Theories of Everything: Science Fiction, Totality, and Empire in the Twentieth Century

by

Gerry Canavan

Graduate Program in Literature
Duke University

Date:_______________________

Approved:

___________________________
Fredric Jameson, Supervisor

___________________________
Priscilla Wald, Supervisor

___________________________
Katherine Hayles

___________________________
Robyn Wiegman

___________________________
Michael Hardt

Dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the Graduate Program in Literature in the Graduate School of Duke University

2012
ABSTRACT

Theories of Everything: Science Fiction, Totality, and Empire in the Twentieth Century

by

Gerry Canavan

Graduate Program in Literature
Duke University

Date:_______________________
Approved:

___________________________
Fredric Jameson, Supervisor

___________________________
Priscilla Wald, Supervisor

___________________________
Katherine Hayles

___________________________
Robyn Wiegman

___________________________
Michael Hardt

An abstract of a dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the Graduate Program in Literature in the Graduate School of Duke University

2012
Abstract

This dissertation, “Theories of Everything: Science Fiction, Totality, and Empire in the Twentieth Century,” argues that the ideology of empire shares with science fiction an essential cognitive orientation towards totality, an affinity which has made science fiction a privileged site for both the promotion and the critique of imperial ideologies in the United States and Britain in the twentieth century. The cultural anxieties that attend a particular moment of empire are especially manifest in that period’s science fiction, I argue, because of the importance of science and technology: first as a tool of imperial domination and second as a future-oriented knowledge practice that itself has totalizing aspirations, grasping with one hand towards so-called “theories of everything” while with the other continually decentering and devaluing humanity’s importance in larger cosmic history. As technological modernity begins to develop horizons of power and knowledge increasingly beyond the scale of the human, I argue, science fiction becomes an increasingly important cognitive resource for navigating the ideological environments of modern political subjects.

In particular I argue for a new understanding of the science fiction genre focused on an aspiration to totality: cognitive maps of the historical world-system on an immense, even hyperbolically cosmic, scale. In the twentieth century empire itself is one such totality, insofar as imperial ideology asserts the existence of a historical logic of progress that ultimately culminates in the empire itself. Such totalities necessarily
provoke thoughts of their own inevitable negation, an eventuality I organize around the
general category of “apocalypse.” In three chapters I consider apocalyptic texts
concerning entropy and evolution (chapter one), environmental collapse and ecological
futurity (chapter two), and zombie catastrophe (chapter 3). In particular I focus on
literary work from Isaac Asimov, H. G. Wells, Mark Twain, Olaf Stapledon, Margaret
Atwood, Ursula K. Le Guin, Kim Stanley Robinson, Robert Kirkman, Joss Whedon, Ted
Chiang, and Philip K. Dick. I ultimately argue that the totalizing thought experiments of
science fiction have functioned as a laboratory of the mind for empire’s proponents and
detractors alike, offering a “view from outside” from which the course of history might
be remapped and remade. As a result—far from occupying some literary periphery—I
argue science fiction in fact plays a central role in political struggles over history,
extreme, identity, justice, and the future itself.
Dedication

for Jaimee, like everything else, and for Zoey, who was just in time
Contents

Abstract ............................................................................................................................... iv
Acknowledgements ............................................................................................................ x
List of Figures .................................................................................................................... xiii
Introduction: How to Read Science Fiction and Why .......................................................... 1
  Science Fiction and Utopia ................................................................................................ 3
  Science Fiction and Empire ............................................................................................. 11
  Science Fiction and Totality ............................................................................................ 21
Chapter One: Billions and Billions ..................................................................................... 47
  I. Three Ways of Looking at Apocalypse: H.G. Wells ..................................................... 53
    Utopia as Event: “The Star” .......................................................................................... 53
    Utopia Denied: The Time Machine .............................................................................. 57
    Utopia Achieved?: War of the Worlds ......................................................................... 70
  II. Amazing Stories .......................................................................................................... 78
    ‘Within Ten Short Minutes...Twenty-Five Thousand Men Lay Dead around Us’ ...78
    ‘Things Go Wrong’ ....................................................................................................... 92
  III. ‘And Yet I Worshipped’: Star Maker ......................................................................... 106
    Olaf Stapledon and the Challenge to God .................................................................... 106
    The Search for the Star Maker ..................................................................................... 121
    ‘How to Face It All?’ .................................................................................................... 137
Chapter Two: Shipwrecked Passengers on a Doomed Planet ........................................... 144
  I. Spaceship Earth ............................................................................................................ 146
Losing Control ..................................................................................................................324

III. Zombietopia ..............................................................................................................329

Coda: Science Fiction and/as Religion ...........................................................................338

Works Cited ......................................................................................................................357

Biography .........................................................................................................................384
Acknowledgements

Although it bears the name of a single author, a dissertation is a collective undertaking. I would first like to thank my advisors, Fredric Jameson and Priscilla Wald, for the awe-inspiring generosity they have shown me at every stage of my time at Duke; with no way to repay this very ample debt, I can only hope to do the same for my own students. The advice and support of Robyn Wiegman, Katherine Hayles, and Michael Hardt have helped shape not only this project but my development as a scholar and teacher; I am so grateful. The members of my dissertation writing group, Lisa Klarr, Calvin Hui, and Tim Wright, have now read every page of this project at least once; for the help they have given me and the ideas I have stolen from them over several dozen lunchtime workshops, I can only offer my thanks. Tim Wientzen, Ryan Vu, Melody Jue, Karim Wissa, Ian Baucom, Don Pease, and Jodi Melamed also offered extremely helpful insights on particular texts and theories at key moments of the project; thank you. To teachers, students, and colleagues in Literature and English, in Polygraph, in the 2010-2011 FHI dissertation writing group, in Summer Study, in too many courses, conferences, colloquia, working groups, and book clubs to name: thank you for your friendship and for helping me work through these ideas and others over the last six years. I will miss Duke and Durham and all of you tremendously.
In addition to the James B. Duke Fellowship, Anne T. and Robert M. Bass Fellowship, and Literature Program Fellowships that funded my graduate education, research for this dissertation was also funded by a Duke University Research Travel Award; a Summer Research Fellowship; an R.D. Mullen Research Fellowship at the Eaton Collection of Science Fiction, Fantasy, Horror, and Utopian Literature at the University of California, Riverside; and travel grants to the Clinton Institute for American Studies at University College Dublin and the Nagoya American Studies Summer Seminar at Nanzan University, Japan. I am also grateful to Fredric Jameson, Priscilla Wald, Alice Kaplan, and Marianna Torgovnick for additional research projects that provided both financially and intellectually lucrative.

Special thanks to the editors of *Lit: Literature, Interpretation, Theory; Science Fiction Film and Television; The Oxford History of the Novel in English*; and *Extrapolation* for their support of the portions of this project that have already been republished as “Hope, but Not for Us: Ecological Science Fiction and the End of the World in Margaret Atwood’s *Oryx & Crake* and *The Year of the Flood*” (*Lit: Literature, Interpretation, Theory, Forthcoming*); “Fighting a War You’ve Already Lost: Zombies and Zombis in *Firefly* and *Dollhouse*” (*Science Fiction Film and Television*, Fall 2011); “Science Fiction” (*The Oxford History of the Novel in English, Vol. 7*, forthcoming); and “‘We Are the Walking Dead’: Race, Time, and Survival in Zombie Narrative,” (*Extrapolation*, Fall 2010). Special thanks too are due to the editors of *Science Fiction*
Film and Television, Science Fiction Studies, Historical Materialism, Novel, American Literature, PopMatters, and Reviews in Critical Theory for helping me to develop portions of this dissertation through book reviews and short articles, and for allowing some portions of those reviews to appear here as well where appropriate. Additional very special thanks to my co-editors on special issues of Polygraph (Lisa Klarr and Ryan Vu) and American Literature (Priscilla Wald); I learned so much from our collaboration.

