter to J. London, 10 Mar. 1915 1). In accordance with London's preference for his work to appear first in the US, an agreement was drawn up in July 1915 for Mills & Boon to publish *The Scarlet Plague*, and by December 10,028 of the 12,500 copies printed had been sold, almost making back London's £75 advance for the book (Mills & Boon 1). This greater success in sales suggests London's idea of the appropriateness of the book to the war may be vindicated, but it also highlights Britons' need for distraction in literary fiction at a time of general hardship. It may also, as with the early uptake of the story by *The London Magazine*, suggest a more immediate reader-base for science fiction in the country that saw the popularization of the genre with H. G. Wells.

The US and UK editions were largely similar. Both were small, affordable books: the Macmillan edition sold for \$1, and the Mills & Boon edition for 1 shilling. The most remarkable difference was the lack of the Gordon Grant illustrations in the UK edition. Perhaps because of a difficulty in shipping illustrations across the Atlantic, as later occurred between Macmillan and Mills & Boon with Charmian's *The Log of the Snark* (1916), or because of wartime shortages, the UK edition of *The Scarlet Plague* lacks the "magnificent possibilities" of a "dandy set of illustrations" that London envisaged for the book (Letter to G. P. Brett, 19 Dec. 1914 1). Grant's pen and ink illustrations for the Macmillan edition, almost always included with subsequent publications of the story, lend a great deal to conveying the mood of London's post-apocalyptic world. Seldom portraying the landscape of the 2073 Bay Area, Grant focuses instead on character portraits, showing the descent of humanity in the change

from the formal attire of citizens in 2013 to the animal skin-clad grandchildren of Smith in the story's present. Two illustrations in particular, which are highlighted by the format of the book, express succinctly some of its most central themes. Inside the hard covers at the front and rear of the book are reprinted an illustration showing the falling to Earth of the last airship of 2013's upper classes. In this simple image the power of both the wealthy classes and modern technology is shown to have been equalized in the apocalypse. Social capital, money, and machinery are all rendered redundant with humanity's return to an agrarian society living according to the crudest contemporary interpretation of "survival of the fittest." The second illustration to be privileged in the book is of San Francisco aflame, witnessed by the silhouetted forms of the city's former inhabitants, and dwarfed by a cloud of smoke in the shape of a human skull. Captioned with the excerpt from Smith's story, "All the world seemed wrapped in flames" (96), the illustration serves as the US first edition's frontispiece. Clearly reminiscent of the firestorm following the 1906 San Francisco earthquake, the image highlights the many similarities between the story and London's account of the city's lived experience of destruction.

CRITICAL RESPONSES TO THE SCARLET PLAGUE

Despite its clear relevance to recent and ongoing world issues in 1915 critical reactions to the novella were remarkably mixed. This can be seen in the many contemporary clippings in Box 517 of the Jack London Collection at the Huntington Library in San Marino, California. Many reviewers who were otherwise fans of London saw promise in the ideas of the story that was lacking in its execution: the *New York City Bookman* wrote that "it's rather discouraging that with all the rich imaginging [sic] shown, this prince of American story-tellers

couldn't have made a better story of it" (Colbron); the *Pittsburgh Sun* wrote that in the hands of Wells the possibilities might have been "stupendous," but that in London's hands we see "but a glimpse of them" ("The Scarlet Plague by Jack London"); and the *Los Angeles Times* felt particularly aggrieved, citing the book as "perhaps the poorest, cheapest, most inconsequential and least pleasing piece of work from the point of artistry or entertainment that Jack London has ever done," an example of "the shoddy, scamped work that is sometimes, but not often, done by authors who are not scrupulous regarding the guarantee offered by their names on the title pages" ("Jack London's Latest"). Among the reviewers who praised the story were several who noted the contemporary relevance of its re-release. Philadelphia's *The North American*, for instance, noted the pertinence of a story about a global plague during a time of war, writing that the story is "of very great present significance, over which many readers will ponder with anxious misgivings and more than passing interest" ("Reversion to Barbarism").

While many publications ran adulatory reviews of the book, London himself perceived the reaction as predominantly negative, as he remarks in an inscription to his friend Ida Winship written in a copy of the US edition: "Like the brook, with my books I go on forever. Here's another. Just a skit, however, though the reviewers took it as a serious man-size effort and gave me hell accordingly." The lack of consensus among reviews, as well as London's own loss of faith in the story reflected in this inscription (after having enthusiastically pitched to US and UK magazines and then to US and UK book publishers) is perhaps to be expected for a science fiction book by an author not well known in his lifetime or since as a writer of science fiction. It also further emphasizes

³⁸ J. London, *The Scarlet Plague*, Sonoma State University.

the difficulty of securing an adequate venue for the science fiction story in the early twentieth century.

This did not cease after London's death in 1916. In 1919, H. L. Mencken described *The Scarlet Plague*, among others, as being "little more than garrulous notes for books" released only due to the speed with which London published (141), and Maxwell Geismer in 1953 dismisses the story as "a rather tedious fantasy of universal destruction, written for children" (210).³⁹ This critical resistance to the story, however, does not seem to have greatly affected the afterlife of *The Scarlet Plague*, which continued to be reprinted in magazine and book form throughout the twentieth century, until receiving more understanding critical treatment from London scholars such as Labor, Reesman, and Walker. Since these the story has gradually begun to enter critical discourse, with Michael J. Martin's "American Crossroads: London, McCarthy, and Apocalyptic Naturalism" (2013) a rare recent example of sustained and thoughtful analysis.

THE AFTERLIFE OF THE SCARLET PLAGUE

Following its initial run of first editions, *The Scarlet Plague* was most often republished in book form alongside other stories by London, with the novel *The Sea-Wolf* (1904), the short stories "Love of Life" (1905) and "The Unexpected" (1907), with the science fiction story *Before Adam* (1907), or, most commonly, alongside *The Call of the Wild* (1903) and *White Fang* (1906), emphasizing the focus in *The Scarlet Plague* on the resilient power of the natural world to outlive human civilization. The story's republication in magazines in particular is worthy of further comment.

³⁹ One might be forgiven for viewing *The Scarlet Plague* as a story for children considering the 1915 first edition's large typeface, wide margins, and numerous illustrations. It is unclear from Geismer's book, however, if he is referring to these elements of the bibliographic code or merely bases his idea on the story's being a "fantasy."

Beginning in September 1922, *The Red Seal Magazine* published the story in four parts. Heading the four sections with the words "Each Part a Complete Story" (28), *The Red Seal* makes a bold claim about their reformatting of *The Scarlet Plague*, a story originally of six parts. In particular, the assertion that the novella can be split into four "complete" stories suggests that editors felt that its content was of sufficient merit to warrant division and detailed scrutiny. The decision of the magazine to republish the story in this year speaks to the relevance London and his reviewers drew between the story and the First World War. With homelessness, famine, and disease still rife in Europe and Russia as a result of the war, and in a literary scene that was to see T. S. Eliot's *The Waste Land* published in magazines in the UK and US in the same year, London's story of "the city of death" is an apt choice (J. London, *Scarlet Plague* 85).⁴⁰

A further example of the story's perceived relevance to wartime is its republication in *Famous Fantastic Mysteries*. Originally brought out in 1939 by the trailblazing pulp publishers the Munsey Company, *Famous Fantastic* was "among the most important" early science fiction magazines, and specialized in reprinting classic stories (Madison). The magazine republished three London science fiction stories, *The Star Rover* in 1947, "The Shadow and the Flash" (originally published 1903) in 1948, and *The Scarlet Plague* in 1949. The single issue in which *The Scarlet Plague* appears dedicates its cover to the story, with an image of a gold-bikini-clad woman draped over a scarlet globe, captioned with the words "Jack London's Gripping Novel of a World's End." While typical of the covers of *Famous Fantastic* (Walker, "Famous Fantastic" 24), the choice

⁴⁰ *The Waste Land* was published in the UK in *The Criterion*'s October 1922 issue, and in the US in *The Dial*'s November 1922 issue. For more on *The Waste Land* and its portrayal of London as a city of the dead, see Chapter 3.

of a pin-up-style image to advertise a story in which only one woman, Vesta Van Warden, appears as an important character, and in which none of the characters wear gold bikinis, is a misleading attempt to bring in a wider audience through sexual suggestion. The Red Seal, too, places the story alongside troubling portrayals of women. The first part appears beside a poem by Douglas Malloch in which the mother of a family is expected to do far more than her share of the work on a camping holiday, and a story by T. E. Holloway in which a man abandons his wife to visit a show and ogle chorus girls. Appearing beside the second part of the story are a number of particularly vicious sayings about red-haired girls and their inadequacies in the opinion of the writer. Certainly, someone with a prejudice might read *The Scarlet Plague* as suited to their views on women, given Smith's frustrations over not being able to possess Van Warden: "Why should Vesta not have been mine? I was a man of culture and refinement, a professor in a great university" (130-1).41 As Bennett Lovett-Graff points out, however, the "fallible narrator" of Smith makes the irony in the story "trenchant," as with all the crimes of the pre-apocalyptic world Smith highlights "he will reveal in himself to be remarkably blind to his silent complicity in their perpetration" (96). Whether or not London intends Smith to be a figure of ridicule for his regressive attitudes towards women, the lack of well-rounded female characters in the story does nothing to dissuade readers from identifying with those attitudes.⁴²

Within the issue of *Famous Fantastic* itself, the many advertisements give an indication of the expected readership and situate the story within broader issues of the time. Prominent among the advertisements are G. I. Bill-

⁴¹ Or even, indeed, as supporting prejudice towards a *plague* of the *scarlet*-haired.

⁴² London does correct this elsewhere in his writing, in particular with the female narrator in *The Iron Heel*.

eligible training programs and courses, with a focus on skills-based self-employment such as electrical, plumbing, refrigeration, and shoe repair.

Besides these are advertisements for the sale of denim clothing, horse saddles, and services related to breaking and training horses. The indication given by these advertisements of the readership suggests one of returning servicemen with a propensity to working with their hands, and a self-sufficient, semi-rural lifestyle, rather such as London himself. Accordingly, the story of a time of complete self-sufficiency and life in a fully rural post-apocalyptic America seems highly appropriate to the magazine's expected readership.

Immediately preceding the story is a one-page tribute piece on the author M. P. Shiel. This seems an intentional pairing with *The Scarlet Plague*, given Shiel's writing on colour-based threats (*The Yellow Danger* [1898], *The Purple Cloud* [1901], and *The Yellow Wave* [1905]), Walker's suggestion that Shiel may have been an influence on London, and the parallels to be drawn between Shiel and London's "Yellow Peril" writing. The piece on Shiel thus serves to introduce London's little-known science fiction as a part of the canon of early science fiction writers, while also highlighting the troubling ideas of race held by both writers.

Opening *The Scarlet Plague* itself is a new illustration by Finlay
Leydenfrost spread over two pages, a dark, vivid image of the violence and
destruction witnessed on Smith's journeys through the dying city of San
Francisco. Beside the excerpt "I stumbled upon bodies everywhere... even as I
looked, men sank down with the death fastened upon them" (93), the illustration
foregrounds the violence of the story in its depiction of ruined buildings,
wrecked cars, the twisted bodies of plague victims, and the fights and fires of
those still living. Notable in this image of destruction is a series of partly-toppled

classical pillars and a pair of monuments resolutely standing. Similar to the manner in which Mary Shelley uses Rome and the Coliseum in particular in *The Last Man* (1826), as discussed in Chapter 1, these ruins stand as monuments to the eternal cycles of the rise and fall of civilizations. The illustration thus powerfully foregrounds the predominant issue of the story: the relentless cycle of the rise and fall of modern urban life. As Smith remarks to his savage grandchildren, "The human race is doomed to sink back farther and farther into the primitive night ere again it begins its bloody climb upward to civilization" (Jack London, *Scarlet* 35). It is a climb characterized by its violence, as Smith expects to see the rediscovery of gunpowder in this new cycle of modernization: "the same old story over and over. Man will increase, and men will fight" (150).

CYCLES OF URBANIZATION AND MODERNIZATION

The Scarlet Plague opens with immediate reference to the reclaiming by nature of the once modernized urban environment: "The way led upon what had once been the embankment of a railroad. But no train had run upon it for many years. [...] The trail was as narrow as a man's body, and was no more than a wild-animal runway" (9). Where once trains had serviced the city through transportation, industry, and commerce, the land has since been reclaimed by nature, and the tracks are now merely a rough trail for primitive humanity and other animals. The evidence of the "rewilding" of the once metropolitan San Francisco, to quote environmentalist Dave Foreman, appears throughout the novella. Smith describes the effect on once cultivated land of the sudden absence of humans in positive terms, due to the new abundance of unharvested crops. The final image of *The Scarlet Plague* in particular stresses the positivity of a world returned to wilderness, as Edwin contemplates a herd of

wild horses playing on the beach at sunset: "There were at least twenty of them, young colts and yearlings and mares, led by a beautiful stallion which stood in the foam at the edge of the surf, with arched neck and bright wild eyes, sniffing the salt air off the sea" (152). The passage stresses the beauty of life returned to an undomesticated state of freedom, and leaves the reader with a final image of the post-apocalyptic Bay Area as a place of at least some peace. The placement of these wild animals on the shore, together with the "sea-lions, bellowing their old primeval chant," evokes a similar symbolism to that used in Wells's Time Traveller visiting the de-evolved London shore of the future, a place of liminality in the development of species and civilizations. The young colts, as with the "skin-clad and barbaric" boys, will progress at some point to mature civilization, but there appears for now to be a certain exultation in their relationship with nature (153). The scene is not one devoid of threat, however, for the wild horses are apparently on the beach because of the "mountain lions getting thicker and thicker and driving 'em down," as Edwin suggests (152). The wilderness has created new dangers: pigs and cats become wild, driving chickens and ducks to extinction, a "veritable plague of dogs" devolve to a wolflife state (113), and horses, sheep, and cows become undomesticated and run wild. The flourishing of the wild world and the sudden evolution of species no longer under the dominion of humanity is particularly reminiscent of the first part of Jefferies's After London, suggesting, as Walker hypothesizes, that London may have been influenced by the novel. These dangers seem necessary, however: it is the threat of mountain lions which creates the meditative moment at the novella's end, just as the boys' savagery is a necessary stage towards the supposedly optimistic future of white Americans spreading across the globe.

For the plague survivors to first reach the relative safety of rural regions, however, they depend on modern technology to escape San Francisco. The wealthy classes board airships "for the wilds of British Columbia" (79), Smith relies on a motor-car to thread the ruined streets of the city back to the safety of the Berkeley campus, and it could be presumed that Smith's nemesis, Chauffeur, escaped by the means suggested by his name and former profession. As with Robert Barr's "The Doom of London" (1892), Verne's The Eternal Adam (1910), and Doyle's The Poison Belt (1913), the personally piloted automobile is essential for survivors to flee the apocalyptic dangers of the urban environment. In contrast, the failure of public transportation and freight services causes chaos: "All railroads and vessels carrying food and such things into the great city had ceased running, and mobs of the hungry poor were pillaging the stores and warehouses" (74). The collapse of public transport seen in these scenes, as with the opening scene of the overgrown railroad and the privileged position afforded the private motorcar, may well have been vindicating for urban commuters reading London's story in the *London* Magazine and Hearst supplements, whose days were dictated by the scheduling and functioning of railways and streetcars. Similarly, the failure of modern communication in the form of both telephones and newspapers leaves the population of the novella disoriented: "It was amazing, astounding, this loss of communication with the world. It was exactly as if the world had ceased, been blotted out" (78). Smith refers to the last wireless operator as "a hero" for staying at his post (75), and finding himself isolated by the failure of technology experiences "a night of terror" (81). Modern technology is thus treated with some ambivalence: reliance on the infrastructure such as public transportation and mass communication renders one impotent in their absence, but the

independence afforded by personal automobiles can enable a form of self-sufficiency, at least until the gasoline runs out. Smith, emblematic of the reliance of the city-dweller on the luxuries of modern technology, is shown to be ineffective in a catastrophe for his lack of self-sufficiency. The ambivalence towards modern technology and the focus placed on the strength of the individual clearly bring to mind London's experiences navigating the burning city of San Francisco, whose downfall was so precipitated by its modernization.

The detachment of Smith from his present is further highlighted in the manner in which Chauffeur, who has always worked with his hands, flourishes in the post-apocalyptic world where Smith invariably fails. Disconnected from the post-apocalyptic world and stranded with his now archaic worldviews, Smith remarks "I am the last man who was alive in the days of the plague and knows the wonders of that time" (142-3). In this manner, the story continues the themes of "last man" stories such as those by Shelley, the anonymous contributor to *Blackwood's*, and Thomas Hood, as discussed in Chapter 1. 43

Leaving many books in a cave on Telegraph Hill, much as the Sibylline leaves fill the cave of *The Last Man*, Smith serves as a warning against the destructive capabilities of modernity for future generations to piece together. It is unsurprising that London conveys this message in *The Scarlet Plague*, given the intensified effects of modernization on the destruction of post-earthquake San Francisco in 1906.

CONCLUSION

As with the texts analysed in Chapter 1, the publication of London's science fiction displays the emerging genre's peripatetic relationship with the form of

⁴³ This theme is also picked up in Chapter 4 with regards to *The Day of the Triffids* and *I Am Legend*.

magazines. As this form was reflective of the late-nineteenth- and earlytwentieth-century urbanization and industrialization of Britain and America and marketed towards a readership on the frontlines of these issues, London saw the appropriateness of the urban post-apocalyptic story and adapted his nonfiction writing on the San Francisco earthquake and the "yellow peril" to dramatize fears of modernization, globalization, and the innate drives of humanity. While London published only some short stories, novels, and plays which could be called science fiction, it is a testament to their enduring popularity that these works have remained in print and seen republication either serially in magazines or in book collections. These stories struggled to find their place in print during his lifetime, but the recognition of the genre of science fiction enabled by magazines such as Amazing Stories and Famous Fantastic Mysteries, as London had argued for in his piece on the "terrible and tragic," means that these stories have since more easily found an accepting audience. Although these stories have a readership for their science fiction elements they are not greatly detached from his other writing. London's often apocalyptic expression in these stories of the follies of modernization and urbanization means that, while their genre may be atypical to his oeuvre, works such as The Scarlet Plague with their theme of the primacy of the natural world and a selfsufficient, agrarian lifestyle, complement his more well-known works such as The Call of the Wild.

While these two chapters show the interconnectedness of magazines and science fiction, however, a slightly different dynamic is at work with their central texts. While *The Time Machine* changed considerably over the course of its first few magazine serializations, and to a lesser extent in its book publications, *The Scarlet Plaque* remained unchanged from London's typescript

to the published version available today. What can be seen through analysing its serializations, magazine reprints, and its inclusion in book collections, and through archival research into the circumstances of these publications, is not a text changed by the circumstances of its publication but a text whose meaning is adapted by those circumstances. As we have seen, its appearances after the 1906 earthquake, at the outbreak of the Great War, in the wake of the First World War, and after World War Two display the changing interpretations of *The Scarlet Plague*'s appropriateness to contemporary urban fears. While post-apocalyptic science fiction texts generally had less turbulent publishing histories after the rise of the science fiction magazine, a similar dynamic persists as the popularization of other media forms, particularly radio and cinema, led to a large number of adaptations.

Chapter 3:

Aerial Warfare in Radio and Cinema

The post-apocalyptic cities depicted in the fiction of the early Cold War years demonstrate that a significant shift has taken place since the period assessed in Part 1, 1890-1914. The years during which this shift takes place, 1914 to 1945, are described by W. Warren Wagar as the "second Wellsian" generation," a time during which science fiction received the recognition of its own dedicated magazines, and an increasing number of mainstream writers (for instance Stephen Vincent Benét, J. B. Priestley, and Aldous Huxley) turned their attentions to the eschatological (Terminal 24). 44 The beginning of this period roughly coincided with the height of literary Modernism, whose practitioners, such as Virginia Woolf and Willa Cather, often wrote with the sense that some epochal shift had taken place in the early twentieth century. Frank Kermode, in *The Sense of an Ending: Studies in the Theory of Fiction* (1967), sees this shift as being a metaphorical "apocalypse" in the Christian sense, a moment of significant transition resulting in revelation. Other critics, notably James Berger in After the End: Representations of Post-Apocalypse (1999) and Teresa Heffernan in Post-Apocalyptic Culture: Modernism, Postmodernism, and the Twentieth Century Novel (2008), have since taken up this idea to claim that the mode of representation labelled Postmodernism is "post-apocalyptic." Though the use of the terms "apocalyptic" and "postapocalyptic" to denote fiction depicting any shift or the aftermath of such a shift

⁴⁴ See Benét's *The Place of the Gods* (1937, later retitled *By the Waters of Babylon*), Priestley's *The Doomsday Men* (1938), and Huxley's *Ape and Essence* (1948).

risks diluting their usefulness, there is justification in assessing some works by Modernist writers with them in mind.⁴⁵

T. S. Eliot's "The Waste Land" (1922), to take one example, is replete with apocalyptic imagery, and one passage in particular connects this imagery to the modern city: "Unreal city, / Under the brown fog of a winter dawn, / A crowd flowed over London Bridge, so many, / I had not thought death had undone so many" (53). The depersonalization and loss of individual identity caused by crowds here brings to mind the fear of overcrowding of urban centres discussed in Chapter 1. As Eliot's notes indicate, however, there is more going on in these lines, which reflect an altered view of the urban experience in the years since the mechanized slaughter of the Great War. The "Unreal city" is a reference to Charles Baudelaire's "Les Sept vieillards" (1859), and its "fourmillante cité" ("fourmillante" can be translated as "bustling," "teeming," "swarming"; interestingly, the root fourmi means "ant"). Baudelaire's poem continues "cité pleine de rêves, / Où le spectre en plein jour raccroche le passant" (translated as "city full of dreams, / Where spectres in broad day accost the passer-by"). The following two lines of Eliot's poem, "A crowd flowed over London Bridge, so many, / I had not thought death had undone so many" (69), are a reference to the *Inferno* section of Dante Alighieri's *Divine Comedy* (1320), pairing the passage across the Thames into the city with the passage across the river Styx into hell. Eliot portrays the inhabitants of London as doomed, as dead men walking. Resigned, the crowd marches on towards the "dead sound" of the knell of Saint Mary Woolnoth's church (53). The ant-like swarm of the mass population thus displays not only a loss of individuality, but

⁴⁵ D. H. Lawrence's last major work, *Apocalypse: and the Writings on Revelation* (1931), for instance, which is given thorough treatment in Kermode's essay "Apocalypse and the Modern" (1985), makes the use of these terms seem very much justified.

of the value of human life. These individuals march across London Bridge to work in a centre of modernity just as the British troops marched across noman's-land towards certain death, facing that military application of modernity, the machine-gun. London itself is a place haunted in broad daylight by the spectre of its own double: at once a living, teeming city and a place evocative of a hellish city of the dead, caught in a state of living death.⁴⁶

The 1920s and 1930s saw several works of fiction featuring apocalyptic visions of urban destruction: Edward Shanks's The People of the Ruins: A Story of the English Revolution and After (1920), Cicely Hamilton's Theodore Savage: A Story of the Past or the Future (1922), S. Fowler Wright's Deluge (1927), Olaf Stapledon's Last Men in London (1932), and John Collier's Tom's A-Cold (1933) are just some of those which are set in England—many other examples exist, set elsewhere in the world. With the Second World War, however, this production declined, and the 1940s was a decade of decreased cultural production, in which, as Wagar writes, "Writers were too busy surviving the horrors of the historical apocalypse to have much time left over for inventing terminal fictions" (Terminal 26).47 These were the years in which urban life in the UK and US came under threat as never before, as fascistic and tyrannical regimes demonstrated the capabilities of plenitudinous state power, and technological advances placed cities and their civilian inhabitants directly in the crosshairs of military strategists. Three things in particular—area bombing, the Holocaust, and nuclear weapons—resulted in a reimagining of the city after the Second World War, highlighting as they did the vulnerability of urban citizens

⁴⁶ Cecilia Enjuto Rangel points out that "the metaphor of the sterile city as desert" in Luis Cernuda's "Otras ruinas" (1949) "clearly alludes" to this passage of Eliot's poem (42). As Cernuda was writing after witnessing the German bombardments in London, this demonstrates the relevance of Eliot's imagery to the portrayal of a city under aerial attack.

⁴⁷ For British fiction of the Second World War, Adam Piette's *Imagination at War: British Fiction and Poetry 1939-1945* (1995) and Mark Rawlinson's *British Writing of the Second World War* (2000) are central works.

who are housed in a military target and subject to the rule of ever-watchful powers.

AERIAL BOMBARDMENT

The immolation by indiscriminate area bombing in Asian and European cities, reflected on a smaller scale in Britain, ⁴⁸ showed how not only the physical structure of cities, but also the culture of its people (its schools and universities, libraries, art galleries, and so forth) could be entirely wiped from existence, a process termed "culturecide" by philosopher A. C. Grayling. This is to say nothing of the revelation that was to come of the instant obliteration and protracted suffering brought about by atomic weaponry in Hiroshima and Nagasaki (of which more will be said later). There had been much discussion prior to the war on the morality of not only area bombing (which targets civilian populations in cities in order to damage morale) but aerial bombing as a whole. The use of balloons as a means of dropping explosives "became a weapon of theoretical terror, whose appearance in the sky portended a more sinister

⁴⁸ The quantity of attacks in continental Europe and Asia, particularly incendiary attacks, represented a significantly greater scale of destruction than that experienced in Britain. The raid on London of December 29, 1940 "almost obliterated the city," and the eight-month period of September 1940 to May 1941, according to A. C. Grayling's figures, saw 30,000 dead and 50,000 injured in London raids (43). Attacks such as this were clearly not insignificant, but a brief look at continental Europe and Asia shows the difference in scale. In "Operation Gomorrah," the incendiary raids on Hamburg carried out between July 24 and August 3, 1943, it is not known exactly how many died, but "at least 45,000" were killed with many more injured and half the city destroyed, "a total of 30,480 buildings according to official contemporary German figures" (20). In the attacks on Dresden of February 13 and 14, 1944, 650,000 incendiaries were dropped (72), levelling the city and killing huge numbers of people with figures still debated as being somewhere between 25,000 and 150,000 (333). These are the two biggest attacks carried out by Allied bombers in Germany, both resulting in huge casualty figures over short time periods, though many other major cities were hit with enormous casualty figures and vast destruction of buildings. The attack of March 9 and 10, 1945 against Tokyo (the first of four incendiary attacks on major cities in Japan, where most buildings were made of wood), killed an unverifiable number, but a number certainly higher than 85,000 people, and possibly up to as many as 185,000 (77). This was the most destructive of the area attacks and the death and destruction in this single attack was greater than either of the atomic bombings of Hiroshima or Nagasaki. Of course, what is important in discussing the effects of bombing raids on the city's security in the minds of its citizens is not only the actual implementation of such tactics, but also the fear that the city might be targeted in the future. In the UK the damage caused in the bombing raids, the upheaval of mass evacuations, along with the news of the vast area bombing taking place overseas, meant that the difference in casualty figures could not assuage fears of potential destruction from the air.

outcome than it could actually deliver," which became apparent in its experimental implementation (Vanderbilt 53). Its moral dubiousness, along with its limited practical application, therefore, meant that as early as 1899 a convention at The Hague agreed to "prohibit, for a term of five years, the launching of projectiles and explosives from balloons, or by other new methods of a similar nature" (gtd. in Grayling 123). With the significant advances made in flight in the years leading up the First World War, however, the potential of aerial warfare became far greater. The Hague agreement, intended as a stopgap until more permanent laws could be put in place, was renewed in 1907 and then allowed to expire, as it became clear that attacking the ground by air was to become integral to modern warfare. Bombing became a fearsome new aspect of warfare which redrew the frontlines and enlisted cities and their civilian inhabitants as combatants. Leo Mellor writes of the Zeppelin raids in the First World War that "the attacks on London had a huge effect in terrifying both the general population, for whom air attack represented a paradigm shift in the front line, and writers, who now could see the British city as filled with actual not merely potential—bombsites" (14). So great was the anxiety regarding the aerial bombing of UK cities that in 1939 the government put detailed plans into place to accommodate the vast numbers expected to die in the cities and the flood of refugees expected to pour into the countryside, plans that significantly overestimated the actual threat.

The spectre of bombing campaigns against cities of course featured frequently in literature, a memorable example being the ominous "great black bombing plane" (16) that haunts George Bowling throughout George Orwell's *Coming Up For Air* (1939). Prescient works of science fiction imagined the horrors of wars fought by air, with the destruction of New York in H. G. Wells's

The War in the Air (1908) and Europe in his The World Set Free (1914), and the extermination of the entire population of China in Jack London's "The Unparalleled Invasion" (1910) among the most disturbing. The actual implementation of area bombing, however, seemed to paralyze the minds of many writers of fiction until years after the end of the Second World War. Nonfiction accounts, too, were affected. Winston Churchill's scientific advisor Solly Zuckerman, for instance, had been instrumental in organizing the British bombing campaigns in Germany. Zuckerman visited Cologne in 1945 with the intention of writing an article for Cyril Connolly's influential cultural magazine Horizon on the effects of the attacks. The scenes he found, however, left him unable to write at all: "My first view of Cologne, and particularly of the cathedral, cried out for a more eloquent piece than I could ever have written" (322).49 W. G. Sebald notes that German accounts, in particular, are very few and far between, and those that do exist, the "literature of the ruins," exist as "an instrument already tuned to individual and collective amnesia, and probably influenced by pre-conscious self-censorship—a means of obscuring a world that could no longer be presented in comprehensible terms" (9-10).

Some accounts of the horror of such campaigns do exist, however, for instance in the diaries of Victor Klemperer, who was liberated on the eve of his deportation to the death camps by the Allied firebombing of his hometown of Dresden. Klemperer's diaries recount the attacks of February 13 and 14, 1945, as he and other survivors struggle to find their way through the city between smouldering bodies and the skeletal remains of buildings, with the

⁴⁹ The intended title for the piece was "On the Natural History of Destruction," a title later annexed for the English translation of a study by German writer W. G. Sebald (2003; German edition first published in 1999).

⁵⁰ Christopher Hitchens notes the irony that the "now overworked word 'holocaust' means literally 'destruction by fire': the old Klemperer couple escaped holocaust in one sense by passing through it in another."

firestorm raging around them. Despite the detail he includes of their movements, however, Klemperer notes himself that he was unable to notice much of what was happening around him, his whole attention being placed on following the other survivors with the hope of eventually reaching safety. "The death by fire within a few hours of an entire city," writes Sebald, "with all its buildings and its trees, its inhabitants, its domestic pets, its fixtures and fittings of every kind, must inevitably have led to overload, to paralysis of the capacity to think and feel in those who succeeded in escaping" (26). Area bombing of the kind inflicted on Dresden, Hamburg, and Tokyo has only recently begun to be addressed in detail, for years having been effectively repressed and, of course, eclipsed by the discovery of Nazi extermination camps and the dropping of the atom bomb. The unrepresentability of vast urban destruction is a theme not unique to Second World War writing, but one which recurs in writing about wars and traumatic events, as we saw with Jack London's reaction to the San Francisco earthquake and fire. A possibility posited is that a form of subconscious "psychic numbing" is at work in such cases, as a means of resisting traumatic possibilities from entering one's consciousness (Lifton 52). Though repressed from the conscious mind, however, postwar fiction exhibits a manifestation of this repressed memory in its fixation on urban destruction in speculative futures, something which will become apparent as we look at postwar radio and cinema.

It is for reasons such as these, as Wagar asserts, that the 1940s saw a much decreased output of eschatological fictions. As the dust settled, however, such fictions did not simply return to their pre-war homes of novels and magazines, but rather spread to newer media forms. As Susan Sontag writes in relation to science fiction films, though this also holds true for radio, "they can

supply something the novels can never provide—sensuous elaboration. In these films it is by means of images and sounds, not words that have to be translated by the imagination, that one can participate in the fantasy of living through one's own death and more, the death of cities, the destruction of humanity itself" (44). The visceral reality of urban destruction during the First and particularly the Second World War rather meant that these fictions found a home in forms of media which could more readily provide an immediate effect on the senses: in audio and visual representation.

THE RISE OF SCIENCE FICTION ON THE RADIO

In America, radio emerged from the war into what has become known as its Golden Age, which would last until the end of the 1950s. The ascendancy of radio was due partly to its earlier success in the 1930s, its indispensability as a source of news and entertainment during the war, and an increasing audience of car owners. Initially, the ending of the war and its war reporting left radio bereft of direction. It was from this moment of crisis that producers increased the variety and quality of shows to a level that saw, as J. Fred MacDonald demonstrates in *Don't Touch That Dial!* (1979), "some of the more impressive series in broadcasting history" (85). Horror and science fiction were key genres among this new breed of programming, which allowed the medium to compete, for a time, with the emerging television, a battle it was to lose by the 1960s.

Paving the way for postwar science fiction dramas was Orson Welles's now infamous "The War of the Worlds," broadcast on the eve of Halloween, 1938. Welles adapted Wells's novel to the setting of New Jersey and structured the story around fictionalized news reports and commentary, drawing upon the authoritative tone of radio anchors and the reassuring stability of the radio

schedule. In so doing, Welles managed, in much the same way as Wells had done in his manipulation of the conventions of journalistic and historical writing, to deliver a fantastical plot in a believable form. It was so believable, in fact, that a myth developed that American listeners had taken to the streets in panic at the broadcast. Newspaper reports at the time claimed that Welles and his team were responsible for causing panic on an enormous scale throughout the nation. As recently as 2006, Richard J. Hand has claimed that "hundreds of thousands took to the streets in panic" (7, emphasis added). MacDonald writes that "for millions of listeners fantasy became reality. [...] The impact of the broadcast was to create a near hysteria in the nation" (53, emphasis added). Accounts such as these suggest huge numbers of Americans were fooled so completely by the broadcast that they were driven into a manic state. At the end of the broadcast the press set upon Welles and his long-time collaborator John Houseman:

How many deaths had they heard of? [...] Had they heard of the fatal stampede in the Jersey hall? Were they aware of the traffic deaths and suicides? The ditches must be choked with corpses, Houseman thought. Then they were released, taken out a back exit. Houseman found it "surprising to see life going on as usual in the midnight streets." (Dunning 454)

In fact, there were no deaths linked to the broadcast. Of those whose dials were even tuned to CBS, the number of listeners who were fooled by the broadcast was small, and even fewer were taken in for long enough to panic.⁵¹ The myth

⁵¹ In part responsible for the exaggeration of the panic was the furore whipped up by the newspapers, and as W. Joseph Campbell suggests "the so-called 'panic broadcast' brought newspapers an exceptional opportunity to censure radio, a still-new medium that was becoming a serious competitor in providing news and advertising." Another significant contributor to the myth was a study published in 1940 by Princeton's Hadley Cantril. MacDonald lets down his otherwise reliable capsule history of radio by claiming that Cantril's study is a "thorough analysis," and by deferring to this for his evidence (373).

has nonetheless established the broadcast as an enduringly popular piece of radio history, and numerous productions of the play have since been made around the world. Instrumental in its popularity is the way in which the play places the listener in the centre of the story, to "participate in the fantasy" as Sontag writes, enabling them to rehearse the apocalyptic scenario in their imaginations (44). Indeed, such a rehearsal was even reportedly practiced by the military, which discovered through the broadcast the lack of American preparedness for invasion (MacDonald 373). The production galvanized interest in the power of science fiction on the airwaves, and in the postwar years radio "theatres" (i.e. series of self-contained episodes) such as *Quiet, Please* (1947-49), *Escape* (1947-1954), *Dimension X* (1950-51), and *X Minus One* (1955-58) delivered chilling science fiction stories to America.

Quiet, Please was written and directed by the highly experienced Wyllis Cooper, and episodes were presented simply with a small cast that would read in the manner of reportage rather than of the theatre: "The cast was told to play it straight: Cooper's pet hate was of 'acting,' and he wanted it related with a deadpan sense of 'here's how it happened'" (Dunning 559). As with Welles's adaptation of *The War of the Worlds* (1897), this straightforward relaying of events suited the format of a medium that was an established source of news and information, allowing the story to be more believable and immersive.

Towards the end of the show's run, two episodes of post-apocalyptic science fiction stand out.

"Adam and the Darkest Day" aired on November 7, 1948, and tells the story of three survivors sheltering in a Chicago warehouse after a nuclear war.

The three survivors are the narrator Adam (Ernest Chappell), Emily (Kathleen Cordell), and the sage old scientist Doc (William Adams). Adam recalls the living Chicago of his youth, relating his nostalgia for parks, lakes, and oceans, and the severity with which the apocalyptic change took place: "one minute, people were buying and selling things to each other—and talking and laughing and looking at the lake in the sunshine and stuff and just—just being people. And, the next minute, they were fighting and velling and killing each other and well, I guess just being people in another way." When Adam visits the surface the change he witnesses is total: "there wasn't any Chicago at all. Just a big, flat prairie; everything all grey." The image calls to mind the ashen ruins of cities levelled during the war by area and incendiary bombing, and especially of the wholesale destruction by atomic weapons, which rendered cities unrecognizable. The comparison of the ruins to a prairie, however, also returns America to the wild frontier. Patrick B. Sharp describes the "nuclear frontier story," a genre that combines "the wasteland imagery of literary Modernism with the frontier imagery of the nineteenth century" in which survivors must "battle with manifestations of savagery in order to establish a new America out of the wreckage of the old" (172). In removing the stability and rigidity of an urban landscape and returning it to virgin lands ready for exploration, "Adam and the Darkest Day" is emblematic of this trend. Not fully wild, however, the Chicago of the story is still functional in orienting the characters, as Doc uses the remains of the roads to tell the time of day: "Drexel Boulevard ran along this way. And and—and this was Forty-Third Street, east and west. [...] So the Sun's a little south of east. It's morning." Not fully reinvented as pioneers, the survivors rely on an urban mind-set that provides a physical map of the world around them. Though the city is dead, it still serves some of its prior function, a zombie place

raised from the dead to serve further purpose to the living. The Sun partially obscured by the nuclear winter, it is the built space rather than the natural world in which these characters continue to survive and interpret their surroundings.

As the story goes on, Doc reveals that the power of the bombs used in the war has thrown the Earth out of orbit. The "darkest day" of the title refers to the day when the Earth is furthest from the Sun, before it begins its journey back to its normal orbit. It is for that reason that the day is the darkest and also the "best," for "that'll be the day when we stop, and start back." The metaphor here is clear: though humanity reached rock-bottom in its use of nuclear weapons, this moment provides us the opportunity for self-reflection and a return to the light.⁵² The opportunities offered by the Hague conventions to curtail this extreme violence may have been missed, but it is the darkest day that allows the chance to start again. This is where the choice of Adam's name is explained, as the characters intend to reboot civilization, this time with the head-start afforded by scientific progress: "If the real old cavemen had to start from scratch and they had to learn everything—even two and two are four why, we cave people have a real live professor with us to show us all the shortcuts, Doc." Their initial optimism is short lived, however: humanity has learned too much in its pursuit of the sciences. These are characters forever tainted by the advances of humankind, just as Adam and Eve are banished from Eden for their acquisition of the knowledge of good and evil. The nuclear apocalypse, says Doc, "is the reward of science. That's the big payoff." Doc walks out into the cold to die, leaving a note that reads: "I'm a scientist, children, and I know too much." In fear of mutation, Adam and Emily never have children,

⁵² It also brings the mind "the midnight of the century," the term derived from Victor Serge that is used to denote the dark times culminating in the Nazi-Soviet pact of August 23, 1939. There are many examples of darkness and midnights being used in apocalyptic fiction to denote the lowest points of humanity's history, with a contemporary example being Josephine Young Case's post-apocalyptic poem, *At Midnight on the 31st of March* (1938), which was adapted for radio on *Author's Playhouse* in 1943.

and, Adam concludes, "The darkest day? [...] They're all dark now." Rather than risking a violent history repeating itself, Adam and Emily see the moral course of action to be to allow humanity to die out entirely, as the temptation to use knowledge for evil will always be too great to resist. Rather than reclaim Chicago, Adam and Emily allow it to die, with this knowledge entombed within.

Quiet, Please ended with a repeat of an eponymously titled episode on June 25, 1949 (first broadcast March 29, 1948). In the manner of Wells's *The War of the Worlds*, we are told of the fall of civilization on Mars, though in this case through war rather than a depletion of natural resources. The ruins of the Martian cities stand as monuments to a once idyllic and enlightened world: "I alone remember: this was a temple; and this a place dedicated to the arts; and there where the waves sped upon the beach the shattered walls of stone we made remain to mock us; and there where the white road was, is the desolation." It is the cities in particular that the Martian, Tor (Ernest Chappell), mourns:

Let me speak of the things that have perished. Our cities where people worked at a hundred occupations, and the muddied, brown slums of the cities and the great green parks. Go out tomorrow in your own city and set your feet upon the smooth concrete of the sidewalk. See the gleaming windows and marvel at the wonders within them that you men have created. And know that, too, I have done these things. And that I have seen man destroy them. And that I helped.

It is the city here that is the signifier of civilization, which provides a point of connection between the Martian Tor and the listeners of Earth. Though composed both of parks and slums, the cities are achievements of civilization

which Tor celebrates, but they are also the primary targets of civilization's self-destructive inclination. The obsession with wars experienced by the people of Mars has resulted in a dissolution of the cultural products of civilization, in the "culturecide" of nations, as expressed by Grayling. The Martian cities are laid flat by the very individuals who built and enjoyed them. As with the bombing campaigns of the Second World War, it is ordinary people who take up arms to destroy the great world cities they had so valued. It is with this message warning of a future in which humankind erases itself that Cooper chooses to end the series.