Exhausted, exuberant thanks to Jaimee for a decade of boundless love and support. Whatever happens, I promise I will never write another dissertation.
List of Figures

Figure 1: "Blue Marble" (Apollo 17, 1972) ................................................................. 158
Figure 2: "Pale Blue Dot" (Voyager Spacecraft, 1990) .................................................. 159
Figure 3: The Walking Dead #1.................................................................................. 255
Figure 4: The Walking Dead #52................................................................................ 255
Figure 5: The Walking Dead #24................................................................................ 262
Figure 6: The Walking Dead #12................................................................................ 265
Figure 7: The Walking Dead #93................................................................................ 266
Figure 8: The Walking Dead #21................................................................................ 280
“To be modern,” Marshall Berman writes in his seminal work on the intertwined origins of modernity, modernism, and Marxism, All That Is Solid Melts into Air, “is to find ourselves in an environment that promises us adventure, power, joy, growth, transformation of ourselves and the world—and, at the same time, that threatens to destroy everything we have, everything we know, everything we are” (15). In that work Berman shows how the cultural and political forms that emerge out of the conditions of modernity can be arrayed along a dialectic between “thrill and dread,” between the “will to change” and a “terror of disorientation and disintegration, of life falling apart” (13). Though Berman pays little attention to the emergence of science fiction in that work, the genre might have been his best example for the tension he identifies as the crux of modernity and the engine of literary and artistic modernism: virtually every science fiction story ever conceived rests on the knife’s edge between the promise of utopia and the threat of apocalypse. Indeed, the persistence (and continued popularity) of the science fiction genre into the contemporary moment can perhaps be thought of as the last, vital vestige of the original modernist project: from dazzling architectural cityscapes to transformed social polities, to experiments in language to new human subjectivities, from Marinetti’s worship of technology and speed to Kafka’s deep
suspicion of modernity as such, the project of science fiction extends the overawing, ecstatic aesthetic directive to “make it new” to the farthest reaches of time and space.

This dissertation arises out of my conviction that science fiction’s emergence as a recognizable literary genre at the turn of the twentieth century is linked to the new horizons of future possibility that emerge out of the conditions of scientific advancement, fossil-fuel-based industrial capitalism, and industrial/technological modernity. The potential for radical social change that these new conditions make possible—the emergence of an unstable world system that seems to be constantly changing year by year and even day by day, in fundamental and irreversible ways—inaugurates a widened perspective on the future that quickly comes to infuse twentieth-century politics and aesthetics. My study of science fiction seeks to reveal a paradigm that now fundamentally structures the way we think about the world; where once the hegemonic language of the future was religious eschatology, I claim it is now predominantly the speculations of science fiction that frame our collective imagination of our possible futures. This new, science fictional sense of futurity provides the terms through which contemporary culture enacts Berman’s dialectic between utopia and apocalypse; under the conditions of technological modernity, human powers become so expanded that literally anything seems possible, from the creation of a secular New Jerusalem to the destruction of all life on Earth.
Science Fiction and Utopia

These two poles, utopia and apocalypse, roughly correspond to the two major approaches to science fiction studies that have dominated the field since its inception in the early 1970s—the first imagining it as a genre of the left, the other as a genre of the right. The first approach comes out of the work of Darko Suvin in the 1970s, which announced science fiction’s importance as “the literature of cognitive estrangement” (“Poetics” 372). In his introduction to Red Planets: Marxism and Science Fiction (2009), Mark Bould characterizes “the Suvin event”—his publication of “Poetics” combined with his founding of the journal Science Fiction Studies with R.D. Mullen in 1973—as the foundation for all subsequent SF theory (18). The SF-flavored image Bould chooses to characterize Suvin’s influence is, in fact, that of a black hole, whose event horizon one might choose either to inhabit or attempt to escape but around which one will always be in orbit. And Suvin’s criticism is indeed such a massive gravitational object, with subsequent theorists still typically beginning their work either by accepting his definition or else by elaborating upon the places in which their conception of the genre differs from his.

“SF,” Suvin defines, “is then a literary genre whose necessary and sufficient conditions are the presence and interaction of estrangement and cognition, and whose main formal device is an imaginative framework alternative to the author’s empirical environment” (“Poetics” 375)—which is to say that in the Suvinian formulation SF is
always in essence about sketching a map of utopia. By now it is nothing new to note that “utopia” may be the most famous pun in literature, with critical analyses of utopia, utopianism, and utopian form(s) still inevitably beginning with Sir Thomas More’s coining of the word to famously suggest both eu-topos (the good place) and ou-topos (the non-place). Science fiction has always contained within itself a similar paradox, suggesting on the one hand a verisimilitudinous narrative plausibility grounded in genuine scientific knowledge—science fiction as an extrapolative or even predictive genre, “tomorrow’s headlines today”—and at the same time designating unrestrained flights of fantasy and irreality—as in the ubiquitous ledes in science journalism that proclaim the latest finding or gadget as “not science fiction, but science fact.” The uneasy, oxymoronic status of the “science” in “science fiction”—a genre that despite its pretensions and protestations to the contrary remains dominated by such manifest unscientific absurdities as warp drives, forcefields, time machines, and superpowers—is sufficiently troubling that for decades authors and critics of the genre have generally agreed to just ignore it altogether, preferring alternate categories like “speculative fiction” or (even more commonly) the referent-less abbreviation “SF” in an effort to sidestep this inescapable foundational contradiction as best as can be managed.¹

Suvin’s innovation was a judo-like embrace of this opposition that reoriented SF around this very paradox and in the process transformed both horns of the dilemma.

¹ In this dissertation, “SF” and “science fiction” will be used interchangeably.
Transmuting an apparently hopeless contradiction into a constitutive antimony, Suvin housed SF’s foundational dialectic between facticity and confabulation with a dialectic he called cognitive estrangement, which he argued was the characteristic aesthetic of the genre and the true engine of its appeal. Unpacking the two terms, we have cognition—loosely defined as Wissenschaft and including “not only natural but also all the cultural or historical sciences and even scholarship,” not insignificantly the Marxist tradition among them (Metamorphoses 13)—and estrangement, explicitly derived from the Russian formalists and Brecht’s famous V-effect to denote the opening of the mind to previously unimagined alternatives that, in turn, cast new and unexpected light on the empirical and the everyday (Metamorphoses 6). SF, then, makes use of the modes of cognition native to science and scholarship, but not at all to predict the future or R&D new technologies for technoscience, and not merely in the service of escapist delight; rather; it does so to defamiliarize our empirical reality and actually existing history to give us access to alternative possibilities and ways of being.

A restatement of this proposition found in a later chapter of Metamorphoses of Science Fiction makes the close interactivity between cognition and estrangement clear. Suvin writes that “SF is distinguished by the narrative dominance of hegemony of a fictional “novum” (novelty, innovation) validated by cognitive logic” (Metamorphoses 6); students of Ernst Bloch will recognize Suvin’s borrowing of Bloch’s notion of the novum, which here becomes science-fictionalized precisely insofar as its newness is
driven by and tethered to cognition, defined not only as empirical physical science but (and most essentially) the social sciences, politics, and history. Nor is the word “validate” chosen lightly; cognition functions as a check on the imagination, the only thing keeping it honest. Suvin’s position is that without a relationship to a cognitive interpretive horizon, SF degrades into mere fantasy, its “narrative logic” no more than “overt ideology plus Freudian erotic patterns”—and therefore useless for the cause of conceiving and building a better world than this one. (A line can be drawn between this critique and Marx’s famous denunciation of the wishful thinking of the “utopian socialists.”) Thus, SF becomes primarily a literature of allegory. And to the extent that SF is a “hidden parable” (Defined 170)—to the extent, that is, that the pleasure of SF comes in judging the reality it depicts against our own physical and social reality—then (Suvin’s argument goes) some sort of cognitive reality principle will always be necessary to structure this interpretive decoding.