The series *Escape* was not one dedicated to science fiction, but rather a series devoted to high adventure that would sometimes include science fiction. Among its adaptations were works by Joseph Conrad, Rudyard Kipling, and F. Scott Fitzgerald, and, in 1948, of H. G. Wells's "A Dream of Armageddon" (1901). The original story, published in the magazine *Black and White*, is narrated by a man on his daily commute, who is told by a fellow passenger, Cooper, of a dream of the end of the world. Cooper's dream depicts a war in which new military airplanes, shaped like arrowheads and with small guns that fire explosive shells, are unleashed for the first time in a global war:

infernal things, silly things; things that had never been tried; big engines, terrible explosives, great guns. You know the silly way of the ingenious sort of men who make these things; they turn 'em out as beavers build dams, and with no more sense of the rivers they're going to divert and the lands they're going to flood! (1026)

Wells shows remarkable prescience for the future of aerial warfare, offering a warning against the type of military technology which would see use in area

bombardment. These technologies are shown to be the endeavour of a doomed species, which advances only towards new methods of its own destruction.

Though the premise remains the same, particularly in the emphasis on a war dominated by bombing, much of the details are changed in the adaptation for Escape. The protagonist, this time a future president named Eden, has the ability to prevent all-out war but chooses exile in order to marry beneath his station: "Perhaps they've finally decided to leave us alone," he remarks to his love interest, who responds "I hope so. I couldn't stand much more of it, our faces on every telescreen all over the world." Employing the word "telescreen," just a few months before it was to feature prominently in Orwell's Nineteen Eighty-Four (1949), is a change from Wells's story that reflects the fear ignited by the tyrannies of Hitler, Stalin, and Hirohito of an ever-watchful and omnipresent surveillance state. The cities in this story are in this way an initially oppressive environment, but with the onset of war they become the most dangerous places for the characters. Eden and his partner become refugees, avoiding the vast areas now contaminated with poison gas, and fearing murderous roving bands on the roads. They finally meet their end beside Roman ruins. Eden notes the "false feeling of peace" that comes over them as they rest beside stone walls that have been there for centuries. Just as the ruined Rome in Mary Shelley's *The Last Man* gives Lionel Verney a sense that his strife is minimized when set beside the cyclical processes of history, so too do the characters of "Dream of Armageddon" feel some comfort next to these monuments. The peace is violently shattered, however, as Eden's partner is machine-gunned by a plane, and jack-booted soldiers speaking in ambiguous Prussian-sounding syllables bayonet Eden and leave him to die. As the story closes he remarks that when the "flaming end" of humanity comes it will no

doubt be through "man's stupidity," echoing Wells's description of the beaver-like, amoral production of war materials.⁵³

SCIENCE FICTION'S "RADIO DAYS"

John Dunning writes that *Dimension X* was "radio's premier series of adult science fiction tales," appearing in 1950, the "year of S-F on radio" (199-200). Whereas Quiet, Please and Escape would only occasionally feature works of science fiction, Dimension X was the first radio series to be dedicated to the genre. That year, 1950, the show adapted Ray Bradbury's "There Will Come Soft Rains," a story that has subsequently been adapted many times on radio. The story tells of an automated house that continues to function after a nuclear apocalypse, attempting to wake its inhabitants every morning, cooking pancakes, and cleaning. All that remains of the family, however, are their shadows, burned into the outside wall of the house by a nuclear blast. The story is another that emphasizes ruins as monuments to a lost civilization, and how humankind's insistence on progress merely results in the building of more elaborate tombs. It is also one of the most successful post-apocalyptic stories in which destruction is absolute: there are no humans left to contemplate the fall of humanity, only the poetic image of machinery uselessly functioning in their wake.

The following year *Dimension X* adapted another Bradbury story, "Dwellers in Silence," sponsored by the magazine *Astounding Science-Fiction*. In this story, the last remnants of humanity have taken shelter on Mars to wait

⁵³ Escape's 1954 adaptation of Jack London's *The Scarlet Plague* (1912) makes remarkably similar changes. The destruction wrought on San Francisco is seen primarily as the work of humanity's violence and stupidity in response to the plague, and the adventures of the hero James Smith (Vic Perrin) primarily concern his attempts at romance with the last living woman. Narrator George Walsh opens the play: "You are alone in a world of decay and desolation looking down on what was once a great city, while coming slowly to meet you, her hand stretched out in greeting to you, is a beautiful girl, whose very existence may the cause of... your death!"

out the half-life on Earth following a nuclear war. Twenty years after the war a group of survivors returns to Earth and finds one lone city "lit up like a Christmas tree." Searching the eerily empty streets, they find the man who has been keeping the city illuminated, a brain surgeon named Cornelius Hathaway. The group visits his home and meets his family, but a feeling of uneasiness leads them to investigate further. They discover that Hathaway's family long since died, and that the people they have met are in fact robots built to replace them. Hathaway's "wife," Alice, remarks that Hathaway's illumination of the city was undertaken towards similar ends, to cure his loneliness: "Once he wired the whole city with sound speakers, and when he pressed a button, the whole town lit up, and made noises, as if ten thousand people were living in it." In contrast to "There Will Come Soft Rains," in this story humanity has survived to maintain its machines, if only in the form of one solitary, lonely figure. Having survived the war itself Hathaway and the city support and sustain each other, though just as the automated house had played out in a futile mockery of humankind's achievements so too does Hathaway's city flood the streets with light for a population long since gone. The uncannily animated new residents of the city are beings which should not have life but appear to do so, and are threateningly inhuman successors to humanity. In both stories a society that places technology over the value of human life is shown as doomed to failure, to be reduced to a ghost town filled with functional but useless machinery. Ruined by war, Hathaway's family and the city are the reanimated dead, brought back to replicate the comfort of pre-war times. The Cold War was to play out a similar dynamic, as America's postwar prosperity and the optimism following the fall of Nazism were tempered by the ever-present threat of annihilation of the Nuclear Age.

X Minus One was the continuation of *Dimension X*, featuring several repeats at first but soon striking out into original science fiction and new adaptations. One such adaptation was the 1956 broadcast of Fritz Leiber's "A Pail of Air," sponsored by the science fiction magazine *Galaxy*, in which the original story appeared in 1951.⁵⁴ As in "Adam and the Darkest Day," Earth is being pulled away from the Sun, though in this case by the gravitational pull of a dark star. In this respect, it brings to mind Wells's story "The Star" (1897), in which a star passing close to Earth initiates a series of cataclysmic environmental disasters, though in "A Pail of Air" the worst image of destruction is of the urban structures, for the gravitational tug-of-war caused earthquakes which "twisted" buildings. With the outside air now too cold to sustain life, the family in Leiber's story shelter in "the nest," a blanket fort in the ruins of a building, heated by a fire, and with breathable air collected from the surface in a pail. A son and daughter and their married parents, they are a nuclear family reflective of the campaigns of 1950s home defence, hunkering down in the nest. As Daniel Cordle writes, civil defence programmes aimed to portray the protected home as "a recognisable, if restricted, version of suburban family life," but notes the boundaries of these homes, "if really impermeable, [...] would of course have suffocated their inhabitants" (95). The trips to the surface to collect air in Leiber's story show the futility in the "role already inherent in the suburbs", of attempting to keep the "outside out" (96). The sequestered family in "A Pail of Air" believe themselves the last survivors of humanity, the rest having succumbed to the cold, and much of the story concerns their now bleak and hopeless existence, the father telling stories of when Earth was warm, and the son making endless trips to the surface to collect air.

⁵⁴ The story was adapted for radio by George Lefferts, who was also responsible for the adaptation of "There Will Come Soft Rains" and "Dwellers in Silence" for *Dimension X*.

One day, however, they are visited by other, better equipped survivors, from the "airtight city" Los Alamos. 55 The repurposed laboratory now sustains life: the nuclear reactor powers the city and the stockpile of nuclear bombs are used for fuel. Initially afraid to go with them and leave the fire to die out, the family decides to join Los Alamos, relieved that the future of humanity no longer depends on them alone. "The trouble with the world is it just kept getting smaller and smaller," says the father, "till it ended with just the nest. Now it'll be good to have a real, huge world again. The way it was in the beginning." What is remarkable is the optimism surrounding nuclear power in this story. The family is liberated from a life of just surviving in the nest, maintaining the fire and scavenging pails of air, by the technologically advanced city of Los Alamos. Suddenly modern society returns, and the mother, who had been gradually becoming ever more depressed by the futility of her existence, now wonders about choosing something new to wear for when they move. 56 Liberated from having to remain indoors the family are able to re-enter a society and its consumerist pursuits, as though these were 1950s American citizens liberated from the threat of nuclear war and the routine of survival embodied by home defence. After the unsalvageable levelled Chicago in "Adam and the Darkest Day," the obliteration of civilization in "Quiet, Please," the oppression and toxicity of Eden's city of Capris in "Dream of Armageddon," the poetic ruins of "There Will Come Soft Rains," and the monument to Hathaway's loneliness in the city of "Dwellers in Silence," Los Alamos is a refreshingly optimistic take on

⁵⁵ Interestingly, "Los Alamos" features several times in nuclear fiction as a name for utopian post-apocalyptic cities (for instance, see Bernard Wolfe's *Limbo* [1952]). The repurposing of the name of the laboratory dedicated to developing nuclear weapons to suggest the progress of cities, rather than their retardation, lends credence to Martha Bartter's idea of "Nuclear Holocaust as Urban Renewal" (1986): nuclear destruction can have a cleansing effect in these fictions by allowing cities to be rebuilt in their entirety. It also calls to mind "Operation Plowshare," the US project to devise peaceful uses for atomic weaponry.

⁵⁶ This may suggest a connection between America's confidence in its superior nuclear arsenal and the rise in the 1950s of a prosperous consumer culture.

the value of technological progress in rescuing humanity from the brink of extinction.

By the end of the 1950s, the Golden Age of radio was drawing to a close, and radio became merely "reflective of a mobile, affluent, and commercialized America, solidly committed to television for its creative amusement, but still requiring radio for music and instantaneous information" (MacDonald 88). Home entertainment needs were now dominated by television, and the need for spectacle was seemingly best met in the movie theatres, particularly with the introduction of colour, widescreen, and 3D technology. Scenes of desolation and post-apocalyptic ruins in visual culture were served far better and became far more profuse than in fiction and radio, for two reasons: first, because the solemnity of war-charred wastelands and an age without humanity (or at least a much reduced population) is principally a quiet one, and modes that usually depend to a large degree on dialogue are less well suited to these portrayals than art, photography, and film; and second, because as Sontag points out in "The Imagination of Disaster" (1965), film in particular offers "one of the purest forms of spectacle," and invites "a dispassionate, aesthetic view of destruction and violence": "Things, rather than the helpless humans, are the locus of values because we experience them, rather than people, as the sources of power" (45). Before looking at the successes of post-apocalyptic science fiction on the screen in 1945-1963 it is worth exploring very briefly how this dominance of the visual representation of urban destruction came to be, which means going to back to where we last left it back in Part 1, with magazine illustrations.

THE DEVELOPMENT OF VISUAL CULTURE IN REPRESENTING URBAN DESTRUCTION Considerable ground was broken in reproducing images with the invention of half-tone printing in 1869. Encouraged by the newfound affordability of reproducing illustrations and photography, gradual advances saw magazines such as Robert Barr's *The Idler*, home of "The Doom of London" (1892), printing high quality images. Contemporaneous with this, the 1890s also saw the rise of cartoon strips in newspapers and of significant advances in film. These parallel developments are more related than they might at first appear. In 1878 Eadweard Muybridge began producing his now well-known serial photographs, of which perhaps the most widely recognized is a series depicting a running horse. These were pictures taken at short intervals from each other, that, when placed side-by-side, created a narrative of action. This set the stage for the two divergent developments which would evolve separately and yet be deeply connected. 1893 saw Thomas Edison's Kinetoscope, a box containing a film reel which could be observed through a viewfinder in the top of the machine. It was this same year that Edison founded the "Black Maria," considered to be the first movie production theatre. Two years after that in 1895 the Lumière brothers gave their first public production. Though watershed moments in the early history of film are disputed, with the stroboscope, the thaumatrope, the zoetrope, and many similar inventions creating the illusion of moving images long before Edison and the Lumières, it was only in the years following the replacement of photographic glass plates by celluloid that the most significant strides were made towards making cinema what it is today.

Already, however, cinema was tied to the violent possibilities of technology, the invention of the movie camera having been informed by the automatic machine-gun, as Friedrich A. Kittler points out: "The transport of

pictures only repeats the transport of bullets. In order to focus on and fix objects moving through space, such as people, there are two procedures: to shoot and to film. In the principle of cinema resides mechanized death as it was invented in the nineteenth century" (124). Experimentation in the early years of cinema led to early special effects, such as in Georges Méliès's *Escamotage d'une dame* (1896), in which the film reel is cut and spliced to create the impression that a woman is vanishing and appearing again in real time, and his *Carrefour de l'Opéra* (1898), in which a time lapse is used to create the impression of speeding through time. These were the formative years of film and the mass reproduction of images, both of which would come to dominate the culture of the twentieth century. The development of cinema alongside the industrialization and urbanization of the late nineteenth and early twentieth centuries resulted in a close connection between the two:

cinema's emergence as a quintessentially urban set of practices has ensured that the city and the moving image have, from the very outset, remained inseparable constituents of the modern urban imaginary. The fascination and spectacle of the moving image experienced by early cinema audiences drew its strength and affective potency from the technological, perceptual and spatial transformations that were shaping rapid processes of urbanization. (Koeck and Roberts 1)

The violence of mechanization and the urban experience were, therefore, tied to the development of film, and informed its development. Accordingly, a mere two decades after Méliès's early experiments, Fritz Lang's visual spectacle *Metropolis* (1927) astounded the public with its imagining of a vast future city, and the abuses perpetrated on its working classes as a result. As we saw with

E. M. Forster's "The Machine Stops" (1909), the seemingly utopian Metropolis of Lang's film is in fact a cannibalistic monster that requires the consumption of an unseen proletariat. Dietrich Neumann describes how writer Thea von Harbou "developed this image into a complex and compelling metaphor for the city as a being, whose individual but interdependent spaces—the skyscrapers, machine halls, and catacombs—fulfilled a body's function as its heart, hands, and mind" (34). As Elizabeth Grosz writes, the body is linked to the city as an ordering principle: "The city is a reflection, projection, or product of bodies. Bodies are conceived in naturalistic terms, pre-dating the city, the cause and motivation for its design and construction" (*Space* 105). In *Metropolis* it is the dark secret of the city's exploitation of its workers, described in terms of the alienated body, which is the impetus for the city's downfall.

In 1936 Wells adapted his novel *The Shape of Things to Come* (1933) as the more decisively titled film *Things to Come*, an epic portrayal of the city "Everytown" from 1940 to 2036. Though meant as a universal city, the street on which most of the film's action takes place seems to be closely modelled on London's Cannon Street, with a domed cathedral remarkably similar to St. Paul's dominating the skyline. Years of war and the subsequent global plague "the Wandering Sickness" cause the inhabitants of Everytown to revert to barbarism and an agrarian society. Human life is devalued as the sick are shot in the streets, and the survivors live among the ruined walls of the old city. In 1970, they are met by another society, the technologically advanced "Wings Over the World." Everytown, which has even reverted in technological terms with the shells of motorcars towed as oxen wagons, stands no chance of

resistance to the sleeping gas and bullet-proof planes of the new society. ⁵⁷ By the time of the story's end in 2036 Everytown has been taken over and is now free of war, with humanity dedicated to achieving either "the universe or nothingness." In contrast to the city of *Metropolis*, which must feed on humanity for the sake of progress, the city of the future in *Things to Come* has demanded human sacrifice too, but is ultimately salvaged from human nature by the advances of science and technology. Everytown is not free of dissent, however, and a movement is rising up at the film's close to bring down those in power. The city seems doomed to play out the cycle of development and destruction in perpetuity, a point telling in its having been made just as humanity was again to be plunged into world war. The call to achieve "the universe or nothingness," while suggesting the risk that technological advancement may end in total destruction, at least gives hope that while humanity remains the revolutions of this cycle propel humanity towards some form of victory.

During the Second World War, as radio was serving the need for increased speed and fidelity in reporting, photography occupied a similar position in a visual form. From the moment Kodak's first portable camera liberated photography from the domain of the privileged elite when it was released to consumers in 1888, photography became ever cheaper, more available, and of a higher quality. Where illustrated journalism had once "liberated visual images from the control of privileged elites," it was photography which "completed the democratization of the visual by placing it in the hands of the masses" (Stout 146). By the 1890s, photography had taken over from illustrated journalism to a significant degree, and its rise was closely tied to the urban environment. As Brian Dillon illustrates, almost "as soon as there was

⁵⁷ The repurposing of outdated or unusable technology will be returned to in Chapter 6 in discussing "retrofitting" in *Blade Runner* (1982).

photography, there were photographs of ruins," such as Charles Marville's photographs of destruction during the "Paris Commune and the districts of the city that were then in the process of being 'pierced' by the urban planner Baron Haussmann," and in London with the "Society for Photographing Relics of Old London" (28). Thus, by the time writers were struggling to represent the horrors of the Second World War in print, photography was an established method of reporting, and delivered visceral images of urban destruction to readers.

Herbert Mason's photograph of the dome of St. Paul's Cathedral above skeletal silhouettes of London in flame, for instance, remains a haunting representation of the city's defiance against the blitz, and one of the most well-known images of the war.

Alongside Britain's war photography, the War Artists' Advisory

Committee was established, which compiled upwards of two hundred illustrations and paintings of destruction during the bombing of British cities.

Works by Graham Sutherland, John Minton, Muirhead Bone, William Ware, and Henry Moore, among many others, concentrated on the physical damage of cities to a far greater extent than they did the damage to human life. As Brian Foss writes, however, "architectural damage acts as a visual surrogate for the unseen broken bodies of the former inhabitants, evoking rather than portraying the violation of the body" (41). Series such as Sutherland's *Devastation 1941* "shift death onto semi-human architectural shells equipped not only with 'sightless eyes' (blown out windows), but also with what Sutherland and others referred to as 'animal movements,' 'arms,' 'entrails' and 'spines'" (42). Across the Atlantic, works such as José Clemente Orozco's 1931 painting of collapsed and broken skyscrapers, *Los Muertos*, depict similar scenes that connect ruins and the body. Of *Los Muertos*, Terry Smith writes that the "anthropomorphic

nature of buildings, their character as frames for our bodies, and their affinity to trees as the basic, natural elements of shelter—all this is strikingly conveyed. And thrown into terminal chaos" (128). As with *Metropolis* these works show the city ordered in the manner of bodies, but these are bodies broken and disfigured. The vast machine of the industrialized city ushered in with modernity is shown to be as vulnerable to age and injury as the human body. Equally, evoking broken bodies in these representations of the city suggests a broken humanity, crippled and disfigured through acts of tyranny and war, and situates the scene of this broken humanity in the built environment. The vivid imagery of photography and painting during the war, therefore, developed a visual language that was to inform a postwar film scene coming to terms with the revelations of global conflict, apocalyptic weaponry, and totalitarianism.

By the end of the war, visual culture had come to dominate urban representations. The two possess indelible links: "Photography, cinema, print, and advertising have trained our senses to experience modern life through images. [...] It is thus that the image of the city imperceptibly becomes the imagined space in which we live. Visuality saturates the symbols, values, and desires that make up urban society as an imaginary institution" (Prakash 2). With visual culture focussed on urban representations, and with the urban imaginary dominated by its mediated image, the two phenomena come to be essentially inseparable. As well as becoming a deeply urban phenomenon, postwar cinema also took on a darker tone. While wartime cinema tended to shy away from especially gloomy subjects, in postwar years aesthetics such as "noir film styling led to a spate of classic films that, in fact, challenged both the guts-and-glory patriotism of the wartime Hollywood product and the mindless suburbanisation that then characterized the cultural landscape" (Foertsch,

American 96). These were years dominated by the memory of the dropping of the atomic bomb in Japan, and with trying to come to terms with living in a world threatened by apocalyptic nuclear war. The years 1945-1963 encompass Paul Boyer's first two cycles of cultural attention on the bomb: the first "extended from August 1945 to the early 1950s," and the second "began in the mid-1950s amid widespread public anxiety about radioactive fallout from nuclear tests and that culminated in an extended period of nuclear apathy and neglect dating from the Limited Test Ban Treaty of 1963" (x-xi). Robert A. Jacobs marks the moment of transition as when America "crossed the threshold into the thermonuclear era in 1954" and asserts that nuclear fiction of the latter cycle "became far more brutal than those of the earlier period" (402). Two films adapted from the novels of Wells, one from each of these two periods, are emblematic of the change in imagining the apocalyptic and post-apocalyptic city: *The War of the Worlds* (1953) and *The Time Machine* (1960).

ADAPTING WELLS FOR THE CINEMA: THE WAR OF THE WORLDS

The opening of Haskin's *The War of the Worlds* presents a world of continually escalating conflict. Against footage from both World Wars a voiceover (Cedric Hardwicke) announces that the First World War was the first instance of nations fighting nations, that the Second World War was the first to involve every continent on Earth, and that subsequently "men turned to science for new devices of warfare which reached an unparalleled peak in their capacity for destruction." Historical inaccuracies aside, the new introduction to the story reflects a pervasive fear in future war stories: that the feverish warmongering of

⁵⁸ There are several noteworthy interpretations of how to divide the eras of the Cold War. Daniel Cordle's influential *States of Suspense* (2008), for instance, marks the "early atomic age" as running from 1945 to 1949 (with the Soviet Union's development of nuclear capability), and the "high Cold War" as running from 1949 to 1962 (with the Cuban Missile Crisis) (11-12). The dates suggested by Boyer and Jacobs, however, seem to most closely support the evidence of the texts looked at here.

humanity risks escalating to the point of self-annihilation. In this specific case the expansion of war extends to outer space. The exhausted planet of Mars is shown as one further along than Earth in the process of modernization, a fact characterized by a futuristic, partially-frozen urban landscape, and in the cylinders that are sent to Earth. 59 The arrival of the first Martian cylinder is witnessed by members of the public outside a movie theatre (evoking the experience of the movie audience in watching the spectacle of Haskin's film. and increasing their identification with the characters), on a suburban street in California. On testing the cylinder with a Geiger counter, scientists arriving at the scene find it to be radioactive. The lack of a dipole magnetic field on Mars, which makes the planet far more vulnerable to the radiation of space, may be the cause of the radioactivity of the cylinder. Additionally, as Martian civilization is in a further stage of civilization from humanity, this may indicate that experimentation with nuclear energy and/or nuclear wars on Mars has caused a large amount of radioisotopes to infiltrate their mineral resources. Whatever its source, the radioactivity of the airborne projectile is highly suggestive of fears of nuclear attacks. When the cylinder unscrews, the vehicle that emerges is not the tripod of Wells's novel, but a flying machine, kept aloft by a technology not yet mastered by humanity. These three changes from Wells's novel (the relocation from Surrey to California, the radioactivity of the cylinder, and the assault by flying machines) support H. Bruce Franklin's assertion of American fear of the bomb in the post-Hiroshima age: "As in many of its pre-World War I fantasies of war, the American imagination projected future scenarios that

⁵⁹ The Martians' leaning towards the cold, unfeeling pursuits of modernity is also symbolized by the use of Mars, the next furthest planet after Earth from the warmth of the sun. The position of Mars outside of the habitable zone (or Goldilocks zone, the equitable distance from the Sun for supporting life) and towards the barren extremities of the solar system, places them, in a linear understanding of history such as that put forward by Francis Fukuyama and others, as further along the same trajectory to be followed by humanity: literally and metaphorically further away from a natural world of light, warmth, and fertility.

reversed the roles of the past. Although the United States had a monopoly on atomic weapons, a wave of fear began to rise as Americans conjured up frenzied images of themselves as potential victims, rather than perpetrators, of atomic warfare" (156). The recent end of this monopoly, signalled by the successful detonation of Soviet nuclear bomb RDS-1 (known in the US as Joe-1) in 1949, exacerbated an already existing tendency towards national role reversal in American future war fiction.

As radio and newspapers were vital in relaying information during the Second World War, so they take up the same role in Haskin's film as the Martian invasion escalates. We are shown montages of radio listeners from a broad range of social classes and occupations, each listening as intently to the broadcast as the last, as radio reporters visit the scenes and provide on-theground reporting; the city's newsstand venders, calling "read all about it" provide a sense of stability with their printed roundups. The information we receive from these sources indicates that the Martians see strategic significance in capturing the urban centres of the (primarily Western) world: the Martians land cylinders at Naples, Bordeaux, London, Santiago, Long Island, Fresno, Sacramento, and Huntington Beach, and have soon after conquered New York, Miami, and Sydney. 60 Against a backdrop of footage of fleeing refugees and collapsing buildings, the voiceover returns: "Great cities fell before them. Huge populations were driven from their homes. The stream of flight rose swiftly to a torrent, a giant stampede without order and without goal. It was the beginning of the rout of civilization, of the massacre of humanity." The "last wire photo out of Paris" is shown in the developing tray, a photograph of the ruined Eiffel Tower still

⁶⁰ Mentioning only Western cities implies that the rest of the world has already been invaded by the Other—this seems to suggest that the Martians are a coded version of the perceived threats of communism or ethnic difference.

soaking in the fixing solution, indicating that even the speed of contemporary media struggles to keep up with the pace of Martian aggression. This unsettling scene is perhaps one of the most telling moments in the film's representation of media, the failure of print media to keep pace with events and thus its failure to mediate and stabilize modern life effectively.

The culmination of the Martian attack on the UK, Europe, Australasia and the Americas occurs at Los Angeles, ⁶¹ where our heroes Dr. Clayton Forrester (Gene Barry) and Sylvia Van Buren (Ann Robinson) are aiding the military in attempting to find a way to resist the Martians. Initially wary of using atomic weapons because of the radiation risk to civilians, Maj. Gen. Mann (Les Tremayne) now turns to this last resort. The bomb is, however, useless against the Martians' superior technology. Jerome F. Shapiro suggests that this shows that the characters of "the post-Hiroshima environment, have lost touch with nature and must recognize that their powers may be rendered useless by greater powers" (85), again supporting Franklin's idea that the feeling of America's technological superiority peaked with the dropping of the atomic bomb, and that the postwar years feature an increasing sense of insecurity.

As most of the city is evacuated, the few remaining citizens (including Forrester and Van Buren) await annihilation in churches. Here the film makes the last of its major changes from the source novel, with an emphasis on Christianity. As the citizens pray, the Martians finally succumb to bacterial infections, and the voiceover returns to state that "god in his wisdom" is responsible for this. Over triumphal music featuring a chorus singing "In this world and the next, amen" the film closes on a shot of the intact church amongst

⁶¹ As Eric Avila points out, the "movement of the Other from the small town" where the Martians first arrive "to the big city parallels the Great Migration of blacks during the 1940s and 1950s, in which massive numbers of black rural southerners migrated to cities such as Los Angeles. Migration becomes invasion in *War of the Worlds*" (*Popular* 102). The idea of the Other of postwar science fiction as a racialized Other invading cities is an idea that will be discussed with greater detail in Chapter 4.

the smoking rubble of Los Angeles. The inference appears to be that Christian faith is responsible for the survival of these few citizens, which in turn implies that everyone exterminated did not warrant divine intervention (including, oddly, Van Buren's uncle, a pious Christian priest). To take this further, it seems to suggest that Americans, and specifically white, Christian Americans, will be, as it were, delivered from the evil of escalating wars simply by the virtue of their being white, Christian Americans. Civilization, and specifically cities, on the other hand, must fall for Americans to emerge unscathed to rebuild the world, just as the cities of a war-battered Europe had to fall for the US to emerge from the Second World War as the dominant superpower.

As in the radio plays such as "Adam and the Darkest Day," humanity's hubris must reach a breaking point and modernity must be forcefully disassembled in order for true humanity to be revived. In this way the film exhibits an early example of what Martha Bartter describes as "urban renewal through nuclear 'war'" (149). The societies of the Western world in Haskin's film are, to borrow Bartter's words, "purified through the sacrifice of a large percentage of its members" and "might eventually be able to build a new, infinitely better world" (148). It is an attitude to urban destruction that can be seen in factual accounts of war damage, as Sebald writes: "The destruction, on a scale without historical precedent [...] has been largely obliterated from the retrospective understanding of those affected," as "the declaration of a new beginning [...] make[s] it look as if the image of total destruction was not the horrifying end of a collective aberration, but something more like the first stage of a brave new world" (3-6). The area bombing campaigns of the Allied powers, too, are shown by Grayling to have been enacted with a similar aim, "an intention to so cripple Germany that it could not revive to become yet again, as

it had twice been in the preceding thirty years, a dangerous and oppressive destroyer of world peace" (158). 62 The fact that the survivors of The War of the Worlds are those sheltering in Christian churches gives hope that the rebuilding effort will possess a structuring ideology, which again correlates with Bartter's theory: "We find special reassurance when the post-nuclear community is shown not as a small, self-sufficient town, but as an institution like a monastery or a college. An ordered community exists to fulfil an explicit purpose, as a town does not" (153). Lastly, the location of this final battle in Los Angeles also has implications for urban renewal. Bartter writes that "In our [American] cultural mythology, we canonize the frontiersman, who, untrammelled by law and undisturbed by neighbours, carves a living from the virgin land. [...] [T]he frontiersman sees the city as pure evil: it represents physical pollution of the landscape and moral pollution of its inhabitants" (149). The transformation of the land that was the last of the frontier from an ordered city back to frontier conditions enables a return to nature from the degeneracy of urban development. The role of Los Angeles as the new old frontier is one that recurs frequently in post-nuclear fiction, and is an issue to which we will return in later chapters.

ADAPTING WELLS FOR THE CINEMA: THE TIME MACHINE

While Haskin's *The War of the Worlds* does feature the annihilation of many major Western cities and indicates who is to do the rebuilding, much more time is spent in the *post*-apocalyptic city in Pal's *The Time Machine*. Unlike Haskin's adaptation, which updates Wells for 1953, Pal retains the historic setting of

⁶² The Morganthau Plan, for instance, which was seriously considered by Franklin Roosevelt, greatly supports this idea. The plan would have moved to create a deindustrialized, agricultural Germany with the aim of extirpating what was perceived as a deeply rooted Prussian militarism.

Wells's story, making use of the advantage of hindsight in presenting the journey through time. Pal's film demonstrates how well suited cinema could be to science fiction. Just like the visitor to a movie theatre, the Time Traveller (Rod Taylor), sits in his time machine in a plush red seat, and through modern technology is treated to a visual spectacle. As Jonathan Bignell writes, "Temporal mobility in *The Time Machine*, as in cinema, allows the subject to encounter what is alien, yet necessarily familiarises this as a consumable media experience" (136). More than this, however, some of the special effects used in the film, which won the film an Academy Award, have their precedents in the early cinema history we have already covered. Though filmed and shown at a time of great technological innovation in cinema, *The Time Machine* not only utilizes widescreen and colour, but also evokes the experimental editing techniques of early cinema, in order to further emphasize the importance of spectacle and imagination in technological progress. For example, George treats his guests to a demonstration using a miniature time machine. The model blurs, then vanishes, to the amazement of his guests. Bignell indicates that "Like the spectators of the first films, the Time Traveller's audiences are thrown into doubt about the evidence of their own eyes. For them, the disappearance of the model Time Machine might be real, but more likely a trick, a simulation, a scientific demonstration or an optical illusion" (138). Despite the clumsy wording (is a scientific demonstration not "real"?) Bignell highlights an important point in this scene: that of the guests' amazement at what seems to be an illusion, but that is in fact the product of an unfamiliar new technology. The disappearance of George's model occurs in a manner reminiscent of the disappearance of the woman in Méliès's Escamotage d'une dame (an effect presented in Méliès's film in the form of a magic show), and similarly creates a technological spectacle for the amusement of its viewers.

To take another example, when travelling forwards through time, George is able to see nearby events transpire at a greater speed. In Wells's story, the Time Traveller notices the increased speed of day and night "like the flapping of a black wing," but is soon travelling too fast to notice the changes taking place around him ("Time" 20). In Pal's film, however, greater emphasis is placed on watching the scenery around George's laboratory change over time. Bignell highlights this scene as well, suggesting that George is able to play with the presentation of time, putting the world on fast-forward: "What both time travel and cinema can do is to make the familiar appear unfamiliar by changing the manner of its perception. What is rapid can be slowed down, what moves slowly can be speeded up, and forward motion can be reversed" (140). A more appropriate way of looking at this may be, to again draw from Méliès, timelapse. If George is able to witness moments around him on his journey into the future while not ageing himself (minutes, hours, and days are reduced to seconds), then time is not passing more quickly but rather whole seconds, minutes, or hours are skipped. In this way it evokes the technique of time lapse, such as occurs in Méliès's Carrefour de l'Opéra. Film mimics the perception of the world by presenting images captured separately from one after another at a similar rate to the human brain, and time lapse simply features images captured more distantly from each other in time played back at the same rate that the brain perceives as movement. A narrative of time is created by these images, much as a narrative could be created by Muybridge's sequential photographs.

Research notes from the film's production seem to support reading the film as a comment on the development of technology. Among these are pictures

of sixteenth-century scientific instruments from the National Maritime Museum, apparently used for the visuals of the time machine, and photographs of a new Shell Chemical Plant near Chester and the Corby steel works, for the industrial caverns of the Morlocks ("The Time Machine – research"). The contrast created between the visuals of antique and cutting edge technologies helps to demonstrate the amount of time passed on the time traveller's journey, but given the time machine's connection to early cinematic techniques it also seems to suggest a contrast with the development of film technologies between the eras of Méliès and Pal. Significantly, our tour guide on this presentation of the powers of cinematic possibilities is named H. George Wells; in other words, the master innovator of the imaginative worlds of science fiction is also an innovator of the possibilities of cutting-edge media. The process of time travel in the film is thus informed by the medium: cinema itself has become a method of expressing science fiction concepts. Again, nonetheless, the focus is on spectacle, and George finds it to be a "wonderful" thing to watch.

George's travels offer, as in the montages of Haskin's *The War of the Worlds*, a way of reading the trajectory of world wars. Stopping first in 1917 and then again in 1940, he initially interprets this to mean there has been only one long war. Stopping again in 1966, he arrives as air raid sirens warn of an atomic satellite about to fire. Wars have escalated again with apocalyptic conclusions, though in this case, as the voiceover tells us, "the labour of centuries [is] gone in an instant" as a result of nuclear weapons and the volcanic eruptions they trigger. George is able to watch these events unfold unharmed, before again travelling forward to October 12, 802701. He is greeted by the peaceful gardens, palatial ruins, and untroubled citizens of a future society. The Eloi of this world are not the inhuman creatures of Wells's novel, but they are equally

unsettling: uniformly white, blonde, blue-eyed, and young, and seemingly devoid of human emotions, they are much like the children of the horror film Village of the Damned (Wolf Rilla 1960), an adaptation of John Wyndham's The Midwich Cuckoos (1957). George is made profoundly angry by the Eloi's disregard for progress and ideas, as he finds books left to decay into dust: "Thousands of years of building and rebuilding, of creating and recreating, so you can let it crumble to dust! A million years, the sensitive men dying for their dreams, for what? So you can swim, and dance, and play!" What they have retained, however, are the "rings that talk," metal rings that when spun play recorded messages. Through these rings it is revealed that a war between East and West was fought for 326 years until almost the entire world had perished. At this point, some retreated for shelter into underground caverns (retaining technology and becoming the monstrous Morlocks) and some took their chances above ground with the radiation (losing their intelligence and becoming the carefree Eloi). It is thus not through class, as in Wells's novel, but through nuclear war, that humanity evolves to become weaker and more animalistic. The near total destruction of the world's population, more far-reaching than that in *The War of the Worlds*, also supports Jacobs's assertion of the increased violence in fiction of Boyer's second cycle. In this world the Eloi are summoned to the sphinx by a siren (the same siren that sent Londoners to shelter underground in the film's 1966) to go below ground and be fed upon by the Morlocks. The dynamic is reversed in the film to that of the 1960 in which it was released: the call to shelter and survival is now the call to death, which comes from below rather than from above.

Rescuing Weena (Yvette Mimieux) and burying the Morlocks alive in their caverns, George returns briefly to tell his story to the dinner guests, before

going back to the future to "help the Eloi build a new world, and build a new world for himself," free from the destructive powers of modern weaponry. George is unable to return and live through the wars of the twentieth century, a time in which he remarks that it "seems people aren't dying fast enough." The decline of civilization has already begun when he first leaves the present on December 31, 1899, and travels into the future. The futuristic London inhabited by the Eloi is a return to the pastoral idyll, but it offers opportunity for rebuilding, for which George takes with him three unnamed books from his shelves. It is another case of Bartter's urban renewal through nuclear holocaust: with the destruction of the city through nuclear war, and the final erasure of modern technology in the killing of the Morlocks, George finds a space in which he can build civilization again from the ground up. Bartter writes that the "cycle of the city represents the rise and fall of the nation-state: a flowering of technology with a concentration of wealth and power, followed inexorably by luxury, degeneracy, and destruction" (155). There is certainly no guarantee that the Eloi will not succumb to the same destructive cycle of luxury, degeneracy, and destruction, but for George the best time to exist is with a civilization in its infancy, symbolized, unsettlingly, by his attraction to Weena's child-like appearance.

CONCLUSION

In both radio and cinema after the Second World War totalitarianism, bombing, and especially nuclear war are constant spectres haunting representations of the city. The city itself was no longer protected from war by the operations of its military on distant battlefields, but had become the frontline in a new kind of warfare that depended for victory on the survival of citizens, in one sense the

post-apocalyptic community of the future. Though not supplanting prose, the unprecedented success of radio and cinema was due to their ability to provide cultural products with the sensory impact afforded by audio and/or the moving image. They were especially well suited to science fiction, and in particular apocalyptic and post-apocalyptic fiction, which thrived in formats that allowed their imaginary scenes to be heard and seen by audiences. These were visceral, dynamic works that spoke to the fears of their time. In many cases, however, the possibility of the destruction of the cities in these texts allows for the reanimation of the city, and the rebuilding of a better world. These are chances to begin again after the tainting of humanity in two world wars and what was perceived as an innate hubris and militarism that would inevitably lead to horrific consequences. These works offer the example of President Eden, the last man Adam, the utopian city of Los Alamos, Christian America, and the fertile gardens of the Eloi's London as opportunities for urban renewal in the wake of global war and nuclear weapons.

Chapter 4:

Masculinity and Whiteness in Post-Apocalyptic Suburbia

The kinds of anxieties we saw haunting the city in the previous chapter (area bombing, totalitarianism, nuclear weapons) exhibit themselves across many genres and mediums in the postwar years. J. R. R. Tolkien's highly popular fantasy novel The Lord of the Rings (1954-5) presents the story of a tool of such great destructive potential that it corrupts all users, of the destructive power of the military-industrial complex on the natural world, and of the personal struggles of the provincial and habitual in coming to terms with global responsibility. American monster movies, such as the 1956 version of Godzilla (Ishirô Honda and Terry O. Morse), see violent aberrations created through mankind's hubris intent on urban destruction successfully defeated by the American military. 63 Nevil Shute's On the Beach (1957) and its film adaptation of the same name (Stanley Kramer 1959) depict citizens of Melbourne living out their final days in knowledge of their impending annihilation by radioactive poisoning following global nuclear war. It is in post-apocalyptic science fiction, however, that some of the most interesting depictions of the imperilled city are presented. The theme of the "last man," which Blackwood's thought to have been so exhausted, experiences a resurgence of interest as a means of expressing the isolation felt in radically changing urban and suburban landscapes. Alfred Noyes's novel *The Last Man* (1940) perhaps paved the way for these, in his story of a world almost completely destroyed (but for one Englishman) by a death-ray. George Orwell had for his novel Nineteen Eighty-

⁶³ As Steve Ryfle shows in *Japan's Favourite Mon-Star: The Unauthorized Biography of "The Big G"* (1998) the successful military defeat of Godzilla was added onto the Japanese original (*Gojira* [Ishirô Honda 1954]). This new ending changes the movie from a sombre reflection on the future of nuclear experimentation and proliferation to "a typical American atomic-monster movie" in which the American military saves the world (57). The change marks an interesting difference between nuclear narratives of the two countries most connected with the use of nuclear weapons in wartime.

Four (1949) the working title "The Last Man in Europe," referring to protagonist Winston Smith's suspicion that he is the only man who desires to resist the totalitarian panopticon of Big Brother (Ingle 118). Within the context of the postwar era and with the Cold War well under way, the last man theme had come to assume a new and pertinent position. Two novels incorporating the last man theme which have proved enduringly popular are John Wyndham's The Day of the Triffids (1951), set in the south of England, and Richard Matheson's I Am Legend (1954), set in Los Angeles County, California. Both novels soon saw film adaptations, as (respectively) The Day of the Triffids (1962) and The Last Man on Earth (1964) and have since been adapted for the small and big screens many times. 64 Looking at these four works can provide a means of assessing both a British and an American perspective on the relationship between urban and suburban spaces during the postwar years, and in their use of the last man theme, the gender and racial anxieties of these spaces.

THE GROWTH OF POSTWAR SUBURBIA

Significant changes were underway in adjusting the boundaries of the city in the 1950s and early 1960s. London's suburbs had begun to be viewed as a rustic retreat from city life in the eighteenth century and in the latter half of the nineteenth century the outer suburban ring experienced particularly rapid growth, from 400,000 inhabitants in 1861 to 2.7 million in 1911, "37 per cent of the metropolitan total" (Inwood 571). With the housing crisis caused by aerial bombardment in London and other major cities during the Second World War,

⁶⁴ The Day of the Triffids most notably as two television mini-series, of the same title, in 1981 and 2009 (for more on the various adaptations, see Terry Harpold's "The End Begins: John Wyndham's Zombie Cosy" [2011]); I Am Legend most notably as The Omega Man (1971) and I Am Legend (Francis Lawrence 2007). The influences of both works go significantly further than direct adaptations, with, for example, Triffids clearly influencing such popular films as 28 Days Later... (2002) and Legend inspiring George A. Romero's creation of the ghoulish zombies introduced in his "Dead" series of films (1968-2010).

as well as the development of Welfare State initiatives, the government increased production of "prefab" homes and municipal council estates on the edges of towns, and developed the new-towns programme, initiated by the New Towns Act of 1946 and largely modelled on the Garden-City principles of Ebenezer Howard. In the US, postwar suburbanization was fuelled in part by the return of service personnel and a subsequent increase in birth rate, the reallocation of industrial land, and improved transport infrastructure, particularly with the rise of car ownership. The American suburbs came to represent "both a planning type and a state of mind based on imagery and symbolism" (Jackson 4-5), "the fullest, most unadulterated embodiment of contemporary culture," and a manifestation of "fundamental characteristics of American society" (4). The rhetoric and ideology surrounding the suburbs thus came to spur on the rapid growth of these spaces in the postwar years, a growth so far reaching as to have been termed the "fourth migration" by Lewis Mumford (*Urban* xvi). 65

Alongside city dwellers in the UK and US increasingly moving out to the suburbs, the city came to be perceived as a place of threat. In the UK this was partly due to the memory of area bombing experienced during the war, along with the pollution and congestion of the industrialized centres. In the US, much of the threat of the city originated from the fear of nuclear war: if such a war were to break out, the cities would be the primary targets. As Daniel Cordle writes, cities "became nuclear environments. No longer places of refuge protected by encircling walls—the new perspective was from above, not outside—they were places to flee from not to" (65). Moving to suburbia was not

⁶⁵ The first migration refers to the clearance of the land west of the Alleghenies by pioneers; the second migration to the reworking of this recently opened land with a "pattern of factories, railroads, and dingy industrial towns, the bequest of the industrial pioneer"; the third to the flow of people and materials into financial centres, where "buildings and profits leap upward in riotous pyramids" (x). The essay, first published in *Survey Graphic* in May 1925, was considered still accurate enough to be reprinted in 1968 as the preface to his *The Urban Prospect*.

quite enough to protect against nuclear war, however, and so Civil Defense literature focussed to a great extent on suburban homes. This greater emphasis was caused partly by "a strong ideological investment in making the middle-class environments of contemporary America seem secure," but also "because defence against nuclear attack, always liable to seem absurd, was marginally more credible in areas at a slight remove from the main target areas" (31). As we saw with Byron Haskin's *The War of the Worlds* (1953), the city could be effectively abandoned to destruction by area bombing or nuclear war, allowing a proportion of society to survive and to emerge, in a sense, "victorious."

In addition to their new status as targets of aerial bombing, however, fear of the city was inspired by a connected racial prejudice. In the US, the years following the Second World War saw millions of African Americans relocating from the segregated South in favour of the potential of large cities. Alongside this, and perhaps because of it, the rate of relocation to the suburbs by white residents of the city escalated. In addition to this physical redistribution by race, suburban enclaves sought to institutionalize the separation of races between city and suburb. The Federal Housing Authority, as Rosalyn Baxandall and Elizabeth Ewen write, established covenants to maintain racial segregation as a matter of policy: "Urban ghettos were reserved for African Americans and other minorities; suburbs were to remain lily white" (175). What has been termed "white flight" generally saw "wholesale departure of white folks from many formerly segregated communities" caused by the perceived fear of "the encroachment of people of colour" (Camarillo 143). In Britain, the 1948 British Nationality Act standardized Commonwealth citizenship laws, and this, coupled with high unemployment in the West Indies, saw the first significant era of black immigration (Clapson 80). Until the early 1950s this immigration proceeded at a

low rate: only 15,000 people of West Indian birth lived in the UK in 1951, and of these only 4,200 lived in London (Inwood 856). The McCarren-Walter Act of 1952, however, greatly restricting West Indian immigration into the US, saw this rate increase sharply, leading to stricter British immigration laws being implemented in 1962. The years leading up to this saw a growing racial prejudice against West Indian immigrants, manifested in groups such as Oswald Mosley's "Union Movement," "Keep Britain White," and the "White Defence League," although prejudice was generally "ubiquitous but well camouflaged" (858). The so-called "Notting Hill Riots" of 1958 were an unusually large-scale and vicious manifestation of such prejudice, which saw white gangs targeting black residents and businesses in the Notting Hill area. Though there was no history quite comparable with that of the US of spatial segregation according to race, it was still the case that the black population typically resided in only specific poor areas of the city which had been effectively abandoned to decay by white Britons, such as Peckham and Brixton.

In both Britain and America relocation to the suburbs necessitated the economic means to do so, and as such was a largely white middle-class phenomenon, and through housing-market discrimination the racial demarcation between suburban and urban space was reinforced. The abandonment of cities to their fate in the event of nuclear war, therefore, takes on racial implications when they are considered as spaces with the highest proportion of black residents, and as opposed to the almost exclusively white suburbs. As Jacqueline Foertsch writes, for "policy makers in general, negroes were a 'problem,' like the bomb, to be solved as expeditiously as possible. For white America, the answer in both cases was flight to the protected suburb, even as it knew that the solution was provisional at best" ("Extraordinarily" 136). Indeed,

as Paul Williams shows, civil defence planning on both sides of the Atlantic "privileged the suburban family (silently encoded as white)" (Race 111). Though it would be a stretch to suggest that either *The Day of the Triffids* or *I Am* Legend⁶⁷ is a conscious parable about the phenomenon of white flight to the suburbs and the sacrificing of black cities, both works are clearly products of prevailing contemporary anxieties over the threats towards cities and suburbs, and fit into a history of works of this kind. As Avila notes, the "rise of Hollywood science fiction paralleled the acceleration of white flight in postwar America and not only recorded popular anxieties about political and sexual deviants, but also captured white preoccupations with the increasing visibility of the alien Other" ("Dark" 88). 68 Sean Brayton, too, notes that there has long been a deep connection in fiction between dystopia or catastrophe, and multicultural landscapes (66). Both *Triffids* and *Legend*, along with their film adaptations, can be said (whether consciously or not) to engage with these kinds of concerns in their depictions of urban and suburban spaces.

THE DAY OF THE TRIFFIDS AND I AM LEGEND

Triffids tells the story of William "Bill" Masen, a man who awakens in a hospital bed in London to find that society has broken down completely as the result of sudden worldwide blindness. His eyes having been covered at the moment of catastrophe, his sight is both blessing and curse, as the few remaining sighted are coveted assets for the hordes of desperate blind citizens. Though seeming at first to be the only sighted person left in London, Masen soon meets novelist Josella Playton, who has also retained her sight, and the two remain allied over

Hereafter "Triffids."Hereafter "Legend."

⁶⁸ Popular anxieties over "sexual deviants" in inner cities will be the focus of Chapter 6.

the course of the novel, resisting the efforts of other disreputable groups of the sighted and blind to pull them apart for their own purposes. Alongside their travels and the conflicts experienced in an effort to re-establish society, the two are also threatened by the constant presence of triffids: venomous, carnivorous, and apparently intelligent plants, which come to dominate a humanity disadvantaged by blindness. Masen and Playton, accompanied by adopted daughter Susan and soon their young son David, eventually escape the mainland to join a community which has settled on the Isle of Wight, and there is some hope for their future. Steve Sekely's 1962 adaptation makes several considerable changes. Masen (Howard Keel) is now a US naval officer, who awakens in a London hospital and, on discovering what has happened during the night, heads across Europe in search of any naval base still manned by US troops. He finally finds such a place in Alicante, where he is rescued from Europe with two of the characters he had met along the way: a young English orphan named Susan (Janina Faye), and a French woman named Christine Durrant (Nicole Maurey). 69 The adaptation has been heavily criticized, for in its various changes of the source material it "falls too gratefully upon the horror film that is implied within Wyndham's story," and with the trek across Europe "loses the novel's sense of cultural claustrophobia" (Sawyer 81).

The protagonist of *Legend* is Robert "Bob" Neville, the last man and indeed the last human on Earth. Neville lives on Cimarron Street, near Compton in Los Angeles County, a macabre parody of a typical suburban neighbourhood. The quiet houses are now occupied by vampires, who descend on his home at night calling for Neville to come outside, to be bitten and join them. Much of his

⁶⁹ In the novel Ms. Durrant is a puritanical tyrant who represents the perilousness of conservative inaction in governance; in the film, Durrant is the hero's love interest, and comes swiftly around to his way of thinking.

life by day is spent in routine chores, of which one is discovering and exterminating vampires. His desperate loneliness leads him to be eventually captured by the living vampires, however, when he meets Ruth, a vampire disguised as a human. With this encounter Neville discovers that his indiscriminate slaughter of vampires has included both the innocent living infected with the plague, who are banding together to form a new society, and the reanimated dead, who are merely monstrous. He realizes too late that he has become the monster, exterminating the infected living as they sleep. The novel in this way "suggests that in a world that does not contain Good or Evil, violence, even when it is [...] undertaken in the name of survival, necessarily dehumanizes and creates monsters" (Waller 262). Having surrendered to capture, Neville dies the final example of his fearsome species, to become merely a "legend." The protagonist of Sidney Salkow's 1964 adaptation The Last Man on Earth⁷⁰ is Robert "Bob" Morgan (Vincent Price). Much of the action of the film remains the same as in Matheson's novel, except that Morgan is a scientist who has long been working on a cure for the vampire plague. At the end of the film he manages to successfully cure Ruth (Franca Bettoia) before being killed beside his wife's grave. What will happen to the cured Ruth is left unresolved, but it seems to leave the film with some hope that the vampires might one day become human again, which would mean Morgan had not become not a monstrous legend, but rather a legendary martyr.

The two novels and their film adaptations contain many parallels. In both novels it is the hubristic and militaristic advancement of mankind which sees its downfall. In *Triffids*, the blindness is thought to be caused by the accidental use of nuclear and biological weapons aboard satellites, and the triffid invasion is

⁷⁰ Hereafter "Earth."

caused by the cultivation of the plants for use as a renewable fuel source. The novel's depiction of military technology leading to widespread blindness recalls the effects of the atomic bombs dropped on Nagasaki and Hiroshima, from which the light emitted burned the retinas of many survivors. It also precedes the first example of artificial satellite technology, the Soviet Union's Sputnik, which was launched in 1957 and heightened the anxieties of the US and its allies over the future of the Space Race. In an essay titled "Science Fiction and Armageddon," Wyndham writes that he finds "scare-'em-to-death approaches" to apocalyptic fiction that directly involve nuclear war and the Space Race unconvincing (1). This may explain why he chose the unusual and indirect route of a story about mass blindness and walking plants. In Legend military and scientific progress is also at fault, as bombs used during the war lead to a virus mutation which turns people into vampires. The film adaptations of both novels take less critical views of humanity by making meteorites solely responsible for blindness and triffids in Sekely's adaptation of *Triffids*, and a mysterious plague responsible for zombie infection in Earth. This simplification may be due to the increased anxiety around nuclear issues in the early 1960s, the years in which heightened Cold War tensions led to the Cuban Missile Crisis and the Limited Test Ban Treaty. In each of the four works there is a coincidence which saves the male protagonist and allows him to become a singular witness of a world gone awry: Masen in the novel is stung in the eyes by a triffid, but this experience of near-blindness ironically leaves him among the few to keep their sight; Neville and Morgan are bitten by a vampire bat with an early mutation of the virus, and so become immune to the disease. Their early awareness of the emerging threats to humanity prepare these characters to resist that threat later on. Lastly, each of the four features a lone male protagonist with a monosyllabic shortened name: "Bill" and "Bob." The reader's surrogates in their exploration of the post-apocalyptic worlds, these are everyman characters, though they carry with them the prejudices of their time.

MASCULINITY IN CRISIS

Despite presenting in his first-person narration many independent female characters with believable motivations. Masen seems determined through his actions in the novel to assert his dominance as a man. In a chapter appropriately titled "The Groping City," Masen attempts to intervene as blind and sighted men sexually assault blind women in the overcrowded Piccadilly Circus. He views his attempted intervention as "a mixture of schoolboy heroics and noble sentiments," but also as a foolish move. Knocked down by another sighted man, Masen regains his "sense" and allows them to continue, remarking "I felt doubtful whether any of the women hereabouts would seriously mind, anyway" (Wyndham 59). Within one or two sentences following the introduction of any female character, Masen is quick to define them in terms of their physical attractiveness to him: he notes that it "seemed likely that beneath the smudges and smears [Playton] was good looking" (65); Sandra Telmont has a "pleasant though unexotic countenance" (105); Miss Cary has a face "interesting rather than good-looking" (111); Stephen Brennell's unnamed female "companion" is "a good-looking, well-built girl" (193); even the young Susan has to be described as a "pretty little girl" (210). This demeaning attitude towards women is also reinforced by his supposedly superior and exaggerated calmness with regards to triffids, which stands in contrast to the reaction of the women around him. who act, as he reports, "hysterically" (78). Sekely's film is also determined to present women as hysterical, with most of the screen time for Karen Goodwin

(Janette Scott), Durrant, and Susan consisting of petrified screaming, as the men push past them to fight back triffids. The women's career independence seems necessarily tempered by physical weakness, as the scientist Karen relies on brawny, aggressive husband Tom (Kieron Moore), and Durant and Miss Coker (Alison Leggatt), who started their own hospital, must rely on the military Masen and the intellectual Mr. Coker (Mervyn Johns). Much of this apparently hysterical femininity and dominant masculinity seems connected with the new role of women socio-economically in the years following the Second World War. A frustrated speech by Coker in the novel suggests such a connection, as he lambasts a young woman for what he sees as "a mess of myth and affectation" which hides the fact that "women can or do—or rather did—handle the most complicated and delicate machines when they took the trouble to understand them" (175). Coker neglects entirely any societal expectations directed at women or any other obstacles, and places the blame entirely on them, rather than so much as acknowledging any fault on the part of men. This understandably angers the young girl, and Coker and Masen watch, bemused, as she storms out. Rather, both Coker and Masen celebrate female resourcefulness while simultaneously demanding their obedience and occupation as housewives. The once independent novelist Playton feels conflicted over this issue, both wishing to make Masen happy and feeling that she "wasn't meant for this kind of life" as "a farmer's wife" (228).

Neville, too, is a character who represents the insecurity of postwar masculinity. As Bernice M. Murphy writes, Neville's attitudes towards women represent a reaction to the new position of women after the war: "the novel reflects conservative responses to [...] sexual equality and the inability of a certain type of man to adapt to the rapidly changing new world" (27). Neville

seeks to dominate women at any opportunity, though he is restricted by necessity to female vampires. Neville's test subjects in understanding the vampire plague are almost always women: "the question posed in his mind: Why do you always experiment on women? He didn't care to admit the inference had any validity" (Matheson 49). He considers the fact that, faced with a sleeping female vampire, he could rape her without consequence: "Morality, after all, had fallen with society. He was his own ethic" (50). As in many postapocalyptic fictions, as W. Warren Wagar notes, his status as the last man liberates him as "high court of the world" (Terminal 69). Feeling insecure about whether Ruth is outsmarting him, he reassures himself that being male gives him the advantage: "That's ridiculous, he argued. She's just a woman" (Matheson 126). Noting her choice of music, he comforts himself with the thought that "Her taste isn't remarkably advanced" (131). Neville attempts to assert his masculine superiority in these scenes, viewing women as having inferior intellects and only deserving attentions as targets of his lust. Part of his need to assert a primitive masculinity must be due in part to his loss of identity with the deaths of both his wife and daughter, whose existence defined him as husband and father, and society, in which he was defined by his maleness and more specifically by his military past. It seems also related, however, to issues with his father. These appear early in our introduction to Neville, when we are told that "Neville had loathed his father and fought the acquisition of his father's logic and mechanical facility every inch of the way" (15). Despite this resistance to scientific thinking, Neville finds that he must activate this part of his brain to try to discover a cure for the vampire disease, in the process unwittingly becoming more like his father. Interestingly, in *Triffids*, Masen seems to have similar issues with his father: "my inability to make any column of figures reach

the same total twice caused me to be something of a mystery as well as a disappointment to him. [...] And until I was thirteen or fourteen I would shake my head, conscious of my sad inadequacy" (Wyndham 25-6). Reliant on their supposedly superior male brains, both characters feel weakened by the fact that these qualities seem not to have passed from their fathers to them. Unequipped with these masculine qualities and so unable to pass them on, the aspiration to a certain kind of masculinity may die with them, making both characters last men.

RELOCATION TO THE SUBURBS

Initially content with objectifying female characters, developing a close homosocial relationship with Coker, and helping to rebuild society Masen becomes obsessed with finding and beginning a relationship with Playton. In other words, after a "youth" of wandering eyes, male bonding, and career focus, he devotes himself to finding a wife and concentrating only on his family. Taking Susan with him, he finds Playton in the Suffolk Downs. Their house, named Shirning Farm, is a "modernized and reconstructed" farm with a "suburban rather than a rural tidiness" which "tired Londoners had found adaptable to their needs" (Wyndham, Triffids 218). With their adopted daughter Susan and their own son David, Masen and Playton call themselves husband and wife and become a typical suburban family. They even drive a "station-waggon" (80), "the family car of the 1950s" (Jancovich, Rational 149). Neville and Morgan, too, drive station wagons. In the film Morgan notes, as he drives the bodies of vampires from his street to be burned in a pit, that "There was a time I shopped for a car—now I need a hearse." Making a connection with the procedures and rituals of death shows suburban aspirations such as the purchase of station

wagons as defeating for these last men—they represent only dead ends. At the farm Playton devotes her time to learning to cook and work around the house as Masen drives into London to gather supplies. The triffid-related violence Masen witnesses on these commutes connects to the fear of "urban violence and decay spreading outside the bounds of the city centre" that Robert Beuka identifies as a common thread in fiction concerning suburbia, particularly when allied to the "racial pluralism of the city" (41). With Playton's domain the adapted rural home and Masen's the dangerous city, the characters fit into prescribed roles as described by Abraham Akkerman in his principals of "Philosophical Urbanism." According to Akkerman, the Western city, or citadel, is deeply rooted in the masculine myth, so much so that the two have long informed each other. Femininity, on the other hand, is commonly associated with the opposite space, the garden, with its connotations of fertility and motherhood (230). Masen and Playton fit into these paradigms with what seems little thought, following the long tradition associated with these spaces.

Making a life in suburbia, the "sterile" cities become merely an "oppressive memory" to Masen and Playton (Wyndham, *Triffids* 164). The everpresent threat to this suburban idyll, however, are the threat of triffids, which necessitate a daily maintenance of the home's defences. Masen, Susan, and Playton have their time consumed with fixing the fences and burning the hordes of triffids with flamethrowers. The ritual exemplifies an extreme exaggeration of routine maintenance of the suburban garden, aggrandizing the achievement of keeping invasive species from spreading to their patch of land. Though they have left the city to decay and be reclaimed by nature, the danger does not remain there, but is continually threatening to encroach into their lives in suburbia. The gradual migration of triffids from the city centre is a manageable

threat, nonetheless, and the ultimate danger occurs when a human gang from the city targets their attractive suburban sanctuary. Defence against the horde of invaders is Neville's daily ritual, too, and much of *Legend* is spent telling of his trips to acquire garlic and mirrors, his maintenance on the house, and his production of wooden stakes. His suburban bachelor home is now a fortress against the constant tide of vampires emerging from their city homes and terrorizing him by night, a scheduled daily encounter with the horrors of his proximity to the metropolis. As with the 1950s civil defence efforts, these characters are continually reinforcing their suburban homes against the threat originating from the nearby existence of the city. Though this can be clearly connected with the nuclear threat, however, there is a distinct racial undertone to the novels and films.

TRIFFIDS AND VAMPIRES AS RACIALIZED OTHERS

Race is not something explicitly dealt with either by *Triffids* or *Legend*. Though Dr. E. H. Vorless advocates in *Triffids* "one primary prejudice, and that is that *the race is worth preserving*" (Wyndham 119, emphasis in original), and Ruth refers to Neville as "the last of the old race" (157), these mentions refer merely to the fight between the human race and a species which is "Other," whether triffid or vampire. There does, however, seem to be some cause to view the threats to the main characters as stand-ins for racialized Others. As Avila writes, there has long been an "ominous affinity between the alien Other of science fiction film and the racialized Other of American history" ("Dark" 88).

⁷¹ The mercenary methods suggested by Dr. Vorless to preserve the race involve using blind women for procreation and refusing to help blind men. In a reading of the novel based on race, the views he espouses make him somewhat evocative of the academic proponents of eugenics such as Dr. Ernst Rüdin. It also raises the history of the social construction of race, which often made allowances for the sexualization of women of ethnic minorities, as Ian F. Haney-López notes (32). While Vorless finds the blind male Other useless to his cause, the blind female Other can be acceptably brought into his new race.

Vincent Price and Howard Keel are both white men, and there is evidence in the novels that Masen and Neville are both white. The race of characters in Triffids is only specifically mentioned with regards to the "dark" Umberto, of "assorted Latin descent," which appears to suggest that he is the only character whose race deserves remark as being outside the norm (Wyndham, *Triffids* 29-30). Neville's race is more clearly alluded to, as he is described as having a "blond beard," "blue eyes" (Matheson 109), and a father named "Fritz" (15). Conversely the antagonists of the stories, the triffids and the vampires, who invade the city and displace the white heroes into the suburbs, are described in terms of their darkness. Umberto, who is largely responsible for the proliferation of triffids, is "sleek, dark," mysterious, and manipulative (Wyndham 30); Masen sees the triffids themselves as "odd and somehow foreign" looking (37, emphasis in original) and they stand out from other foliage by making "a dark border round any inhabited place" (255). The "dark border" here is suggestive of the poorer suburban neighbourhoods on the outskirts of towns. Racial minorities in the UK generally did not move out to suburban areas until policy decisions from 1969 encouraged this by making it economically viable, and even then only in small numbers due to the isolating effects of moving into predominantly white areas. Cheaper land tended to be on the outskirts of town, however, which made it a suitable site for low-income council estates. This created division within suburbia along class lines, as the council estates were distinct from the "many originally prosperous and class-specific suburbs [which] have remained as bywords of suburban kudos" (Clapson 72). In *Legend* Neville repeatedly refers to the vampires with such terms as "black bastards" (Matheson 24) and "dark men" (150). He even mockingly refers to his fight against them as "minority prejudice" (20), suggesting that, while theoretically he could live side-by-side

with vampires, he would not "let [his] sister marry one" (21). 72 Comments such as this imply that while Neville recognizes the arbitrariness of his prejudice against the Other, he nonetheless still perceives associating and procreating with them as potentially dangerous to his own identity. Neville's encounters with the vampires in the city invariably begin with a drive along Compton Boulevard, which runs through the middle of the city of Compton. Whether or not Neville's house is actually within Compton itself or merely nearby, the repeated reminders of this particular city in Los Angeles County is evocative of racialized spaces. As Murphy points out, at the time of the novel's publication Compton "was well on its way to becoming one of the most racially divided cities in the United States" (32). Neville's repeated characterization of the vampires as "black" and "dark" therefore suggests that whatever his attitudes towards the racial composition of Compton prior to the apocalypse, "now a really bad element had moved into the neighbourhood, [Neville] can violently express feelings that otherwise have been repressed" (33). The use of Los Angeles can be seen, therefore, as further evidence of the vampires as suggestive of African Americans.

THE COLONIZATION OF COLONIZERS

These invading forces, the triffids and vampires, are suggestive of a new colonialism, in which roles have been reversed and the white colonizers have become the colonized. As John Rieder writes, stories of science fiction invasion have a close connection to the subject of colonialism:

⁷² Mathias Clasen argues against reading any kind of subtext into phrases such as these, writing dismissively "To be sure, the vampire is an apt metaphor for the other, the mother, the subaltern, the liminal, for the allure of death, for fear of death, desire for immortality, fear of immortality, for immigration, the phallus, the vagina, capitalism, for colonization, female sexuality, male sexuality, amorphous sexuality, and probably much else" (318). The argument that any of these suggestions could be made and that therefore none of them should be, of course, gets him nowhere.

all these are not merely nightmares morbidly fixed upon by science fiction writers and readers, but are rather the bare historical record of what happened to non-European people and lands after being 'discovered' by Europeans and integrated into Europe's economic and political arrangements. (124)

Peter Hutchings makes a similar point, noting the telling nature of British obsession with invasion narratives: "In reality Britain has rarely been invaded. In its fantasies the opposite is true. It is perhaps fitting that a nation with such an expansive imperial past should have developed a rich tradition of narratives about itself being invaded" (337). While much of these invasion narratives imagine a European, often German, aggressor (as demonstrated by I. F. Clarke in *Voices Prophesying War: Future Wars 1763-3749* [1992]), the logic carries forward to a postwar era which saw unprecedented degrees of immigration taking place in Britain from countries previously under colonial rule. The post-apocalyptic landscape, re-ordered by catastrophe, allows for a new colonial encounter to take place, as Williams writes:

The world after nuclear war, then, mirrors the pre-colonial and "pre-civilized" world of soft places⁷³ that defy European cartography. Both spaces are positioned outside human civilization, either awaiting its imprint or the result of its self-destruction. And as such, the post-apocalyptic world can be an arena for the replaying of the colonial encounter, frightening in its unintelligibility but alluring in its virgin promise. ("Beyond" 304)

⁷³ The term "soft places" derives from Neil Gaiman's description of the "phenomenon of 'nothing' spaces resistant to cartographic inscription," (Williams, "Beyond" 86), which equates to the "space preceding colonization." Soft places both acknowledge and value "the space that exists its 'discovery' by colonists" and "offers a sentimentalized space where past and present meet in a site outside colonial history" (87).

The history of British colonialism, therefore, makes the post-apocalyptic terrain of southern England the perfect environment for a new colonial encounter to take place and a continuation of the tradition seen in H. G. Wells's The War of the Worlds (1897). The title "The Day of the Triffids" shows a colonial role reversal of this kind in which humanity is no longer the most powerful race, and Masen remarks that it is "an unnatural thought that one type of creature should dominate perpetually" (Wyndham 112). In the manner of Victorian fictions utilizing the theme of the dying sun, as explored in Chapter 1, Triffids and its film adaptation reflect a post-colonial Britain, and the rise of the American Empire in its place. In America, too, what Rieder describes as "the form of global hegemony being established by the United States in the wake of World II" ignites anxiety of the reversal of colonizer/colonized (148). By the end of Legend, Neville finally comes to realize that majority and minority roles in his world have reversed: "I'm the abnormal one now. Normalcy was a majority concept, the standard of many and not the standard of just one man" (Matheson 159). As Veronica Hollinger writes in "The Vampire and the Alien: Variations on the Outsider" (1989), the vampire in particular is a figure with which conventional oppressor/victim relationships have often been explored and deconstructed in fiction (155). Each of the four texts thus expresses anxieties over the inversion of colonial power, in which karmic reprisal is meted out for the crimes of empire.

Spaces which had previously been dominated by humans such as Masen and Neville have come to be reallocated as belonging to the invading forces of a new society. In *Triffids*, this new society is the reclamation by nature of built spaces. Commenting on rural developments, Playton notes "people were wailing about the way those bungalows were destroying the countryside.

Now look at them." Masen replies, "The countryside is having its revenge, all right" (Wyndham, Triffids 242). In depicting the conflict between the natural and built environments, the bungalow possesses very specific connotations. An architectural form originating in India with a hybrid Bengali name, bungalows were used by members of the East India Company and the British Raj, and were later appropriated for use in Britain itself (Kennedy 103). At the apex of the British Empire in the late nineteenth century, London occupied a central global position in banking, finance, and services. Bungalows were constructed on the outskirts of the city to accommodate "a new bourgeoisie" (King 65), representing "the symbolic display of private property ownership" in their purposely uneconomical horizontal use of space (56). Even after the Empire began to decline, the bungalow continued to be a stalwart of suburban housing. After the Second World War, local authorities took over army land and erected 15,000 temporary bungalows or "hutments," and the "popularity of these aluminium-framed 'prefabs,' which were produced in their tens of thousands by redundant aircraft factories at the end of the war, was one of the surprises of the postwar years. All but 500 of them were still in use in 1955" (Inwood 824). A quintessentially suburban development, bungalows are thus structures associated with the privilege of a colonial power which spread broadly across rural land. Their reclamation by nature in *Triffids*, therefore, displays an inversion of the established power structure. Human colonizers, bringing about their own demise in the course of their dominion over nature, are now the colonized, as nature moves in to destroy them and their homes.⁷⁴

In *Legend*, the new society is one not wholly different to humanity, albeit in an earlier, more primitive form. Neville wonders, "Did they have to do it like

⁷⁴ For more on botanical incursions in science fiction, see Rob Latham's "Biotic Invasions: Ecological Imperialism in New Wave Science Fiction" (2007).

this, with such a black and brutal slaughtering? [...] They were more like gangsters than men forced into a situation" (Matheson 149). Indeed, the labelling of this new society as "gangsters" links them intimately to a specifically American urban space, putting them further at odds with Neville's suburban identity. In The Immediate Experience (1962), Robert Warshow writes that "the experience of the gangster as an experience of art is universal to Americans," and describes the figure of the gangster as "the man of the city, with the city's language and knowledge, with its queer and dishonest skills and its terrible daring" (86, emphasis in original). When Charlton Heston was pitching the novel for a second film adaptation (which would become The Omega Man [Boris Sagal 1971]), he characterized the "Others" as a gang-like group, its members like teenagers who stay in all day and wake at night, and whose affliction is like drug abuse, "capable of chemically inducing a progressive and irreversible psychosis" (2). Given the formation of youth gangs such as Compton's Pirus in the 1960s and 1970s, Heston's description pairs the vampires with a particularly urban incarnation of drug-related and violent crime which is commonly seen as being comprised of gangs of "minority youths, dressed out in certain colours or clothing, and striking menacing poses as 'outsiders'" (Cummings and Monti viii). While it is not always the case, some violent gangs emerge in response to "disparities between aspirations of young persons and the lack of opportunities they have in poor communities" (Joan Moore 33), enabling a modicum of empowerment and resistance to the dominant, oppressive forces of society.

Accordingly, Ruth shows Neville the hypocrisy of his criticisms: "New societies are always primitive. [...] In a way we're like a revolutionary group—repressing society by violence. It's inevitable. Violence is no stranger to you. You've killed. Many times" (156). Those infected with the vampire plague,

hunted by Neville, have organized and formed a rebellion to overthrow his dominion and reclaim the land. Attempting to hold out against this rebellion, "Neville's possessive investment in individuality [is] pathological in its protection of both white masculinity and private property[.] [...] Neville's house marks the boundary between the human and the nonhuman; it is [...] the 'first line of defence' against vampires whom Matheson casts as racialized Others" (Diehl 103). In a scene redolent of a race riot, and in an urban county that was to see the Watts Riots of 1965, the vampires come by night "in their dark cars with their spotlights and their guns and their axes and their pikes. Came from the blackness [...] around the [Compton] boulevard corner and clutching out at Cimarron Street" (Matheson 147). As Carl Abbott writes, the city is a place "custom made for spreading disease" such as bascillus vampirus, where if "forces of social order and discipline weaken [...] country folk will presumably go on behaving like solid citizens, but urbanites will turn into a mob" (185-6). Imagining the vampires in terms of the inhuman, racialized Other in rebellion against white masculine rule brings to mind the origins of the "zombie," not least because of Legend's crucial importance in the evolution of the zombie myth itself.

BLURRED BOUNDARIES

The Haitian zombie, which would later be appropriated by America as the Hollywood zombie, began as an adapted form of West African religious ideas repurposed to speak to the experiences of slaves in the Caribbean. A person robbed of their volition and humanity and set to work tirelessly in the fields, the zombie was a fate to be feared and a clear parody of the system of Euro-American capitalism which depended on slave labour. The idea of the zombie

originated first in the colony of Saint Domingue, later the site of the Haitian Revolution and a localized overthrow of the system of slavery. Outnumbered by the black slaves, French colonial rule was defeated. Reports of life in the newly formed Haitian Republic came to emphasize the perceived primitiveness of life there, in such books as Spenser St. John's *Hayti: Or, the Black Republic* (1884). St. John's book, researched through a combination of hearsay, conjecture, and hyperbolic newspaper reports, portrays Haitian rule as cannibalistic "barbarism" (188).

The revolution of a majority Other which is viewed as primitive by the white oppressor has clear links with the story of Legend. Indeed, the vampires of Legend and Earth provide something of a bridge between the Haitian origins and Hollywood appropriation of the zombie. Though referred to throughout as vampires, the Others of *Earth* are scruffy, shambling, groaning creatures, the reanimated dead, and visually share far more in common with the zombies of future George A. Romero films than the vampires depicted in films such as Dracula (Tod Browning 1931). Their infection in the novel is through bascillus vampirus, mutated by the use of bombs during the war and transmitted via mosquitoes and dust storms. The infection in the film is merely an airborne virus. In both cases the means of transmission has moved from the body horror of gothic vampire stories to the scientific reasoning of science fiction, and places the creatures in line with what Kevin Boon describes as the "bio-zombie": "one that has been deprived of its essential self or its volition by some external substance, either temporarily [...] or permanently [...] [by] chemicals [or] viruses" ("Other" 5). The chemical nature of the vampire epidemic, a form of germ invasion, speaks to fears of the time of an insidious enemy with the ability to infect normal, upstanding American citizens. In this way Legend and Earth,

along with Triffids in its novel and film incarnations, fit into the broader history of invasion-scare narratives of the postwar years, Invasion of the Body Snatchers (Don Siegel 1956) being a classic example, in which aliens and monsters are often seen as stand-ins for communists. The vast majority of scholarship on postwar science fiction focusses on this theme as the primary concern As Mark Jancovich writes, however, this is an oversimplification which excludes "a great many films which simply do not fit with this subgenre," and "even the 1950s invasion narratives are often markedly different from one another" (Rational 2). Diehl points out that the racial context of the time is connected with this anxiety: "I Am Legend is set up to be yet another alien invasion narrative that elicits male hysteria over the transgression of clearly marked boundaries of masculinity and race (1954 marking the beginning of the end of American segregation with Brown v. Board of Education)" (103). The boundaries between race for Neville, once so clearly demarcated, have become blurred, and he realizes that it is he who has become the feared monster. As Sarah Juliet Lauro and Karen Embry write in "The Zombie Manifesto" (2008), the zombie is a figure highly suited to these issues: "the zombie's irreconcilable body (both living and dead) raises the insufficiency of the dialectical model (subject/object)" (87). Established divisions in society, therefore, have become problematized. As with the blurred boundaries between the racialized body, the racialized city is also not clearly demarcated.

While attempts were being made to racially segregate populations between the suburbs and the urban centres, in practice these boundaries were not so clearly defined. Despite the "separate but equal" laws which came to be dismantled beginning with Brown v. Board of Education, "the lines between black space and white space increasingly blurred [in the 1950s], particularly in

the cities, where racialized minorities, blacks in particular, concentrated in unprecedented numbers" (Avila "Dark" 89). The decentralization of cities no doubt influenced this amorphousness in racial boundaries. Jane Jacobs, in her The Death and Life of Great American Cities (1961), lamented the presence of the automobile in decentralizing American cities, resulting in the formation of "Noplace" (352). Mumford, too, wrote of the mechanical functionality of "formless urbanization" brought about by automobile transportation, which "disrupted urban space [...] recklessly" (Reader 110). Despite the prevalence of white flight to the suburbs, urban and suburban spaces were nebulous and formless enough that they were not wholly separate but rather bled between one another, as, consequently, did supposedly black and white spaces. Not only this, but the suburbs were not simply exclusively white. In London, for instance, while West Indian immigrants seldom lived in the outer suburbs, most lived in "poorer inner suburbs" (Inwood 858). In America, studies such as Kevin M. Kruse's White Flight: Atlanta and the Making of Modern Conservatism (2007) demonstrate that the conventional wisdom of a division between "chocolate cities' and 'vanilla suburbs'" is only part of the story, as many cities had both white suburbs and black suburbs (Avila, "Dark" 88). The interdependence of city and suburbs also challenges this idea of a clear demarcation. Beuka writes that the daily commute between suburb and city in fiction of the suburbs "both highlights and ultimately works to dissolve the distinction between the urban and nonurban realms" (250), and this too can be seen in the works looked at in this chapter. The routine drives between suburb and city by Masen in *Triffids*, and by Neville and Morgan, make clear the lack of an absolute division between what are supposedly the violent and dangerous city and the sanctuary of the suburbs.

CONCLUSION

The parallels between the two novels and their film adaptations in terms of the use of the last man theme to portray anxieties regarding the status of white males in cities and suburbs are, therefore, distinctly evident. There are noteworthy differences between them, however, caused by their differing settings of Britain and America. In Triffids, Masen recounts people mentioning America repeatedly with only one specific inference: that America will eventually intervene to save the afflicted Britons. Brennell's good-looking companion, for instance, "had an utterly unshakeable conviction that nothing serious could have happened to America, and that it was only a matter of holding out for a while until the Americans arrived to put everything in order" (Wyndham 194). Other refugees refuse to join up with Masen and Coker, holding a "widespread and fixed idea" that the Americans "would never have allowed such a thing to happen in their country." Masen and Coker, although not being able to disprove these ideas, react to them with scorn, mockingly referring to belief in "American fairy godmothers" and remarking that "any surviving Americans would be likely to have their hands more than full at home" (202). Reliance on American intervention is considered beyond belief, and Masen instead prefers to rely only on a British "make-do" attitude such as that championed during wartime. In the film adaptation, Masen is now a member of the American military, and though he cannot save Britain, he does at least manage to save Susan and Durrant. The remaining American naval personnel (all white, all male) in Alicante are the only organized force left in Europe, and they alone are evacuating survivors from the ruined Europe to the (presumably) better-off America. It is only through the power and stability of the American military and its white masculinity,

therefore, that anyone on the continent survives this apocalypse. This highly positive spin on US military power separates it somewhat from the novel and makes the film far more typical of American monster movies of the time. In America itself, in *Legend* and *Earth*, there is no real mention of Europe, or really of any other continent. With the knowledge that Los Angeles and therefore the rest of the US has ceased to function, Neville and Morgan hold out no hope for being saved by another nation: if America has fallen, the world has fallen. The difference is telling: in all four works the existence of America stands for the continued existence of the world, so much so that it possesses the aura of a fairy-tale in *Triffids*. In contrast to works discussed in earlier chapters which focus on London as the nexus of Western civilization, a transition is underway in the immediate postwar years to passing that title to the great American cities such as Los Angeles.

The two novels and their film adaptations, in their use of the last man theme and their exploration of post-apocalyptic urban centres and suburbia, depict Britain and America in something of an identity crisis. White masculinity has ceased to be the dominant mode, as cities, which Akkerman shows as inherently male spaces, are given up to the threat of nuclear annihilation and an increasing proportion of black residents. Moving to the suburbs, gendered female, these white men struggle to adjust to inhabiting a space of female empowerment, and are additionally threatened by a black populace that is no longer subject to "separate but equal" laws. Though living surrounded by many other beings, whether the blind, the vampiric, or the independent and successful Josella and Ruth, the last men are characters nonetheless profoundly alone and desperate to assert the superiority of their gender. Their only refuge is in the futile maintenance of the defences of their suburban homes against an

emergent new society with which they are not compatible, in the obstinate conservatism of a doomed order.

With their last white men standing in as generic everymen, it is mainly in their incompatibility with the dominant forces of society that these texts interrogate such a conservatism. Neville's realization of his own monstrosity in Legend, although coming too late to save himself, is the only moment in these four works in which this interrogation is consciously addressed. As Jancovich notes, "Matheson's fiction seems to be preoccupied with the male anxieties of the 1950s, although he does not necessarily endorse these anxieties. More commonly, he explores and criticizes the conceptions of normality upon which these anxieties are often founded" (Rational 130). The novel's depiction of "the privileged trying to maintain their privilege" (148) places readers "in an uneasy relationship to Neville in which they are not only deeply involved in his thought processes and responses, but are also able to identify their limitations and omissions" (149). This ability is certainly not forced upon the reader, however, and while Neville is clearly a character with many limitations, it is not until the conclusion of the novel that he gains the self-awareness to recognise his role in their formation. While it might be argued that we are placed in a similarly uneasy relationship to Masen, particularly given his attitudes towards women, the refusal of *Triffids* to overtly pass judgment on him as a character could be read either as a lack of self-awareness, or as an indication that Wyndham is leaving this judgment entirely to the reader. In an early manuscript, Triffids had possessed a Foreword written in the style of the disclaimer before an evewitness report:

The Editors wish to make it clear that the following account is the personal story of one man involved in disaster, and the opinions

expressed are his personal views. William Masen was not a person of any importance in the pre-catastrophe world. He was an ordinary man of his time, reacting as an ordinary man. (Wyndham Manuscript 1)

A conceit similar that used in the quasi-journalistic science fiction stories of Wells, the Foreword introduces moral distance from Masen, indicating that perhaps the conservatism seen as typical of men of his time was no more endorsed by Wyndham than by Matheson. Its removal, however, makes this uncertain. Both novels and their film adaptations can thus be seen as a product and a potential critique of the anxieties of white male anxieties in postwar Britain and America, anxieties closely connected to the demographic makeup of both the cities and the growing suburbs.