In this way the genres of utopian speculation and SF merge inextricably: in the Suvinian formulation pre-nineteenth-century utopian fiction is re-inscribed as “an early an primitive branch of SF” (Defined 39), while (in an unusual, hard-to-conceptualize family tree) SF becomes “if not a daughter, yet a niece” of utopia, and contemporary utopian narrative likewise “both an independent aunt and dependent daughter of SF” (Defined 43). The pastoral comes in for particular praise: in the College English article Suvin notes that the genre “relates to SF as alchemy does to chemistry and nuclear
physics: an early try in the right direction with insufficient sophistication” (“Poetics” 376). For Suvin, and for the thinkers that would follow his approach, SF is at once the “privileged locus” (Ibid.) for utopia speculation in our moment, but also always firmly situated within utopia’s boundaries. Thus the preoccupation with futurology and prediction that often characterize approaches to SF becomes completely beside the point, as does the inevitable scientific nitpicking of fans and non-fans alike; SF as a genre emerges out of this very incompatibility to gesture not towards a possible future so much as towards alternative modes of living. The science of science fiction is for Suvin less about physics than it is about historical materialism. “A novum is fake,” Suvin writes, “unless it in some way participates in and partakes of what Bloch called the ‘front-line of historical process’—which for him (and for me) as a Marxist means a process intimately concerned with strivings for a disalienation of people and their social life” (Metamorphoses 81-82). Utopia consequently must always be conceived from below: “All utopias involve people who radically suffer of the existing system and radically desire to change it” (Defined 30n11). SF therefore in Suvin’s hands becomes a genre of the political left, and the ultimate Ur-narrative of all science fiction is something like socialist revolution.

Elsewhere I have pointed to Karl Marx’s famous dedication in a September 1843 to “the ruthless criticism of all that exists, ruthless both in the sense of not being afraid of the results it arrives at and in the sense of being just as little afraid of conflict with the
powers that be” as a succinct restatement of utopian political desires that Suvin sees undergirding science fiction. Ray Bradbury’s version of SF’s capacity for critique is stated in significantly plainer language: “That’s all science fiction was ever about. Hating the way things are, wanting to make things different.”\(^2\) The notion recalls the answer Spanish surrealist filmmaker Luis Buñuel once gave when asked why he makes films: “To show that this is not the best of all possible worlds.”

If, as Aaron Bady has remarked, each school of criticism sets out to remold all of “literature” in the image of a preferred, privileged genre (Bady), for Utopian Marxists that privileged genre then is undeniably SF. Fredric Jameson’s utopian-centered strategies of critical exegesis, first sketched out in his essay “Metacommentary” (which, published in 1971, predates Suvin’s “Poetics” by a year), explicitly originate in a strategy for reading SF, particularly addressing the question of how to understand the latent utopian content of 1950s disaster cinema. Responding to Susan Sontag’s seminal essay “The Imagination of Disaster,” Jameson notes that her approach only engages science fiction “on its own terms,” and suggests that we must instead look beneath the “disguise” of manifest content to discover the utopian impulse lurking there:

Thus, in this perspective, all the cataclysmic violence of the science-fiction narrative—the toppling buildings, the monsters rising out of Tokyo Bay, the state of siege or martial law—is but a pretext, which serves to divert the

\(^2\) See Canavan and Wald, 2011. Ursula K. Le Guin has likewise claimed that SF is a genre, if not of the left per se, then certainly of political dissent: “The intellectual crime for which Zamyatin was reviled and silenced was that of being an ‘internal emigre.’ (The American equivalent would be ‘un-Americanism.’) This smear-word is a precise and noble description of the finest writers of SF, in all countries” (“Surveying”).
mind from its deepest operations and fantasies, and to motivate those fantasies themselves. (In this fashion, metacommentary adopts, if not the ideology, then at least the operative techniques of Russian Formalism, in its absolute inversion of the priorities of the work itself.)

No doubt we could go on and show that alongside the fantasy about work there is present yet another which deals with collective life, and which uses the cosmic emergencies of science fiction as a way of reliving a kind of wartime togetherness and morale, a kind of drawing together among survivors which is itself merely a distorted dream of a more humane collectivity and social organization. In this sense, the surface violence of the work is doubly motivated, for it can now be seen as a breaking of the routine boredom of middle-class existence as well, and may contain within itself impulses of resentment and vengeance at the nonrealization of the unconscious fantasy thus awakened. (17)

In “Reification and Utopia in Mass Culture” (1979) we see this tendency expanded across all literary and cultural production: “[A]ll contemporary works of art—whether those of high culture and modernism or of mass culture and commercial culture—have as their underlying impulse…our deeper fantasies about the nature of social life, both as we live it now, and as we feel in our bones it ought rather to be lived” (46).

In Jameson’s later work, much of which focuses specifically on SF, he comes to fashion his version of “cognitive estrangement” around what he calls “the desire called Utopia”: our attempts to imagine and shape big-H History by recasting the present as the fixed historical past of some projective future. Utopia’s status as a “desire” here is crucial; utopias “succeed by failure” the sense that the positive strivings and blueprints towards utopia (which Jameson calls “utopian programs”) are for him never ones that it might be possible or desirable to implement; rather than programmatic speculation, it is
the latent *utopian impulse* towards radical historical difference, accessible in negative, that vitalizes SF as a practice of critique:

On the contrary, [SF’s] deepest vocation is over and over again to demonstrate and to dramatize our incapacity to imagine the future, to body forth, through apparently full representations which prove on closer inspection to be structurally and constitutively impoverished, the atrophy in our time of what Marcuse has called the *utopian imagination*, the imagination of otherness and radical difference; to succeed by failure, and to serve as unwitting and even unwilling vehicles for a meditation, which, setting forth for the unknown, finds itself irrevocably mired in the all-too-familiar, and thereby becomes unexpectedly transformed into a contemplation of our own absolute limits. (“Progress vs. Utopia” 289)

In this light the well-known dictum from “Reification and Utopia in Mass Culture” that the latent content of all literature is fundamentally about utopia might well be rephrased as an instruction to read all cultural production *as if it were science fiction*.

Likewise, in Jameson’s recent work utopia itself becomes a kind of science fiction, even couched in the language of speculative physics, as in the dreamlike image that closes 2009’s *Valences of the Dialectic*:

It would be best, perhaps, to think of an alternate world—better to say the alternate world, our alternate world—as one contiguous with ours but without any connection or access to it. Then, from time to time, like a diseased eyeball in which disturbing flashes of light are perceived or like those baroque sunbursts in which rays from another world suddenly break into this one, we are reminded that Utopia exists and that other systems, other spaces, are still possible (612).

Utopia becomes in Suvin and Jameson’s hands a powerful ur-narrative that allows us to politicize not only SF but other cultural domains as well. An evocative image in his
essay “Future City” reimagines “the secret method” of SF as a “battering ram” that
bursts us “out of the windless present of the postmodern back into real historical time”
(“Future City”). Utopia becomes, in the end, Jameson’s trump card, the ultimate
metanarrative, one that is able to survive (if only in negative, as a kind of negative
theology) even the late-capitalist triumph of postmodernity and postmodernism.
Indeed, for Jameson perhaps it is the only such thing.