Chapter 5:

Environmental Wastelands and Underground Cities

The mid 1970s to the late 1980s witnessed an unprecedented concentration of post-apocalyptic fiction in the US, UK, and continental Europe. In literature many expansive novel series gained cult followings, such as Georges-Jean Arnaud's vast La Compagnie des glaces (The Ice Company, original run 1980-1992), and subject matter tended towards the harrowing, such as the explorations of infanticide and cannibalism in Russell Hoban's Riddley Walker (1980) and Paul Auster's In the Country of Last Things (1987); series such as *Doomsday* + 1 (1975-77), 2000 AD (1977-present), and *American* Flagg! (1983-1991) made a lasting impact in the medium of comics; in television both series adaptations of classic fiction such as *The Day of the Triffids* (1981) and docudramas such as *The Day After* (1983) received high viewing figures; and early videogames began to lay the groundwork for the explosion of postapocalyptic titles that would begin with 1988's Wasteland, as we will see in Chapter 7. It was US movies, however, long since liberated from the Motion Picture Production Code (abandoned in 1968), which represented perhaps the densest concentration of these texts. W. Warren Wagar's Terminal Visions: The Literature of Last Things, the most complete study of apocalyptic and postapocalyptic fiction, was published in 1982 as this cultural output reached a crescendo, but as a result misses the peak of the cycle in 1983 and 1984. Wagar does manage, however, to record some observations about the makeup of this phase. "The 'disaster' film," he writes, "provided up to one-quarter of the cinematic entertainment available in Our Town in any given week of the late 1970s and early 1980s," and the creators drew on

a rich variety of astrophysical, geological, climatological, and biological dooms. One science in particular, ecology, has generated an immense literature of catastrophe. Ecologists tell of "the population bomb," the coming "death of the oceans," the "limits to growth," the need for a new "lifeboat ethics." There will soon be great famines, droughts, and—take your choice—a new ice age or the transformation of the earth into one vast suffocating hothouse. (*Terminal* 4)

Indeed, in the wake of postwar industry, the growth of car culture, and suburban sprawl, environmental concerns were being increasingly voiced in the US. Rachel Carson's *Silent Spring* (1962), which criticized the lack of regulation of pesticides and the effects of chemicals on the environment, was perhaps the most significant single work to instigate a greater awareness of environmental issues in the US. As Robert C. Paehlke writes in 1989, such voices increasingly heralded the threat of "easy apocalypse," "ecological doom," and rhetoric with a "millennial dimension" (2). As cities grew the demand for energy, petrochemical products, and virgin land grew with them, and with the government repealing environmental protection legislation (particularly under the Reagan administration), the threat of oil crises, and nuclear accidents, the environmental movement increased in urgency and came to be at the forefront of the national consciousness.

Post-apocalyptic narratives found themselves returning to these issues repeatedly, resulting in a large number of films with very similar aesthetics, tones, and plots. In contrast to the texts of previous chapters, films of the 1970s and 1980s place a greater focus on the threat posed to the city by a damaged global ecosystem, a threat often caused by the city itself through urbanization

and industrialization. Catastrophic events in these stories leave a barren, desert landscape incapable of sustaining organic life. Frequently, the forsaken surface of the Earth is abandoned, whether for biodomes aboard space-stations (Silent Running [Douglas Trumbull 1972]), extra-terrestrial terraformed planets (Blade Runner [1982]), or sealed sanctuaries on Earth (Logan's Run [Michael Anderson 1976]). Of the latter category, many films follow Fritz Leiber's "A Pail of Air," analysed in Chapter 3, in situating their sanctuaries below ground. Two of these, A Boy and His Dog (1975) and Slipstream (1989), are the focus of this chapter. In narratives such as these, surviving humans raid the shells of ruined buildings for canned goods but the lack of fresh food, water, and gasoline to power machinery shows that their existence is unsustainable. As Gary K. Wolfe and Mick Broderick note, these are narratives concerned with survival, in which characters are alienated from the environment and primarily scavenge from the detritus of the old world rather than developing anything new. Though Earth's barren surface is left behind in favour of mining the urban past, whether for physical objects or ways of life, these films show such temptations as mortally dangerous. These narratives as a whole call for a greater awareness of the fact that the built and natural environments are not separate, and a politicization of environmental concerns is necessary for urban and technologically advanced civilizations to prosper. Following Donna Haraway's work on the "boundary breakdowns" of the cyborg (Haraway 151), critics have suggested that the city, as a cyborg, inevitably complicates the boundary between built and natural environments: "[cities] were formed from and by the earth itself—objects ultimately derived from rocks, water, plants, and sometimes animals—but were also manipulated by human hands," thereby becoming "part-human, partnatural 'cyborg' buildings" (Bohannon 477). As a result these are works

contributing to a narrative of "reinhabitation," a term used since the 1970s to describe, in the words of pioneering ecocritic and sesquipedalian Lawrence Buell, "mutual renewal implicit in a dedication to ecocultural understanding and restoration." In other words, these works taken collectively provide urban communities a means to "(re)learn what it means to be 'native' to a place" (85), resituating the city in the cultural mind-set as a place interwoven into the broader environment of the global ecology. Through cautionary depictions of Earth's environmental future, the place of the city is re-evaluated as a sustainable setting for civilization.

BEGINNINGS OF THE ENVIRONMENTAL MOVEMENT

Environmental issues came to public attention in the US during the 1970s and 1980s after a number of high-profile calamities. Activists during these years warned of "the dangers of unchecked industrial growth" and how "uncontrolled technology might feasibly destroy whole cities," showing that urban centres could at once be the perpetrators and victims of such incidents (P. Jenkins 40). The discovery in 1976 of a vast toxic waste dump at Love Canal in Niagara Falls, New York as well as stories from abroad such as the 1976 chemical leak at Seveso in Italy gained popular attention for the environmentalists' cause. Alongside these incidents, the long established reliance on oil as an energy supply was being tested. The first major oil shock came to the US in 1973 as its foreign policy during the Yom Kippur War led to an oil embargo by Arab members of the Organization of Petroleum Exporting Countries (OPEC). The impact of the embargo both indicated to oil exporting countries in the Middle East their influence over the US and other countries in holding this precious commodity, and also showed how far the US had come from the self-sufficient

era of domestic oil production. Rather than America supplying the world with oil products as it had beginning with the kerosene exports of the 1870s, it was now at the mercy of the availability of oil in the world market, a power shift that would ultimately bear profound influence on foreign policy. This reliance on oil imports rather than home-produced oil led also to the crisis of 1979, when the Iranian Revolution destabilized the consistency and quantity of imports. President Jimmy Carter implored the American people to conserve energy in two speeches in 1977, asking for personal sacrifices in exchange for "a decent world for our children and our grandchildren" (gtd. in Merrill 125). Seeking alternatives to fossil fuels, nuclear energy was increasingly seen as a viable substitute. A dramatic backlash, however, followed 1979's partial nuclear meltdown at Three Mile Island in Pennsylvania and the devastating 1986 nuclear meltdown at Chernobyl in Northern Ukraine. While nuclear energy had been imagined as a "clean" alternative to the fossil fuels long attacked by environmentalists for their polluting effects, the accidents of 1979 and 1986 (among many others) irreparably damaged the image of nuclear power. 75 Despite the demand for energy it was clear from these incidents of the 1970s and 1980s that the damage done to the worldwide ecosystem by fossil fuels, chemical processes, and nuclear energy could not be kept at arm's length, but rather would affect urban, suburban, and rural areas alike.

With tensions over the availability of energy mounting, the US government pushed back against the recent advances of an increasingly

⁷⁵ For studies of popular opinion on nuclear energy in the wake of these incidents see, for instance, J. Richard Eiser, Joop van der Pligt, and Russell Spears' *Nuclear Neighbourhoods: Community Responses to Reactor Siting* (1995). Denunciations of nuclear power from this era such as Viktor Haynes and Marko Bojcun's *The Chernobyl Disaster: The True Story of a Catastrophe – an Unanswerable Indictment of Nuclear Power* (1988) argued that the nuclear "experiment" should be abandoned for the tried and tested fossil fuel plants. Haynes and Bojcun write that considering "cost[,] [...] the damage to the environment, economy and people's health caused by one major accident like Chernobyl, it becomes patently clear that nuclear is no bargain at all for human society" (205).

politicized environmental movement. The Environmental Protection Agency (EPA), set up in 1970, began seeing resistance from the Carter administration: "corporate opposition warned that environmental restrictions would further damage the economy" (Kline 98) and "business coalitions, such as the Business Roundtable, attacked regulations established by the EPA" (99). From 1980 the Reagan administration seemed to make this push back a matter of policy, with the appointment of such figures as Secretary of the Interior James Watt, EPA official Anne Gorsuch Burford, and "Edwin Meese protégé" Rita Lavelle (Schaller 101). These individuals were often "ideologically, and in Watt's case religiously, opposed to most government-mandated efforts to protect the natural environment" (100). As the Reagan presidency wore on the extent of the systematic damage done to environmentalist causes became ever more apparent. The 1987 Nuclear Regulatory Commission investigation discovered that a profound neglect of nuclear safety had been allowed to develop in the 1980s, and preliminary surveys by the Defense and Energy departments found in 1989 that clean-up of the damage done "may take thirty years and cost between \$200 and \$400 billion" (103). The confidence gained by environmental progress made in the 1970s was undermined by the almost systematic sabotage conducted by the government in the 1980s. Apocalyptic fictions grappled with these issues, taking government deregulation to its logical extreme by picturing lawless wastelands populated by murderous bands of resource-hungry savages and their gas-guzzling death-machines.

THE AMBIVALENT ROLE OF THE COMBUSTION ENGINE

A principal manifestation in post-apocalyptic narratives of the global energy shortages of the 1970s and 1980s was organized around their impact on the

consumer: that of the price of gasoline and the place of automobile culture. Frequently, this was an issue explored in fiction through "gasoline wars" and the use of rusting, weaponized automobiles. The quintessential example of this genre is the Australian film series Mad Max. In the movies Mad Max (George Miller 1979), Mad Max 2: The Road Warrior (George Miller 1981), and Mad Max Beyond Thunderdome (George Miller and George Ogilvie 1985), motorcycles, cars, gangs, and the availability of gasoline all play central roles in the plot and generally in the makeup of the post-apocalyptic world. The series has received extensive scholarly attention, but other movies symptomatic of similar concerns have received comparatively little treatment. 76 While Mad Max resulted in a large number of close imitations, the trend of post-apocalyptic narratives featuring automobile culture as a harbinger of danger extends beyond its influence to be more broadly reflective of the times. The US production No Blade of Grass (Cornel Wilde 1970), for instance, depicts a family escaping the riots and looting of London for the pastoral idyll of the North after the onset of a global environmental crisis. At the mercy of the lawless roads, a motorcycle gang preys upon them, raping both the protagonist's wife and daughter. The film becomes a struggle between the protagonist, John (Nigel Davenport), and the motorcycle gang leader, a character nicknamed "The Fuhrer," which results in a final bloody shoot-out. Released prior to the oil crisis of 1973, No Blade of Grass could be seen as part of the history of films that includes violent motorcycle gangs, including The Wild One (Laslo Benedek 1953) and The Wild Angels (Roger Corman 1966). Its bringing together of motorcycle gangs and a global environmental apocalypse, however, makes the film representative of a

⁷⁶ For analysis of the *Mad Max* series see, for example, Jerome F. Shapiro's *Atomic Bomb Cinema: The Apocalyptic Imagination on Film* (2002), Roslyn Weaver's *Apocalypse in Australian Fiction and Film: A Critical Study* (2011), and Paul Williams' *Race, Ethnicity and Nuclear War: Representations of Nuclear Weapons and Post-Apocalyptic Worlds* (2011).

new development in this tradition, setting the stage for post-apocalyptic films to come.

In George A. Romero's Dawn of the Dead (1978) the survivors of a zombie apocalypse escape from Philadelphia and take refuge in a shopping mall, but are forced into a violent showdown with a marauding motorcycle gang. The gang leader prominently wears a Nazi Shutzstaffel (SS) helmet, signalling, as it did with the nickname of The Fuhrer, their status as ruthless enemies without a sense of the value of human life. In each of these films, while the threat to the damaged ecosystem poses the most significant threat to humanity, the futile battles initiated by these resource-hungry gangs go beyond reason. Riding around the inside of the mall until many of their own have been killed, the gang of Dawn of the Dead finally retreat, having taken very few items in their disorganized looting, showing their chaotic purposelessness and selfdestructive consumerism. Regarding the barbarous gang, the character Peter (Ken Foree) remarks, "that's a professional army. Looks like they've been surviving on the road all through this thing." Something about these gangs makes them apparently uniquely suited to confronting the danger and anarchy of the post-apocalyptic world.

Outlaw motorcycle clubs such as the Hells Angels and the Bandidos had emerged following the Second World War, growing to such a size that in the 1970s they were viewed as criminal syndicates and prosecuted under the 1970 Racketeering Influenced and Corrupt Organizations (RICO) Act (Caine 19). Drawing on this, the motorcycle gangs of *No Blade of Grass, Mad Max*, and *Dawn of the Dead* embody the lawlessness of post-apocalyptic society, and their home of the open road is just as dangerous as the cities from which the heroes have fled. It is noteworthy that the villains of these films are engaged in

the euphoric consumption of gasoline, an increasingly costly commodity and a signifier of one of the most important inventions of the modern era, the combustion engine. At a time of steeply rising oil prices, these characters are freed from financial constraint just as they are freed from the constraints of the RICO Act, and this manifests itself in chaotic violence on a grand scale. In each of these films the open road and its fanatical gasoline-fuelled criminal groups represent a very real fear to the survivors who have abandoned the city out of necessity, yet can find no sanctuary on the open road.

The self-destructive chaos of the biker gangs, however, also links them to the popularity in the 1970s and early 1980s of demolition derby, which may in turn be connected to issues of gasoline availability. In contrast to America's burgeoning love affair with the automobile in the immediate post-Second World War years, the era of oil crises coincides with an increased fascination with the visceral spectacle of automobile destruction. With the extreme rise in costs of gasoline, automobiles themselves become comparatively of little value—if you cannot afford to refuel it, the car becomes merely a piece of metal, as shown in the repurposing of automobiles as oxen wagons in the post-apocalyptic future of Things to Come (1936). With cars deprived of gasoline they may as well be junked, and an attraction for the audience of the demolition derby may be to see their frustrations with automobile transportation enacted in spectacular vehicular carnage. The trend largely drew to a close when the price of oil began to fall in the late 1980s, with the automobile suddenly back as a viable investment. Coinciding with the decline in popularity of the demolition derby was a time of significant investment in car-related sports by automobile manufacturing companies, resulting in an innovative period often described as "the last golden age" of motorsports (Jonathan Moore). The on-screen car crash has a long

history, as Paul Newland demonstrates, but often "operates as a monument to a culture of waste" (15), "depicts an ephemeral moment in which the march of modernity is seen to suffer a brief setback" (16), and highlights the "fascination with the body of the car as [...] a site of inevitable decay" (17). The spectacle of extreme obsolescence and destruction thus clearly is in dialogue with post-apocalyptic urban settings in science fiction of the era, showing that a similar impulse is at work in presenting the ruined futures of technology and urbanization.

There are many further examples from this period of post-apocalyptic films exploring issues of the availability of oil powered machines. Globally examples include the New Zealand film Warlords of the 21st Century (a.k.a. Battletruck [Harley Cokeliss 1982]), the South African film Survival Zone (Percival Rubens 1983), the Japanese film Akira (Katsuhiro Ôtomo 1988), and a number of Italian B-movies such as 2020 Freedom Fighters (Joe D'Amato 1982), 1990: The Bronx Warriors (Enzo G. Castellari 1982), The New Barbarians (a.k.a. Warriors of the Wasteland [Enzo G. Castellari 1983]), Warrior of the Lost World (a.k.a. Mad Rider [David Worth 1983]), 2019: After the Fall of New York (Sergio Martino 1983), Endgame (Joe D'Amato 1983), and Exterminators of the Year 3000 (Giuliano Carnimeo 1983). The reason there is such a concentration of Italian B-movies set in post-apocalyptic America during this decade may have something to do with the Italian film scene of the time. Gian Piero Brunetta cites the 1980s as a period of "crisis" in Italian film making, when Italian cinema was increasingly unpopular and films from the international market swamped theatres in Italy (281). These two events coinciding, Brunetta suggests that Italian cinema, while in something of an identity crisis itself, was more influenced by the world film scene (and particularly American cinema).

The Australian (but clearly American Western influenced) *Mad Max* was released in Italy on 17 January 1980, and this seems to have triggered the run of Italian movies rooted in similar post-apocalyptic worlds.

In the US examples include *The Omega Man* (1971), the second adaptation of Richard Matheson's novel I Am Legend (1954), in which the tenuous survival of Robert Neville (Charlton Heston) is undermined by forgetting to fill his generators with gasoline: Damnation Alley (Jack Smight 1977), in which the characters must cross America in armoured personnel carriers to protect themselves from the dangers of the postwar environment; Roger Corman's Deathsport (Allan Arkush and Nicholas Niciphor 1978), in which postapocalyptic city-states have replaced the death penalty with a motorcycle-based fight to the death in which criminals vie for their freedom;⁷⁷ The Last Chase (Martyn Burke 1981), which is set in a dystopian future where all vehicles with combustion engines have been outlawed; The Aftermath (a.k.a. Zombie Aftermath [Steve Barkett 1982]), in whose post-nuclear Los Angeles the protagonists take on a biker gang; Stryker (Cirio H Santiago 1983), in which villainous motorcycle gangs aim to impede the heroes in their search for fresh water; and City Limits (Aaron Lipstadt 1985), in which the world's adults have been decimated by a plague and teenage biker gangs dominate Los Angeles. 78

Each of these films depicts the combustion engine in a central role in post-apocalyptic worlds, often in the form of gang and especially motorcycle gang culture. These examples portray a reliance on oil as a weakness for their heroes and heroines, or as the marker of irresponsible, dangerous, and often

⁷⁷ The gladiatorial battles of post-apocalyptic societies, a chance for retribution and entertainment, is a recurring theme that most recently finds expression in the *Hunger Games* series of novels (2008-2010) and films (2012-2015).

⁷⁸ An apocalypse which kills only adults is also the premise for *Dark Enemy* (Colin Finbow 1984), in which a band of children set out to explore the post-apocalyptic world. It is also the premise of *Kids Rule*, *OK!* a comic that was serialized in the short-lived British weekly anthology *Action*.

short-lived individuals who are either the films' antagonists or their outlaw antiheroes. Oil is, therefore, treated with suspicion but as a necessary component of the old world order built by civilization. Only by rejecting this old world and returning to nature to build the future from the ground up can characters be free of this treacherous commodity, as we will see later. The liberty of the biker gangs and the freedom afforded to the characters of films such as Damnation Alley may also, however, represent a sort of voyeuristic pleasure. In watching the wilful consumption of gasoline at a time when citizens were restricted both by financial restrictions and the warnings of President Carter, it may be that the secret desire to consume gasoline is somewhat abated by its on-screen enactment by these characters. While these examples tell something of international and particularly US film during these years, the vast genre extends into comics, videogames, and other media.⁷⁹ Dependence on a ready supply of energy is firmly connected with a sense of threat in these texts, reflecting ambivalence towards fossil fuels and nuclear power in the US and globally during this period.

A BOY AND HIS DOG AND THE PERVERSION OF THE POST-APOCALYPTIC CITY

While the cities of No Blade of Grass and Dawn of the Dead are seen only

during their downfalls, cities depicted long after such catastrophes face
environmental concerns of their own. In A Boy and His Dog, a nuclear war has
left Phoenix, Arizona buried beneath the dirt, "finally solv[ing] the problem," an
epigraph informs the viewer, "of urban blight." The film is the story of Vic (Don
Johnson) and his intelligent, telepathic dog Blood (Tim McIntire), who roam the

⁷⁹ See, for instance, the novel *The Lost Traveller: A Motorcycle Grail Quest Epic and Science Fiction Western* (1977) by Steve Wilson, the animated television series *Cadillacs and Dinosaurs* (1993-1994), and the videogame *Quarantine* (1994). The trend can also be seen influencing adaptations with, for example, the apocalyptic conflict between the Soviet Union and the US in Philip K. Dick's "Second Variety" (1953) substituted for war over a new energy resource in the film adaptation *Screamers* (1996).

wastes of Phoenix, Arizona, searching, respectively, for women⁸⁰ and food. Vic and Blood's partnership is required by their respective strengths and weaknesses: Blood can detect the presence of dangerous men or vulnerable women, but is unable to open canned food; Vic is dim-witted and inattentive to his surroundings, but is happy to barter and forage in the ruined city below for food. The dynamic shows that while neither are entirely well suited to the postapocalyptic city, the character whose species has brought about the apocalypse is better able to interact with the detritus of the old world. Blood remarks, "what's left here where once were homes and families and warm hearths, now only desolation. Civilization lies smothered and decaying under an ocean of mud belonging to anyone who's strong enough to dig and fight and take it for his own." Indeed, the "civilized" pre-war Phoenix has been submerged by a new order, and the surface is now a place of violence, slavery, and rape. The ocean of mud itself bears no plant life, resembling instead an arid, infertile desert. While Vic remembers little from before the war, Blood holds a belief that working the land may be possible beyond the city's desolate wastes, in a realm they call "over the hill." Vic mocks his optimism about finding such a place, having come to accept the lifelessness of Phoenix as normality: "Over the hill where the deer and the antelope play and it's warm and clean and we can relax and have fun. And they grow food right out of the ground. How do you like that pipedream?" So far removed are the characters from a world of natural life that organic vegetation is almost unimaginable, and Vic further mocks Blood, saying "they also have a great crop of clothes and guns and gorgeous chicks." Phoenix

⁸⁰ For the sexism of characters and, arguably, of the film itself, see Joanna Russ's "A Boy and His Dog: The Final Solution" (1975). Roger Ebert finds that the movie's final scene particularly troubling, in which Vic kills and cooks his lover Quilla to save his starving dog Blood. Vic's casual attitude towards rape and sexual violence throughout (such as a scene in which he discovers a naked, raped, and recently executed woman, and remarks, "hell, they didn't have to cut her—she could have been used two or three more times"), however, makes him just one of the film's many thoroughly unlikeable characters.

is a city unable to rise from its desolation, but an encounter with an opposing community shows that life in the mud has its advantages.

In tracking one particular female character, Quilla (Susanne Benton), Vic descends to "the down under," an underground city named Topeka, likely named to bring to mind Topeka, Kansas. 81 Modelled after pre-apocalypse sleepy Midwestern towns, Topeka is designed to be an idyllic community but it possesses a corrupt core. As Jerome F. Shapiro writes, it is "a combination of George Orwell's vision of a Big Brother society in 1984 [sic], but dressed in Walt Disney's vision of Main Street, U.S.A." (165). Passing through numerous tunnels filled with whirring machines, Vic reaches Topeka to find grass and shrubs artificially kept alive deep underground. The inhabitants, their faces heavily made-up, seem to be in the middle of a fête with a brass band playing alongside a barbershop quartet. Their cosmetics give the characters an unnatural and clown-like appearance, however, and the two conflicting musical groups produce a gaudy, abrasive soundtrack which is extremely unpleasant to hear. The artificiality of the city makes it an unsettling, uncanny place, and Vic immediately feels ill at ease. Rather than being truly real or alive, the fabricated city is one of neither the promised utopia of pre-war urban idealism, nor the clearly defined dead wasteland of what had once been Phoenix. In addition to the city's appearance, its participation in violent, amoral, and cannibalistic activities also exhibit its living death.

The leader of Topeka, Lou Craddock (Jason Robards), is first shown correcting blueprints while simultaneously handing out euphemistic death sentences ("send him to the farm") to a procession of citizens who refused to follow the rules. Topeka is thus shown as a place with oppression and violence

 $^{^{81}}$ As a town name Topeka particularly invokes the Midwest, for there are also Topekas in Indiana and Illinois.

linked to city planning, where the recreation of pre-apocalyptic life is superficial, garish, and hollow. Taken captive by the Topekans, who wish to harvest his sperm to inseminate their impotent society, Vic finds himself longing to return to the surface, remarking "I've got to get back in the dirt so I can feel clean." As we have seen already with such films as *Metropolis* (1927), the human body and the built forms of the city can be mutually symbolic. The scarcity of sperm in the city of Topeka and the underhand means of acquiring it from Vic thus speaks to contemporary energy crises: as energy is vital to the sustainability and development of the modern, industrialized city, so too is reproductive material vital to the sustainability and growth of Topeka. This parallel works to further mark the difference between the urban and natural worlds in the film. As Peter C. Hall and Richard D. Erlich suggest, Vic's escape from the Topeka laboratory back to the surface "marks his transition from unconscious, instinctive motivation to full consciousness," a place where he can control and decide his own destiny (320).82 Avoiding a life of zombie-like bodily captivity. Vic refuses the protection of a position in sexual slavery in Topeka and escapes to reclaim ownership of his selfhood. Despite the savagery of life above ground, the regaining of autonomy makes it far preferable for Vic to the confining, fake, and corrupt Topeka. However damaged the natural world, therefore, a built environment embodying the living death of the old world offers no acceptable substitute.

THE REVENGE OF NATURE AND SLIPSTREAM

The threat of irreparable environmental destruction appears repeatedly during these years in US cinema. Further examples include *Soylent Green* (Richard

⁸² For a psychoanalytic (particularly Freudian) reading of the film, see Shapiro's *Atomic Bomb Cinema*, pp. 160-6.

Fleischer 1973), in which the environment is unable to sustain the demands of nourishing overcrowded cities, and the countryside is accordingly off-limits to citizens; Robert Altman's *Quintet* (1979), starring Paul Newman, in which a new ice age has smothered the built environment in snow; *Blade Runner*, in which the world has been left in an eternal, rain-drenched night after biological and nuclear wars; and the comedic thriller *Night of the Comet* (Thom Eberhardt 1984), in which Regina (Catherine Mary Stewart) wakes up the morning after the apocalypse and, seeing the lethal haze still hanging in the air of Los Angeles, unsuspectingly mutters to herself, "God, bad smog." While environmental apocalypse had long been a staple of speculative fiction, the regularity of such themes in post-apocalyptic film of this era is highly conspicuous.

By the end of the 1980s, environmental peril was so ingrained in US cinema that it became almost passé, and required little explanation. In 1989's *Slipstream*⁸³ a voice over introduces the plot:

By the end of the century man's destruction of the Earth's environment turned the forces of nature upon him. There are many stories about the converging earthquakes that split continents apart, mixing civilizations together, about the floods that buried the cities, and the emergence of a river of wind called

⁸³ Slipstream is a British production (Auger 417, Hunter 207). Filming took place at Pinewood Studios in the UK and in Cappadoccia, Turkey, and the film never saw a US theatrical release due to a poor reception in the UK and Australia. The film should be considered a product of the US film scene, however, with its American screenwriter, director, and producer, its predominantly American cast (and with many of its British actors performing with US accents), and even its setting. The landscape of Slipstream bears strong visual resemblance to the Western US, and the eroded cities carved into the rock are very reminiscent of the ruined settlements of the Ancestral Pueblo peoples of Utah, Colorado, Arizona, and New Mexico. Moreover, a contemporary review in Variety reports that the film was "made as a deliberate attempt to crack the U.S. market" (Adam 20). This is to say nothing of the plot, dialogue, and characterization, all of which are strongly Americanized. As I. Q. Hunter writes, Slipstream was one of many films produced in Britain in the late 1980s which were "essentially American," in which it "is meaningless to extricate from the complex realities of international co-production the 'Britishness' of [a production] [...] one simply notes the involvement of British personnel in a genre defined by American product" (12-13).

the "slipstream" that washed the planet clean. Those stories all happened years ago but this story is about a fugitive travelling the Slipstream who needed a friend.

Skipping over the details of the global environmental catastrophe that has befallen humanity, the film quickly narrows its focus to a story contained within this world. The "fugitive" and his "friend" are, respectively, the android Byron (Bob Peck), and the hero Matt (Bill Paxton) who is transporting Byron to "the big city" for the reward money. They make their journey by aircraft powered by wing-mounted solar panels, thereby allowing the world to be one beyond fossil fuels. Looking over the devastated world, Byron recites from the Book of Revelations: "And I saw a new heaven and a new earth: for the first heaven and the first earth were passed away.'84 All those souls swept away in a moment." Matt responds, "Buried by the convergence. Man against nature and we lost. I could have told them that up front but nobody asked me." Few other references appear to the "convergence," as the apocalypse is called, but the environmental issues are evident: it is through abuse of the natural world that the apocalypse came about, it was in the form of natural disasters that the apocalypse manifested, and it is amidst the environmental devastation that humanity must now struggle to survive. The post-apocalyptic world seems to be composed exclusively of rocky valleys, leafless trees, and the bleached ruins of old stone buildings. Among these ruins survivors lead an agrarian lifestyle,

⁸⁴ The biblical quotation in its original context reads: "And I saw a new heaven and a new earth: for the first heaven and the first earth were passed away; and there was no more sea. And I John saw the holy city, new Jerusalem, coming down from God out of heaven, prepared as a bride adorned for her husband" (*King James Bible*, Revel. 21.1-2). The promise of "new Jerusalem" shifts the focus from one of the world lost to the revelatory unveiling of a promised land. The use of this passage in particular in *Slipstream* (rather than, say, a passage from the environmental destruction of the Flood) suggests that Byron and Matt's journey through the post-apocalyptic terrain will end, as it does, with the characters each finding their preordained places in cities. For Byron this is "upstream" in a community of androids, and for Matt this is "downstream" where he can set up his hot-air balloon business.

apparently living off livestock, though those in power have greater access to scavenged luxuries.

Matt's hometown is named Hell's Kitchen, but is a place more closely resembling the ruins of the Acropolis than its namesake in New York City. The city shows class and racial disparity have remained, as Hispanic citizens toil among the stones and huddle around a few campfires, while certain white citizens sit in an indoor hot tub and listen to recorded music. The whites are apparently led by a man with a thick New York accent, named Montclaire (Robbie Coltrane), who is very well fed in contrast. Of the Hispanic citizens, none are named and they speak to the heroes only *en masse*. The resulting effect is that the racial disparity is set up in Hell's Kitchen, but not interrogated. Two other communities, however, are presented for comparison.

The first is a village built into natural holes in the rocky landscape, its people wearing animal furs and surrounded by indicators of primitive civilizations such as large clay urns. Settings such as this are particularly evocative of the ruins of the Ancient Pueblo peoples of the Western US (such as in Bandelier National Monument, New Mexico), but they also bring to mind the underground cities of *Slipstream*'s filming location of Cappadoccia, Turkey. Cappadoccia is a region containing several ancient underground cities, the largest being Derinkuyu, a city carved into the volcanic rock in the seventh century B.C., which once housed 20,000 people (Starr). While underground cities such as these were built to protect citizens from invaders, the community in *Slipstream* live in these rocky caves to protect themselves from the environmental peril of windstorms. ⁸⁵ They are a community led by Avatar (Ben Kingsley), who informs Byron that they "live a pure and virtuous life." Their way

⁸⁵ When Matt and Byron first arrive the community are recovering from an attack by another tribe, showing the cave dwellings offer little or no protection from invasion.

of life is a little too archaic for Matt, however, who discovers Byron tied to a kite during one of the nightly wind storms as a means of appeasing their god.

Moving on with the help of Ariel (Eleanor David), the pair leave Avatar's settlement and find their way to another underground community. Housed in a vast museum filled with priceless relics of old civilizations, the citizens retain a sense of the luxuries of the world lost, wearing tuxedos and drinking champagne. Ariel remarks to Byron, "When I was young I used to think life was going to be some great, noble battle. But it ended up like this. Heated rooms where people only think about food and drink and playing games. They're terrified of the world outside." Afraid to let the secret of their existence escape, the inhabitants, led by Cornelius (F. Murray Abraham), refuse to allow Byron and Matt to leave alive. This standoff is ultimately resolved by the bloody arrival of two rival bounty-hunters, Tasker (Mark Hamill) and Belitski (Kitty Aldridge). As with the Topeka of A Boy and His Dog, this community is superficial and hollow, its hedonism stultifying and life-threatening. Compared with Avatar's and Ariel's communities, the relative freedom of the agrarian city of Hell's Kitchen makes it a preferable choice. This resonates with contemporary concerns, for the Reagan era was often criticized for its unchecked greed (Webb 47), and awareness of the finite resources of the "Western, industrialized, luxurious lifestyle" raised the prospect of this greed leading to "crisis and destruction" (Ahrens 63). While the residents of Ariel's community face a world with a finite quantity of champagne, the citizens of Hell's Kitchen can sustainably survive by goat farming. The citizens of Hell's Kitchen are thus in a process of "reinhabitation" of the city, allowing the reclamation by nature of the built spaces of the city and reimagining their relationship towards the environment as city inhabitants, and involving, in Buell's words, the "simultaneous reimagination of

the urban-industrial transformation of natural landscapes and the persistence of physical environment as constitutive influence" (86). *Slipstream* presents its preindustrial urban environments as fundamentally superior to industrial cities, but also presents them in a hierarchy of their own, with Hell's Kitchen, visually suggestive of Ancient Greece, at its apex. The timelessness of Greek ruins and the connotation of democratic Athens are thus elevated as the superior model of urban living.

CONCLUSION

The communities of Topeka in A Boy and His Dog and the home of Ariel in Slipstream present the dangers of hedonistic urban lifestyles in which citizens are alienated from the natural world. In both cases inhabitants depend on the old world and its machinery, struggling to continue living in a way no longer compatible with the world order. As with contemporary threats over energy consumption and abuse of the natural world, the fear is that urban living is unsustainable and must be reimagined to allow civilization to continue. In both cases a return to the rural is vastly preferably, despite the fact that the rural landscape is one crippled by the environmental destruction wrought by civilization. The underground cities of both films pose mortal danger to the surface-dwelling protagonists. Critics such as Robert E. Park herald the city as a place of healthy catharsis of humanity's innate "passions, instincts, and appetites," whether in sports, politics, or the arts (610). In A Boy and His Dog and Slipstream, however, these base drives and instincts manifest not only through such healthy outlets, but also in state sanctioned violence. In Slipstream this is shown in the attempt by Maya (Rita Wolf) to sacrifice Byron to the wind god, and in the order to kill Matt and Byron given by Cornelius. In A

Boy and His Dog, while the mayor Craddock is responsible for the issuing of barbaric orders, the violence itself is performed by the android Michael (Hal Baylor), who can crush bones with his bare hands. Michael is, essentially, a grotesque, hyperbolic humanoid representation of what Louis Althusser might refer to as the repressive state apparatus of Topeka. The promised utopias of these underground cities exist only through covert blood-sacrifices, showing that the suppression of humanity's "latent impulses" and "wild, natural dispositions" through the city's channels of "symbolic expression" has failed as a permanent solution (Park 610). Rather, the violence built into and suppressed by the cities has necessarily resurfaced, producing both the violent scenes seen in these two films but also the violent origins of each storyline's backdrop of environmental apocalypse. Placing these post-apocalyptic cities underground draws attention to this idea, situating the urban experience beneath the surface—or, one could argue, suppressed in the subconscious.

The legacy of this era continues to be felt. In the 1990s, there are examples from a number of different media. The four-issue comics series *Car Warriors* (1991) features marauding biker gangs and "autoduelling." The Sega Genesis game *Outlander* (1992) involves driving through a post-apocalyptic wasteland while being assaulted by biker gangs and trucks. More recently, the videogame *Interstate* '76 (1997) is set in an alternate history in which the 1973 oil crisis is still ongoing, and involves attaching weapons to and battling cars against one another. Though relatively quiet in the late 1990s and 2000s, the trend underwent a resurgence earlier this decade. In the racing game *Fuel* (2009), players explore post-apocalyptic Connecticut in the wake of global warming-related catastrophes, and use fuel as currency. The 2011 videogame *Rage*, a combination first-person shooter and third-person driving game, is set

in a post-apocalyptic wasteland and centred on retrofitting and upgrading weaponized cars. *Post Apocalyptic* [sic] *Mayhem* (2011) is one of many recent racing games that exclusively use post-apocalyptic tracks, and it featured heavily on the digital game distributor Steam around its release date. Alongside these, environmental catastrophe in recent films represents a resurgence of interest in apocalypse of the natural world, with *The Day After Tomorrow* (Roland Emmerich 2004) in particular leading to *The Hunger Games* films (2012-15), *The Colony* (Jeff Renroe 2013), and *Pacific Rim* (Giullermo del Toro 2013). The popularity of these texts, along with the fact that now seems a suitable time to reboot the *Mad Max* series, with 2015's *Mad Max: Fury Road* (George Miller), seems an indication that recent concern over peak oil (after which the global availability of oil will see the industry in terminal decline) and global warming is creating a similar context for creative works to that of the 1980s.

Chapter 6:

Urban Decay, Outlaws, and Outsiders in Blade Runner

The urban future of Los Angeles in Ridley Scott's film *Blade Runner* (1982) is one of advanced decay, a science fiction-noir vision of a postwar metropolis in decline. The film has a strong legacy of scholarly discussion, but despite this little has been written to situate the film in the movement of the late 1970s and 1980s towards demonizing and policing sexuality in America's major cities. ⁸⁶ Based on Philip K. Dick's novel *Do Androids Dream of Electric Sheep?* (1968), the *Blade Runner* universe has led to several spin-offs, including a 1982 Marvel Super Special comic, which adapted certain scenes from the film somewhat verbatim, and three official *Blade Runner* sequels in novel form by K. W. Jeter (1995, 1996, and 2000), which received lukewarm reviews. A film sequel to *Blade Runner* is also forthcoming. The focus in this essay, however, is on three of the most critically acclaimed and popular texts in the *Blade Runner* universe: Scott's 1982 film, ⁸⁷ Dick's original novel, and the Westwood Studios videogame *Blade Runner* (1997). ⁸⁸ In these works, the protagonists are "blade

⁸⁶ Notable scholarly texts include *Retrofitting Blade Runner: Issues in Ridley Scott's Blade Runner and Philip K. Dick's Do Androids Dream of Electric Sheep?* (1991) edited by Judith B. Kerman, Scott Bukatman's *Blade Runner* (1997), and Will Brooker's *The Blade Runner Experience: The Legacy of a Science Fiction Classic* (2005).

⁸⁷ There are multiple versions of *Blade Runner* in existence, but the three major releases are the theatrical cut (1982), the director's cut (1992), and the final cut (2007). This chapter will not attempt to delineate the differences between these versions, as they have been thoroughly documented by other scholars (see, for instance, Paul M. Sammon's 1996 book *Future Noir: The Making of Blade Runner* for differences between the theatrical and director's cuts, and online resources such as Doc Idaho's 2008 comprehensive comparison of the director's and final cuts at Moviecensorship.com). Instead, this chapter will use the final cut unless otherwise stated, as this should be considered Scott's definitive version.

⁸⁸ A videogame also titled *Blade Runner* was released in 1985 for the Amstrad CPC, Commodore 64, and ZX Spectrum. It was very poorly received. Unable to obtain the rights to the film, the production company said it was based "on the Van Gelis [sic] soundtrack" to the film, and is only loosely based on that universe (Mangram 14). The Westwood Studios videogame was released for PC in 1997, and ties in very closely with the film. Several locations and characters from the film are featured in the game, and the player character Ray McCoy's investigations lead him to almost cross paths with the film's Rick Deckard at several points, though they never actually meet. Several actors from the film voice the videogame versions of their characters including William Sanderson (J. F. Sebastian), Brion James (Leon), and Joe Turkel (Eldon Tyrell). The lush filmic environments of the game were taxing on systems at the time of the game's release, causing it to be issued on four separate CD-Roms. Despite selling in excess of one million copies, and receiving largely favourable reviews, it is now no longer available (Woodard).

runners," law enforcement officers tasked with discovering and exterminating "replicants." androids almost indistinguishable from humans but for a subtle difference in their morality. The Los Angeles of the Blade Runner universe is a city in decay from the ravages of World War Terminus, an apocalyptic conflict involving biological and nuclear weapons that has sent the world into a protracted decline. The fatal blow has already been dealt to the city, but through the retrofitting of failing structures and technology its demise is delayed. suspending the city between life and death. Partially reanimated, though not fully rejuvenated, Los Angeles has been rendered undead, in a sustained state of physical decay and decrepitude. It is, however, the perceived moral decay of the deviant Other, the illegal trespassing of replicants within city limits, which is promoted by the state as society's principle concern. While the city falls into profound disrepair and its citizens succumb to debilitating sicknesses, the furore over fugitive replicants consumes the attentions of the authorities and the blade runner protagonists. Scott's film is reflective of the context of a culture fixated on the policing of sexual outlaws in American cities, an obsession that was escalating at the time of the film's release.

THE GLAMOUR OF DECAY: LOS ANGELES AND NEW YORK CITY

Following from such post-apocalyptic films as *The Last Man on Earth* (1964) and the second adaptation of Richard Matheson's *I Am Legend* (1954), *The Omega Man* (1971), *Blade Runner*'s setting uses Los Angeles as "a blank canvas on which to depict the neuroses of city life" (Bell 51). In *Ecology of Fear* (1999), Mike Davis writes that Los Angeles has become a singular place in the American imagination, as the prototypical American city built on land conducive to natural disasters. He writes that the "gleeful expendability of Los Angeles in

the popular imagination is in no small part due to Hollywood, which, when not immolating itself, promotes its environs as the heart of darkness. [...] The decay of the city's old glamour has been inverted by the entertainment industry into a new glamour of decay" (*Ecology* 278). A prominent example of this can be seen in Nathanael West's *The Day of the Locust* (1939), adapted into a film of the same name in 1975 (John Schlesinger), in which the character of Tod is planning a painting of

Los Angeles on fire. He was going to show the city burning at high noon, so that the flames would have to compete with the desert sun and thereby appear less fearful, more like bright flags flying from roofs and windows than a terrible holocaust. He wanted the city to have quite a gala air as it burned, to appear almost gay.

And the people who set it on fire would be a holiday crowd. (85) In works such as this it is shown that the immolation of Los Angeles can be enjoyed as an aesthetic, glamourous spectacle. The appeal of the erosion of the built environment also extends, however, to the erosion of the constructed social architecture of the same space. The elicit pleasure in the degradation of boundaries thus manifests in the transgressions of societal boundaries. After 1980 in particular, Davis writes, "the city turns from an endangered home into the Alien itself; and its destruction affords an illicit pleasure not always visible in previous annihilations" (*Ecology* 282). Apocalyptic and post-apocalyptic fictions, which had previously concentrated on London and New York, now focussed their attention primarily on Los Angeles, and the city would be enduringly popular as a site of destruction. The Alien Other of the 1980s Davis describes "echoed highly publicized claims that 'real' extraterrestrials were on a sexual crime spree" (340-1). The glamorization of urban decay in film of this decade,

therefore, is connected to the perceived threat of sexual Otherness visited on the city.