**Science Fiction and Empire**

Naturally such a single-minded, politics-centered approach to the genre
threatens to deprioritize any number of alternative pleasures that one might suggest as
operative in the consumption of literature and art—the aesthetic, the domestic, the
psychological, the erotic or libidinal, the purely or “merely” ethical, and so on. Likewise,
it suggests that the genre has a special relationship with resistive, leftist politics, and (as
Suvin explicitly affirms) perhaps even that only texts with these sorts of political
commitments might properly count as SF at all. For these reasons the Suvin/Jamesonian
approach has by no means been accepted without argument in the field, compounded
by Suvin’s generalized dismissal of what we might call “non-cognitive estrangement”:
folklore, fantasy, and myth (“Poetics” 375-376.) ³

---

³ For the record, Suvin happens to think the vast majority of what is published as SF is essentially non-
cognitive as well (“Poetics” 381), and, indeed, in recent years has loosened the once-sacrosanct boundary
The principal competitors to the Suvinian/Jamesonian approach in recent years—though it may perhaps be better described as a “supplement” or even a “correction,” as it too relies on an essentially Suvinian logic of cognitive estrangement—has been the “imperial turn” recently explored by such writers as Istvan Csicsery-Ronay, Jr., John Rieder, and Patricia Kerslake. These writers have focused their attention on the submerged colonial and imperial longings and race fantasies of the science fictional imagination, which are sometimes be obscured by a Suvinian/Jamesonian focus on its more Utopian and critical/resistant qualities. Where Suvin and Jameson take SF as a genre of the political left, these thinkers tend to take it as a genre of the right, or at best as a genre that shifts uneasily and unpredictably between the two.

Noting that SF gets its start in “precisely those [nations] that attempted to expand beyond their national borders in imperialist projects: Britain, France, Germany, Soviet Russia, Japan, and the US,” Csicsery-Ronay writes in “Science Fiction and Empire” that SF is consequently “an expression of the political-cultural transformation that originated in European imperialism and was inspired by the idea of a single global technological regime.” (“Science Fiction and Empire.”) For Csicsery-Ronay, the

between SF and fantasy by conceding that some fantasies may indeed have radical potential after all. “Let me therefore revoke, probably to general regret, my blanket rejection of fantastic fiction. The divide between cognitive (pleasantly useful) and noncognitive (useless) does not run between SF and fantastic fiction but inside each—though in rather different ways and in different proportions, for there are more obstacles to liberating cognition in the latter” (“Considering” 211).
imaginary model for this single global technological regime is Hardt and Negri’s global capitalist, capital-E Empire, which he provocatively reads as itself a kind of science fiction.

In this telling of the history of the genre anti-utopian science fiction—lost race novels like Edward Bulwer-Lytton’s Hollow-Earth horror The Coming Race (1871), Yellow Peril stories, superweapon fantasies, and the like—become at least as important as utopian SF visions of better tomorrows. The reading of science fiction remains crucially allegorical, though for the critics of the imperial turn the reading is typically “against the grain,” as Benjamin read history (“Theses” 256); the purpose of criticism here is to expose science fiction’s deep investment in racial and imperial form. In the case of Gene Roddenberry’s Star Trek (1966-1969), for instance, the imperial turn would ask us to look past the fantasy of an egalitarian, liberal cosmopolitan “United Nations in space” that nominally structures the show’s famous back-story and focus instead on how things actually work episode-to-episode. Despite the series’ high ideals of representationality and inclusion that led the original crew of the Enterprise to be cast from both sides of the Iron Curtain, with regular cast members portraying characters from Africa and Asia, the crew of the Enterprise remains overwhelmingly white and American, with final authority invested in the swashbuckling hands of the series’ traditional white male hero, Captain James T. Kirk (William Shatner). The role of African communications officer Lt. Uhura—whose marginalization on the series can be seen in
the fact that the character did not receive an official first name until the 2009 reboot—so rapidly receded into the background that the actress (Nichelle Nichols) nearly quit the show in protest. Famously, it took the intervention of Martin Luther King to change her mind and convince her to stay.\(^4\)

Nor is the Federation’s supposed cosmopolitan ethic of IDIC (Infinite Diversity in Infinite Combinations) especially well represented in actual episodes of the show. The crew’s exploration of new worlds, new life, and new civilizations frequently put them in contact with races whose members (in accordance with classic Orientalist fantasy) adhere to monolithic cultural practices and who are for all intents and purposes completely indistinguishable from each other. Fans have dubbed these beings “Forehead Aliens” because their racial difference is conventionally signified by some prosthesis or another attached by makeup to the actors’ faces. Nearly all of these beings begin as implacable enemies, and each racial-enemy-turned-uneasy-ally is replaced in turn by another, even more monstrous Other that can only fought—suggesting the deeper function of the ship’s allegedly peaceful mission of exploration may be to license fantasies of unleashing genocidal violence. It is no coincidence that the Enterprise—a heavily armed warship—retains the “U.S.S.” prefix of American naval vessels; while the letters now stand for United Space Ship instead of United States Ship, the mission of the Enterprise is nevertheless a continuation of the gunboat diplomacy of the Vietnam-era

\(^{4}\) Nichols’s retelling of this story can be found in her autobiography, *Beyond Uhura* (1994).
United States, replicating its fraught politics of liberalism on a galactic scale and bringing American-style democracy to the galaxy, whether it wants it or not.

Roddenberry’s Utopia, like the nation that birthed it, somehow finds itself embroiled in war after war after war, despite its official desire for peace.

The progress narrative embedded in the Star-Trek-style popular fantasy of futuristic galactic civilization—and the retention of the logic of an imperial military-industrial complex despite pretentions to a nominal politics of anti-militarism—is the imagined culmination of a fantasy of progress that has its roots in both the ideological operations of imperial domination and in the racist misapplication of Darwinian evolution. In such narratives it is commonly asserted that mankind’s “destiny” lies in expansion into the stars; such a claim even structures comparatively left-wing science fiction like Octavia Butler’s Parable series: “Earthseed is all that spreads Earthlife to new earths. … the Destiny of Earthseed is to take root among the stars” (68). Naturally we can find this self-same desire for interplanetary empire expressed in the NASA speeches of John F. Kennedy, Richard Nixon, and other U.S. presidents—but the fantasy has a much longer history. Returning to the turn of the twentieth century we can find the dream at work, even in the long-ago letters of imperialist par excellence Cecil Rhodes, perhaps in its most essential form of pure colonial annexation:

The world is nearly all parceled out, and what there is left of it, is being divided up, conquered and colonized. To think of these stars that you see overhead at night, these vast worlds which we can never reach. I would annex the planets if I could; I often think of that. It makes me sad to see
them so clear and yet so far. (qtd. in Csicsery-Ronay, “Science Fiction and Empire.”)

As Csicsery-Ronay provocatively puts the point: “Imperialism promises the stars; sf delivers.” (“Science Fiction and Empire.”)

But the ideological affinities between science fiction and empire goes somewhat deeper than this. As Johannes Fabian notes in his *Time and the Other*, a crucial ideological operation of the progressivist historical narrative at the root of imperial expansion was the retemporization of space that imagined nonwhite humanity as a kind of surviving anachronism, a pastness-in-the-present that is (at best) primitive or (at worst) dangerously obsolete, subject to disruption, displacement, and even extermination in the name of the European arc of history:

[I]t is not difficult to transpose from physics to politics one of the most ancient rules which states that it is impossible for two bodies to occupy the same space at the same time. When in the course of colonial expansion a Western body politic came to occupy, literally, the space of an autochthonous body, several alternatives were conceived to deal with that violation of the rule. The simplest one, if we think of North America and Australia, was of course to move or remove the other body. Another one is to pretend that space is being divided and allocated to separate bodies. South Africa’s rulers cling to that solution. Most often the preferred strategy has been simply to manipulate the other variable—Time. With the help of various devices of sequencing and distancing one assigns to the conquered populations a different time. (29-30)

At the turn of the 20th century this temporal fantasy is frequently and arguably *always* cast in the terms of science fiction, drawing from physical and social sciences as well as the academic humanities in an attempt to ground the imperial fantasy in genuine knowledge. Darwin’s theory of evolution, and the pseudoscientific theories of social
organization and civilization progress that flowed out of it, becomes particularly useful in the service of imperial fantasy, and arguably constitutes the most essential “science” of “science fiction” both in and outside the recognized constraints of the literary genre. When Francis Galton attempts to lay out his eugenicist theory in “Hereditary Talent and Character” (1865), for instance, it is to the science fictional speculations of More’s Utopia and Swift’s flying city of Laputa that he ultimately turns:

Let us, then, give reins to our fancy, and imagine a Utopia—or a Laputa, if you will—in which a system of competitive examination for girls, as well as for youths, had been so developed as to embrace every important quality of mind and body, and where a considerable sum was yearly allotted to the endowment of such marriages as promised to yield children who would grow into eminent servants of the State… (165)

Indeed, we might go further still, and note that these sorts of explicit attempts to apply Darwin’s biological theories to the social realm through the use of allegory—as in Galton’s eugenics, or in something like Herbert Spencer’s Social Darwinism—are attempts to narrativize science in the service of ideology: quite literally, they are “science fictions.”

The logic of evolution gives white European civilization—and, within that civilization, the white upper-class in particular—a claim on the present that is tantamount to ownership, as John Rieder has noted:

[O]ne of the keys to SF’s imaginary ‘contact zone’ is the uneven distribution of technology across a spatial geography that the ideology of progress codes as a temporal one. In the ideological environment of the late nineteenth and early twentieth centuries, where the industrially developed world saw non-industrialized cultures as survivals of its own
pre-industrial past, possession of the technological breakthrough was tantamount to ownership of the present itself—a logic which relegated those who did not have it to the residual past. ("Spectacle" 86)

Imperial forms of violence have historically been justified by this sort of appeal to a transcendent historical totality that “demands” white hegemony and dominance across the globe as a historical necessity, to the diminishment and exclusion of all other forms of human life. Empire attempts to cast itself backward into the past (to make the present the privileged, inevitable outcome of a historical process) and forward into the future (to make the present moment continuous and permanent). This is to say that empire ultimately crafts a \textit{fantasy} of itself, and its own unbounded immortality, that in turn justifies its own perpetuation at whatever cost. The ideology of empire, we might say, seeks to annex all of time as well as all of space.

As we will see in further detail in chapter one, the discovery of evolutionary time gives a pseudoscientific grounding for imperialism’s constitutive fantasies of white hegemony—naturalizing inequitable social relations through an appeal to supposed scientific fact. But at the same time science produces the knowledge that the current world system is only a historical moment among many that will itself eventually be superseded. The fantasy that white European civilization represents the most advanced stage of human history necessarily, and irresolvably, produces the possibility of an \textit{even more} advanced stage that is still to come. Thus the logic of process that legitimates imperial violence simultaneously dooms it. This is explicitly the logic of Wells’s \textit{War of
the Worlds (1898), which imagines the Martians as an advanced version of human civilization originating from a planetary ecosphere that developed long before Earth’s—making them as much invaders from the future as from another planet. Likewise, the catastrophism and mass extinctions at the heart of evolutionary theory produce the possibility that such an apocalyptic moment will someday be visited upon human life as well; in fact the nineteenth century discovery of entropy, the propensity of all thermodynamic systems on all scales to run down over time, makes this final apocalypse a scientific certainty.

In his work on SF—which he renames fantastika in an effort to emphasize the horror and “planetary dread” he believes to be essential to the genre—John Clute claims that the birth of SF comes at the moment when History itself is born: Fantastika began when the creation of geologic time and evolutionary change began to carve holes in reality, which became suddenly malleable; when, for the first time, the human imagination (as in the French Revolution) could conceive of altering, by fiat, both human nature and the world we inhabit. (3)

Key to this inversion is the host of post-Enlightenment scientific discoveries that show Planet Earth to itself be fragile, unstable, irrational, and constantly in flux—discoveries that have recast the human race as not the privileged children of God but rather “a species clinging to a ball that may one day spin us off” (23-24). This is the ontological dread Clute calls “the world storm”: the unceasing, vertiginous pulse of a planetary history that seems to be propelling us faster and faster towards utter ruin. Thus
fantastika becomes in Clute’s hands something more than just another literary genre; it becomes an essential mode of human cognition, perhaps the very mood of modernity itself. Fantastika is the literary genre most appropriate to a world that has lost its grounding, of a reality that no longer seems to be quite real.

For Clute it is Kurtz’s deathly gaze—*the horror, the horror*—that is fantastika’s most essential encounter with modernity, though he might have cited alongside Kurtz such paradigmatic figures of modernity as Benjamin’s impotent Angel of History, who sees only catastrophes in the storm of progress that is blowing us away from Paradise (“Theses” 257-258), or Joyce’s Stephen Dedalus, for whom history was a nightmare from which he was fighting to awake (28). For Clute horror is the most vital form of fantastika because the horror at its core is always precisely this horror of recognition, of seeing truths one does not wish to see but cannot ignore: “It is the task of modern horror to rend the veil of illusion, to awaken us. Horror (or Terror) is sight. …. Horror (or Terror) is what happens when you find out the future is true” (42).

Thus we find at the dawn of the twentieth century an increasingly desperate ideological need to find some way out of catastrophe—to, in essence, find some way that white European global civilization might somehow *exempt* itself from history altogether, and thereby avoid its own inevitable collapse or supersession. Here we find a central antimony, or even contradiction, in the logic of empire: it must at the same time both *fulfill* history and *exempt itself* from history. As I will suggest in the chapters to
come, the final impossibility of such an exemption—the inevitable triumph of entropy as a final law of nature, the heat death of the universe—is frequently expressed in twentieth-century SF as a kind of neurotic preoccupation, an unbidden unhappy thought that can never be put out of our minds.

These, then, are the grounds on which I seek to associate empire with the “apocalypse” axis of Berman’s dialectic of modernity: empire is apocalyptic first in the mode of violence it inflicts on everyone else, and second in its obsession with its own annihilation, which it continually conflates with the end of all being as such.5

**Science Fiction and Totality**

My approach to science fiction in the dissertation that follows rejects the question of whether science fiction is of really a genre of “the right” or “the left”—which, I’d suggest, may be a rather strange question to ask of a literary genre—in favor of a focus on the theoretical impulse I see as ungirding both approaches. I would suggest that what Csiscery-Ronay calls the “entelechy, the embedded goal, the conceptual fulfillment of imperialism” (“Science Fiction and Empire”) is not so much big-E Empire but *totality*—in the sense of an actually existing, total geopolitical system that manages all localities as

---

5 One interesting figure for this intersection is the Marvel comics villain Galactus, introduced in 1966, whose cosmic hunger causes him to wander the universe in search of planets to consume. In *Galactus: The Origin* (1983), we discover that Galactus’s deployment of the first mode of imperial apocalypticism derives from his embodiment of the second: Galactus is Galan of the Planet Taa, the last survivor of the previous cycle of the universe, whose attempt to escape from entropy has caused him to become its terrible embodiment.
well as also an ideological mapping of that system, which justifies it as both fully
coterminous with the globe (total in space) and the culmination of human history (total
in time). In this sense the ideological work of empire might be said to be a kind of dark
reflection of Jameson’s famous “cognitive mapping,” in that it strives not to create an
accurate map of the world but rather to refashion the entire world into the image of the
map. And this of course is very much the work of “utopia” as well: utopian speculation
seeks to imaginatively create a new, overarching totality that might somehow be
sufficient to oppose the world system as it currently exists.7

Utopia and empire, that is to say, are really two sides of what should be the same
analysis—which is why it should come as no surprise to see these two impulses so
commonly at work together in the same texts. If we think of another long-running
popular science fiction series, the BBC’s fifty-year-old Doctor Who (1963-1989, 2005-
present), we can see this overlapping pattern quite clearly. In Doctor Who we are given
the promise of radical liberation from everyday life; step into the Doctor’s miraculous
TARDIS and one can suddenly go anywhere, do anything. The Doctor offers his
companions not only personal freedom but immense personal enrichment as well; the
Doctor’s life is an exhilarating union of bewildering whimsy, meaningful labor, exotic