As Scott Bukatman writes, however, the original title for *Blade Runner* was to be "Gotham City" (Blade 61) and the major set for the film was "the New York Street at Burbank Studios," which had been used in "numerous Warner Bros. crime films and noirs" (21). Despite the film's setting ostensibly being Los Angeles in 2019, therefore, the aesthetic is deeply rooted in portrayals of New York City, an environment long associated with urban claustrophobia, atrophy, and architectural recycling. The city had recently experienced calamity with the fiscal crisis of 1975, in which President Gerald Ford initially declared that he would veto a bailout, effectively abandoning New York to its fate. The city had become unusual in an increasingly suburbanized America, with its downtown displaying the concentrated integration of disparate sections of society. As Marshall Berman writes, the tendency across the country was to abandon the city and move to "zoned suburbs protected from 'them,' from various stigmatized economic, racial and ethnic groups" (68). Emblematic of the stigmatization of New York City, Berman writes, is Times Square, which symbolized "une mauvaise lieu, a whole city stigmatized" (68). Blade Runner's enormous video billboards clearly echo the aesthetics of Times Square, but Wong Kin Yuen also points out that the film's Hong Kong-inspired visuals evoke the Hong Kong mall "Times Square," an apparently coincidental American-Asian crossover (5). Both Hong Kong's and New York's Times Squares are "patronized by practically all walks of life," and are "fairyland[s] of diversity and display" (6). The similarity seems also to have prompted the inclusion of a Times Square calendar displaying "the millennium's celebratory riots" in Deckard's rural hideout in Jeter's first novel sequel (*Edge* 12). The comparison

between the city streets of *Blade Runner* and New York's Times Square goes further than aesthetics, however, to the marginalization and demonization of a particular segment of its citizenry.

According to George Chauncey, the existence of Times Square as a central location in the gay landscape of New York City began in the 1920s (2). By the time of Blade Runner's release, films such as Midnight Cowboy (John Schlesinger 1969) and Taxi Driver (Martin Scorsese 1976) had established a pervasive, though "arguably overblown," image of Times Square, reflecting how the area had become "the most crime-ridden district in all of New York City," with one of its most defining features "the ambivalent attractions of the illicit, especially of non-normative sex" (Eeckhout 205). Times Square had become, in Pat Califia's words, a "sex zone," a designation which transforms the city into "a sign of desire: promiscuity, perversity, prostitution, sex across the lines of age, gender, class, and race" (216). Sex zones are not physically separate areas within cities, but rather are superimposed upon other urban spaces and generally come alive at night. These zones frequently provide community and security to various groups of the sexually stigmatized, and provide a black market for contraband. Elizabeth Grosz views this as the strength of such regions, noting that "women, or gays, or other minorities, aren't 'imprisoned' in or by space, because space (unless we are talking about a literal prison) is never fixed or contained, and thus is always open to various uses in the future" (Architecture 8). In the 1970s these areas, and particularly in the sale of pornography and patronage of the bathhouses, generated "an economy that could support activism and assumption of a full-time, totally open gay identity" (Califia 7). The resulting sex zones such as New York's Times Square created a space in which visitors could be educated in and practice safe sex, and enjoy

the company of others with whom they could identify and feel a sense a community. These areas also, however, attracted unwanted attention from city authorities, making it easier "to both demonize and control them (and to sanctify majority cultures and spaces)" (Knopp, "Framework" 136). Despite Grosz's optimism about the "gay freedom" and "very large closet" of sex zones (*Architecture* 8), the geographical delineation of sexual identities enabled far easier targeting of such groups by those who found their existence undesirable.

THE POLICING OF SEXUAL IDENTITIES

In 1971 New York's Mayor Lindsay sought to move against Times Square as a place for sexual freedom with his "Times Square Development Council." This led to the creation of two police "super precincts" nearby, which objected to "the proliferation of prostitutes and pornography primarily because they attracted unspecified 'undesirables' to the area" (Senelick 344-5). A number of other task forces emerged to "return Times Square real estate to 'good commercial uses" (345), which continued well into the 1990s and beyond with Rudy Giuliani's "crusades against 'immorality,' on behalf of 'civility'" (Berman 68). Science fiction writer Samuel R. Delany, in his *Times Square Red, Times Square Blue* (1999), is particularly concerned with the manner in which this kind of language disguised the destructive intent of the changes proposed. Of the "redevelopment" program he writes,

in the midst of that spurious vision of a stable world, it first struck me that 'major development' of the Times Square area would mean *a priori* major demolition, destruction, and devastation in what had established itself not only in the American psyche, but in

the international imagination, as one of the world's most famous urban areas. (xiv)

The invasion of spaces such as the bathhouses by these initiatives made public spaces out of private ones, and the acts conducted within them accordingly became classed as "lewd,' 'indecent,' or 'unnatural'" (Califia 18).

As Acquired Immune Deficiency Syndrome (AIDS) became a national issue in 1981, raids took place across the country on bathhouses, pushing gay sex to less safe places such as rest stops and adult bookstores. People caught in these places were publicly shamed by local newspapers, creating a homophobic environment of stigmatization and secrecy. Reagan was silent on the AIDS crisis until 1986, in his second term, though the religious right which helped bring him to power was bombastically vocal, as Allen White writes:

A significant source of Reagan's support came from the newly identified religious right and the Moral Majority, a political-action group founded by the Rev. Jerry Falwell. AIDS became the tool, and gay men the target, for the politics of fear, hate and discrimination. Falwell said "AIDS is the wrath of God upon homosexuals." Reagan's communications director Pat Buchanan argued that AIDS is "nature's revenge on gay men." 89

Many conservatives saw AIDS as an opportunity, hoping that the disease, "which they imagined as a 'gay plague,' would be a wedge to help them turn back gay rights once and for all" (Faderman and Timmons 308). This kind of divisive propaganda enabled intervention to come in the form of policing rather than prevention. Under the language of stamping out AIDS, shutting down

⁸⁹ The convergence of religion and politics, which had been initiated only a few decades previously and which laid the groundwork for the Reagan administration's relationship with the religious right, is explored in Kevin M. Kruse's recent book, *One Nation Under God: How Corporate America Invented Christian America* (2015).

areas of free sexual expression for gay people in fact retarded the fight against the spread of HIV, whilst Reagan failed to do anything for those with the disease "because of his commitment to the New Right, which required a moralistic stance against gays and lesbians and drug users" (Brier 80).

This moralistic stance led to the Reagan-commissioned 1986 Attorney General's Commission on Pornography (known as the Meese Commission after attorney general Edwin Meese). The report was a biased charade which, Califia warns in the same year, "holds out the hope that by using draconian measures against pornography we can turn America into a rerun of 'Leave it to Beaver'" (42), and indicated "a new wave of sexual McCarthyism. Porn is about to become the 'red menace' of the '80s" (44). William E. Brigman describes how the report was an effort on the part of the administration to suppress pornography altogether: the report "relied heavily on selected anecdotal presentations to mount a propaganda attack on pornography" and instituted new laws which "appeared to be aimed at child pornography, [but] were designed to regulate the producers of all sexually explicit materials out of existence" (158-9). Certain feminist groups had been campaigning since the 1970s against pornography, believing that "sexually explicit words and images were causally linked to sexual violence against women" (Senelick 346). 90 The suppression of pornography, vital to the economy of the sex zone and gay neighbourhoods, was crucial in undermining their stability. While not all visitors to the sex zone visit porn shops, as Lauren Berlant and Michael Warner write, "all benefit from the fact that some do": "A critical mass develops. The street becomes queer. It develops a dense, publicly accessible sexual culture. It

⁹⁰ For more on the feminist anti-pornography movement and the supposed connection between sex and violence, see Carolyn Bronstein's *Battling Pornography: The American Anti-Pornography Movement,* 1976-1986 (2011).

therefore becomes a base for nonporn businesses" (562). Zoning laws brought about in the wake of the Meese report broke apart these queer streets and thus prevented queer communities from continuing to develop in the cities.

These events led to a peculiar sexual climate. The late 1970s and 1980s were an era when the sex zone and gay neighbourhoods, which had provided a safe community for those of minority sexualities, brought these people into a place where they could be more easily stigmatized and controlled by the dominant forces of society, when sexual puritanism promised to crack down on all forms of sexual expression, and when the AIDS crisis threatened to isolate and demonize these groups still further. It is in the midst of this environment that Scott takes a novel about a stigmatized, demonized minority who transgress the boundaries of the urban environment and threaten to corrupt society with their supposedly unnatural, perverse natures, and adapts it into a film that blurs the lines between this minority and the majority.

SEXUAL MCCARTHYISM

The minority status of the film's antagonists, the replicants, has rightly been linked by several critics to America's historical racial prejudice. ⁹¹ Replicants are slaves, forced to work in the colonization of other planets (known as Off-world), recreating the "halcyon days of the pre-Civil War Southern states," as a TV commercial in the novel proclaims (Dick 16). Replicants who escape are hunted down by law enforcement as they attempt to pass as human. In the 1997 videogame, a group known as Citizens Against Replicant Slavery (CARS) attempts to assist fleeing replicants, and one of their members, Spencer Grigorian (Terry Jourden), likens their efforts to the underground railroad. There

⁹¹ See, for instance, Robert Barringer's "*Blade Runner*: Skinjobs, Humans and Racial Coding" (1997) and LeiLani Nishime's "The Mulatto Cyborg: Imagining a Multiracial Future" (2005).

are clear parallels to be drawn with the system of slavery and the subsequent ingrained racism in America. On the one hand, replicants are machines created for the purpose of conducting hard labour and consequently are, physically, unalterably different from organic human beings. The apparent consciousness and emotions of beings made to be, in the words of the film's Eldon Tyrell (Joe Turkel), "more human than human," however, makes the division far less clear. Given their inbuilt humanity, therefore, the alienation of replicants from the products of their labour and their simultaneous status as property in the eyes of the law evokes a system of arbitrary prejudice and oppression visited on human beings in the real world. To draw this comparison out further, the disenfranchisement and subhuman position of replicants brings to mind the origins of the figure of the zombie and its half-lived life of bodily servitude. Infiltrating the undead city of Los Angeles, zombies in a zombie city, the replicants further corrupt and decay the integrity of the already crumbling urban environment. There are many further examples of the appropriateness of comparing replicants and those maligned on the basis of race, but, as Bukatman writes,

the film refuses simply to 'naturalize' its victims as either women or blacks—Roy is as hyperbolically male and heterosexual as he is hyperbolically white. What defines the replicants as victims is the status they're given; it is their treatment by humans, and nothing inherent about 'them,' that makes them who and what they are. [...] Their inferior status is arbitrary, solely a function of legal definition. (*Blade* 76-7)

This is less the case in the novel, in which Dick presents replicants as clearly lacking something of a living, human being, which he shows in such scenes as

the replicants Pris Stratton's and Rachael Eldon's mutilation and murder of animals. In the novel these replicant characters are fundamentally, unalterably different, however human they may at first appear. Rather, the amorphousness of the replicants' Otherness in the film is something only introduced with Scott's adaptation of the novel to film. The humanity or inhumanity of these characters is not something innate but rather is constructed by society's image of them, just as it is with prejudice on the basis of race or sexuality: the replicants are considered depraved, perverted, and sinful, merely for their being different. As well as this narrative, there are several specific clues in the film, as well as in the novel it was based upon and the game for which it was the basis, which encourage readings connecting the urban decay and social outsiders of the *Blade Runner* universe to the issues surrounding sexuality in 1980s America. While the replicants' Otherness is generally well-covered terrain, this specific and pertinent contextualization is as yet undeveloped in critical work on the film.

One key and quite explicit clue towards this is in the manner in which blade runners determine if a suspect is human or replicant. This is generally achieved through Voight-Kampff (VK) empathy tests administered by blade runners. The tests measure a subject's reactions, and particularly their involuntary reactions (pupil dilation, blushing), to a number of morally and emotionally provocative scenarios read out by the blade runner. A typical example from the computer game sees blade runner Ray McCoy (Mark Benninghoffen) claim his briefcase is made from "baby hide." If a subject displays delayed or insufficient moral outrage to these scenarios they are deemed to deviate from the acceptable norm, and are assumed to be a replicant who can be "retired," in the euphemistic language of the department. More often than not retiring a replicant involves violent retribution against the

deviant being. Anne Allison writes of the violence inflicted on artificial life-forms in movies such as Blade Runner, and how the reconfiguring of the humanoid body raises issues of selfhood and queerness: they are "subjects who, made in the nexus of violence, emerge with their lines of 'humanness' and 'selfhood' redrawn. Unanchored from the semblance of monolithic roots, these new subjects exceed the parameters of a singular identity and, in this sense, are queer" (244). Though "queer" has come to be used by critics to designate a wide spectrum of deviations from the norm, Allison's point can be applied directly to the issue of sexuality in its focus on the body. The retiring of replicants which looks in the film and videogame so like the killing of a human is in the novel an explosion of intricate machine parts, yet in all three cases the simulation of humanity is disassembled by the violent retirement. These bodies deviate from the norm of human beings and the violence inflicted draws attention to this. When blade runner Rick Deckard (Harrison Ford) retires Zhora (Joanna Cassidy) in the film, for instance, he at first finds it difficult to distinguish the replicant from the crowds on the Los Angeles streets. Upon taking his first shot, however, he forces Zhora into running through mannequin-filled, neon-lit store windows. The scene highlights the objectification of the replicant body, with Zhora's slow-motion public execution surrounded by the constructed scenes of commercial window displays. At the same time Zhora's human-like qualities are highlighted one last time with, in clear contrast to the backdrop of inanimate mannequins, the sound of a heartbeat in the background, the blood from her gunshot wounds, and her mouth open in silent screams of pain. Scenes such as this demonstrate how replicants embody the perceived inhumanity of the deviant, but only with their selfhoods violently disassembled by the ruthless binarism of the blade runner's moral and legal code.

The violent intent of the blade runners which queers these androids' selfhoods is dependent on the interrogation of the empathy tests. In all three texts, displaying empathy is depicted as a moral act, and consequently the replicants' difference from humanity, their lack of empathy, is something which is immoral and incriminating. This is often tellingly connected to deviations from the supposed heterosexual norm. In the novel, in response to a question involving a picture of a nude girl, Rachael interrupts to ask, "Is this testing whether I'm an android [...] or whether I'm a homosexual?" (Dick 43). In the film, Rachael (Sean Young) asks the same question, "Is this testing whether I'm a replicant or a lesbian Mr. Deckard?" The implication is clear, that the blade runners accuse both Rachaels of transgressive thought, of having a private identity which would criminalize them in the eyes of the majority. In post-HUAC America these characters display the anxiety over committing an Orwellian thought-crime, of feeling taboo desires and consequently being "outted" and punished. Joseph McCarthy had, in fact, also persecuted homosexuals as part of his communist witch hunt during the Red Scare, in what came to be called the "Lavender Scare." Administering tests such as polygraph interviews and psychometric surveys, individuals could by merely refusing to answer questions be accused by authorities of "homosexual tendencies," and therefore a likely propensity to communist activities (Johnson 144). Wendy Pearson writes of how the fear of the ability of queer people to invisibly "pass" manifests in "a proliferation of stories and films fixated on the danger of the alien who is able to assume human guise and travel unseen amongst us," demonstrating that post-Second World War science fiction typically seen as anti-communist can also be read as homophobic (6). This environment of fear in which people seen as "twisted mentally or physically in some way" (Johnson 16) are rooted out and

punished is strongly echoed in the VK tests of replicants in the *Blade Runner* universe.

The taboo of supposed sexual transgression is also highlighted when replicant subjects attempt to turn the tables and accuse their accusers. In the novel, opera singer Luba Luft objects to the sexual line of questioning and declares, "You're not from the police department; you're a sexual deviant" (90). In the videogame the dancer Dektora (Signy Coleman) ends a VK test, turning a gun on blade runner McCoy and remarking "You're some kind of sexual deviant." In both cases, the replicants use this accusation as a cover to telephone the police. Bound by their commitment to and faith in the legal system the blade runners await the police officers, not knowing that in the novel the officers are from a department infiltrated by replicants, and in the game are replicant sympathizers. Suddenly finding their roles reversed, the blade runners experience crises of identity, as they wonder if perhaps they are in fact replicants with implanted memories. In the film the dancer Zhora, too, seems to suggest that Deckard is a sexual pervert. When Deckard says "You'd be surprised what a guy'd go through to get a glimpse of a beautiful body," she scoffs and pointedly replies, "No, I wouldn't." The film takes a slightly different route to the novel, changing the opera singer Luft into the topless dancer Zhora, and the game follows suit, with Dektora a topless dancer as well. The change in occupation thus connects the outsider replicants to the sex zone rather than the acceptable mainstream. In each case, with both Rachaels and with Luft, Zhora, and Dektora, the accusation of sexual deviancy and perversion carries with it fears of stigmatization and even criminality, and can be used as a weapon to destroy a person's credibility, highly evocative of the crackdown on safe areas of sexual expression in the 1980s.

PERMEABLE BOUNDARIES

The occupations of Luft, Zhora, and Dektora as public performers also highlight their performative existence on Earth: they are not really human female performers, but rather androids in drag enacting the performance of being human. Intent on hiding their real identities these are characters forced to lead double lives, performing the roles of acceptable members of society while bearing secrets which would see them rendered criminal. Links between the performative acts of replicants and sexuality can also be seen with regards to the elaborate, theatrical confrontation in the final scenes of the movie, between Deckard and Roy Batty (Rutger Hauer). 92 For Deckard the chase is, as Bukatman writes, "some kind of homophobic nightmare" (85). The use of the term here is one of the very few explicit references to homosexuality in critical work on the film. Using the term to describe Deckard's fear of Batty's unclothed physicality during the performance of his deadly masquerade, however, Bukatman stops short of expanding on this idea to link the replicants to the sexual climate at the time of the film's release. More generally, however, he demonstrates that the "performative side of Roy Batty breaks down traditionally drawn distinctions between the authentic and the artificial, or theatrical," enacting "a performance of self that becomes an implicit challenge to Deckard's stoic desire to preserve the 'real'" (85, emphasis in original). By breaking through walls between rooms, climbing through windows, and leaping between buildings, Batty redraws the accepted routes of the built environment, much as he transgresses the metaphorical boundaries of the society housed by that built

⁹² Scott's change of the name Baty to Batty may be a link to the informal, pejorative term for a male homosexual, "batty boy," a phrase of Caribbean origin. The term was used more widely in post-Second World War Britain than it ever has been in America ("Batty boy; batty bwai; batty bwoy"). As Scott was born in and grew up in England in the years this was first introduced, it may well have been familiar to him.

environment. He treats the Bradbury Building as, in Michel de Certeau's words, "a space of enunciation," expressing himself through his navigation of physical space just as one expresses oneself in speech through navigating language (98). These scenes show Batty forego the established routes of the physical environment (doors, hallways, and stairs) in favour of spatial transgression, in a way that evokes his daily transgression between his secret identity and public performance.

Deckard quickly loses his advantage as, pointing his gun towards a doorway, Batty breaks through the wall behind him, seizing Deckard's gunwielding hand and breaking his fingers. It is clear from moments such as this when Batty disrupts the physical boundaries of the building that Deckard has entered a world in which the rules he follows do not apply. Deckard's panic and loss of control is reflected in the heavy noir styling of disorienting lighting, soft focus, and spotlights shone through boarded-up windows, as he is forced into a way of existing in the world he does not understand and finds intensely frightening. An additional visual indicator of this is the characters' costumes. Whereas Deckard is wearing his heavy overcoat, which he has resolutely worn throughout most of the movie, Batty stands in contrast to this with his muscular physique clothed only in close-fitting shorts and a pair of shoes. Having disrobed specifically for this confrontation, Batty's sexual physicality is a part of what Deckard finds so disorienting in this scene. As Deckard finds himself unable to take cover behind the now clearly permeable barriers of brickwork and doorframes, he too is forced to transgress the physical environment. Breaking the glass drawers of an old cabinet Deckard utilizes its wooden frame as a ladder to reach the rotting ceiling, and pushes himself through to the next floor. What Bukatman describes as Deckard's "stoic desire to preserve the real"

must be abandoned as the roles of hunter and hunted are reversed. With his established sense of normality broken, the role reversal results in Deckard coming to some understanding of the replicant's plight in Batty's final moments, and triggers his desire to commit to Rachael and escape Los Angeles. As Laura Kipnis writes,

The edges of culture are exquisitely threatening places. Straddling them gives you a very different vantage point on things. Maybe it makes us a little nervous. (And what makes us nervous makes us conservative and self-protective.) Crossing that edge is an intense border experience of pleasure and danger, arousal and outrage—because these edges aren't only cultural: they're the limits that define us as individuals. (166-7)

Kipnis's point here, on the transgressive culture of pornography, could be a description of Deckard and Batty's life-or-death dance in this scene. Deckard, who had always resisted the world of replicants in his work as a conservative, self-protective blade runner, is forced in transgressing these boundaries himself into experiencing something both terrifying and simultaneously revelatory. The encounter is reminiscent of Delany's celebration of Times Square as a site of "rewarding, productive, and pleasant" contact and sexual expression, in contrast to the harmful effects of the demonization of difference (111).

Just as the permeability of its walls reflect his transgressive movements, the decay of the building has connections to the body of Batty. Coming to the end of his limited lifespan in the decaying Bradbury Building, Batty's body begins to act against him, his fist closing against his will. His fast increasing physical deterioration and acute mortality have a clear resonance in an America still coming to terms with AIDS, first discovered only a year before the film's

release. The corporeal anxiety of the AIDS era thus manifests in the film in the anxiety over degenerating physical, and notably urban, space. N. Katherine Hayles writes that frequently in Dick's novels "androids are associated with unstable boundaries between self and world" due to the fears they raise about the self being assembled and disassembled (160). This is equally the case in the film, as we see the fate of Batty and the architecture of Los Angeles tied together. As Batty dies, the dove he had been holding in his hands flies away into the polluted city sky; ⁹³ while certainly speaking to Batty's liberation from the prison of his doomed body, this moment is also suggestive of Deckard's awakening. Crossing the boundaries which limited the identities of Batty and himself, he is suddenly aware of their mutual constructedness, and can believe in his desire to be with the replicant Rachael.

ILLICIT RELATIONSHIPS

Deckard's relationship with Rachael in both the film and novel threatens to cross the boundaries of respectability and, potentially, law. In the film, after discovering that Rachael is a replicant, she and Deckard begin a romantic relationship. This relationship is forcefully initiated by Deckard, who physically restrains Rachael and orders her to submit under the apparent threat of violence. Initially resistant and almost in tears, Rachael indicates her acquiescence to Deckard's domination by not only repeating the phrases he demands she say, but ad-libbing her own. The scene could be viewed as an example of marginalized and taboo sexual role-playing, specifically of dominance and submission. As a blade runner, however, Deckard holds the

⁹³ A clear sky in the Director's Cut. The choice to introduce a clear blue sky at this point is incongruous with the aesthetics of the rest of the movie, but further emphasizes the freeing image of the dove in flight. The polluted sky in the Final Cut tempers this optimism, more closely fitting with the film's ending: Rachael and Deckard resolve to make a life together, but Rachael has an extremely limited lifespan, and, if Deckard is a replicant, so does he.

power over whether the replicant Rachael lives or dies, and so her acquiescence may be only to appease Deckard and earn his protection. Indeed, as an android Rachael can be entirely objectified, owned, and commanded by Deckard to do his bidding. Either way this is a scene which can be unsettling for viewers, presenting as it does a form of romantic or sexual interaction uncommon to Hollywood movies before or since. As such it is far more suggestive of non-mainstream relationships and the kinds of activities marginalized to the realm of the sex zones of major cities. At the film's close, Rachael and Deckard leave the apartment, and Deckard notices an origami animal on the floor outside his door, the calling card of the police officer Gaff (Edward James Olmos). Evidently Gaff had toyed with the idea of retiring Rachael, but chose instead to allow her to live out her limited lifespan with Deckard. His gun raised, Deckard escorts Rachael into the elevator with the implication that they will flee the city and the legal system that would see their relationship as criminal.⁹⁴

Despite the apparent taboo of Deckard and Rachael's human-replicant relationship, however, the film makes a point of showing the sexual objectification of each of the female replicants by male humans: Deckard's first meeting with Rachael in the softly-lit Tyrell building is charged with sexual tension, Deckard studying Rachael's involuntary pupil dilation through the mediation of Voight-Kampff machine, as she slowly smokes a cigarette; aside from Zhora's occupation as an exotic dancer, police captain Harry Bryant (Michael Emmet Walsh) first introduces her to Deckard as a trained killer who is both "beauty and the beast"; and Pris (Daryl Hannah) is described as "a basic

⁹⁴ In the theatrical version this is made more explicit, with an added scene of Deckard and Rachael driving a ground car along a sunny mountain road. The voiceover during this scene tells the viewer that Rachael is "special," without the limited lifespan of other replicants.

pleasure model, a standard item for military clubs in the outer colonies." The work of military space exploration in the *Blade Runner* universe seems to be primarily carried out by replicants, hence Batty's final monologue describing how he has "seen things you *people* wouldn't believe." Thus whether Pris has been designed by the Tyrell Corporation for the sexual gratification of android or human soldiers is unclear, though her seduction of Sebastian while being in a romantic relationship with Batty demonstrates that there need be no rigid dividing line. Either way, female replicants are apparently all built with sexual objectification in mind, though while human-android relations might be permitted in the military clubs of the outer colonies they remain transgressive acts on Earth.

In the novel the legal boundaries that prevent human-android relationships are more explicitly stated. Fellow blade runner Phil Resch asks, "Don't you know, Deckard, that in the colonies they have android mistresses?" Deckard responds, "It's illegal." Resch replies, "Sure it's illegal. But most variations in sex are illegal. But people do it anyhow" (Dick 123). Despite its illegality the transgression is evidently common in the colonies, and even Deckard, whose job requires him to be opposed to replicants, "had found himself physically attracted by several" (81). Deckard's reflexive response, "It's illegal," therefore, seems to suggest something of self-censorship. The supposed sexual deviancy of human-android relationships is apparently common and perfectly natural, only demonized in societal stigma and legal definition. Certain humans evidently feel attraction to androids and act on this attraction, though they keep this part of their lives secret to protect themselves from prosecution. There are clear parallels to be drawn here with any number of

criminalized acts marginalized to the sex zone, such as gay sex or prostitution, which "respectable" members of society secretly visit to take part in.

In the videogame the player character can enter a romantic relationship with one of two replicant characters. McCoy is himself either replicant or human, depending on the random selection made by the computer on starting a new game, and on the choices the player makes through the game world. The method of play, either mercilessly retiring all replicants or favouring either Dektora or Lucy (Pauley Perrette), determines which of the several endings will take place. If Dektora or Lucy are favoured in the player's choices, McCoy will escape the city with them either alone or together with the other replicants aboard the "moonbus." It is notable that both of these characters, Dektora and Lucy, are very visibly connected to social issues of sexual deviance. Dektora is of course a topless dancer in the red light district of Nightclub Row (the same location where Zhora worked in the film), and the storyline of Lucy, Dektora's fourteen-year-old daughter, involves issues of paedophilia.

From the first scene of the game it is made clear that Lucy's sexual identity takes precedence for characters of the game world. Her previous employer Runcitter (Warren Burton), whom McCoy meets at a crime scene, refers to Lucy as "a very attractive young thing." When McCoy asks if she was treated well as an employee, he explodes "as well as any young tart should be treated!" Lucy later tells McCoy that Runcitter treated her as though she belonged to him. Though Runcitter is presumably unaware that Lucy is a replicant (and therefore able to be "owned" in the eyes of the law), his attitudes towards her nonetheless speak of a kind of sexual, patriarchal ownership and

domination. 95 Runcitter sees Lucy not as a person but as a sexual object. Another character, Early Q (Stephen Root), owns a nightclub advertising "live exotic dancers," in which Dektora and other women dance as objects of sexual entertainment. McCoy notes that Early "used to call himself a humanitarian because he'd recruit orphans for his sex club."96 Questioned about whether he knows Lucy, Early replies, "This ain't no day-care centre, General. 'Course she ain't half bad looking. My grandpappy always used to say if there's grass on the field it's time to play ball!" Unashamed to display his paedophilic inclinations in front of McCoy, Early nonetheless denies anything that could be seen as criminal. In one photograph McCoy discovers, however, it is clear that on at least one occasion Early sexually assaulted Lucy while her mother Dektora was in the next room. On discovering this McCoy remarks, in his voice-over, "Early, you sick bastard." Though Runcitter's and Early's exploitation of Lucy is certainly presented as depraved in the game, if the player chooses to act on Lucy's attraction to McCoy and to escape the city with her no judgment is made about McCoy's transgression of the age of consent. Though their need to flee the city contributes to the feeling that they are acting outside the law, Lucy's complicity in their relationship results in an upbeat, optimistic ending. Here the videogame medium shows its strengths: whereas it would likely not have been possible to follow such a storyline in the novel or the film, the videogame allows players the opportunity to explore the idea of cross-generational relationships and the motivations of the characters involved. Offering multiple choices, the game allows the player to question their own belief in the moral basis for legal boundaries surrounding age of consent. The fact that the player-character may

⁹⁵ In the majority of the possible narrative lines the game can take, it does seem clear that Lucy is a replicant. On some play-throughs, however, a Voight-Kampff test of Lucy determines that she is human. ⁹⁶ In the narrative line in which Lucy is human, this could provide an explanation of why she has two replicant parents.

already be outside the law as a replicant further blurs the boundaries between what is considered right and wrong, providing an opportunity to experience traversing morally ambiguous terrain not easily explored in the linear storylines of the novel and film. Indeed, the ability to save and load games and thus try different routes allows a curious player to transgress these boundaries and then return to safer ground if they wish.

Setting this narrative about the sexual abuse of a fourteen-year-old and her subsequent cross-generational elopement in the *Blade Runner* universe is fitting given the context in America at the film's and the game's releases. At the time of the film's release a national moral panic had been whipped up in the wake of the Protection of Children Against Sexual Exploitation Act of 1977. This legislative act, as well as several others passed in the following years, was directed towards cracking down on the sexual exploitation of children but it contained vague wording and could be liberally exercised. In 1996, the year before the videogame's release, the Child Pornography Prevention Act was passed, which banned any kind of computer-generated image which could be construed as being an eroticized representation of a minor. Given the videogame's inclusion of the romantic storyline for Lucy, the developers tread a fine line given the rigorous policing and public outrage at representations in any media of children's sexuality. The broad applicability of acts such as these (and many others passed in the intervening years) led to a number of cases of aggressive police crackdowns on anything which could constitute a transgression of sexual thought. A number of high-profile court cases thus directed attention not towards preventing child abuse and protecting minors, but rather towards "criminalizing thoughts and emotions," often ruled by the Supreme Court as threatening to breach the First Amendment (Califia 66).

Given these contemporary concerns, the videogame's inclusion of both the sexualisation of a minor and the option for the player-character to enter a cross-generational relationship presents a challenging set of moral issues. These issues are largely presented without judgment, inviting the player to decide their own path.

DEVIANCY AND CLASS

It is not only replicants in this universe, however, who are marginalized as outsiders. J. F. Sebastian (William Sanderson) is a character whose low status is shown spatially in the city of the film. Driving a ground car and entering his home, the Bradbury Building, by a street level entrance, he is shown as being of a less privileged order than Deckard, who drives a hover car called a "spinner" and enters buildings through their roof entrances. As with other dystopian city films such as Metropolis (1927) and The Time Machine (1960), Blade Runner establishes a "high/low dichotomy with the wealthy literally occupying the upper strata of society, while the workers struggle below" (Bukatman, *Blade* 63). Given the film's architectural roots in New York City, this evokes the systematic restructuring of the city in the post-Second World War years by Robert Moses. As Robert A. Caro writes, Moses recreated New York to separate and divide its populace, as he "tore out the hearts of a score of neighbourhoods," "flooded the city with cars" (19), and left minority groups and the poor "dispossessed" (20). This creates a city in which one dominant "type" occupies the privileged position, and a variety of minority and subjugated groups are kept at a distance. Through "unchecked urbanization," the social disparity created by this division results in "levels of misery rarely seen in American film" (Vest 10). This spatial separation creates a vast disparity in living conditions in *Blade Runner*. For

instance, the entrance to Sebastian's home is found amongst a high pile of garbage, in which Sebastian finds another outsider, the replicant Pris. Outsiders such as Sebastian and Pris are thus shown as having been side-lined and discarded, living out of sight of the affluent and elevated members of society amongst the urban detritus termed in the novel as the "kipple." Lonely and isolated, though for different reasons, the two find acceptance and company with each other. Sebastian is socially stigmatized because of a medical condition, Methuselah syndrome, which causes him to age quickly and has left him unable to pass the medical exam necessary to move Off-world. His "accelerated decrepitude," as Pris refers to it, means that he feels he has more in common with the replicants than with the higher strata of society, and he quickly sells out his boss Eldon Tyrell to Pris and Batty.

Sebastian's equivalent in the novel, J. R. Isidore, is part of a more widespread group of the socially stigmatized, known as "specials." "Regulars" who have stayed in the city rather than relocating Off-world are eventually corrupted by the dust from World War Terminus, which turns them into specials. Isidore is a member of subset of specials known as "chickenheads," tainted people who have diminished mental capacity. By law chickenheads are unable to reproduce, or to move Off-world. Deckard wears a lead codpiece and undergoes monthly check-ups to confirm his status as a regular, defined as "a man who could reproduce within the tolerances set by law" (8). The definition of the family is thus legally protected from transgression through mixing with chickenheads, just as it is outlawed to become sexually involved with an android. In a seemingly prophetic choice, Dick imagines the alienating condition affecting subjects via the penis, just as many cases of HIV were to be transmitted via sex. In this way Cold War-era anxieties regarding the bomb and

global war provide a suitable form for AIDS-era anxieties of the sexual transmission of disease, and make the novel a well-suited source text for a film released in 1982.

Isidore, like Sebastian, has sympathy for synthetic life, which he views as being a result of his own low status: "maybe it's I, John Isidore said to himself. Maybe when you deteriorate back down the ladder of evolution as I have, when you sink into the tomb world slough of being a special—well, best to abandon that line of inquiry" (63). Discrimination against minority groups is a luxury afforded only to the privileged, and Isidore more readily finds acceptance amongst others who are as ostracized as he. Isidore is overjoyed to have received company in the form of Pris Stratton and Roy and Irmgard Baty. Initially unaware of their replicant status he is determined to keep his own status a secret: "I have to keep calm, he realized. Not let him know I'm a chickenhead. If he finds out I'm a chickenhead he won't talk to me; that's always the way it is for some reason" (23). On discovering his guests are replicants, however, Isidore finds himself so connected with them that he becomes their dedicated servant. Isidore later draws the connection in their statuses himself, when speaking to the replicant Roy Baty about the replicants' illegality on Earth: "I'm a special; they don't treat me very well either, like for instance I can't emigrate. [...] You can't come here; I can't [go Off-world]" (140). After the sense of belonging he had felt, Isidore finds that he can no longer exist in solitude: "The silence, all at once, penetrated; he felt his arms grow vague. [...] You have to be with other people, he thought. In order to live at all. [...] You can't go back, he thought. You can't go from people to nonpeople" (175). When Deckard retires the replicants, Isidore gives up his life in the otherwise empty apartment building, heading "deeper in town where there's m-m-more people," where he

can become part of a community again (193). Having lived in self-imposed isolation in the suburbs, the meeting with the replicants gives Isidore the realization that he can find solace in the company of others who have been socially excluded. Heading deeper into the city of San Francisco, a city already well established by the time Dick's novel was published as a sanctuary in the US for gay, lesbian, and trans people, Isidore finds community and identification in a metaphorical sex zone of the similarly disenfranchised.⁹⁷

CONCLUSION

While the replicants and specials are clearly outsiders, the power of the Blade Runner universe lies in the fact that the dividing lines are always blurred. The silence Isidore experiences in his empty apartment building, which "smote him with an awful, total power [...] as if it—the silence—meant to supplant all things tangible" (18), is also experienced by Deckard and his wife Iran, who sometimes hear the empty apartments "at night when [they were] supposed to be asleep" (5). The loneliness of existence is not specific to those physically alone such as Isidore, but is felt by all in an increasingly depersonalized urban future in which people are categorized, judged, and criminalized by the law. Doubt is also cast in each work about the human/replicant status of the protagonist. Deckard in the novel and film and McCoy in the game all experience moments of doubt over this, and the narratives never conclusively state one way or the other. At any moment they could be discovered and fall on the wrong side of the law, destined to be hunted until their short lifespan runs out. Lastly, as much as these hierarchies consume their lives, the characters in these works are all stuck on Earth, trapped in the undead and moribund city of Los Angeles. If the

⁹⁷ For the history of San Francisco's importance in this regard see Eric Sides's *Erotic City: Sexual Revolutions and the Making of Modern San Francisco* (2009).

blade runners survive their assignments they will still eventually succumb to radioactive dust, and if replicants successfully evade capture they will cease functioning after only four short years. Despite their efforts these characters are all outsiders, all as worse off as each other.

To return to the context of the suppression of cities' sex zones in the early 1980s, a similar dynamic is at work. Lawrence Knopp writes that "dominant forms of gay male identity politics are strongly linked (ideologically, if not in practice) to the infiltration by gay men of mainstream economic and political institutions" ("Gay" 154). In a manner similar to racial passing, during the postwar Red Scare and Lavender Scare the political and sexual Other in the city was someone who could not be identified by sight, who was in fact not noticeably different from anyone else. Lines drawn by vaguely worded laws designed to police sexual variation during these years did not represent actual, fundamental differences, but were merely arbitrary. Yet however arbitrary they were, being accused carried severe penalties in a society embroiled in a moral panic and new conservatism which had emerged in reaction to the 1960s, and was encouraged by the new religious right which had contributed to the election of the Reagan administration. Scott's film and the videogame based upon it take a novel set in San Francisco, the home of some of the first gay neighbourhoods in the US which suffered greatly from the crackdowns of the late 1970s and 1980s, and transplants this to Los Angeles, a city which glamorized decay, adding an aesthetic that draws on the look of New York, a city notoriously in economic decline in the 1970s. As Davis writes, "Hollywood's pop apocalypses and pulp science fiction have been more realistic, and politically perceptive, in representing the programmed hardening of the urban surface in the wake of the social polarizations of the Reagan era" than contemporary urban theory (Quartz

223). Whether consciously or unconsciously utilizing such motifs, the franchise reinforces these great American cities as locations primed for destruction, with the arbitrary divisions established between its citizens only precipitating this end. In comparison with the radical apocalypses of texts looked at in previous chapters, *Blade Runner's* Los Angeles of 2019 is a city whose apocalypse had initiated a protracted death. It is a city fixated on decay, both in the physical architecture and in the supposedly deviant individuals infiltrating its populace, and as such reflects the supposed moral decay of urban centres which was very much a part of the popular conversation at the time of the texts' releases. Whether specials, replicants, or blade runners, the characters of the film, the source novel, and the videogame are all detrimentally affected by this fixation and the vigorous policing of the arbitrary dividing line separating what is designated deviant or undesirable.

Chapter 7:

In September 2014, a little later than scheduled, the digital distribution software Steam offered full access to the computer game *Wasteland* 2. ⁹⁸ A sequel to *Wasteland*, a 2D role-playing game (RPG) released for computers in 1988, this release marked the end of a quarter of a century of waiting for fans who wished to return to creator Brian Fargo's vision of a post-apocalyptic Southwestern United States. While Fargo's *Wasteland* sequel was facing years of rejection from developers, however, the legacy of the original game with its immersive post-nuclear world and complex, morally ambiguous narrative paths inspired a number of videogames worldwide which took advantage of the significant technological breakthroughs of 1990s-2010s gaming systems.

It is often argued that "games celebrate and explore spatial representation as a central motif and raison d'être," as gameplay typically consists primarily of navigation through a virtual world (Aarseth 44). This frequently means navigation through replicas of built environments, whether corridors and rooms such as in early first-person games like *Wolfenstein 3D* (1992), or expansive cities such as in *Grand Theft Auto* (1997). Lev Manovich writes that navigation through space provides a means for visualizing and processing information, as explored in early fictional depictions of cyberspace such as the film *TRON* (Steven Lisberger 1982) and William Gibson's novel *Neuromancer* (1984), and accordingly it is fitting that internet browsers bear names such as Internet Explorer and Netscape Navigator (249-51). With internet browsers, users can "explore" information in spatio-visual terms through

⁹⁸ Following the example of most criticism on digital games, the term "computer game" refers to a game played on one or a combination of Microsoft Windows, Linux, Macintosh OS, etc., and "console game" refers to a game played on one or a combination of PlayStation, Xbox, Nintendo, etc. consoles.

[&]quot;Videogame" will be used as the umbrella term for both of these.

"opening windows," conducting "searches," and passing through "portals." The idea of movement through space thus enables the processing of information through internet browsers, and, similarly, of narrative in videogames, as Michael Nitsche writes: "game spaces evoke narratives because the player is making sense of them in order to engage with them" (3). This is particularly the case in games which privilege offering narrative choices in complex moral scenarios, such as adventure games and RPGs, in which players often navigate large "open worlds" at will, meeting and interacting with non-player-characters (NPCs). Nonfiction information as well as fictional narratives thus find expression through the creation of visual representations of space, and accordingly the consumption of such information and narratives takes place as an exploration of these virtual spaces.

The navigation through broken, ruined, post-apocalyptic environments in particular accounts for a significant proportion of videogames released between 1988 and 2014. This appears to be no coincidence. A 2013 rebranding of Microsoft's Internet Explorer browser personifies the software as an anime girl named Inori Aizawa. In a promotional animated video, Aizawa is shown fleeing murderous, red-eyed robots through a post-apocalyptic cityscape. Utilizing the power of Internet Explorer's security and browsing capabilities, the robots are defeated and Aizawa is able to safely navigate the internet once more. The implication of representations such as this is that cyberspace and virtual worlds are already utterly fragmented and chaotic, and the input of a human-software team is required to conquer these spaces. In the online magazine *Kill Screen*, which specializes in academic videogame studies, scholar David Chandler writes that the player of videogames which feature ruined spaces is frequently cast "in the role of 'restorer,' someone to set the world right again. Ruins

provide an aesthetic setting that matches the core idea behind most games: to interact with a broken world and change it through play." Post-apocalyptic cities in science fiction videogame narratives are, therefore, paradigmatic of how we interact with digital information in an age in which technology is continually progressing and adapting. Analysis of the preponderance in videogames of ruined, post-apocalyptic cities as game spaces is so far an underdeveloped field. There are, nonetheless, significant conclusions to be drawn from these ruined, urban, virtual realms, through examining game design, narrative, and the reasons for play.

GAMEPLAY MOTIVATION AND IMMERSION

In order to understand the motivations of players in wishing to repeatedly spend hours in post-apocalyptic worlds such as *Wasteland*, it is worth looking at the phenomenon of "immersion" in videogames more generally. Despite the current size of the videogame industry and its value to various academic fields, there is still insufficient critical work on the motivational factors involved in the popularity of the medium. The few studies that do exist are flawed by the problems of studying something that is constantly becoming more sophisticated, more various, and far less easily assessed as a cohesive phenomenon. Historically, the majority of scholarship on videogame motivation has drawn on psychological theories of the "partial reinforcement effect" (a theory used in explaining gambling habits [Loftus and Loftus]), and ideas such as "cognitive evaluation theory" (in the drive to enhance individual autonomy and to achieve competency [Ryan, Rigby and Przybylski]). ⁹⁹ These theories go some of the

⁹⁹ Theories such as these raise the issue of how to properly situate the analysis of videogames alongside ongoing discourses, which has found prominent expression in the debate between ludology (an approach focusing on game mechanics) and narrativism (an approach focusing on story such as might be taken with

way to explain videogame play, but are unable to explain the interest in revisiting certain spaces in game narratives, such as post-apocalyptic ruins. Rather, they seem to suggest that game settings and narratives are arbitrary backgrounds to the motivations of scoring points or beating opponents. Such a limited perspective is unable to explain the popularity of, for instance, popular linear adventure games such as the Broken Sword series (1996-2013). A more appropriate allure of visiting game spaces is the idea of "presence," "the sense of being in a mediated environment with the perception of non-mediation" (Gackenbach and Bown 4), essentially removing the distance between the player and the game world created by technological hardware such as joysticks and computer screens. Presence is created through the motivational pull of "flow" states, or the experience of being fully engrossed in an activity such as videogaming. Flow and presence are the necessary components of videogame immersion, and a game's replay value is greatly improved by its propensity to these states. Jayne Gakenbach and John Bown write that presence can be more easily achieved through advanced graphics (5), which provide a sense of "being there" by replicating the visual appearance of the real world (17). This suggests that the upward trajectory in visuals of post-apocalyptic videogame environments since Wasteland increases immersion and engagement with game narratives.

Some contemporary scholarship in videogames research attempts to make a connection with psychoanalysis, with a recent paper connecting a lesser known Freudian notion, that of self-determination theory (SDT), to

a novel). For ludology vs. narrativism see, for example, *First Person: New Media as Story, Performance, and Game* (2004) edited by Noah Wardrip-Fruin and Pat Harrigan. The "partial reinforcement effect" situates videogaming in the longer history of repetitive gaming that offers occasional, often chance, rewards, using similar methods of analysis as might be used with slot machines or dice games. Cognitive evaluation theory places videogaming in the history of skill-based games such as sports, which enable practice to lead to mastery. Both of these methods have their advantages, but neither can be said to effectively address the diverse origins of videogames as a field.

games. Richard M. Ryan, C. Scott Rigby, and Andrew Przybylski's 2006 paper made headlines for its ground-breaking connection of SDT to gaming (Clark and Scott 60). The paper is not without its limitations, but the use of a psychoanalytic lens through which to view gaming has made a significant impact on gaming scholarship. 100 Their basic premise is that gaming satisfies certain basic psychological needs, specifically "that games are primarily motivating to the extent that players experience autonomy, competence and relatedness while playing" (Ryan, Rigby, and Przybylski 348). The desire for competence, mastery, and achievement of goals is one frequently associated with videogame motivation, particularly in early studies of arcade gaming where scoring points is the focus. Relatedness, a desire to feel connected with others, and autonomy, the feeling of undertaking an activity for personal value, are more revolutionary in terms of studies in gaming motivation. The paper builds on previous research into videogame motivation, such as that of Richard A. Bartle and Nick Yee, two scholars who have attempted to define player "types" as a means of explaining motivation. Ryan, Rigby and Przybylski's research, rather than trying to categorize players, offers an explanation grounded in more universal psychological needs.

¹⁰⁰ The first three of the four studies that the scholars conduct tested players' use of a Nintendo 64, with the games Super Mario 64 (1996), San Francisco Rush (1997), Star Fox 64 (1997), Zelda: The Ocarina of Time (1998), Super Smash Bros. (1999), and A Bug's Life (1999). In doing so, the scholars not only inexplicably used an outdated games console (the Nintendo 64 was succeeded by the Nintendo GameCube in 2001 and discontinued altogether in 2003) but even used outdated games for that console in choosing no titles released after 1999. The game genres chosen are also particularly limited, being predominantly games with simplistic goals, similar to arcade games, such as fighting an opponent, navigating a platform environment, or completing a lap of a track in the fastest time. The scholars admit this limitation: "We drew from several genres to show the generality of the model, but we assume different genres, game contents and interfaces will have different effects on, and relate differently to, the motivational variables we assessed and the needs that players can satisfy" (361). Indeed, the motivational variables may not be as limited as the model depicts them, given the popularity of genres less applicable to the model such as open-ended single-player games, which seldom hinge on simplistic goals. Additionally, as they admit, the laboratory setting of their experiments also calls the results into question: "outside the laboratory game play is self-selected, and involvement voluntary. [...] [E]xperimental studies artificially induce people to engage in games" (361). The final of the four studies was a survey on "massively multiplayer online" (MMO) gaming, fraught with its own issues due to its survey of only a single online community.

Some of the most notable recent work on the motivations and effects of videogame play is being performed by Gackenbach and her team at Grant MacEwan University. Connecting videogame play and lucid dreaming, Gackenbach concludes that videogaming can serve as a way of developing consciousness as a means of emotional rehearsal. One theory states that a purpose of dreaming may be to practice or rehearse dealing with threat in a safe place. During rapid-eye movement sleep, where dreaming occurs, the neurological activity is very similar to that of the neurological activity of waking, but the part of the brain stem that controls muscle use is shut down. The function is, therefore, to have emotionally engaging experiences but be safe from physical harm. As Gackenbach asserts in her studies of regular videogame players, dreaming and videogame play are both examples of this practice of emotional rehearsal. Studying the dreams of gamers, Gackenbach discovered that they are prone to experience more lucid dreams and dream control, and that their nightmares involve an empowerment leant by the feeling of threat. Intensive video gaming over a long period of time, Gackenbach says, essentially becomes a meditative practice. She attributes this to the welllearned response developed by videogame use, in other words, that gamers practice responding to certain situations, and that this has consequences for the evolution of consciousness. 101 This is more the case in videogames than it is in film, television, or radio, as it is not "unidirectionally presented or pushed at the passive viewer," but, rather, an "active participatory element is captured in computer use and video-game play" that is more similar to real life (Gackenbach, Rosie, Bown, and Sample 32-3).

¹⁰¹ For more on consciousness and videogaming, see *Video Game Play and Consciousness* (2012), edited by Gackenbach.

Following the example of Ryan, Rigby, and Przybylski's use of psychoanalysis through SDT, we might look further at the idea of practicing encountering emotional scenarios via Sigmund Freud's Beyond the Pleasure Principle (1920). In this study of human motivation, Freud seeks to explain the existence of drives that lie outside of the pleasure principle, seemingly beyond the pursuit of mental or physical satisfaction. As part of this work Freud describes instances seen in patients of the wilful repetition of traumatic events. giving the now famous example of the fort da game. In this example, a child was unaccountably throwing a toy from his crib, saying the word "fort" ("gone"), and then reeling the toy back in on a string, and saying the word "da" ("there"). Freud hypothesized that this game replicated for the child the repeated absences of the mother, an event which the child could not control, in order to achieve mastery and place himself in an active role: "At the outset he was in a passive situation—he was overpowered by the experience; but, by repeating it, unpleasurable though it was, as a game, he took on an active part" (Freud, Beyond 35, emphasis in original). The unusual drive Freud noticed here, and elsewhere in his study of subjects repeating past trauma in dreams, seems to lie beyond the concept of the pleasure principle. It could, he theorized, be attributed to an unconscious desire present in us all to master in advance an idea of death that has been heralded by the traumatic event, a "death-drive" that allows the individual to approach death on their own terms.

Freud's theory, that repeated actions seemingly beyond the pursuit of pleasure constitute a desire to achieve mastery over a psychological scenario, seems highly appropriate to Gackenbach's ideas of the encounters of videogames, and the practice and control furthered by these encounters. If, in playing videogames, we practice dealing with particular emotional scenarios,

then the process could be attributed to a subconscious desire to achieve mastery over these scenarios, much as Freud's patients experienced in repeated dreams or compulsive behaviour. The connection is particularly relevant when we assess the popularity of the apocalypse theme, a seemingly un-pleasurable encounter with a vision of human extinction or the ruin of Earth. Players, in fact, indicate a desire to repeatedly revisit these apocalyptic scenarios in their purchases of numerous downloadable content packages and sequels. The growth in popularity of these games, if viewed from the point of view of emotional rehearsal, could be seen as being related to preoccupations in the society in which they are played. For instance, there has been much media coverage in the last few years on the issues of the predicted 2012 apocalypse, the threat of terrorism, and climate change. Not only do recent popular videogames feature a preoccupation with the apocalypse theme in general, but there are several specific examples that deal with these three major issues, for example, respectively: Broken Sword II: The Smoking Mirror (1997; remastered edition released 2011), Call of Duty: Modern Warfare 2 (2009), and Fate of the World (2011). Articles such as Stephen Graham's "War Play: Practicing Urban Annihilation" (2007) and Ryan Lizardi's "Repelling the Invasion of the 'Other': Post-Apocalyptic Alien Shooter Videogames Addressing Contemporary Cultural Attitudes" (2009) demonstrate, for example, how terrorism and the US war in Iraq can be seen to feature in such games. Such a correlation ought to make a strong case, therefore, that we can see through trends in videogame culture the emotional scenarios that members of a society feel the need to confront.

Wasteland was developed by Fargo and his team at Interplay, and released to worldwide acclaim in 1988. Gameplay is split between top-down 2D navigation (moving the characters between and within different locations) and text-based interaction (using items, fighting enemies, levelling-up abilities, 102 etc.), a combination since used extensively in, for example, the Pokémon series of videogames (1996-present). Additionally, the game was released with a physical book of "paragraphs": exposition and clues which the player was referred to read by prompts in the game. Players select or create four characters to be a part of their team of "Desert Rangers," a group trying to bring law and order to the post-nuclear wasteland. The ability to choose different specializations for these characters enables multiple ways to solve problems in the game world, and accordingly means that the narrative of the game can take multiple routes. Likewise, traversing the post-apocalyptic Southwest can also take several forms, depending on the order the player wishes to visit locations such as the Savage Village, the town of Highpool, or the city of Las Vegas. As Fargo explains, "It's not like the top-down graphics are what grabbed people with Wasteland. There was this open sandbox world and we weren't preaching to you as to how to behave, in terms of a morality perspective" (Futter). It is worth noting here that while moral choices in videogame narratives may seem tangential to a discussion of the post-apocalyptic spaces of these games, the two are in fact closely linked. Evan Watts, in "Ruin, Gender, and Digital Games" (2011), shows that the ruined settings of these games are "paralleled by, and symbolic of, the destruction of social structures, thus associating ruin with liberation and freedom" (247, emphasis in original). They are, accordingly, "sites

¹⁰² Improvement of the player character through gaining experience and developing certain skills is a staple of RPGs such as the *Wasteland*, *Fallout*, and *S.T.A.L.K.E.R.* series. In *Wasteland* the player gains experience points through completing tasks and fighting the mutated beasts of the wasteland, and can spend these points in improving diverse skills such as lock-picking, climbing, or throwing knives.

of empowerment" (248), and represent "a perfect accentuation of the shaping power allotted to the player, as the freedom from social constraints provides a space in which the player can work with the game to mutually construct, with varying degrees of freedom, how gender and power are portrayed" (263). Games in which the player navigates ruined buildings symbolic of a ruined social order, therefore, present the navigation of treacherous spaces and complex moral choices in tandem.

As exploration of the pixelated 2D world in *Wasteland* occupies only the gaps between text-based interactions with characters, enemies, and aspects of the environment (locked gates, for example), the graphic representation of space serves only in as much as it facilitates immersion in the narrative. As Nitsche writes of more recent games, "Visual detail has become the fetish of some game developers who entered into a kind of space race to the most advanced presentation form," though the narrative grows not from graphics and spectacle alone, but "from a comprehension based on interaction with and reading of the game world" (72). Wasteland was rereleased on Steam to coincide with the release of Wasteland 2, and while the graphics now appear extremely dated, the complexity of decision-making possible in the game does not. The 1988 game is perhaps the first example of what Watts describes as the pairing of a ruined urban landscape with extensive freedom of play, and it came to be the first of a diverse genre which has proved highly popular. Certainly a complex narrative landscape was far more possible to produce than one of great visual detail given the technological restraints of the late 1980s, but as we will see it is one Fargo privileges repeatedly in games developed since.

As systems became more powerful, Fargo and his team at Interplay were able to allow the visual settings of their games to do more of the work in immersing players in the game world. This saw the beginning of the highly successful Fallout series (beginning 1997). Despite the critical success and broad appeal of Wasteland, there was not sufficient support for a sequel with publisher Electronic Arts (EA), which owned the rights to the series. According to Fargo, the game series beginning with Fallout (1997) "was born because I couldn't do Wasteland 2" (Hurley). The series was, however, to be among Fargo's most popular work. Fallout and its sequel Fallout 2 (1998) follow in the footsteps of Wasteland as post-apocalyptic RPGs seen from an overhead viewpoint, but display a significant leap forward in graphics. Rather than Wasteland's flat, "topdown" 2D graphics, Fallout features "isometric" graphics, sometimes described as "2.5D" for their 3D-like effect. As Grant Tavinor explains, isometric games provide a "quasi-three dimensional form of graphical representation where the game action is represented in one or more fixed or scrolling isometric perspectives[.] [...] Unlike 2D representation, isometric representation gives some impression of game world depth without allowing for the movement into the picture plane that is possible in true 3D graphics" (Videogames 202). For example, the 3D-effect of buildings in the *Fallout* games allows for the player character to move behind its walls, something not possible in Wasteland (see Fig. 1). The text-based interactions and battles of Wasteland have also been

¹⁰³ The *Fallout* series includes multiple canon and non-canon titles. This chapter will be primarily concerned with Fargo's two games *Fallout* (1997), developed by Interplay, and *Fallout* 2 (1998), developed by Black Isle, a division of Interplay, as well as, *Fallout* 3 (2008) and *Fallout* 4 (2015), Bethesda's 3D continuations of the series, and *Fallout: New Vegas* (2010), a game very similar to *Fallout* 3 developed by Obsidian Entertainment. Additional titles include *Fallout: Tactics* (2001), an enjoyable game which focussed more on tactical battles than dialogue or moral choices, and *Fallout: Brotherhood of Steel* (2004), a console game which was a huge commercial and critical failure. Several additional titles were also planned for the series, including Fargo's original intention for a third *Fallout* game, *Van Buren*, which was cancelled in 2003 due to cuts at Interplay. Of the published games, Fargo was directly involved only with *Fallout* and *Fallout* 2.

replaced in *Fallout* by animated character sprites which visually depict actions such as lock-picking and using weapons. The paragraph book is abandoned, as the game code is better able to handle the large amount of dialogue and descriptive text. The visual representations of animated actions along with the in-game integration of text previously stored off-screen reduces the disconnect between players and the post-apocalyptic world of *Fallout*, meaning that presence is far more easily achieved. Visually and mechanically *Fallout* and *Fallout 2* are very much alike, although the latter offers a more expansive world for the player to explore.

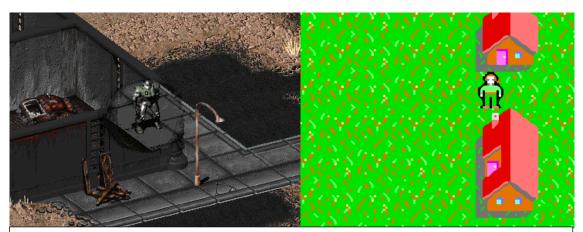


Fig. 1: A comparison showing the player-character moving "behind" (from the player's viewpoint) isometric walls in *Fallout* (left), and the inability to do so with the flat 2D buildings in *Wasteland* (right). Copyright: *Fallout*, Interplay, and *Wasteland*, Interplay.

The *Fallout* series is set in an alternate universe which has diverged from our own in the years immediately following World War Two. Retaining the culture and aesthetics of 1950s America, the world of *Fallout* is plunged into nuclear war in 2077. A chosen few survive the war in underground vaults and generations pass as the "vault dwellers" outlast the nuclear fallout above. In the ruins of the world discovered by the vault dwellers on their return to the surface

This style, referred to by Tom Bissell as "George Jetson Beyond Thunderdome" (7), could be described as "retrofuturist," a term developed by Scott Bukatman in "There's Always Tomorrowland: Disney and the Hypercinematic Experience" (1991). For more on the use of retrofuturism in videogames, see Grant Tavinor's "Bioshock and the Art of Rapture" (2009) and my essay "Bioshock and the Uncanny: Rapture as Haunted House" (2015).

are new populations of *Mad Max*-like raiders, tribal groups, irradiated ghouls, and giant super mutants. In the first *Fallout* game, the player emerges from the vault into post-apocalyptic Southern California which is now ruled over by the New California Republic, a power modelled after the politics of the old world. Alongside new towns built from the wreckage of the war are Bakersfield (now renamed Necropolis and populated by ghouls) and Los Angeles (renamed Boneyard). Fallout 2 encompasses much of Northern California, Nevada, and Oregon, with two of its largest settlements being New Reno, built among the ruins of Reno, Nevada, and San Francisco. These locations are largely pieced together from the same range of image tiles, and accordingly look remarkably similar to one another. Their specific narrative relevance, however, creates a world in which they feel like individual and distinctive locations. In New Reno, for instance, players can visit casinos which, although their exterior appearance makes them look little different to taverns or churches in the game, contain mobsters, slot machines, and cantankerous gamblers, creating an expressive atmosphere that is more suggestive than visually comprehensive. As Tom Bissell describes, the effect of games which provide the player with freedom to explore the world on their own terms means that a "gamer trying to describe to another where something can be found in an RPG will often have directions as longitudinally inviolate as those of a real map" (121). In contrast to linear game maps where a player begins at one end and follows a prescribed route to reach the other end, Wasteland and Fallout encourage players to explore the world as they choose, generating narrative meaning along the way. Bissell finds the experience reminiscent of how people navigate real world cities, writing that he found his own way around London based on his experiences of playing The

Getaway (2002), a game set in a meticulously recreated version of central London (121).

CHOICES IN VIRTUAL WORLDS

Ian Bogost, in his pivotal *Unit Operations: An Approach to Videogame Criticism* (2008), argues that literature, videogames, and other texts can be read through the information technology terms "unit operations" ("modes of meaning-making that privilege discrete, disconnected actions") and "system operations" ("deterministic, progressive systems") (3). In other words, as with real life they can be seen as being composed of numerous individual exchanges, transactions, or interactions, rather than everything in the text contributing to a singular, accumulative narrative arc. Looking at *Grand Theft Auto III* (2001), or "*GTA*," Bogost writes that "*GTA*'s structured configuration of possible actions [i.e. unit operations] within a larger space suggests [...] space is used not for the repleteness of exploration, but in order to structure smaller, singularly meaningful experiences" (159). The player's "experience in *GTA* comes from the relations of individual decisions rather than a sequence of tasks, even if those tasks are subject to resequencing" (168).

This is very much the case in *Wasteland* and *Fallout*. While each of Fargo's games contains a main storyline, the vast majority of the experience for players comes from exploring specific locations which provide new and individual combinations of encounters, quests, loot, and so forth. The decision to take a particular course of action in these games opens new possibilities but also precludes the decision to take another course, resulting in a complex navigation of unit operations to unit operations. For that reason, videogames in particular complicate the issue of analysis as individual play-throughs by

different users can result in wildly differing experiences. Crucially, Bogost also suggests that such processes of decision making refer outwardly to the real life unit operations they represent, again referring specifically to GTA whose decisions often raise questions of law and criminality: "The simulation fever GTA instils arises out of the dissonance between these activities not only within the game world itself, but also between the game world and the real world. GTA draws attention to our tenuous relationship with crime and punishment" (168). In contrast to the furore generated over violence in videogames, with critics often citing in-game violence as the impetus for real-life crimes, Bogost suggests here that the juxtaposition of affordances in the game world with that of the real world creates a space for interrogating decisions over morality. 105 As we saw with the videogame Blade Runner (1997) in Chapter 6, and the player-character's ability to engage in a romantic relationship with the child Lucy, videogaming thus affords the player a chance to explore complex moral issues from both sides in a safe space. In Grand Theft Auto III, this means stepping into the shoes of player-character Claude and his involvement in the Liberty City crime world.

While *GTA* presents a relatively complex world in which the player is caught between a life of criminality and lawfulness, post-apocalyptic games offer a more nebulous interrogation of morality. Decisions to commit murder or robbery in *GTA* will inevitably result in unwanted attention from the police, and eventually the FBI and the military, showing the incompatibility of these choices with the civilized status quo of the game world and accordingly the real world it represents. In *Wasteland* and *Fallout* such organizations do not exist. Rather, the player is always caught between rival factions, unable to make a decision

¹⁰⁵ See, for example, Craig A. Anderson, Douglas A. Gentile, and Katherine E. Buckley's *Violent Videogame Effects on Children and Adolescents* (2007), Lawrence Kutner and Cheryl Olson's *Grand Theft Childhood: The Surprising Truth About Violent Video Games and What Parents Can Do* (2008), and Christian Happ and André Melzer's *Empathy and Violent Video Games: Aggression and Prosocial Behavior* (2014).

that will satisfy all parties, and so must live with the consequences of their actions. In other words, decisions do not fall on the side of lawful- or unlawfulness, but rather lead to further decisions with less predictable repercussions. For example, within *Fallout's* city Boneyard are two rival groups, the Regulators and the Blades. The Regulators are a police force for a section of the town called Adytum, and are endorsed by the elected mayor Jon Zimmerman, The Regulators, Zimmerman, and the people of Adytum view the Blades as a criminal syndicate, and among their alleged crimes is the murder of the mayor's son. As becomes clear to the player in talking to these groups, however, the Blades are in fact a peaceful group, and their reputation has been slandered by the Regulators in order to enforce an oppressive control over Adytum. The mayor and the people of Adytum have been manipulated into believing the lies of the Regulators and overlook the group's embezzlement of city funds and their barbaric behaviour as a result. The player is thus given a choice: they may side with the Blades, helping to kill the Regulators and Zimmerman, and to clear the name of the group; they may side with the people of Adytum and their elected mayor and police force, and assist in wiping out the Blades; or they may do neither, as the quest is not integral to the main storyline of the game. None of these options is without its difficulties: siding with the Blades will result in the deaths of many innocents manipulated by the Regulators; siding with Zimmerman will result in the deaths of the innocent Blades; and doing neither will presumably allow the protracted struggle to continue indefinitely. As Marcus Schulzke writes, these kinds of choices are fundamental to the post-apocalyptic world-building of Fargo and his team: "the Fallout series is unique in giving players an open world in which they can make genuine moral choices. Moral dilemmas are not presented for passive

contemplation – they are an integral part of gameplay." As described by Watts, this is what makes post-apocalyptic games unique: morality and the ruined environments of *Fallout*'s post-nuclear cities work together in creating a complex and immersive game world ripe for contemplative exploration.

3D GAME SPACES

This has the potential to become all the more the case as post-apocalyptic games move towards utilizing advanced 3D graphics. Nitsche's Video Game Spaces: Image, Play, and Structure in 3D Game Worlds (2008) makes the argument that 3D game spaces offer a more immersive experience than their 2D predecessors. While presence and flow do not necessarily come from 3D game worlds in and of themselves, "Both presence and flow support each other in videogame practice" due to the activities performed within these spaces (205). This has certainly become the case in 3D games, though it has not always been so. Some early attempts at bringing 3D graphics into the mainstream resulted in games which were less immersive, as gameplay mechanics established in 2D worlds struggled to be translated to the new form. Often it was the case that these early forays into 3D worlds offered visual spectacle as an attraction far more than they offered well-developed gameplay experiences. For example, the first fully 3D game in the Sonic the Hedgehog franchise, ¹⁰⁶ Sonic R (1997), while being visually impressive for its time, suffered greatly for its gameplay mechanics. Conversely, the first 3D game in the Super Mario series, Super Mario 64 (1996), was a tremendous success on both fronts. Despite early difficulties, however, 3D has become the standard in

¹⁰⁶ Sonic 3D: Flickies Island (1996), released for the Sega Genesis and Saturn, was not strictly 3D, but rather a "2.5D" isometric game (similar to *Fallout*) with 3D animated character "sprites" and with 3D special stages (bonus levels). These special stages were not unlike the groundbreaking 3D special stages of *Sonic the Hedgehog* 2 (1992), and so the game was not a particularly revolutionary step towards 3D, but rather offered a 3D-like experience.

mainstream videogames for its immersive ability in enabling the player character to not simply be superimposed over a background, but to interact with the environment. ¹⁰⁷ The interactions possible with the environments of 3D game spaces contribute to presence, as not only can players open doors and windows, but the player-character may even cast a moving shadow on their surroundings, meaning that the world "seem[s] to react to the player" (Nitsche 208). Manovich writes of the difference as being akin to moving the movie camera during a film scene, again citing this as being of critical importance in creating a compelling game world: "Directing the virtual camera becomes as important as controlling the hero's actions" (84). Accordingly, he views game and film architecture as analogous: "After all, film architecture is architecture designed for navigation and exploration by a film camera" (265).

A number of influential and highly popular games set in ruined or postapocalyptic urban environments made use of this new dimension to videogame
design. The Japanese *Resident Evil* videogame series (1996-present) moved
from fixed-camera to third-person 3D games, often set in the fictional American
location of Raccoon City, a place in the grip of a zombie apocalypse after a
mysterious virus is let loose. A strategy game with isometric graphics named *Jeff Wayne's The War of the Worlds* was released in 1998, which used many
3D elements that pushed the abilities of systems at the time, and was swiftly
followed by a separate third-person vehicular combat console game, entirely
3D, also named *Jeff Wayne's The War of the Worlds* (1999). The *Deus Ex*series (beginning 2000), one of the most critically analysed series of
videogames, presents a dystopian world ravaged by a global plague, and uses

¹⁰⁷ Many "indie" games in particular still utilize 2D or isometric graphics, sometimes out of budgetary necessity but often as a stylistic choice.

a first-person perspective in its 3D rendering of many cities such as New York, Hong Kong, and Paris.¹⁰⁸

The highly popular but insufficiently critically analysed *Half-Life* 2 (2004), along with its seguels Episode One (2006) and Episode Two (2007), presents a dystopian future eerily reminiscent of George Orwell's Nineteen Eighty-Four (1949), its dilapidated cities composed of the monolithic architecture of Sovietera uniformity. Like *Deus Ex*, the *Half-Life 2* games are first-person shooters (FPSs), and players engage in firefights and solve puzzles as they navigate a primarily linear, controlled game space. The games' central urban setting, City 17, along with the surrounding wasteland, are rich fictional environments heavily laden with real-world significance. The city's resemblance to Soviet design is a conscious effort to evoke Eastern European locales, and art director Viktor Antonov drew on Russia, Romania, and his home country Bulgaria for the architectural aesthetic (Valve, Raising 168). Antonov notes that Eastern Europe "represents the collision of the old and the new that is difficult to capture in the United States" (166), and the historical significance associated with the setting captures the sense of the layering of political ideologies in City 17. The world entered by the player at the start of Half-Life 2 is one fundamentally altered by a series of undisclosed catastrophes. An early idea for a time-lapse introduction to the world illuminates the process of this transformation:

There is a flash. Suddenly everything has changed. The earth is brown; the sky is grey. The streambed is dry and black. The trees are twisted skeletons now. [...] On the horizon, the city appears grey, no longer lively. A pall hangs over it. [...] Another flash

¹⁰⁸ For analysis of the *Deus Ex* series see, for example, McKenzie Wark's *Gamer Theory* (2007), Michael Nitsche's *Video Game Spaces: Image, Play, and Structure in 3D Game Worlds* (2008), and Miguel Sicart's *The Ethics of Computer Games* (2009).

engulfs you, and as it fades you find the land has changed again. The earth is utterly blasted. The streambed is choked with ashes. The trees are gone. [...] The city is a blackened ruin, its surviving towers tilted and about to fall. The sky is choked with smoke. From the center of the city, an alien spire begins to rise, towering over the damaged human structures. (138-9)

The flashes, apparently the violent takeover of an alien species, a monolithic force appropriately named "the Combine," have rendered the environment sterile, clad in uniform grey ash, with all individuality and character washed away. Fashioned onto the layers of human architecture is a new, alien architecture of advanced technology, complete with force fields and unbreakable locks. As one City 17 citizen was to remark, in another early draft, "I've gotta say... it looks a lot like [City] 49. And 40 before that" (165). Life on Earth under Combine rule accordingly represents the fear of communist dominion and homogeneity. Civilians in City 17 wear identical blue outfits, collect their rations in orderly lines, and cower from surveillance drones in their dilapidated apartment buildings. The city's only sounds are the propaganda of Dr. Breen blaring from every television set and speaker, and the routine raids by the euphemistically titled "civil protection" officers. The clear evocation of Cold War anxieties in *Half-Life 2*'s antagonists and setting suggests a certain comfort in the established threat of authoritarian governments and the trope of using aliens as stand-ins for communists in fiction. The player-character Gordon Freeman joins the civilian resistance and his singular abilities, honed during the first Half-Life (1998, remade in the Half-Life 2 game engine by fan collective Crowbar as *Black Mesa* in 2012), enable him to generally keep the Combine threat at bay and to afford the citizens (all with American accents) some form of

freedom. Released shortly after 9/11 and the declaration of the "war on terror," *Half-Life 2* may be yearning for a time when America's military aspirations were more defined and its enemies less diffuse and indistinct, a time when the threat could more readily be identified by prominent indicators of political ideology or geography. ¹⁰⁹

Further 3D FPS games presenting worlds of urban ruination include *Homefront* (2011), in which North Korea is in the process of invading the US, *Rage* (2011), in which life on Earth has long been all but wiped out by an asteroid, and the stunning Ukrainian games *Metro 2033* (2010) and *Metro: Last Light* (2013), in which the player is one of a number of survivors of global nuclear war who live in the subway systems beneath a ruined and irradiated Moscow. One of the most interesting among post-apocalyptic FPS computer games released during these years is the *S.T.A.L.K.E.R.* series, composed of *S.T.A.L.K.E.R. Shadow of Chernobyl* (2007), *S.T.A.L.K.E.R. Clear Sky* (2008), and *S.T.A.L.K.E.R. Call of Pripyat* (2010).¹¹⁰

S.T.A.L.K.E.R. AND THE "OPEN WORLD" GAME

Developed by Ukrainian company GSC Game World, the *S.T.A.L.K.E.R.* games are set in an alternate timeline in which the Zone of Alienation surrounding the Chernobyl nuclear reactor has been repopulated following the 1986 meltdown for the purposes of secretive scientific testing, leading to a second, more severe disaster in 2006. While the games fit the 3D FPS style, they are also open world

¹⁰⁹ This new era of American and British anxiety, and its manifestation in the zombie saga of the *Walking Dead* franchise, is the focus of Chapter 8. For other examples of apocalyptic videogames displaying a nostalgia for Cold War anxieties, see *Destroy All Humans!* (2005) and *The Bureau: XCOM Declassified* (2013).

The title of the series, as well elements of the games' tone and story, are drawn from the 1979 Andrei Tarkovsky film *Stalker*, and the novella *Roadside Picnic* (1972) by Arkady and Boris Strugatsky upon which the film was based. Both the film and novella were unsettlingly prescient of the 1986 Chernobyl disaster and the subsequent establishment of the Zone of Alienation, in their depiction of a "Zone" possessing dangerous, almost supernatural properties.

RPGs, as the player is free to talk to NPCs and take quests at will, following or diverging from the main storyline and choosing to make alliances or war with various factions. Similar to Fallout and Wasteland, S.T.A.L.K.E.R. is a series in which the array of unit operations open to the player offers a narrative which is not simply non-linear, but in fact highly dynamic and variable. Moreover, the player is not only given freedom to explore the Zone of Alienation as they choose, but exploration is in fact rewarded, with secret caches of supplies and bonus encounters hidden about the map to be discovered as prizes for the more adventurous of players. As Ernest W. Adams writes, game spaces operate to propel narrative, but "ludic [i.e. visual game] space also has a secondary function, which is to entertain in its own right by a variety of means" (458, emphasis in original). Manovich writes that "If the player does nothing, the narrative stops. From this perspective, movement through the game world is one of the main narrative actions. But this movement also serves the selfsufficient goal of exploration" (247). Though the main narrative arc of the S.T.A.L.K.E.R. games is dependent on the player-character reaching certain predefined areas of the Zone in a certain order, the freedom given to take sidequests, or to collect rare items and barter with merchants, or simply to explore the irradiated landscape and its mutated flora and fauna, means that exploration is as much an end in itself as it is a by-product of the advancement through the main storyline. In its morality, too, the S.T.A.L.K.E.R. games bear strong similarity to Fallout and Wasteland. A typical encounter finds an injured man in a crumbling house, set upon by wild, mutant dogs. The player has the option to defend the man using valuable ammunition and risking their life, or to leave him to be ripped to shreds before looting his dead body, or any number of other options depending on the items in their inventory. Whatever happens to the

man does not affect any of the following encounters, but the player is given the option, as Chandler writes, to "fix a broken world or to widen its fractures." The player is accordingly welcomed into the performance of ruin by the game, allowing for an active, immersive role in interacting with the post-apocalyptic world.

One of the central locations within the Zone, featuring in the backgrounds of the first two games and visited at length in the third, is the ruined and foreboding city of Pripyat. Unusual for being the largest of modern ghost towns, Pripyat also raises questions, as Paul Dobraszczyk writes, about what conclusions should be drawn when the "modernizing process itself threaten[s] to turn the physical and social fabric of the city to ruins" (371). As such its position in the contemporary consciousness can be seen to be performing a similar role to San Francisco following the 1906 earthquake and in Jack London's *The Scarlet Plague* (1912). Abandoned in the aftermath of Chernobyl's reactor number four meltdown on April 26, 1986, the entire city is representative of the potential for modern technology to destroy the urban environment itself. Especially appropriate to the format of the open world game, in the city and its surroundings, "nature and culture, landscape and ruin, begin to bleed into one another, so that we can no longer truly say what is ruin and what its background, what is monument and what the dead thing it recalls" (Dillon 41). Pripyat is recreated in detail for S.T.A.L.K.E.R. via the use of satellite images and maps (Adams 459). As Adams suggests, the preservation of the decaying city in the form of a game is a "memorialization" of "a place that still exists, but that cannot be inhabited, rather only remembered" (emphasis in original). While the built form will eventually crumble, the game will remain as "a ludic space that people may experience in three dimensions. A video game will

keep alive the memory of a poisoned town" (459). Manovich suggests something similar, writing that "the virtual can at least preserve the memory of the real it replaces, encoding its structure, if not its aura, in a new form" (261). In his use of the word "aura," Manovich evokes the problem espoused by Walter Benjamin in "The Work of Art in the Age of Mechanical Reproduction" (1936). Benjamin writes that the "presence of the original is the prerequisite to the concept of authenticity" (218), and that "the unique value of the 'authentic' work of art has its basis in ritual, the location of its original use value" (220). The "aura" of a piece of art is lost when it is removed from this ritual, location, and original use value. Accordingly, reproducing the city of Pripyat in electronic form to be played outside of the Ukraine cannot replace the actual visiting of the site itself, as evidenced by the highly popular activity of illegally "stalking" in the Zone of Alienation, or the few tour companies that serve to allow visitors the opportunity to view specific areas of the Zone. In contrast to the kind of mechanical reproduction of images discussed by Benjamin, however, the digital reproduction allows engagement with a navigable, semi-fictionalized version of the original. Rather than simply being a carbon copy or photograph, the unique interactive world created in S.T.A.L.K.E.R. has greater potential to generate its own aura, in the singular opportunities for exploration it affords. Physical excursions into the Zone itself fit into a category of tourism labelled "dark tourism" by John Lennon and Malcolm Foley in their 2000 book of the same name. It could be argued that the S.T.A.L.K.E.R. games represent a virtual form of dark tourism, which could go some way to explaining their enduring popularity. 111 Recent discussions of navigation through digital and other visual

¹¹¹ This popularity can be seen by ill-fated and some apparently fraudulent campaigns on crowdfunding websites for a *S.T.A.L.K.E.R.* sequel, which attracted thousands of pledges from fans (Hall).

worlds frequently utilize Charles Baudelaire's concept of the *flâneur*. As this discussion is now well-travelled ground, more profitable insights may be offered by utilizing dark tourism, a phenomenon previously unconnected with videogame studies.

Lennon and Foley's concept of dark tourism describes places of violence, death and disaster that are made amenable to tourism. Their book Dark Tourism: The Attraction of Death and Disaster (2000) serves the purpose both of establishing a theoretical framework for dark tourism as well as introducing it to a larger audience, though the phenomenon had seen prior attempts at classification (Sharpley 14). Despite having since led to several essays and books, as well as the founding for the Institute for Dark Tourism Research at the University of Central Lancashire, "understanding of both the production and consumption of dark tourism remains limited—especially considering the relationships between dark tourism and the cultural condition and social institutions of contemporary societies" (Stone). Sites given this term include the Holocaust death camps, World War battlefields, the 9/11 site of "Ground Zero," areas of recovery from Hurricane Katrina of 2005, and Haiti after the 2010 earthquake. Although scholarship on dark tourism has so far made reference only to actual sites, it is easy to reapply this idea to the visitation of dark sites in fiction, and particularly videogames, given their explorative, visual focus on spatial representation. As with historical sites, fictional representations of disaster and death representing events that have or could come to pass can likewise be seen as attempting to comprehend the incomprehensible, by processing past or prospective disaster on a human scale through the

¹¹² See, for example, Anne Friedberg's *Window Shopping: Cinema and the Postmodern* (1993) and Maren Hartmann's *Technologies and Utopias: The Cyberflaneur and the Experience of 'Being Online'* (2004).

perspective of the FPS. Lennon and Foley make the case simply for dark tourism as "an intimation of post-modernity" as follows:

first, that global communication technologies play a major part in creating the initial interest [...] second, that the objects of dark tourism themselves appear to introduce anxiety and doubt about the project of modernity [...] third, the educative elements of sites are accompanied by elements of commodification and a commercial ethic which (whether explicit or implicit) accepts that visitation (whether purposive or incidental) is an opportunity to develop a tourism product. (11)

Marita Sturken has since argued that the third feature, the acknowledgement of the commercial transaction at dark sites, is itself a means of processing death and disaster. The "intersection of cultural memory, tourism, consumerism, paranoia, security, and kitsch" in American culture, she writes, creates a relationship between the tourist and history which privileges "U.S. culture as somehow distanced and uncomplicated in the troubled global strife of the world" (4). Joy Sather-Wagstaff places focus on the first feature, writing that the process of visiting "dark" sites is "the act of physically bearing witness to the site as it exists at the moment of visitation" in order to make "more real the distant witnessing" experienced through media portrayals of the event (75). In an age of media saturation of catastrophic events, dark tourism can be seen as an attempt to comprehend disaster on a human scale, by moving physically closer to events that seem incomprehensible in the distant witnessing of news reports and documentaries. While games such as the *S.T.A.L.K.E.R.* series are mediated through console or computer, they provide a less mediated

experience than television or traditional media due to their interactivity, which can enable engaging flow states and presence.

The second feature, however, offers a reading particularly relevant to the S.T.A.L.K.E.R. games. Nuclear power, the promised "clean" energy of the future, as discussed in Chapter 5, represents a significant loss of faith in the project of modernity, which in turn inspired the environmental movement to push back against the advances of science and technology and return to natural, renewable energy sources for meeting human needs. S.T.A.L.K.E.R. offers an individual tour through the wasteland created by the most notorious historical example of the failure of the nuclear energy, and a means of processing the anxiety created by the 1986 accident. While the forces of radioactive hot-spots and "anomalies" in the game's Zone of Alienation threaten at all times to overwhelm the player-character, mastery of the Zone is possible as the player practices encountering these threats and learning to use them to their advantage, in a manner reminiscent of Gackenbach's and Freud's theories of emotional rehearsal. It is possible through practice, for example, to carefully enter lethal anomalous areas in the games and retrieve highly valuable "artefacts," or to lead one's enemies into areas of intense radiation, defeating them without needing to engage in a firefight. It may be, therefore, that to complete the S.T.A.L.K.E.R. games offers a form of catharsis for the anxiety created over the apparent failure of modernity in harnessing nuclear power. The previously hostile environment of an urban region corrupted by the failure of the project of modernity can not only be comprehended more easily through play but may also be overcome and manipulated to the player's advantage.

There are further ways to read the motivations of visiting dark sites.