---

6 See, among other places, Postmodernism and The Geopolitical Aesthetic.
7 This is the sense, I think, in which we must read Suvin’s claim in Positions and Presuppositions in Science
Fiction that utopia is “socio-politics understood as human destiny” (35). Istvan Csicsery-Ronay makes a
similar point in “Science Fiction and Empire,” noting “the utopian architext is closely linked to the model of
Empire.”
travel, and heroic self-sacrifice. But the freedom offered by the Doctor comes at a significant cost; while any of the individual adventures of the Doctor seems blissful when taken on its own terms, as our viewership of the series goes on we discover an abiding darkness lurking in the character. We discover, for instance, that his people have proclaimed themselves the Time Lords, and that they claim hegemonic jurisdiction over all space and time; we see the Doctor repeatedly enacting genocidal violence against the alien races like the Cybermen or the Nazi-like Daleks that threaten humanity’s destined future expansion into the stars. In the 2000s reboot of the series following its first cancellation in 1989, this theme has become even more pronounced; the missing fifteen years are described within the chronology of the narrative as a brutal “Time War” that led to the total extinction of both the Daleks and all the other Time Lords, at the Doctor’s hands. The Doctor’s darkness is, perhaps, the residual darkness of the British empire itself, which constantly has to be checked by the basic decency of his middle-class, usually female human companions—whose lives he in turn always destroys in the name of the greater good, turning them all into soldiers and killers before ultimately discarding them. Because the Doctor is immortal (and, unusually for this kind of science fictional fantasy, entirely celibate), and the last one of his kind, he is unable to form genuine relationships with anyone. Everyone and everything in the universe instead becomes his instrument, leaving him utterly alone.
Both valences of modernity—the utopian and the apocalyptic—are thus activated for us in *Doctor Who*, through the totalizing cosmic perspective of a 900 year old immortal who exists outside of space and time, who indeed through the TARDIS can be everywhere and everywhen at once. The pleasures of *Doctor Who*, that is, derive from this quintessentially science fictional attempt to think totality, and the ways in which this attempt produces both utopian and imperial forms that exist simultaneously alongside one another, that indeed are at times completely indistinguishable from one another. I suggest this opening up of these sorts of immense totalities, in either their utopian or imperial guises, should be understood as the distinctive and most essential imaginative gesture of SF. In this way, then, science fictional writing can be thought to stand against that overriding postmodern injunction “Do not totalize” (McHale 17); science fiction, as a genre that stretches out towards the farthest reaches of time, space, and the possibilities of human knowledge, can do nothing else.

In this vision of SF the literary function Jameson calls *world reduction* (271)—“a kind of surgical excision of empirical reality”—becomes crucial to the construction of SF texts; it is through this “operation of radical abstraction and simplification” that readers of SF come to better understand “the sheer teeming multiplicity of what exists” (271). Science fiction might even be understood, paraphrasing Lukács’s *Theory of the Novel*, as the epic of an age in which the “extensive totality of life” may not be “directly given” (36) but remains an open problem still to be solved—or, if you prefer, not “the epic of a
world that has been abandoned by God” (88) but the epic of a world in which man might yet become God.

Many of the aesthetic pleasures associated with the reading of SF might thus be recast as the sublime pleasure (which is also always simultaneously a displeasure) of appreciating a harmonized totality. A somewhat more sinister characterization of this pleasure, perhaps, might alternatively be to call it a fantasy of mastery—thereby embedding a kind of imperial gaze within SF reception itself. We can see this pleasure at work (in both forms), for instance, in Damien Broderick’s notion of the science fictional “megatext” that structures fan consumption of SF across the genre:

One crucial factor is that sf is written in a kind of code (on top of—and sometimes displacing—all the other codes of writing) which must be learned by apprenticeship. ... No doubt this is true to some extent of all genres, but the coding of each individual sf text depends importantly on access to an unusually concentrated “encyclopaedia”—a mega-text of imaginary worlds, tropes, tools, lexicons, even grammatical innovations borrowed from other textualities. (xiii)

Likewise, the “absent paradigm” identified by Marc Angenot as fundamental to SF—which puts the reader of a text in “the same situation as the swimmer on an unfamiliar beach” until she successfully masters the symbols and signs of this new world (Angenot)—suggests that one of the deepest pleasures of SF is to come to know a world,

---

8 In his The Seven Beauties of Science Fiction, Istvan Csicsery-Ronay, Jr., identifies the sublime as the fifth and in some ways most important “beauty” of science fiction, linking it to the vaunted “sense of wonder” that has long characterized aesthetic appreciation of the genre: “The sublime is a response to a shock of imaginative expansion, a complex recoil and recuperation of self-consciousness coping with phenomena suddenly perceived to be too great to be comprehended” (146-147).
and by allegorical extension our own world, in its full totality. In his influential essay “A Key to Science Fiction: The Sublime,” Cornell Robu develops a theory of science fictional aesthetics along precisely these lines, arguing that science fiction is in essence about achieving the dis- and re-orienting “pleasure in pain” that is the Kantian or Burkean sublime: “The anchoring into science, the assimilation and appropriation of the image of the universe as it results from the incessantly developing twentieth-century science ensures for sf unlimited resources to figure infinity, resources more remote for the other forms of literary expression” (21-22).

The centrality of science fictional attempts to totalize all the possibilities of history as a constitutive feature the genre directs our attention to the hyperbolic spatial and temporal scales that characterize science fiction in the moment of its emergence. Early science fiction is replete with attempts to justify the thinking of history as a totality—the “hubris,” as Martin Jay put it, “to believe [one] might know the whole of reality” (12). Thus we find alongside the usual tales of interplanetary travel and “confrontation of God” multiple stories of miniaturized universes, as in Theodore Sturgeon’s well-known “Microcosmic God” (1941), whose small spatial scale is matched by a radically accelerated temporal one—allowing all of human history to pass by within the span of a single human life. Of course, the sped-up history of Sturgeon’s neoterics does not stop with the moment of twentieth-century Earth; by the end of the story the “neoterics” are living far in mankind’s future, “after innumerable generations of
inconceivable advancement,” and have become a futurological threat much like Wells’s Martians (156). The inverse gesture is also quite common: expansion out into *macrocosmic* universes for which the entirety of our cosmos is but a single atom; Donald Wandrei’s “Colossus” (1934) and G. Peyton Wertenbaker’s “The Man from the Atom” (1926) are but two representative examples. In Edmond Hamilton’s “The Man Who Evolved” (1931)—discussed in more detail in chapter one—we have the invention of a cosmic ray device that will evolve the human form 50 million years in 15 minutes, allowing a gathered group of scientists the chance to see the future forms of humanity in a single afternoon. Familiar science fictional plot devices like time machines, alternate histories, prophecy, fourth and fifth dimensions, and parallel universes can all also be reinterpreted as attempts to grasp historical-cosmic totality—to master both the inner logics of possibility and probability and thereby understand exactly how history, in its full immensity, actually works.

Such a desire is the explicit ambition of a text like Isaac Asimov’s highly influential *Foundation* series (1942-1986), which is centered on an imagined science called “psychohistory” whose extrapolative mechanisms suggest the psychohistorian Hari Seldon as a metafictional stand-in for both academics and writers of SF alike. Psychohistory—a hyperbolic melding of historical materialism, sociology, psychology, and population science—allows Asimov’s psychohistorians to predict the grand historical arcs of the future with great specificity. Psychohistory allows Asimov’s
characters to recognize that their culture has been doomed by its own internal contradictions, as well as gives them the leverage needed to begin crafting the better galaxy that will arise from its ashes; psychohistory, this is to say, is an allegory for the central role played by science fiction in the cultural milieu of the twentieth century U.S. Indeed, through the small school of “psychohistorians” that closely follows and seeks to implement Seldon’s work after his death, Asimov seems to be speaking directly about the possibility that science fiction fandom could in fact some day save the world.

Asimov himself was a member of the influential “Futurian” science fiction fan circle in the 1930s;\(^9\) Everett Bleiler, in his *Science Fiction: The Gernsback Years*, calls groups like the Futurians *trufans*, and notes that for the members of these groups science fiction was less an aesthetic pleasure and more a kind of ethos: “It is difficult to put into words, but for the ‘trufan’ science fiction or the magazines entered his life more than a hobby and only a little less than a vocation. Over and over one encounters the statement that when a trufan discovered science fiction he/she found a fulfillment” (xxiv). Gary Westfahl, in his history of the early days of the genre titled *The Gernsback Years*, ultimately credits the quasi-scholastic, quasi-evangelic practices of communal reception that began in the pulps with the rise to prominence of the genre as a whole:

> Because of the stimulating and supportive atmosphere of the commentaries engendered by Gernsback, American science fiction steadily expanded and improved; because of the absence of such

---

\(^9\) See *I, Asimov: A Memoir*. 

28
commentary, British and European traditions floundered. Simply put, literary criticism made American science fiction great, and that was Gernsback’s great contribution to the field. (28-29)\(^\text{10}\)

Science fiction in texts like Asimov’s is figured as a very important conversation that is taking place both synchronically across space and diachronically across time(s). Both economist Paul Krugman and former Speaker of the House Newt Gingrich have cited childhood adulation for Hari Seldon as the inspiration for their adult personae; after 9/11, a widely-circulated article in the Guardian even made the case that al-Qaeda may have taken its name from an Arabic translation of Asimov’s novel.\(^\text{11}\)

Asimov’s *Foundation* is thus one of the key texts that first helped generate the “cosmic standpoint” Hannah Arendt would later described in *The Human Condition* (1958) as integral to twentieth-century technological modernity, especially the post-Sputnik moment (265). For Giorgio Agamben, too, this science fictional sense of cosmic cognitive estrangement is the defining quality of what it means to be a contemporary writer at all, with the capacity of “driving and interpolating time … transforming [time] and putting it in relation with other times” (53). “Those who are truly contemporary,” Agamben writes, “who truly belong to their time, are those who neither perfectly coincide with it nor adjust themselves to it” (40); these ideas of temporal

\(^{10}\) “How good this magazine will be in the future is up to you,” Gernsback writes in that first Amazing Stories editorial in 1926; “Read Amazing Stories—get your friends to read it and then write us what you think of it” (3).

\(^{11}\) This article also notes that the Aum Shinrikyo sect that launched sarin nerve gas into the Tokyo subway system in 1995 was explicitly modeled in part on Asimov’s *Foundation*. See Giles Foden, “What is the origin of the name al-Qaida?”
“disconnection” and “out-of-jointness” themselves suggest the estrangements of science fiction. Near the end of the essay Agamben—echoing Jameson’s asymptotic vision of utopia, which can only ever reach us out of the corner of our eye—again turns to science fictional cosmic imagery in his attempt to capture contemporaneity: “To perceive, in the darkness of the present, this light that strives to reach us but cannot—this is what it means to be contemporary” (46). To be a contemporary writer, for Agamben, is in a sense to write science fiction, whether one calls it that or not.

As with Jameson’s utopian criticism, the risk here is that all literature and art—and perhaps all discourse—threatens to become science fiction, at least to some extent. Paul Kincaid’s clever observation that “the more comprehensively a definition seeks to encompass science fiction, the more unsatisfactory it seems to those of us who know the genre” (43) might be reread in this context as exemplary of SF’s refusal to be bound to any particular definition or limitation; Gary K. Wolfe, too, has suggested that the abbreviation SF is “almost universally favored” by fans and critics of the genre precisely because its two letters don’t really stand for anything (21). The unhappiness with which fans and critics alike react to any principle of exclusion that might limit what counts as science fiction—embracing Derrida’s notion that the “law of genre” is as much a “principle of contamination” as it is a “line of demarcation” (57) to the point of inventing new name after new name for the genre to deny any possibility of final closure—likewise suggests the way critical reception of the genre is frequently drawn to the
tantalizing, totalizing possibility that there may in fact be nothing that’s not SF.

Jameson’s former student Carl Freedman flirts with this very possibility, in a book that attempts to update and sustain Suvin’s original theory, *Critical Theory and Science Fiction*, when he suggests that the dialectic of “cognitive estrangement” that characterizes “science fiction” could in fact be something like “the precondition for the constitution of fictionality—and even of representation—itself”:

> It is, then, in this very special sense that the apparently wild assertions that all fiction is science fiction and even that the latter is a wider term than the former may be justified: cognition and estrangement, which together constitute the generic tendency of science fiction, are not only actually present in all fiction, but are structurally crucial to the possibility of fiction and even of representation in the first place. (21-22)

Such a pronouncement echoes the bravado of the legendary editor of *Astounding Science Fiction*, John W. Campbell Jr., who designated mainstream literature but a mere “special subgroup of the field of science fiction,” since “science fiction deals with all places in the Universe, and all times in Eternity, so the literature of here-and-now is, truly, a subset of science fiction” (xv).

As Freedman’s title suggests, he goes further still in that work, suggesting that theory itself is a kind of cognitive estrangement, and that critical theory and science fiction are in fact “each … a version of the other” (xv). Such a bold pronouncement echoes Deleuze’s observation at the start of *Difference and Repetition* (1968) that “A book of philosophy should be in part a very particular species of detective novel, in part a kind of science fiction. … we write only at the frontiers of our knowledge, at the border
which separates our knowledge from our ignorance and transforms the one into the other” (xx-xxi); we might compare this, too, to Arthur C. Clarke’s effusive declaration that “science fiction is the only genuine consciousness-expanding drug” (“In the Beginning”), which suggests again a connection between science fiction genre and other high modernist projects like Cubism and surrealism. The hint of mysticism suggested by Clarke (and perhaps rather more than just a “hint”) has its echoes in science fictions ranging from Olaf Stapledon to Margaret Atwood to Octavia Butler to Philip K. Dick; as I will discuss in my conclusion, SF’s perennial interest in the expansive horizons of radical alterity suggests that extent to which, at their limits, science fictional and religious thinking unexpectedly begin to bleed into one another.

What some SF writers have done for religion, of course, others have done for history, linguistics, sociology, psychology, economy, and ecology, drawing those discourses into science fiction. The totalizing logic of the science fictional imagination—connecting everything to everything in search of a theory of the whole—parallels Marx’s sense in *The German Ideology* that proper criticism requires a sense of totality:

> Our conception of history depends on our ability to expound the real processes of production, starting out from the simple material production of life, and to comprehend the form of intercourse connected with this and created by this (i.e. civil society in its various stages), as the basis of all history; further, to show it in its action as State; and so, from this starting-point, to explain the whole mass of different theoretical products and forms of consciousness, religion, philosophy, ethics, etc., etc., and trace their origins and growth, by which means, of course, the whole thing can be shown in its totality… (63)
The tendency under discussion—what might be thought of as science fiction’s own imperial, totalizing impulses, its strange aspiration to colonize other spheres of thought—has been a central feature of the genre since its inception. Indeed, it is built into one way to read the name of the science itself, with “science” operating as an intensifier of “fiction” that marks the genre as something more than mere fiction. The sheer enthusiasm with which SF fans tend to “nitpick” SF narratives likewise suggests they are somehow expected to be held to a higher standard than most fictional entertainment. As far back as Wells and Verne, science fiction has frequently figured as a genre of real knowledge, despite the “fiction” in its name, the absurd, impossible situations that characteristically drive its plots, and its often preposterous relationship to the science on which it is nominally based. As the title for my own project suggests, science fiction is filled with ambitious “theories of everything” that go well beyond even physics’ attempt for a Grand Unified Theory—science fiction characteristically seeks to draw all modes of human discourse and knowledge practice into itself.

Contemporaneous commenters frequently spoke, as they still often speak, of science fiction as if it were actually, in Hugo Gernsback’s terms, a genre of “prophetic vision” (3); stories that were understood at the beginning of the twentieth century to be mere fantasies were quickly retrospectively reinterpreted as startling accurate predictions.