Dobraszczyk, on his own visit to the Chernobyl reactor and Pripyat, expresses

his "uncomfortable sense of being a voyeur onto an ongoing tragedy," despite the primary rationale for the academic research trip being "an established interest in industrial decay" (372). In similar language Richard Sharpley suggests, "Undoubtedly, morbid curiosity, voyeurism or schadenfreude may be a principle driver of tourism to certain dark sites," though he notes that "at other sites, interest in death may be minimal or nonexistent, or the association of death may have little relevance." Visitors to William Wordsworth's grave, Sharpley suggests, might be "more interested in his life and poetry than his death" (23). While the spectrum of dark sites suggested by Sharpley may be broad, accounts such as Dobraszczyk's suggest that motivations for and responses to a visit to the Zone of Alienation in particular might be various and contradicting. Likewise, voyeurism may certainly be a motivating factor in the popularity of games like S.T.A.L.K.E.R., as players may be well out of harm's way during their virtual, vicarious exploration of the irradiated city, but of course this does not preclude the existence of other motivating factors being involved simultaneously. 113 In opposition to voyeurism, Erika M. Robb writes that many instances of dark tourism may be motivated by far more noble intentions, with trips "undertaken in the name of social justice and historical awareness; tourists report that they go on dark tours because they may learn more about violence in the hope of preventing future atrocities or ending current ones" (51). Reading dark sites as an opportunity for reflection on the present seems highly appropriate to science fiction, given the genre's long history of using the future or parallel presents to comment on the issues affecting the real world. The

¹¹³ Stephen Graham, for example, makes this case in regards to certain popular FPS games that he sees as bringing "the vicarious thrills of urban war directly to the homes of news-hungry consumers" for "voyeuristic" purposes (420). Again, however, voyeurism alone cannot explain the immense popularity of these games. For more on the cultural work being done by games depicting historic sites of urban warfare, see Debra Ramsay's "Brutal Games: *Call of Duty* and the Cultural Narrative of World War II" (2015).

setting of the game *Fallout 3* (2008), for example, offers another possible example of this.

FALLOUT 3 AND 3D WORLDS

The rights to the *Fallout* series were sold by Interplay to Bethesda in 2004 (Pichlmair 109), resulting in 2008's Fallout 3, 2010's Fallout: New Vegas, and 2015's Fallout 4. Fallout 3 is set in the ruins of Washington, D.C. in 2277. In a beautifully rendered 3D world, play can be either first- or third-person. The expansive world includes locations such as the faithfully recreated Capitol Building, National Archives, National Museum of Natural History, and other features of the National Mall, as well as small towns on the outskirts of the capital and original locations such as underground vaults used as refuge from the nuclear war. The choice of the US capital as a setting makes this an evocative commentary on apocalyptic themes. As Watts demonstrates, ruin can figure as "an icon of resistance and subversion" while "what is being resisted depends on what the ruined structures are taken to represent" (248). With the case of Fallout 3, the use of the capital, "the symbolic centre of American society," the iconic structures of the National Mall are "repurposed in ways that are often deliberately antithetical to the common social meanings associated with them—for example, the Lincoln monument is now home to a group of slavers." As a result, the ruins of the symbolic monuments of America stand as "tattered reminders of its own failure" (257). While this comments on present day US society and the promises upon which it was built, if we follow Robb's suggestion that the visitation of dark sites operates as a means of preventing future atrocities, the crumbling ruins of D.C. provide a cautionary vision for

players of a possible future, and that America's current trajectory is at odds with its founding principles.

Further, the ruin of the National Mall, "a memorial landscape that evokes an abiding sense of national identity" (Savage 10), brings to mind portrayals of the ruins of great civilization seen in Romantic literature such as are discussed in Chapter 1. Percy Bysshe Shelley's "Ozymandias" (1818), in particular, displays the impermanence of the power of nations against the timeless forces of nature. The impotent declaration inscribed upon the pedestal of a "shattered visage" (4), "My name is Ozymandias, King of Kings; / Look upon my Works, ye Mighty, and despair!" (10-11), is a monument "Half sunk" (4) into the surrounding desert, in which none of Ozymandias's works still stand. As Christopher Woodward explains, Shelley's fascination with ruins can be linked to his political fascination with freedom from the domination of civilization: "It was in the ruins of ancient Rome that Shelley found hope for the future—more specifically, in the flowers and trees which blossomed in the Baths of Carcalla[.] [...] [T]heir exuberant and wild fecundity promised the inevitable victory of Nature—a Nature which was fertile, democratic and free" (66). Likewise, the ruined National Mall and its fractured Washington Monument stand as somewhat ironic declarations of American exceptionalism amongst the grey debris of the surrounding wasteland. While the ruins of these monuments to American power and ideology are the centrepiece of Fallout 3's landscape, the suggestive aesthetic permeates each area of the map. Key locations include thinly veiled parodies of the giants of American capitalism, for instance the Nuka-Cola plant, which is partially flooded with a toxic, soda-like liquid that has produced mutated monsters, or the Covega factory of Chryslus Motors, which is filled with giant killer-ants, worker drones ruthlessly patrolling the production

lines in defence of their monstrous queen. In fact, the number of locations in the game such as factories, office buildings, and power plants far outweighs the number of iconic structures of the mall. As Shannon Lee Dawdy points out, the kind of Renaissance and Romantic predisposition towards ruins of the Old World has found limited expression in the young country of the USA, though modern ruins are expressive of "capitalism's fast-moving frontiers and built-in obsolescence, as well as political hubris and social conflicts" (771). The ruins of urban, industrial, capitalist structures is accordingly more familiar terrain in American fiction, and provides a balance in *Fallout 3* with the monumental ruins of the D.C. Mall. The liberation afforded by the ruination of both the icons of the republic's political identity and the young country's structures of capitalist industry thus offer distinct opportunities for reflection on the potential future of the nation.

The setting of New Vegas in *Fallout: New Vegas*, as with its corollary of Las Vegas in *Wasteland* and New Reno in *Fallout 2*, evokes the joyous nature of the "pleasure zone," described by Robert Venturi et al. as being defined by "lightness, the quality of being an oasis in a perhaps hostile context, heightened symbolism, and the ability to engulf the visitor in a new role" (53). Such environments are highly suggestive of the post-apocalyptic videogame: their worlds of heightened symbolism immerse the player in the role of the player-character as they explore a game world oasis amongst the barren ruin of the hostile post-apocalyptic wasteland. New Vegas, a satirical portrayal of the already hyperbolic city of Las Vegas, Nevada, offers the player-character chances to participate in various casino games, visit brothels, bet on literally underground bare-knuckle fights, and meet many NPCs with their own stories and motivations. Will Kaufman writes that Venturi proves that "gleeful

promiscuity, messiness, plurality and playfulness in civic design help turn cities into sites of joyous, collective 'intertwined activities,' rather than grim deserts of isolation and individual despair that the modernists had built," which "threatened to turn the American built landscape into a sterile, humourless, dead space," and was "the work of both visual and political tyranny" (143). Kaufman could easily be comparing the anarchic, joyful setting of the vibrant post-apocalyptic city of New Vegas with its array of unit operations to the oppressive, sombre architecture of *Half-Life 2*'s City 17 and the Pripyat of the *S.T.A.L.K.E.R.* games. The freedom and light-heartedness of New Vegas suggests that even post-apocalypse, the variety and exuberance of American cities is preferable to the drab uniformity of Soviet-like urban environments.

The world of *Half-Life 2* in particular enforces narrative linearity, the "controlled scheme of narrative spaces" (Pearce 200), rather than offering an open world environment to explore, adding to the feeling of dystopian surveillance and control. As *Half-Life 2*'s game designer Dave Riller notes,

we crafted a pretty deliberate path through the world, but we also were careful to preserve the illusion of nonlinearity by sprinkling in rich, but optional, content [...] it really pays off in immersion and richness by giving players the ability to explore and reveal more of the world when they want to, peeling back new layers in the experience "onion." (Valve, *Raising* 277)

Chris Priestman recently noted on *Kill Screen* that the way *Half-Life 2* succeeds at "guiding players through an environment without shoving them around" is suggestive of the design of real world cities, as Guy Debord writes: "cities have psychogeographical contours, with constant currents, fixed points and vertexes that strongly discourage entry into or exit from certain zones" ("Theory" 65). This

illusion of nonlinearity by providing occasional optional encounters prevents the world from seeming contrived and importantly suggests the existence of a larger world behind what the player experiences. Crucially, as the player-character is being shepherded by rebels fighting against Combine rule, the areas of the city that are seen are those areas which are usually hidden: the city's courtyards, sewage canals, underground tunnels, and so forth. Accordingly they bring to mind Bruno Latour's Paris: Ville invisible (2004), which suggests that the suppression of dark places behind the scenes of the public façade will result in an eventual resurfacing of such spaces. The suppression of the populace therefore manifests in the emergence of their resistance in the areas of the city which were also suppressed. The behind-the-scenes look at City 17 greatly contributes to the feeling that the world of Half-Life 2 goes considerably beyond what is seen by the player. Jesper Juul describes this as performing a function comparable with analytical philosophy's concept of "possible worlds," writing that "all fictional worlds are incomplete" (122), and that this "leaves the user with a number of choices in imagining the world" (123, emphases in original). In this sense, the deliberate limitations imposed on the players' ability to explore the world of *Half-Life 2* only increases its potential richness.

It remains true, however, that the strictly controlled nature of the narrative means that repeated play-throughs of the *Half-Life 2* series can be remarkably similar, and not open to the kind of random encounters possible in open world games. While the architecture City 17, therefore, reflects its status as the product of a totalitarian regime, New Vegas has been constructed from the rubble by diverse groups for the purposes of entertainment, commerce, and community. In the *S.T.A.L.K.E.R.* series the contrast is made side-by-side, as rural regions of the zone repopulated and repurposed by the Stalkers offer the

opportunity for NPC interaction, side-quests, and other elements to explore, while the intimidating uniform ruined city blocks of Pripyat house only the relics of past inhabitants and the lethal threat of the player's enemies. The limitations of the cities of *S.T.A.L.K.E.R.* and *Half-Life 2* and the freedom to play granted by cities of *Fallout 3* and *Fallout: New Vegas* are, accordingly, built into the very fabric of their architectural settings.

FALLOUT 3 AND NARRATIVE CHOICES

Bissell writes that the excitement generated by the long awaited follow-up to Fallout 2, in 3D no less, was at the vivid creation of a visually immersive postapocalyptic world which the player could explore at human eye-level, presenting incredible landscape panoramas along with the minute details of enclosed environments: "Fallout 3 was going to be fucking awesome" (Bissell 6). At certain moments, he writes, seeing the dynamic lighting interact with objects in the world, "it is hard not to be startled—even moved—by the care poured into the game's smallest atmospheric details" (8). The game's moral landscape, too, displays the heritage of morally complex choices that were such a distinctive feature of the first two games of the series. Schulzke praises Fallout 3's complexity, suggesting the game could "provide a promising look at how video games can serve as tools of moral education," allowing "the audience catharsis - a chance to lose themselves in the work and experience the emotions of fear and pity in a controlled setting." As seen with the research into dreams and video gaming by Gackenbach, as well as its connection with Freud, such a sense of moral experimentation offers a means of deeply engaging the player with the post-apocalyptic world in an immersive state of presence and flow.

Reviewers have not been united on judging the game's success in this arena, however. Videogame journalist Yannick LeJacq suggests that Fallout 3 may be guilty, in fact, of Nitsche's observation of the "space race" that prioritized advanced visuals at the expense of story: "It was a gorgeous game, a technical feat beyond what Fargo and his co-developers could achieve in the nineties. You could spend hours just walking through its barren, rusted-out landscape, listening to the debris crackle under your feet. Its world actually felt open... until it didn't" (LeJacq). In its use of a "karma" system, Fallout 3 awards points based on whether the player performs "good" or "bad" actions. While being either virtuous or evil provides opportunities as much as it makes other opportunities unavailable (such as gaining the favour of certain virtuous or evil factions or characters), the moral simplicity of offering a simply good choice versus a simply evil choice is, for LeJacq, jarring in a virtual world which otherwise feels intensely real. LeJacq cites one scene in which the player could set a prisoner free or take her supplies and leave her to the mercy of her captors. "[I]t was frustrating," he writes, "because the game was clearly telling me that I could only do one thing if I wanted to keep being the 'good guy." With the release of its sequel, Fallout 4 (2015), this seems to have become even more the case. Patricia Hernandez, in an article for the popular videogame blog Kotaku titled "Fallout 4 is Not the Fallout Fans Fell in Love With" (2015), bemoans how moral decision making has all but been excised from the series:

It's way harder to play a unique character with a novel point of view. There are only two types of wanderers in *Fallout 4*: the hero who saves everyone and does the right thing, or the cartoon villain who only looks out for themselves. And whichever you choose,

however you build your character, you will mostly be doing one thing in *Fallout 4*: killing stuff.

The protagonist of the sequel is a man or woman cryogenically frozen before the apocalypse who has to learn to adapt to post-apocalyptic Boston, Massachusetts. As one critic observes in *The Atlantic*, this also breaks down the ironic distance created between pre- and post-apocalyptic worlds. Where the Fallout series' ironically used the "cultural mores of the 1950s, including the idea of the happy, suburban nuclear family" in reference to America's historic relationship with nuclear energy, Fallout 4 utilizes the aesthetic as a "visual shorthand" to suggest the emotional stakes of the character's journey, in that the player is attempting to maintain the supposed stability, normality, and innocence of the pre-apocalyptic world. The retrofuturist aesthetic for which the series is most well-known thus loses its satirical and humorous impact. becoming simply a leftover aesthetic from the ground-breaking writing of Fargoera Fallout games: "Maybe the answer to 'Why the '50s?' is simply that without the '50s, Fallout wouldn't be Fallout' (Pemberton). The lack of agency for players in exploring the possibilities of the post-apocalyptic open worlds presented by Fallout 3 and Fallout 4 can, therefore, be disruptive in creating spaces for immersion and flow. Offering greater moral complexity to decision making and world building would, however, be something which would again take centre-stage in Fargo's long awaited Wasteland 2, highlighting its importance in creating believable post-apocalyptic cities.

WASTELAND 2

Fargo founded inXile Entertainment in 2002, bought the rights to *Wasteland* from EA, and set out to pitch the sequel to every major publisher (Futter). None

of them offered to fund the game. Attributing this to the fact that dealing with publishers means "dealing with someone's interpretation of what the audience might like" (Hurley), Fargo retained his conviction that there was significant demand for a seguel and, following the example of Tim Schafer and the studio Double Fine, turned to crowdfunding. Initially seeking only \$90,000 on the website Kickstarter, over 60,000 backers eventually provided inXile nearly \$3 million to create Wasteland 2 ("Wasteland 2"). Developed by members of the original team from Wasteland and the first two Fallout games, the full version of the seguel was released in 2014, grossing \$1.5 million in its first four days on Steam (Crossley). The overwhelming public support of the game prior to its release suggests that something about these three Fargo titles was not being made available elsewhere on the market, despite the number of high-budget, visually ornate post-apocalyptic games being released at the time. Returning to the isometric appearance of the early Fallout games (albeit with the ability to rotate the view through 360 degrees and to zoom in and out), Wasteland 2 bucks the trend of visual spectacle in 3D first- and third-person post-apocalyptic games, which had become the standard by 2014. 114

The post-apocalyptic Arizona and Southern California displayed in Wasteland 2 are still highly detailed, showing a significant step forward from the graphics of Fallout and Fallout 2. The first part of the game takes place in many of the locations introduced in the first Wasteland. This primarily rural and small-town based portion of the game offers a gradual introduction to the game world, leading up to the transition of gameplay to the setting of post-apocalyptic Los Angeles. The opportunity to explore Los Angeles at will, effectively the prize of

¹¹⁴ It is not alone in doing so. See, for instance, the point-and-click adventure game *A New Beginning* (2010) and the side-scrolling platformer *Deadlight* (2012). It is, however, unusual in the fact that despite this it both received critical acclaim and sold in such large numbers.

continued gameplay and the development of the player's team of Rangers, offers many of the game's most climactic and memorable moments, and the city's lush green vegetation and dynamic streets populated with unique NPCs offers a bountiful contrast to the stark brown wastes of the scrap-filled Arizona desert. This contrast could be read as an intentional indication of the game designers' greater capacity in 2014 to create a visually engaging post-apocalyptic city for players to explore, and a suggestion that the city is privileged as a site for the themes critical to its post-apocalyptic narrative.

Crucially in its immersive world building, however, Fargo focusses on the creation of a world filled with genuinely ambiguous moral choices, rather than technological and graphical advances. As Fargo describes, the player is frequently presented with the opportunity to offer support to threatened inhabitants of the wasteland in chance encounters, but repercussions for any actions resound through the game: "At any moment there, you could have stepped in and intervened, [...] [y]ou could have started a gunfight. But then you also have to consider: this is an important faction in the city. These people will remember who you are. If you get in a fight with them you will be making some powerful enemies for the rest of your time there" (LeJacq, emphasis in original). The focus placed on complex narrative potential, rather than advanced graphics, means that Wasteland 2 is unusual for its time, and this is likely a significant contributing factor for the game's Kickstarter success. Its presentation of a post-apocalyptic Los Angeles, therefore, most crucially offers the player a chance to explore, through immersive spatio-visual means, the complication of moral choices in a post-apocalyptic world. The post-apocalyptic city, free from the constraints of replicated real life law and order such as that presented in *Grand Theft Auto*, is a freeing moral playground in which players

can witness the ramifications of their moral choices throughout its interconnected communities. It is in the extreme circumstances of its specifically post-apocalyptic setting that these choices and their mixed consequences can be most readily made comprehensible. In contrast to the increasing focus in games such as *Fallout 3* and *Fallout 4* in privileging the vicarious exploration of graphically realistic physical settings, the exploration offered by *Wasteland 2* is through an alternate plane represented visually by the virtual form of the ruined, post-apocalyptic metropolis.

Games which rely on the presentation of large, visually interesting 3D digital worlds certainly do not seem to be going out of fashion, however. 2015 has seen the immensely popular first-person zombie survival game Dying Light, and the massively-multiplayer-online (MMO) games DayZ and H1Z1 are just two open world zombie games proving highly popular even in early access form (released for early access in 2013 and 2015, respectively). 3D worlds, Nitsche writes, offer a "new universe" that "literally added a new dimension to video games" (4) and "changes the textual qualities of video games and distances them in some ways from other interactive pieces that present their content in a less spatially defined manner" (6). While 3D graphics "for its own sake cannot be the goal," their use allows "the generation of fictional worlds in the player's imagination that grow from a comprehension of the 3D representations" (2). With both narrative complexity and visual graphics in a continual upward trajectory, striking the balance between the two is therefore evidently crucial to the development of believable, immersive virtual post-apocalyptic cities that allow the freedom to explore in states of presence and flow.

CONCLUSION

In looking at the history of videogames with a post-apocalyptic urban setting from 1988 to 2014 it appears as though the genre has come full-circle, though this would be an oversimplification. The expansive, visionary post-apocalyptic worlds suggested by Fargo's early games could only be visually represented in a way that displayed some of their impressive scope by the advanced 3D graphics made possible by recent gaming systems. Games such as Metro: Last Light in particular capitalize on the spectacle of visually ornate virtual ruingazing, and the popular release of a graphically improved "Redux" edition of the game in 2014 is testament to the importance of such visual appeal. The open world format and first-person perspective have proven enduringly popular among these games in bringing the player into the place of the player-character, and as a result achieving deep immersion through presence and flow. As has been seen, however, this push towards achieving spectacular graphics in these games has often come at the cost of ludological or narrative advancement in kind, though this is not always the case. Fallout 3 and New Vegas, for instance, offer a compromise, with greater freedom in exploring morally ambiguous problems than the Metro or Half-Life 2 games. The S.T.A.L.K.E.R. games offer much greater freedom still. These titles are, nonetheless, unusual in this respect, as games tend to favour spectacle, action, and clear narrative arcs over nuance and irresolution. It is for this reason, it would seem, that there remains an admittedly niche, though still significant, market for Fargo's brand of morally complex post-apocalyptic games, which are able to take advantage of the scope of exploration made possible by the medium.

As the videogame industry continues to grow, however, and its mainstream games continue to increase in budget, creativity, and

sophistication, it seems inevitable that narrative and mechanical possibilities will catch up with advanced graphics. Recent games such as *Bioshock Infinite* (2013) show that it is possible to produce visually lavish games with relatively complex narratives and to achieve broad popular and critical appeal. A game which could marry the unit operations of *Wasteland 2* with the graphical splendour or *Metro: Last Light Redux* would be a significant realization of immersive post-apocalyptic cities that harness the potential of exploration of both space and narrative afforded by the form of videogames.

Chapter 8:

Violence and Gated Communities in *The Walking Dead*

The Walking Dead franchise has become a hugely popular worldwide phenomenon. The television series in particular sees spectacular viewing figures, as one media journalist put it, "beating everything in broadcast and cable in the 18-49 demographic" (Wallenstein). 115 Set in the Deep South of the United States, the franchise depicts a post-apocalyptic world filled with zombies, in which survivors struggle to defend themselves both against the undead and the often more severe threat of opposing groups of the living. 116 Kyle William Bishop notes that the years following the terrorist attacks of September 11, 2001 "unleashed perhaps the largest wave of paranoia and anxiety on American society since the Japanese attack on Pearl Harbour in 1941" (9) and the twenty-first-century "zombie renaissance" in popular culture is a surprising manifestation of this (12). Similarly, scenes in news media of Americans wielding home-made weapons in defence of their property after natural disasters such as hurricanes Katrina and Sandy show the pertinence of post-apocalyptic narratives in expressing the anxiety that governments and city

basic-cable channel AMC, with comics writer Robert Kirkman as executive producer (2010-present). While the television show features characters based on those from the comics series, with similar plot arcs and even some verbatim dialogue, the two diverge significantly. A spinoff TV series, *Fear the Walking Dead*, began in 2015. A critically acclaimed and popular videogame series based on the world of the comics is produced by Telltale Games (2012-present). *The Walking Dead: Survival Instinct* (2013) is a poorly-received first-person-shooter game released by Activision, based on two characters who appear only in the television show. The franchise has also seen six novels written by Kirkman and Jay Bonansinga, as well as multiple board games (two based on the comics, and two based on the television show). Given the fact of the franchise's breadth and ongoing production, this chapter will be limited to the first six seasons of the AMC show released to date (2010-2016), the first two *Compendium* editions of the comics series (2009 and 2012), which feature near equivalent story arcs to the six seasons of the show, and both of the currently released "seasons" of the Telltale videogame (2012 and 2013-14). These texts offer a representative sample of the franchise's most popular output released to date.

the TV show and videogame, the word "zombies" is never used. Instead, terms differ according to the group describing the zombies, and include "biters," "geeks," and "walkers." In the comics, a more precise range of terms is used to designate different varieties of the undead, with terms such as "lurkers" and "roamers" used to denote the zombies' characteristics.

authorities will fail to protect their citizens in the face of catastrophe. 117 While events since 2001 have certainly created a space in which The Walking Dead could be expected to resonate with American audiences, the sheer success of the franchise has bemused critics and led to much theorizing over its various series. The broad appeal of the TV show (2010-present), the original comics series (2003-present), and Telltale videogames series (2012-present) have already resulted in several collections of popular and academic essays, though so far largely neglected is the role played by cities across the series. 118 The comics, TV show, and videogame all use Atlanta, Georgia as their principle urban location, a city used in other dystopian narratives such as the recent film Divergent (Neil Burger 2014). Besides Atlanta, The Walking Dead also takes in Georgia's cities Senoia, Macon, and Savannah, Virginia's Richmond and Alexandria, and Washington, D.C. While these urban centres offer hope, whether through potential cures to the zombie outbreak, the chance of meeting other survivors, or simply a source of supplies, cities in *The Walking Dead* are primarily seen as a threat. At all times the menace of the zombies amassed within and emanating from the city, as well as the attraction of the city to bands of nefarious cannibals and villains, projects an ambivalent attitude towards the potential for cities to offer sanctuary or security. Over the course of the franchise the characters test multiple forms of settlement, but it is the post-

¹¹⁷ See, for instance, an *Los Angeles Times* article from 2005 which describes a New Orleans resident defending his property with a spear "fashioned from a butcher knife strapped tightly to a length of iron pipe" and a blowgun made from "a piece of tubing" (Pringle), and a *Daily News* article from 2012 describing survivors of Sandy defending their properties from looters with "guns, baseball bats, boobytraps—even a bow and arrow" (Trapasso, Morales, and Siemaszko)

Among the less academic collections are *Triumph of the Walking Dead: Robert Kirkman's Zombie Epic on Page and Screen* (2011) edited by James Lowder, *The Walking Dead and Philosophy: Zombie Apocalypse Now* (2012) edited by Wayne Yuen, and *The Walking Dead and Philosophy: Shotgun. Machete. Reason.* (2012) edited by Christopher Robichaud. "We're All Infected": Essays on AMC's The Walking Dead and the Fate of the Human (2014) edited by Dawn Keetley is perhaps the best example of academic writing on *The Walking Dead*, though it focuses almost solely on the TV show, with occasional comparison to the comics and no mention of the videogame. Paul Boshears's "Mass Shock Therapy for Atlanta's Psych(ot)ic Suburban Legacy" (2014), part of Keetley's collection, is one article to look at the role of cities, though it focusses almost exclusively on the portrayal of Atlanta in the TV show.

apocalyptic adaptation of the gated community which offers the principle hope for a life free of violence.

"WE ARE THE WALKING DEAD"

Set in the Deep South of the United States in a time not dissimilar to our own, The Walking Dead franchise follows survivors of an apparently global zombie apocalypse. All remnants of government or state control are eradicated shortly after the epidemic takes hold, and the characters of these works struggle to live in a lawless world in which a violent death is inevitable for weak and strong alike. The comics and TV show centre around the character Rick Grimes (played in the TV show by Andrew Lincoln), a small-town sheriff's deputy who awakens in his hospital bed post-apocalypse. In this respect the opening is identical to both that of the novel The Day of the Triffids (1951), discussed in Chapter 4, and the British zombie film 28 Days Later... (Danny Boyle 2002). After reuniting with his family and other survivors near Atlanta, Rick takes leadership of the group and gradually moves them further away from the city, first to a farm, then an isolated prison. Following a bloody encounter with a ruthless character known as "The Governor" (played in the TV show by David Morrissey), the autocratic leader of a community named Woodbury, the group are forced to leave the once secure prison and set out again on the road. In the TV show they next attempt to join a community at a train-depot named "Terminus," are forced to return to Atlanta to attempt to save Beth Greene (Emily Kinney), and then seek shelter at an overrun gated community near Richmond, Virginia. In both the TV show and the comics the group finally ends up at the city of Alexandria, Virginia, on the outskirts of Washington, D.C.

Season One of the videogame follows Lee Everett (Dave Fennoy), who is being driven out of Atlanta to prison at the moment of the apocalypse.

Meeting up with an eight-year-old, recently orphaned girl named Clementine (Melissa Hutchison), the two visit the city of Macon, Georgia, occupy a fortified motel, attempt to join a small family at a rural farm, and then head to Savannah, Georgia, with the hope of finding a boat and living off the coast permanently. An optional piece of advice the player-character can give to Clementine on his death bed at the end of Season One is to "stay away from cities[;] [...] they're just not worth it" ("No Time Left"), and accordingly the player of Season Two, this time in control of Clementine, abandons the cities of Georgia for a primarily rural existence, staying at campsites, remote cabins, and a Civil War museum. Deprived of medical supplies and food in the frozen forests, Clementine and her group resolve to move back towards the ruins of civilization, and head towards the fabled settlement of Wellington, Ohio.

The Walking Dead is unusual among zombie narratives for two main reasons. Firstly, the episodic, serialized nature of the comics, TV show, and videogame enables a narrative which breaks away from the established, well-worn structures of typical zombie films and novels. 119 Bishop, writing about the comics series prior to the release of the TV show, suggests that "the most insightful and revolutionary development in store for the zombie lies in its potential for serialization" (206), by providing a narrative with "the time it needs to map out the complicated human relationships that would result from a zombie infestation that ends normal society" (207). Indeed, what results from the long-

The Walking Dead: Season Two, are each split into five "episodes" released separately over a period of time, and each episode begins with a short summary of the events of the game so far with the voice-over "Previously, on the Walking Dead," an identical conceit to that used at the start of each episode of the TV show. The interwoven nature of the serializations make the franchise a truly cross-media storytelling venture.

form narrative of the comics, TV show, and videogame is "a zombie apocalypse tale where the zombies provide the backdrop for an exploration of the human drama" (Ruditis 71), in some ways making the franchise "much more like a soap opera than a story about a zombie apocalypse" (Jancovich, "Walking"). As tends to be the case with the most interesting post-apocalyptic narratives, the apocalyptic event can be seen to stand in for any catastrophe in which conventional powers are unable to protect their citizens, and the focus of each series is on the individuals forced to adjust and survive this shift. As such, as several writers note, The Walking Dead reflects anxieties over several recent catastrophes such as the aftermath of hurricanes Sandy and Katrina, 9/11 (Goldberg, Meslow, and Gould), the H1N1 outbreak, "Islamic terrorists beheading innocent captives, debt bombs, financial meltdowns, mass shootings in schools" (Totten), and any number of others. Secondly, the method of transmission of the zombie infection is unusual in that all human beings are already infected. In most zombie narratives infection only occurs through direct contact with the undead, usually through a bite. In *The Walking Dead*, however, when a character dies, whether through sickness, accident, or murder, they are all destined to return as the undead. While the reasons for the pre-existing infection are still undisclosed in the franchise, this aspect of the story further breaks down the already decaying boundaries in zombie narratives between the living and the undead, the self and the Other. As Rick famously says in the comics ("The Heart's Desire") and in the TV show ("Them" Season 5 Episode 10), "we are the walking dead." These two singular qualities result in a large

¹²⁰ In accordance with other critical work on the series, this chapter will use episode titles to reference specific moments in the extensive TV show, with the addition of the season and episode numbers. As the comics collections are not paginated, reference will be made instead to chapter titles (these correspond to the "volumes" releases. For example, the first chapter of the first compendium is titled "Days Gone Bye," the same title as the first volume, which all collect issues 1-6). For continuity, references to the videogame will be made according to their episode titles.

space in which to explore and contrast various differing systems of community and governance in post-apocalyptic cities and settlements, in a world in which established boundaries between "good guys" and "bad guys" are as broken as the boundaries between civilization and savagery, the built environment and the natural world.

ATLANTA

Since the end of the Second World War US cities increasingly became decentred, sprawling, amorphous expanses of built environment, as we began to see in Chapter 4. Atlanta, a city which experienced some of the most rapid suburban growth in the latter half of the twentieth century, is particularly symptomatic of this trend (Boshears 117). Visiting Atlanta in 1987 and 1994, Rem Koolhaas reported that Atlanta displayed better than any other city the critical nationwide change in architecture and urbanism of "the shift from centre to periphery, and beyond" (836). "Atlanta is not a city," he writes, "it is a landscape" (835, emphasis in original). These qualities make Atlanta an ideal location for the nomadic survivors of *The Walking Dead*. In the videogame, the story of the player-character of Lee begins with his departure from Atlanta, and as the games progress the action moves further away from the city. In the TV show and comics, many of the principle characters had begun by trying to enter the city, before finding it overwhelmed by the impenetrable morass of the living dead, and their camps gradually move further away from Atlanta into suburbs, the smaller cities of the exurbs, and rural farmhouses. 121 In each case, the

¹²¹ Exurbs are "extra-urban" locations or "commuter towns," areas beyond the suburbs whose residents generally commute long distances to the suburbs or cities for work. Hee-Jung Jun and Maria Manta Conroy note that Atlanta's exurbs in particular have been growing in popularity in recent years. For more on exurbs see, for example, Judy S. Davis, Arthur C. Nelson, and Kenneth J. Dueker's "The New 'Burbs: The Exurbs and their Implications for Planning Policy" (1994), Ivonne Audirac's "Unsettled Views

threat of the metropolis is concentrated in downtown Atlanta, but continually threatens to spread outwards in every direction, with the wandering undead searching for fresh sources of food. This is shown explicitly with the climax of the TV show's second season, as a herd of zombies is led from downtown Atlanta to the quiet sanctuary of Hershel's farm, overrunning the survivors and forcing them back onto the open road ("Beside the Dying Fire" Season 2 Episode 13). The landscape of "disurbanism" that Atlanta exhibits, the "dissolving" of the urban centre (Koolhaas and Mau 836), figures in The Walking Dead in the way that the city's urban sprawl continually threatens to engulf the pastoral idyll of its rural surroundings. Rather than introducing the rural to the urban, as occurs with the texts looked at in Chapter 5, The Walking Dead presents rural locations as being infected by the spreading troubles of the innercity, an extension of the urban plague visited on suburban sanctuaries in Chapter 4.

This recurrence of themes suggests a potential similarity between the historical concerns of post-Second World War Britain and America and post-9/11 America. In both historical eras, the city and its civilian inhabitants are put at risk of the tactics of terror: post-Second World War by recent aerial bombing and the possibility of nuclear strikes, and post-9/11 by incidents such as the 2013 Boston Marathon bombing. It also may suggest similar racial concerns, particularly given the connection between zombies and race. Atlanta itself has one of the highest proportions of black residents of any US city, leading to the title "Black Mecca" (Bullard, Johnson, and Torres), while many of its most prosperous suburban and exurban areas are, as is the case across the US, predominantly white. Recent figures suggest this demographic distribution in

Atlanta may be undergoing a reversion, with the gentrification of the city's black neighbourhoods in the form of "expensively renovated homes and factories converted into upscale lofts," while the broader "Atlanta region is growing less white" at a pace "that outstrips the rest of the nation" (Gurwitt). As with the post-Second World War racial redistribution of city and suburbs, fears may be present of the imprecise demarcation of areas which threaten to place high-cost residences in close proximity to areas of poverty and crime.

Also contributing to the appropriateness of Atlanta as a backdrop for an expansive post-apocalyptic narrative is the city's history of destruction and reconstruction. Incorporated only in 1847, Atlanta was a key strategic point during the American Civil War due to its role as a railroad hub. Following the protracted Siege of Atlanta, Union forces evacuated its citizens and razed the city to the ground, in an attempt to prevent it being recaptured by the Confederate Army. In the years following the Civil War the city was rebuilt and became the prosperous and diverse capital of Georgia in 1868. The city flag and seal both commemorate this burning and reconstruction with the image of a Phoenix, and the motto "resurgens," Latin for "rising again" (Link 55). In 1917, the city would again succumb to fire, with over 1900 homes destroyed and 10,000 people displaced (H. Mason 6). Compounding the immolation of the physical city were upheavals and transitions amongst its populace, from smallpox epidemics to the 1906 race riot, and the city's central position amid the turbulent years of the Civil Rights Movement. In the wake of this history, and as many US urban centres were being effectively abandoned for the suburbs, Koolhaas arrived in Atlanta to record his observations. While "the cores of most American cities were in total, demonstrative states of disrepair," he writes, bearing "an apocalyptic atmosphere of downtown doom," Atlanta exhibited the

"rebirth of the American downtown" (839), a historical city "artificially resuscitated" (835). As Paul Boshears points out, for a city with a violent and self-destructive history as well as a history of reconstruction and rejuvenation, the symbol of a phoenix, a "zombie bird," is particularly appropriate (113). Long accustomed to destruction and reanimation, Atlanta offers a singularly appropriate urban setting for *The Walking Dead*'s post-apocalyptic zombie narrative.

RESURGENS

Atlanta suffers a further holocaust within the narrative of the TV show. In a flashback during the first season, Rick's wife Lori (Sarah Wayne Callies) and his ex-colleague Shane (Jon Bernthal) watch from a distance as the US military, having ordered citizens to enter the city for protection, rain napalm into the streets in an attempt to limit the spread of infection ("Wildfire" Season 1 Episode 5). Just as the Union Army had refused to allow the city to fall to the Confederates, so the US military attempts to deny the city to its zombie invaders. When Rick and the group return to Atlanta in season five, they witness this fiery destruction up close, with Federal Emergency Management Agency (FEMA) vehicles and medical tents reduced to charred husks, and the undead bodies of citizens partially melted into the tarmac ("Crossed" Season 5 Episode 7). As she looks out of a downtown window at the blackened cityscape, Carol (Melissa McBride) notes that the metaphor extends also to the living, as well as the undead. Remarking that the apocalypse had given her a chance to reinvent herself as "who I always thought I should be," her reinvented self

¹²² As well as making reference to the fires of Atlanta, Boshears points to the execution of "William McIntosh, or *Tustunugee Hutke* (White Warrior), a prominent chief of the Creek Nation," the subsequent "violent and tense period of ten years" culminating with "the brief battle between the United States and the Creeks in 1836," and the forced removal of the Creek Nation along the Trail of Tears to what is now the state of Oklahoma (112).

nevertheless "got burnt away. Everything now just consumes you." The laconic Daryl (Norman Reedus) growls in reply, "Hey, we ain't ashes" ("Consumed" Season 5 Episode 6). Characters, like the city, are caught in a cycle of destruction and reconstruction, never succumbing fully to being merely ashes, but caught between life and death.

Menaced by the density of zombies in the streets, Daryl and Carol take to the elevated walkways of Atlanta's downtown (see Fig. 2). As Koolhaas writes, these walkways, which connect buildings to enable citizens to circumnavigate the city streets, were designed by architect and developer John Portman. Responsible for building much of the city's downtown, Portman:

triggered Atlanta's rebirth. But the new Atlanta was a virgin rebirth: a city of clones. [...] [A]s further consolidation, he connected each of his buildings to each of his other buildings with bridges, forming an elaborate spiderweb of skywalks with himself at the centre.

Once you ventured into the system, there was almost no incentive to visit the rest of downtown, no way of escape. (841, emphasis in original)

In contrast to modernist urban architecture which opened up space through light and transparency, a "paradigm of total control" over "suspicion, tyranny, and above all the irrational" (Vidler 168), Portman's postmodernist designs sought to create isolated enclaves within downtown areas. His redesign of Atlanta brings to mind another of his designs, the Bonaventure Hotel in downtown Los Angeles. Fredric Jameson famously describes the Bonaventure as aspiring "to being a total space, a complete world," which "does not wish to be a part of the city but rather its equivalent and replacement or substitute" (40). The building's reflective glass exterior, in particular, "achieves a peculiar and placeless

dissociation of the Bonaventure from its neighbourhood" (42). With his efforts to sequester space for the privileged few in the inner-city. Portman exacerbates alienation between city residents, containing and ensnaring different groups within increasingly confined spatial boundaries. This becomes eerily the case in The Walking Dead, as Carol and Daryl discover the skywalks filled with the tents of survivors who had used the elevated passages as sanctuaries from the infected in the streets below. The survivors evidently found themselves trapped and perished in these refuges, likely through thirst or starvation, and now populate the walkways as the undead. Their fate shows that the attempt to withdraw from inner-city problems through architectural planning is impossible and in fact, as with the innate infection of the franchise, citizens are always already tainted by its consequences. The overcrowding and confinement of the inner-city streets from which they had attempted to escape followed them into the narrower corridors of the supposed shelter of the skywalks. The concentration of urban populations in the nineteenth century and its consequences of contamination and infection—so crucial to the postapocalyptic portrayals analysed in Chapter 1—is clearly still problematic for the city, and the attempt to divide downtown through skywalks is shown in *The* Walking Dead as an insufficient solution. Portman faced numerous critics for his creation of a sequestered downtown, "many of whom say his insular structures 'turn their backs' on the true vibrancy and community of city life" (Wooten). Certainly, the use of raised walkways connecting buildings that allow some citizens to avoid the community below recalls the trend in urban planning of literally elevating the privileged to a higher level in the city, while leaving the poorer citizens at ground level, as discussed in relation to *Blade Runner* (1982) in Chapter 6. Despite their elevated position, the privileged few who were

caught in the skywalks at the time of the outbreak might have survived a little longer than their fellow citizens below, but all finally succumb to the inevitable fate brought upon them by the concentrated population of the city.



Fig. 2: Daryl identifies the skywalks as the safest route through downtown Atlanta ("Consumed" Season 5 Episode 6). Copyright: *The Walking Dead*, AMC.

In the TV series, after suffering immolation through napalm, the city reanimates itself, both in its hordes of zombie citizens but also in a community of the living based at Grady Memorial Hospital. Viewers are introduced to this community in the fourth episode of season five, entitled "Slabtown," the name of Atlanta's former red light district and the site upon which the real-life Grady Hospital was since built. The cyclical process of "rising again" is compounded here. Slabtown was historically "destroyed by fire so completely that [it never] rose again" (Garrett 331), before seeing the construction of Georgia's largest hospital upon the ruins. Correspondingly, in the episode "Slabtown" we are told that at the first sign of the outbreak the police had ordered all inhabitants of the hospital moved to Selena S. Butler Park, which was targeted with napalm, but a community of doctors and police have since reopened the hospital in an uncanny version of its former purpose. Presided over by former police officers

led by Dawn Learner (Christine Woods), the hospital treats injured survivors in return for their indentured service, a self-perpetuating system from which patients never escape. Evocative of contemporary America's debt crisis and overpriced healthcare system, the lofty mission of Dawn to work "for the greater good" creates an inescapable dystopian environment, from which Beth and Carol must be violently liberated by Rick and the group.

On the surface, the meticulously clean uniforms and ordered rooms of the hospital give the impression of an effectively run community, but in a postapocalyptic world these are signs that a darker truth is being masked. While the doctor Steven Edwards (Erik Jensen) works to save the lives of survivors brought in to Grady Hospital, for example, he is also compelled to take lives to ensure his own protection. Recognising an injured oncologist brought in by the police, he misleads Beth to administer the wrong medicine in order to bring about the doctor's death, thereby retaining his position as the indispensable sole doctor to the group. Initially intent on killing Steven for causing the death of the oncologist, Beth comes to see Dawn's strict and perverse governance as responsible for acts like these, and she gives her own life to take Dawn's. After the deaths of Dawn and Beth, the other officers promise to reform the hospital and suggest that Rick and the others stay, and that it would be preferable to life outside. Rick simply, forcefully replies "no": there is no need for him to elaborate, for the city has clearly come to offer he and his fellow survivors only death, and even the dangers of the open road are preferable to this aberration created by the authority figures of the former world ("Coda" Season 5 Episode 8). The storyline at Grady Memorial Hospital shows The Walking Dead's libertarian spirit in full force: the costs and regulations of old state institutions, the police and the health service, ultimately harms those it intends to aid, and

the characters must reject their paradigms to return to free lives. Living in the city and being subject to suffocating state control are thus shown to be connected, and characters who have been empowered for so long cannot return to an urban life.

UNSALVAGEABLE CITIES

Prior to Atlanta's incorporation in 1847, the city was named "Terminus," in reference to its being at the "zero-mile marker of the Western Atlantic Railroad located at what is today called Five Points" (Boshears 112). The location at the terminus of the railroad networks both made Atlanta a centre of prosperity and meant that it attracted the death and destruction wrought during the Civil War. The modern-day presence of one of the world's busiest airports, Hartsfield-Jackson Atlanta International Airport, means that Atlanta remains today a key crossroads for commerce, manufacturing, and transportation (McDonald 17). This heritage also carries through into the narrative of the TV show. In the second half of season four, after the brutal showdown at the prison, Rick and his group find themselves separated and lost in the Georgia woodlands. In their efforts to regroup, over several episodes the fractured community gradually come across a number of signs posted beside railroad tracks for a community named Terminus, stating "Sanctuary for All, Community for All, Those Who Arrive Survive." Enticed both by the promise of sanctuary and the prospect that others of their group may have seen similar signs, the survivors follow the map to the point where the various rail lines converge. The use of the historical name of Terminus suggests that the city of Atlanta remains, even in the postapocalyptic future, a central hub for Georgians seeking sanctuary, supplies, and

security. 123 As with the outward appearance of the community at Grady Memorial Hospital, the apparently utopian Terminus immediately unsettles Rick, who realizes too late that the community lures in survivors to be slaughtered and eaten. Carol again turns to fire as the great equalizer, setting Terminus ablaze and opening its gates to the walking dead. Just as the city of Atlanta had to be razed because of its strategic location at the railroad terminus, so Terminus must be razed because of its attraction to other survivors seeking a strategic advantage in the post-apocalyptic world. The promise of the fledgling city as represented by Terminus consumes the lives of those who put their faith in its perverse system of governance, and so it stands in *The Walking Dead* as a further example of the unsalvageable hope that the city can be a sanctuary.

While the characters of the videogame never enter post-apocalyptic

Atlanta, Lee's first impulse is to return to his hometown of Macon. While around
a third the size of Atlanta, Macon is one of the largest cities in Georgia, and
features similarly to Atlanta in *The Walking Dead* franchise: hordes of zombies
make navigating the streets perilous, but, given the initial speed of
zombification, shops are virtually untouched and offer the greatest source of
food, weapons, and other supplies. Accordingly both Macon and Atlanta are
vital locations in the post-apocalyptic world, as well as the epicentres of danger.
Lee and Clementine take refuge in a motel, signifying their nomadic, untethered
existence "on the road" between cities, and likewise in the comics and TV show
Rick and his group sleep in a recreational vehicle (RV), a holiday home for the
retired character Dale (in the show played by Jeffrey DeMunn). From these
temporary, almost "suburban" refuges, characters take occasional necessary

¹²³ The map which appears in the TV show shows this convergence in the centre of the state of Georgia. This suggests that while the name Terminus suggests its location as being Atlanta, the actual geographic location may be the city of Macon.

trips into the cities to sustain their lives at a safer distance, much as we saw with Mason and Neville/Morgan's trips into the city in Chapter 4. The untenable, transient existence on the road is ended in each narrative of the franchise when the characters eventually seek an alternative to the cities, returning to nature in fully rural locations. In the videogame this is represented by the St. John Dairy, and in the comics and TV show it is the farm of Hershel (in the TV show played by Scott Wilson), two apparently idyllic locations which harbour dark secrets, respectively cannibalism and a barn filled with Hershel's undead neighbours. In this way, the series are reminiscent of the trope in post-apocalyptic literature of Lawrence Buell's "reinhabitation" of the natural world, as explored in Chapter 5. The TV show in particular explores this return to a relationship with nature, as Rick learns from Hershel how to work the land at the prison, eventually even leaving his gun inside because it might "get in the way" ("A" Season 4 Episode 16).

While initially seen as safe havens, these traditional rural spaces sit at the opposite end of the spectrum from the cities, but offer illusory tranquillity and are equally unliveable. The family at the St. John Dairy are ruthless killers who see all outsiders as potential meals, and Hershel's fundamentalist Christian pacifism sees him take neighbourliness to an extreme, filling his barn with dangerous walkers just a few yards from where his daughters sleep. As well as this perversion of the rural idyll, these locations are not free of the danger emanating from the built environment. Forced out of these locations by a gradual urban sprawl represented by the zombie horde, in each work the group is compelled to pin their hopes once more on finding sanctuary elsewhere, and find themselves given direction by the singular qualities of being close to the city. In the videogame, Lee and Clementine set out to reach the coastal city of

Savannah, though only to secure a boat to head offshore; in the TV show and comics, Rick and his group head for Washington, D.C., though only to investigate the last possible location of what might remain of a government.

Cities are in each case both essential to survival and essentially dangerous, and a delicate balance between rural and urban must be achieved in choosing a site of habitation.

ALEXANDRIA

Having come to the conclusion that the cities are now the domain of the undead and the barbarous living, Rick and his group stop short of D.C. Intercepted by recruiters from a community called Alexandria, however, the sceptical but desperate group heads to the walled settlement on the outskirts of the city. The recruiters eagerly convey the amenities of their community to Rick's group. primarily the ability to make use of the city's amenities with the safety and security afforded by their walls. Driving towards Alexandria in the TV show, the sight of the distant Washington Monument offers Abraham (Michael Cudlitz) and Rosita (Christian Serratos) a moment of peaceful reconciliation from an earlier dispute. As with the ruined National Mall of Fallout 3 (2008) analysed in Chapter 7, the defiantly standing Washington Monument might be viewed as an ironic comment on American exceptionalism. It also, however, calls to mind other Alexandrian obelisks, and in particular an ancient obelisk that served as partial influence to the design of the Washington Monument, once located in the Egyptian city of Alexandria, and since relocated to New York City's Central Park.

Once the "largest city known to mankind" (Hinge and Krasilnikoff 9),

Egyptian Alexandria was a "multi-ethnic and internationalized community" (10)

marked by the "meeting of cultures" (9). Likewise, Alexandria in The Walking Dead is a community dedicated to expansion and increasing their population through recruiting other survivors. Rick and his group are not only welcomed to the community, but receive houses of their own, jobs, and the ability to shape community policies. While not a particularly ethnically diverse community until the arrival of our heroes, Alexandria does have one of the first openly homosexual couples to feature in the franchise, and its welcoming of all survivors marks it as possessing something of Egyptian Alexandria's "diverse cosmopolitan urban setting" (Haas 11-12). 124 Reminiscent of American cities, Egyptian Alexandria was "a planned city [...] most clearly seen in the regular grid pattern of the streets, [which] set it apart from such cities as Athens or Rome." As Christopher Haas writes, "a certain unity of design to the urban landscape prevails, much like L'Enfant's Washington D. C." (24). There are clear parallels to be drawn, therefore, between Ancient Alexandria and Alexandria, Virginia, a city only around six miles south of downtown Washington, D.C. Crucially, however, Egyptian Alexandria has long been associated with revolution, brutal suppression, and sectarian violence. While the reputation of the populace as "frenzied madmen" (279) prone to sporadic and protracted violence has been largely exaggerated (Hinge and Krasilnikoff; Haas), it is certainly the case that the city saw many high profile and violent rebellions to Roman rule, as well as violence between certain groups within the citizenry.

¹²⁴ Hints are made in the TV show about the possibility of Andrea (Laurie Holden) and Michonne (Danai Gurira) being in a relationship during their winter alone, but Andrea soon engages in a relationship with the Governor and Michonne abandons her. Tara (Alanna Masterson) and Alisha (Juliana Harkavy) begin a relationship at the camp of Martinez (Jose Pablo Cantillo), the Governor's former enforcer, but during the assault on the prison Alisha is killed by the young girl Lizzie (Brighton Sharbino). Alexandria offers Tara a second chance at romance in season six, though this is again cut short by a violent death.

Accordingly, the peaceful environment of Alexandria in *The Walking* Dead in which people walk their dogs, play sports, and have dinner parties, is not exempt from the brutal reality of the post-apocalyptic world, either in the threat from outside or within. Deanna (Tovah Feldshuh) in the TV series and Douglas in comics, the leaders of Alexandria and both former politicians, protect their community from the outside world by creating an illusion of normality, which shocks the survivors who have endured devastating hardships on their journey. Closed-mindedness to the violence necessary in the new world can be seen with Deanna's refusal to reprimand the alcoholic surgeon Pete (Corey Brill) who is beating his wife Jessie (Alexandra Breckenridge) and their sons. Deanna justifies her lack of action by saying that they have no choice but to hope Pete's crimes cease, given his instrumental position in the community. Rick, placed in the position of "constable" for Alexandria, replies that waiting will likely lead to the death of Jessie, and the only solution is to execute Pete if he does not desist immediately. "People die now," he insists, "there's times like this you can decide who and when, or it can be decided for you" ("Try" Season 5 Episode 15). In the same manner as Dawn at Grady Memorial Hospital the attitudes of Deanna and Douglas exhibit a philosophy that Abraham in the comics describes as "Protect the many, fuck the few" ("Too Far Gone"). In maintaining an overall façade of peace and harmony, individual cases such as these are permitted to occur and escalate.

So unused to any form of governance such as the Egyptian Alexandrians faced under the Roman imperial rule, whether the old US federal, state, or even municipal governance, Rick and his group of hardened, self-sufficient, libertarian survivors rebel against the sudden limitation placed on their activities by the rule of the politicians Deanna and Douglas. In the eyes of Rick and his

group, merely erecting a wall is not a sustainable defence against the violence threatened by the city, but rather a more militarized readiness is required. This is shown early in their stay at Alexandria. Discussing security with Douglas in the comics, Rick is stunned to discover that there are no lookouts posted at the gate. "What if someone found you? What then?" lambasts Rick. Douglas replies, "I always thought the wall was enough" ("Life Among Them"). In both the comics and TV show Alexandria's citizens are unarmed, their weapons kept in an armoury with the presumption that this would improve public safety. Rick exercises his second amendment rights by breaking and entering into the armoury and stealing several firearms for himself and his trusted allies to carry. As Carol remarks to Rick in the finale of season five, "these people are children." The naïveté of the citizens of Alexandria who have never had to live outside the walls, and have so far been lucky in not encountering malicious groups of marauding bandits, must necessarily be tempered by Rick and his fellow survivors, who are by now far more ready to meet the violence of the new world directly. At the same time, a civilized existence can only begin when the group cease their nomadic existence and settle in one place, as Alexandria's architect in the TV show, Reg (Steve Coulter), remarks: "civilization starts when we stop running" ("Conquer" Season 5 Episode 16). This combination of philosophies, the establishing of a physically secure location along with the readiness to accept violence as a price for maintaining security, makes Alexandria suggestive of what has become an increasingly popular compromise in modern America between inner city and suburban living: the gated community.

GATED COMMUNITIES

In response to a perceived "increase of crime in their urban neighbourhoods," "changes in social composition" (Low 136), and "the desire to protect oneself, family, and property from dangers seen as overwhelming them" (141), gated communities have been appearing at a rapid rate in America in recent years, and can now be found in "every major metropolitan area" (Blakely and Snyder 3). While exclusive residential areas are nothing new, with "baroque layers of regulations" often used to build "invisible walls" (Davis, Quartz 246), urban planning and architecture are increasingly used to physically separate urban communities. Gated communities can be divided between several types, but particularly common are "security zone communities," distinguished by their "gates and fences," "security mechanisms," and often private security forces (Blakely and Snyder 99). Essentially private neighbourhoods surrounded by high walls and defended by armed guards, these gated communities are inhabited by citizens who wish to keep the perceived threat of urban decay at a distance. The "fear of violence is one of their main justifications," and in occupying such communities wealthy residents abandon the city's "streets to the poor, the 'marginal,' and the homeless" (Caldeira 83).

In the TV show, Rick and his son Carl (Chandler Riggs) immediately notice the disparity between the homes of Alexandria and the homes they had experienced in the past: Carl notes that the houses look like mansions, and Rick relates to Carl how he and Lori had once driven through such neighbourhoods, "thinking, 'one day" ("Remember" Season 5 Episode 12). While the apocalypse has removed the economic impediments to the Grimes family living in such houses, their social class remains at odds with that of the Alexandrians who had been living there since the beginning, resulting in a

tension which conflicts with their desire to assimilate. As Elena Vesselinov suggests, the segregation of gated communities follows not only economic lines but also continues the connected racial barriers established by housing associations in the postwar years, as discussed in Chapter 4. Vesselinov writes that the "new signs of increased walling off seem to invoke troubling parallels with the 1940s and 1950s and beg the question whether this is a trend with which American Society will have to struggle not too far down the road" (537). Indeed, the contemporary trends of both gated communities and private security began in the 1950s, particularly in response to racial tensions developing in cities like Atlanta (Kruse, Flight 11). Following the zombie apocalypse, however, gated, predominantly white, middle-class Alexandria must welcome our band of ethnically and economically diverse heroes in order to fill the gaps left by the absence of a working class (such as the community's guards, delivery persons, and labourers). With the joining together of Rick's group and that of Alexandria, the gated community can be fully secured. In the TV show Deanna's husband Reg vows to train Noah (Tyler James Williams) to maintain the integrity of the walls and Sasha occupies the watchtower (a position held by Andrea in the comics), shooting down the undead as they wander towards Alexandria from the city and watching for the threat of other groups of the living. The preservation of a standard of living incongruent with the world immediately outside the walls becomes the show's raison d'être, and the group's protectionist, isolationist policy is summed up by Rick in the sixth season: "everything we need is right here inside these walls, and we're not losing any of it again" ("East" Episode 15).

Alexandria is not the only location in *The Walking Dead* to place hope in the security of the gated community. The first location reached by Rick and the

group in the comics as they move away from Atlanta is the Wiltshire Estates, a walled community with large iron gates. Stopping at the gates, Rick remarks "I think we've hit the jackpot." Within the walls is a vast neighbourhood of residential properties, apparently fully secured to resist the zombie hordes emerging from Atlanta. It soon becomes apparent, however, that the walls have been keeping the undead inside, rather than outside. As Otis tells Tyreese on the group's arrival at Hershel's farm, "Everyone in this area who couldn't make it to Atlanta decided to hole up there. It was a disaster... We didn't have no protection... Once them things come in we had no way a stopping them" ("Miles Behind Us"). Trapped within the walls which had been their protection, the inhabitants of Wiltshire were unable to escape once the infection began to spread. In the TV show, the group stop on their way to D.C. at the previous home of Noah, just outside of Richmond. Tellingly named Shirewilt, the gated community is an adaptation of the gated community visited in the comics. Again, the survivors find only the undead within this heavily fortified neighbourhood, though in this case the deaths of those inside has been the result of a human attack. Initially hoping to exterminate the zombies and take Shirewilt as their own, Rick and Michonne discover that the rear wall has been knocked down, clearly by determined, living enemies of the neighbourhood. In both cases the survivors are initially optimistic at the thought of securing their own gated community, a protection against both the living and the undead. In both cases, however, it is the absence of adequate armed protection that has led these settlements to fall, and consequently Rick has limited patience with Deanna's and Douglas's pacifist refusal to confront the reality of an increasingly violent world. Certain studies suggest that in particularly well-guarded gated communities the "security discourse undermines the image of the enclave as a

social community where people help each other" (Grant and Rosen 582).

Deanna and Douglas seem to perceive this possibility, purposely avoiding establishing security measures and even prohibiting the carrying of weapons, in an effort to encourage a cohesive, egalitarian, utopian community. In response to a dangerous world, however, heightened security measures are required beyond simply erecting walls.

This heightening of security correlates with the development of gated communities in the US in recent years. As Joost Zonneveld writes, threats to suburban enclaves such as the urbanization of suburbia and examples of urban dangers such as the 1992 Los Angeles riots justified the "security aspect [...] added to the civilized suburban way of life, because the suburban way of life has not disappeared but has been restored and adapted to the experienced dangers of today's world" (53). Fences and walls thus become "signs of safety and fear" (32, emphasis in original) "used to create distance from undesirable people and situations" and preserve the "prestigious environment the residents hoped to find" (49). In this respect connections might easily be made with the kinds of downtown architectural projects developed by Portman in Los Angeles and Atlanta. Relating this trend more broadly to American life in recent years, Robert M. Gould and Patrice Sutton refer to post-9/11 US attitudes as an "upgrade of Fortress/Fallout Shelter America as the penultimate Gated Community [which] is symbolic of an ecocidal conception of security" and an "equation of collective security with militarism" (2, emphasis in original). Examples of this can be seen in the militarization of police departments in even small cities in the US in response to the perceived threat of terrorism, which has progressed to such an extreme as to greatly widen the divide between law

enforcement officers and citizens.¹²⁵ As has been demonstrated, the military equipment afforded to these police departments has been principally used in responding to the legal protests of US citizens in places such as Ferguson, Missouri, rather than in response to actual terrorist incidents.

In the videogame, Lee and Clementine encounter a gated community taken to the extreme of militarized security. Near the Savannah docks Lee finds the fortified neighbourhood of Crawford, its walls composed of the undead skewered onto pikes and stacked in piles. Presided over by the tyrannical Oberson, Crawford is a well-quarded, militaristic community which has leaned too far towards a form of violent governance. As Molly (Erin Yvette) tells Lee, Crawford are "willing to do anything to stay alive, stop the dead getting in." After sealing off the neighbourhood the elderly, the ill, the weak, and the children, while still alive, are skewered onto the barricades in an effort to keep the community composed only of the "fittest." As is revealed in a series of videotapes the player discovers, however, this gated community also suffered from a critical weakness. The footage reveals a doctor's examination of a young woman who it turns out is pregnant. Compelled to operate by the rules of Crawford or risk his own life, the doctor insists on terminating the pregnancy. The young woman kills the doctor in self-defence, after which it is presumed that the doctor became undead and turned the entire community into zombies. Continually horrified by the evidence of the rules of governance at Crawford, Lee aptly remarks, "Looks like the sick system these bastards cooked up to protect themselves ended up destroying them" ("Around Every Corner").

¹²⁵ See, for example, Arthur Rizer and Joseph Hartman's "How the War on Terror Has Militarized the Police" (2011), and Radley Balko's *Rise of the Warrior Cop: The Militarization of America's Police Forces* (2013).

The most prominent example of a gated community "gone bad" in the TV show and comics is Woodbury, which the guard Martinez in the comics describes as "the last little town on Earth" ("The Best Defence"). While Woodbury is a fictional town in the comics, the TV show uses as its setting the small city of Senoia, Georgia (Boshears 112). In both the TV show and comics, Woodbury is a walled section of a once larger urban area, led by the Governor, a ruthless tyrant who appears to his citizens as an avuncular leader with smalltown Southern charm. As the Governor remarks in the TV show, the secret to their success is "really big walls," but also "what goes on within these walls. It's about getting back to who we were, who we really are. [...] There's a sense of purpose here. We're a community." Creating a similar façade of the preapocalyptic world to that established in Alexandria, the Governor encourages citizens to hold fetes and talks jovially with them in the streets, before seamlessly transitioning to committing torture, rape, and murder behind closed doors. Fixated on violence, as evidenced by his obsession with punishing Michonne, the first person to resist his charms, and with taking over the prison held by Rick and his group, the Governor initiates his own downfall. It is the Governor's iron fist which allows for Woodbury's secure emulation of a peaceful society, but by taking the violence too far he pushes Rick's group to intervene. This has naturally led to comparisons between the Governor and despotic leaders such as Saddam Hussein and Muammar Gaddafi, whose perverse dictatorships maintain a kind of stability but place them at odds with the humanitarian standards of global law. 126 Andrea in the TV show immediately finds Woodbury's recreation of the old world difficult to accept, gasping "it can't be," but the Governor encourages her to resist her suspicions, replying that "it

¹²⁶ See, for instance, D. J. Pangburn's website article "The Walking Dead' Writers Show Just How Terrorist' Boogeymen are Created" (2012).

can, and it is" ("Walk with Me" Season 3 Episode 3). In the comics it is Glenn, Michonne, and Rick who first come upon Woodbury. Finding the unwalled section of the former town in darkness and ruin, Glenn observes, "This can't be it—this place looks dead." Michonne agrees, "It is dead—there's nothing here—nothing alive." While the gated community run by the governor is flooded with spotlights and bustling with activity, the observation rings true: Woodbury is no place for the living. Shepherded within the walls by Martinez they encounter the Governor, who plies them with Southern charm: "Follow me, folks. I'll give you the nickel tour," before leading them to unwittingly become food for the captive zombies used in Woodbury's arena fights ("The Best Defence").

CITIES AND VIOLENCE

Woodbury's arena fights are one of the interesting ways in which violence is managed by the community. An opportunity to watch two living humans fight while surrounded by the chained undead offers residents both a chance to alleviate their aggression by cheering on a blood sport, and, as the Governor in the TV show notes, "we're teaching them not to be afraid [of zombies]" ("Say the Word" Season 3 Episode 5). As discussed in Chapter 5, critics such as Robert E. Park note that the city has the ability to manage and channel innate "passions, instincts and appetites," the "wild, natural dispositions" such as violence into sports, politics, and other relatively healthy avenues (610). Sigmund Freud later expressed similar ideas, writing in *Civilization and its Discontents* (1930) that civilization "obtains mastery over the individual's dangerous desire for aggression by weakening and disarming it and setting up an agency within him to watch over it, like a garrison in a conquered city" (114). Living harmoniously with others necessitates the creation of a conscience or "super ego" to police and repress one's own instinctual desires. While Andrea

objects to the arena fights as "barbaric" ("Say the Word" Season 3 Episode 5), these occasional fights allow the Woodbury citizens their moment of barbarism in otherwise mundane, peaceful lives, an outlet for repressed instinctual aggression. Their needs satisfied by the fights, the placated citizens of Woodbury are content to conform to the Governor's rules and demands. In contrast, Rick insists on channelling violent instincts into mandatory self-defence classes, meaning all members of the community can contribute to their collective security. This gives his group an advantage during the assault on the prison, in which even the children take up arms. The Governor's amateur army, on the other hand, mutiny at being exposed to a new form of state sanctioned violence, their bloodlust having been long satiated by the familiar arena fights.

Several recent studies support the idea that violence is managed and channelled by urban environments and public entertainment, but the concerning corollary to such conclusions is that a fall of the city and the structures of governance would result in an unleashing of these repressed instincts and drives. As Benjamin Wittes and Gabriella Blum point out in *The Future of Violence: Robots and Germs, Hackers and Drones—Confronting a New Age of Threat* (2015), recent advances in the international and remote possibilities of violence have ushered in a new era of anxiety over the ability of established security forces to manage threats to the city. With the state weakened from without by a new and unmanageable threat (such as a zombie apocalypse) the ability of a city (or smaller community such as *The Walking Dead*'s gated neighbourhoods) to manage the violence inherent in its own citizens is accordingly impaired. The Governor's establishment of the arena fights could,

¹²⁷ See Richard Wrangham's and Dale Peterson's *Demonic Males: Apes and the Origins of Human Violence* (1997), Harold Schechter's *Savage Pastimes: A Cultural History of Violent Entertainment* (2005) and Stephen Pinker's *The Better Angels of Our Nature: The Decline of Violence in History and its Causes* (2011).

therefore, be considered a somewhat understandable solution to channelling the violent desires of Woodbury's populace in an uncertain and dangerous world.

Rick's police background gives him a rather different perspective on how to manage civil disobedience. Visiting Jessie on his rounds as Alexandria's constable, he finds her cleaning up the vandalized remains of an owl sculpture she had been making with her son. Rick expresses his intent to investigate the vandalism, telling Jessie it is his adherence to the "broken windows theory": "you keep the windows intact, you keep society intact" ("Spend" Season 5 Episode 14). The theory Rick is paraphrasing, proposed by James Q. Wilson and George L. Kelling, suggests that "untended' behaviour also leads to the breakdown of community controls," an "atomization" of residents with no stake in their community (157), and that like a slippery slope "serious street crime flourishes in areas in which disorderly behaviour goes unchecked" (160). It is Rick's pursuance of this minor crime that leads to his discovery of the violent nature of Pete, who, when separated from the wife and child he had been beating, responds by cutting the throat of Deanna's husband Reg. Forcibly awakened to the reality of the violent world in which she now lives, Deanna recants her earlier objections to Rick's suggestion of killing Pete. In the climactic final scene of the finale of season five, Deanna orders Rick to execute Pete immediately. In front of the assembled community of Alexandria, Rick shoots Pete in the head without hesitation, realizing too late that Morgan (Lennie James), a character he has not seen since the very first episode of the show, was also watching. Likely as swept up as Rick with the idea of the necessity of executing the violent and uncontrollable Pete, the viewer is rudely awakened to the reality of what has occurred by the presence of both the naïve onlookers

from the community and Rick's old friend from when he was far less hardened to violence. The scene forces comparisons between what violence has done to Alexandria, and what it had once done to places like Wiltshire, Shirewilt, Crawford, and Woodbury. The escalation of events, while understandable from the close-third-person point-of-view the show places on Rick, raises questions over the effectiveness of the broken windows style of policing: Rick's pursuance of Pete may well have prevented possible further injury to Jessie and her sons, but it is certainly the case that it led to the deaths of both Reg and Pete. Critics of broken windows policing suggest that this kind of violent escalation of encounters between police and citizens is a recurring problem. As J. Phillip Thompson writes, policing in the US has progressed from initiatives such as New York mayor Rudolph Giuliani's "zero tolerance policy" to recent acts of excessive police violence against Michael Brown in Ferguson (who was initially challenged for "walking in the street instead of the sidewalk) and Eric Garner in New York City (who was placed under arrest "on suspicion of illegally selling a loose cigarette"), both of which resulted in the deaths of unarmed civilians (43). A similar case might be made of Rick's philosophy of maintaining law and order.

The gated communities of *The Walking Dead* necessitate a balance between, on the one hand, violent responses to and diplomatic control of both internal and external threats of violence, and on the other hand, the comforts and luxuries of the old world no longer available outside the security of the walls. As with the criticism levied at gated communities in modern day America, in the ruthless abandonment of minorities, the poor, and the disenfranchised to the disrepair of what are perceived to be broken inner cities, gated communities in the franchise offer the promise of sanctuary and a better life, but simultaneously risk inflicting great damage on the communities of urban areas.

To follow Gould and Sutton's example of expanding the metaphor of the gated community to American society in general, the environment of fear created around the threat of terrorism which has emerged since 9/11 has led to greater autonomy in the violent responses possible by the state. As Giorgio Agamben describes it, the current "state of exception" caused by fear in an uncertain world permits governments to work at the "threshold of indeterminacy between democracy and absolutism" (3). Substituting the real-world threats of terrorism or natural disasters with the highly visible external threat of *The Walking Dead*, the continually approaching zombie hordes, it is clear that Rick's group live in just such a state of exception. Rick's righteous claiming of the outlawed weapons of Alexandria's armoury and his violent encounters with Pete prior to the execution, emblematic of his increasingly totalitarian rule over all who join the group, could be seen as reflective of the US government's increased assumption of the role of international judge, jury, and executioner in its expansive use of drone strikes, its justification of torture by the Central Intelligence Agency, and its collection of the private data of its own citizens by the National Security Agency. In the state of exception afforded by the fear of violence from the outside world, the government are able to utilize greater violence against enemies and a zero-tolerance approach to civil disobedience within their own borders.

CONCLUSION

The Walking Dead franchise is a cross-media storytelling venture involved in what Henry Jenkins, in Convergence Culture (2008), describes as "the art of world making" (21). The various media forms produced by Kirkman and his colleagues are "canonical expansions" of the storyworld of *The Walking Dead*,

but they have also given rise to "noncontradictory expansions" in their online afterlife of memes, fan fiction, and parodies (Thon 36, emphasis omitted). Faced with this corpus,

consumers must assume the role of hunters and gatherers, chasing down bits of the story across media channels, comparing notes with each other via online discussion groups, and collaborating to ensure that everyone who invests time and effort will come away with a richer entertainment experience. (H. Jenkins 21)

In comparison with the works looked at in earlier chapters, where texts appear as media-specific experiences such as individual novels or videogames, or as direct adaptations from prose to film, *The Walking Dead* is a synergistic experience in which all parts offer contributions towards uncovering greater detail about the same story, an example of "balanced transmedia" storytelling (Mittell 317). The advantages of modern technology (such as digitally recording television episodes or watching online on-demand, the continuous availability of videogame episodes on online digital distribution platforms, and the ability to read comics issues online) mean that committed fans can track down the entirety of the franchise with far greater ease than might have been possible in the eras looked at previously. The serialized and parallel texts thus create a vast world in which critiques can be offered on a broad range of issues.

In terms of its settings and habitations this means an exploration of urban, suburban, exurban, and rural space, whether in the form of downtowns, neighbourhoods, gated communities, or secluded farmhouses. Each is shown to have its attendant advantages and disadvantages for the survivors hoping to establish and maintain a prosperous and secure community, but it seems that at

the end of season six of the TV show, the second compendium of the comics, and season two of the videogame the gated community of Alexandria and the mysterious walled community of Wellington might offer some form of sanctuary. In the face of urban dissolution and the sprawl of decentred cities into the surrounding suburbs, exurbs, and countryside, sanctuary from inner-city issues can only be found in the gated, guarded enclave. These are fortresses erected to resist the supposed corruption of the suburbs by the urban environment whilst still retaining the usefulness of the proximity to cultural and economic centres. As such, the franchise normalizes gated communities as an alternative to living unprotected either within or on the outskirts of the city. In each case, however, it is not the zombie horde which is the greatest threat to the stability of these urban locales, nor perhaps even the threat from rival groups: the community can be fortified and armed to defend against these threats. Rather, it is the latent violence inherent within all survivors that threatens to manifest and destabilize the tenuous security that these communities fight to uphold. As Michael J. Totten writes, "Hardly anyone fears healthy, prosperous, and orderly cities, but when urban areas break down [...] nothing is more anxiety-producing than other people." While the gated communities offer protection from threats external to the community, the unnatural sequestering of the enclave creates its own problems internally. Similarly, while modern-day America can be fortified and defended at home and abroad from the majority of threats from terrorism, environmental destruction, and pandemics, the greatest risk lies within Americans' fellow citizens at the moment of such catastrophe. In other words, "we are the walking dead."

Conclusion

The post-apocalyptic science fiction city, a damaged, decaying, and repurposed built space, is a zombified reflection of our contemporary urban landscape. The portrayals analysed over the course of this thesis display the effectiveness of the zombie city in demonstrating the fears and anxieties surrounding urban space. The variety of these portrayals shows that the zombie city is not something limited only to a niche subgenre of science fiction, but in fact recurs throughout texts produced from the early nineteenth century to the present day. Its purpose in reflecting urban anxieties has changed over time, however, due to the changing form of the modern city itself as well as historical contexts at the time of these texts' creation, reception, and rerelease or adaptation. As seen in Part 1, nineteenth- and early-twentieth-century fiction often explored the risk that natural disasters could be exacerbated by the modernization and industrialization of the city, for instance in the plagues spread through the globalized worlds of The Last Man (1826) and The Scarlet Plague (1912), the changing wind patterns which suffocated London in its own pollution in "The Doom of London" (1892), and the comatose cities which were engulfed in flame in *The Poison Belt* (1913). Fiction of the aftermath of the Second World War, as seen in Part 2, concentrated on the threats posed to the city by the perceived danger of other humans. Whether in the fear of aerial bombardment expressed in "Adam and the Darkest Day" (1948) and The War of the Worlds (1953), or the fear of Others in The Day of the Triffids (1951) and I Am Legend (1954), these texts display how the convergence of populations in cities can result in the targeting and marginalisation of civilians and particularly of minority groups. The late Cold War texts of Part 3 increasingly imagine cities as doomed, either in inevitable decline or already in ruins. Either the characters

embrace the terminal status of their cities, as with Vic (Don Johnson) in *A Boy and His Dog* (1975) and Rick Deckard (Harrison Ford) in *Blade Runner* (1982), or reject the urban concept entirely for a return to a closer relationship with nature, as with Hell's Kitchen in *Slipstream* (1989). The futility of saving the city is carried through to the texts of Part 4, in which the imagined post-apocalyptic world has become so common as to be a site for tourism and recreational exploration. Surviving within the violent, comprehensively ruined post-apocalyptic worlds of Part 4 involves the creation of walled safe-zones, such as New Vegas in *Fallout: New Vegas* (2010) and Alexandria in the TV show *The Walking Dead* (2010-present).

What is demonstrated by this trajectory over the last two centuries is a change in purpose for fiction's zombie cities, which correlates with the concurrent development of media technologies. The novels, magazine fiction, radio dramas, and early films of Parts 1 and 2 present largely recognizable post-apocalyptic worlds, either only recently ruined or, as in *The Time Machine* (1895), contrasted with the living city within the text. This is understandable given the unfamiliarity of the emerging form of science fiction for both writers and readers of prose and its radio adaptations, and of the tentative early explorations of visual special effects in early cinema. In venturing gradually into post-apocalyptic worlds in this way, the fiction of the nineteenth and early twentieth centuries shows problems affecting the cities, but often offers hope that some kind of change could limit their effects (however difficult that change may be to bring about). For example, solving the problems of industrial pollution, entrenched class divisions, and the speed of developing vaccinations could avert the catastrophes of "The Doom of London," *The Time Machine*, and

The Scarlet Plague, and thus prevent the awakening of dormant violence in urban populations triggered by these catastrophes.

In contrast, the texts of Parts 3 and 4 present drastic, irreversible destruction which has often come about through forces set in motion long ago, such as the extensive environmental damage of Slipstream and the global nuclear armament of the *Fallout* series (1997 to present). The potential for human savagery is laid bare in these texts, no longer kept in check by the order of the urban environment. The post-apocalyptic worlds of these texts increasingly appear in forms that allow exploration and audience interaction, either within the "open worlds" of videogames or across vast multimedia franchises enabled by the digitization of old media like television and comics. In what might be called "sandbox" portrayals of post-apocalyptic cities, these texts increasingly privilege the opportunity to discard the broken world and create experimental new ones. This is literally possible in Fallout 4 (2015), in which players are encouraged to "scrap" ruined buildings and damaged consumer goods, and use their constituent parts to build new, ordered, and secure settlements for their post-apocalyptic communities. In this way, the gradual changes prompted by the texts of Parts 1 and 2 are substituted for the thorough ruins of Parts 3 and 4 which prompt either nihilistic acceptance or the potential to imagine radical, revolutionary transformations. Both the science fiction postapocalyptic city and the media forms in which it appears have thus become more interactive and far-ranging over the last two centuries, enabling increased opportunity to explore and experiment with the issues affecting the urban environments of Britain and America.

Outi Hakola, in her study of the history of American living dead films, notes that "death has been brought closer to humanity and normality" since

1995 in a proliferation of apocalyptic films (146). This is so much the case that high-profile apocalyptic comedies and the zombie romantic comedy (or "zomromcom") are now common, in which post-apocalyptic themes are both utilized and parodied. Following the success of *Shaun of the Dead* (Edgar Wright 2004) and *Zombieland* (Rueben Fleischer 2009), recent film examples include *Life After Beth* (Jeff Baena 2014), *Scouts Guide to the Zombie Apocalypse* (Christopher Landon 2015), and *Pride and Prejudice and Zombies* (Burr Steers 2016), and TV shows include *The Last Man on Earth* (2015-present), *iZombie* (2015-present), and *You, Me and the Apocalypse* (2015-present). With this prevalence of apocalyptic themes in popular culture comes increasing opportunity to analyse these representations for their depiction of the causes of disaster and the makeup of their post-apocalyptic worlds, which frequently centre on cities.

At the time of writing, for example, a slew of alien invasion narratives are forthcoming, which privilege the city as a site of conflict. These include the films *The 5th Wave* (J. Blakeson 2016), *Independence Day: Resurgence* (Roland Emmerich 2016), *The Blob* (Simon West 2016), *Arrival*(Denis Villeneuve 2016), and *Spectral* (Nic Matheu 2016), the videogame *XCOM 2* (2016), and the TV show *Colony* (2016-present). Convergences in plot such as this are inevitable in a marketplace saturated with apocalyptic-fare, but there is still value in assessing their causes. For example, countries globally are divided over how to respond to both the protracted Syrian refugee crisis and the continued economic migration of populations from the Middle East. Former British Prime Minister David Cameron referred to "a swarm of people coming across the Mediterranean" (Dearden), and right-wing groups have grown across Europe in opposition to efforts to grant refugees asylum, particularly in major cities

(Fotiadis). The refugee camp termed the "jungle" (bringing to mind Bob Marley's song "Concrete Jungle," with its lyrics "no chains around my feet, but I'm not free. I know I am bounded in captivity"), near the port city of Calais, France, was aggressively demolished by French authorities in an attempt to prevent what has been seen as an illegitimate city from gaining some permanence. Opinion is also deeply divided in the US, with many elected officials resisting the resettlement of refugees (Seipel), and projections suggesting that refugees are likely to primarily settle in major cities (Misra). In the 2016 Republican primary race, candidate Donald Trump's proposals to ban Muslims from entering the US and to build a wall to prevent immigration from Mexico proved surprisingly popular with voters (Holpuch). With the divisive issue of immigration on the minds of particularly urban populations in Britain and America it seems no coincidence that 2016 should see a resurgence of alien invasion narratives, in which a "swarm" of Others descends on the city (The 5th Wave even terms its alien antagonists "the Others"). Connections such as this offer potentially fruitful opportunities for further scholarship into the role of zombie cities in postapocalyptic science fiction.

By looking at adaptations, sequels, and re-imaginings, in particular, it is possible to see that the history of urban representations in post-apocalyptic science fiction is connected to a history of evolving urban anxieties. As is demonstrated by scholars of film history, "remakes of horror, science fiction, and fantasy films" allow filmmakers to "revisit important issues, stories, themes, and topics in ways that speak to contemporary audiences" (Lukas and Marmysz 2). For instance, the series reboot of *Mad Max* begun with *Mad Max: Fury Road* in 2015, as mentioned in Chapter 5, can be viewed as drawing connections with the context of the series' origins in the late 1970s. The first three *Mad Max* films

(1979, 1982, and 1985) and their fossil fuel-guzzling wastelanders appeared at a time when the international oil crises of 1973 and 1979 had displayed the vulnerability of a dependence on fossil fuels, and accordingly the concerns in 2015 over "peak oil," climate change, and switching to renewable energy sources resonates with the latest instalment of the series. To take another example, it has been reported that director Ridley Scott "now sees franchise potential in Blade Runner" (1982), and he has confirmed he will produce a sequel (Child), to be released 2018 (J. Wolfe). The decision to develop the franchise more than three decades after the original film indicates the perceived relevance in returning to the decaying urban future of the 1982 film in the late 2010s. As Chapter 6 shows, Blade Runner reflects the criminalization of difference and the brutality of police occurring in the suppression of sex zones in American cities in the early 1980s. Given the recent attention paid to excessive use of force by police in American cities and the institutionalized racism of police practices, and the backlash over the 2015 Supreme Court ruling in Obergefell v. Hodges guaranteeing the rights of same-sex couples to marry, Scott may be identifying that the themes of the original *Blade Runner* possess enduring resonance, and are likely to appeal to a new audience.

In bringing together the history of science fiction in emerging media forms, scholarship on the zombie, and urban studies, this thesis intervenes in all three fields: the post-apocalyptic city is shown to be a singularly appropriate subject for a developing genre and the changing forms in which it appears, the metaphor of the zombie is extended from the inhabitants of an urban space to examine the role of the space itself, and the portrayal of that space reflects the anxieties affecting cities in the context of the text's creation and reception. While previous studies have charted the rise of apocalyptic and post-apocalyptic

themes in science fiction, particularly the work of W. Warren Wagar, this thesis offers the first history of science fiction focussed on post-apocalyptic portrayals of urban space, as well as the only work to offer a sustained reading of how post-apocalyptic themes operate in relation to the development of media forms. In its case studies the thesis charts new ground, both by re-evaluating prominent texts and by providing close readings of critically neglected texts deserving of greater attention. Rather than merely updating Wagar for the twenty-first century, the thesis offers a new way of reading the history of a highly popular subgenre by going back to the origins of science fiction and tracing the relationship between apocalyptic themes and developing media. This story is crucial to understanding the origins and the current position of post-apocalyptic science fiction in UK and US culture. As the subgenre has become so widely prevalent in recent years, a study of this kind is both necessary and timely.

In bridging the gaps between these fields, further opportunities for scholarship are also opened up. As mentioned in the introduction, the historical omissions in this thesis warrant expansive studies of their own, namely of post-apocalyptic British and American science fiction in the eras 1914 to 1945 and 1963 to 1975. The early years of science fiction's appearance in its own dedicated magazines in the 1920s and 1930s, for instance, a history already told by Mike Ashley, Sam Moskowitz, and others, merits a focussed study of its explicitly post-apocalyptic portrayals of cities. Expanding the methods employed in this thesis to other geographic regions is another obvious example. Recent studies of apocalyptic fiction such as Leona Archer and Alex Stuart's book on French literature, Roslyn Weaver's book on Australian fiction, and Motoko Tanaka's book on contemporary Japanese science fiction begin this work, but

further studies are needed taking in the expansive history of post-apocalyptic science fiction cities beyond the North Atlantic world. In particular, the corpus of Japanese science fiction texts concerning apocalypse since 1945 is vast, with hugely popular shōnen manga (aimed towards young men), shōuju manga (aimed towards young women), and animated films and anime frequently set in post-apocalyptic wastelands. Given Japan's innovative technological advancements in recent years, there is particular scope to expand on the media history of this thesis through study of Japanese post-apocalyptic science fiction stories. As well as their significant position in popular culture in Japan, these fictions have enjoyed widespread popularity worldwide, and, as such, much more academic study of the preponderance of post-apocalyptic imagery in Japanese culture is required. With the continuing popularity of representations of post-apocalypse in science fiction worldwide, new opportunities for scholarship are constantly emerging, and it is likely that this momentum will continue for many years to come.

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