---

12 China Miéville puts this point rather bluntly in his “Cognition as Ideology”: “To the extent that SF claims to be based on “science,” and indeed on what is deemed “rationality,” it is based on capitalist modernity’s ideologically projected self-justification: not some abstract/ideal “science,” but capitalist science’s bullshit about itself” (240).
Gernsback undoubtedly took great pride in his own novel’s supposedly successful predictions, among them (as outlined by the novel’s 1950 forwards from Lee de Forest, the inventor of radio, and science fiction author Fletcher Pratt) television, microfilm, air and helicopter travel, lie detectors, talkie film, spaceflight, sleep-learning, night baseball, synthetic fibers, and radar, to name only a few (Ralph 124C 41+ 16-18, 20-22). Manhattan Project physicist (and science fiction author) Leo Szilard has credited H.G. Wells with the imagination of the atomic bomb (ctd. in The Making of the Atomic Bomb 24); Arthur C. Clarke has been credited with the ideas for both the satellite and the Internet. Science fiction, this is to say, quickly comes to be understood to be in some basic sense predictive, and therefore real—accessing not a fantasy but the actual conditions of the world that is to soon come through either careful scientific extrapolation or imaginative leaps of inspired genius.

As science and technology developed further, transforming the character of everyday life, even this temporality begins to telescope, and the science fictionality of the future became temporally relocated in the present itself. This is the sense of alienated estrangement from one’s own time that Alvin Toffler called “future shock.” At the extreme of this line of thought, science fiction becomes indistinguishable from literary mimesis; “science fiction,” asserts Kim Stanley Robinson in a favorite slogan, “turns out to be the realism of our time” (Flood). “Everything is becoming science fiction,” announced J.G. Ballard in 1971; “from the margins of an almost invisible literature has
sprung the intact reality of the twentieth century” (205).

Such observations about the science fictionality of the present have become commonplace in the halls of theory as well, as with Donna Haraway’s observation in her famous, science-fiction-infused “Cyborg Manifesto” that “the boundary between science fiction and social reality is an optical illusion” (149). Tom Moylan, too, notes that over a century of instantaneous communication, supersonic transportation, environmental catastrophe, and apocalyptic nuclear superweapons, science fiction has come to seem ever more important: “…this genre has been a uniquely privileged symbolic response to the conditions of existence in this century” (41–42). “We live science fiction,” Marshall McLuhan agreed in 1964, because “[t]he bomb is our environment” (73). In much the same vein, Steve Shaviro has written recently that in an era of “hyperobjects”—entities like global capitalism, nuclear radiation, and climate change “that are perfectly real in and of themselves, but that are so out of scale with regard to our immediate experience that we find them almost impossible to grasp”—science fiction is one of our “best tools” for “psycho-socio-technological cartography.” The genre’s ability to translate such colossal, hyperbolic concepts into a graspable vernacular functions as “a kind of focusing device, allowing us to feel the effects of these hyperobjects … intimately and viscerally, on a human and personal scale, contained within the boundaries of a finite narrative” (4). Shaviro’s approach recalls Raymond Williams’s insightful observation that in an era of “militant empiricism”
[I]t is now the very battlement and frustration of this militant empiricism, and especially of the best of it, that should hold our attention. … But now, very clearly, there are other, deeper forces at work, which perhaps only imagination, in its full processes, can touch and reach and recognize and embody. (123-124)

John Su makes a similar point in his *Imagination and the Contemporary Novel* about the capacity for imagination, where he notes that in the twentieth century:

> Imagining is not seen as a withdrawal from the world but an effort to interpret it more accurately, and thereby to enable a clearer recognition of the possible shared horizons for the future. … If ideology involves conditioning the empirical senses to take certain images as more real than others, then the imagination’s unique status as a mediator between the senses and cognition makes it crucial to recognition and understanding. (3)

Ray Bradbury phrases the same idea in rather more hyperbolic terms: “The ability to fantasize is the ability to survive” (Harrington Hall 4).

Even Kurt Vonnegut—famously frustrated throughout his life by his sense that he had been unfairly pigeonholed as a science fiction writer—allowed himself at times to embrace this most expansive sense of science fiction triumphalism. “‘I love you sons of bitches,’” one of his characters tells a convention full of SF authors:

> “You’re all I read any more. You’re the only ones who’ll talk all about the really terrific changes going on, the only ones crazy enough to know that life is a space voyage, and not a short one, either, but one that’ll last for billions of years. You’re the only ones with guts enough to really care about the future, who really notice what machines do to us, what wars do to us, what cities do to us, what big, simple ideas do to us, what tremendous misunderstandings, mistakes, accidents, catastrophes do to us. You’re the only ones zany enough to agonize over time and distance without limit, over mysteries that will never die, over the fact that we are right now determining whether the space voyage for the next billion years or so is going to be Heaven or Hell” (18).
Some critics have gone further still, seeking to discover the science fictionality of the past as well, as with the Afroturist school of literary criticism. If, in Walter Mignolo’s words, “There is no modernity without coloniality” (155), the Afroturist school of criticism finds that modernity is consequently shot through with science fictionality from the very beginning, in the crucial moment of first contacts with Europe, sub-Saharan Africa, and the New World. If we are interested in stories about strange, bewildering outsiders who come to a place in technologically advanced ships and disrupt forever the lives of its inhabitants—who steal their bodies, colonize their minds, and control their movements and reproduction—we need not look to futuristic fantasies of UFOs and alien abduction; we can look instead to the actual history of Africa and the slave trade. “The blunt thesis underlying Afroturism,” writes Isiah Lavender III, “is that all black cultural production in the New World is sf” (187)—precisely, in Greg Tate’s memorable formulation, because “Black people live the estrangement that science fiction writers imagine” (qtd. in Dery 208).

From this perspective even the famous double consciousness described by W.E.B. Du Bois can be reimagined as a science fictional double vision, a version of Darko Suvin’s “cognitive estrangement”: a “second sight” that only allows the African-American viewer to “see himself through the revelation of the other world” and
experience all things through this “twoness” (5). In the boldest version of this claim, all of modernity—white and black—becomes in some basic sense science fictional, insofar as post-Enlightenment science (and all that comes with it) inaugurates a radical social-technological transformation—an estrangement, an alienation—of mankind’s “natural,” base state. Science fiction, from this perspective, becomes a marker not only of the thin edge of the wedge of the future—its opening into the present—but of all forms of possibility and alterity as such.

As such we should expect to find instances of the science fictional imagination infusing discourse well outside the confines of what is published and sold as SF in bookstores and on film. This approach to science fiction has an analogue in the work Laura Brown has done on what she calls “cultural fables” in her book *Fables of Modernity*. Writing of “stories without a text, imaginative events without an author,” Brown traces the way these cultural fables (which are “not necessarily coterminous with a single text”) “transcend particular writers and texts … generated collectively in many texts over a period of time” (1-2). The cultural fable is “a flexible model through which the various and diverse images and figures that collect around particular aspects of eighteenth-century material history can be understood in themselves and in relation to one another”; these cultural fables pass freely through many modes and forms of discourse and cultural reproduction. Because of this multiplicity, “the cultural fable can

---

tell a story that seems to grasp the processes of history with a particular discernment, or
to represent the contradictions of such processes with a striking clarity” (3); the same is
true, I argue, of science fiction in the twentieth century, which in fundamental ways has
structured the chaotic collective experience of the rapidly transforming world system of
the twentieth and twenty-first centuries.

This project seeks, then, to take seriously SF’s most totalizing ambitions and see
where they might take us. It suggests science fiction studies as a tremendously useful
archive for interdisciplinary work in the humanities in the 21st century academy, both in
the classroom, and in our attempts to communicate our knowledge practices to the
public at large. My work attempts to argue that the thought experiments of science
fiction can play an important role in mediating the cultural and political debates that
arise out of a world in crisis; science fiction not only responds to (and frequently
anticipates) these debates, but provides narrative frames and cognitive categories that
can help make such debates accessible to non-specialists. This is to say that in the
modern and contemporary periods science fiction is, in essence, the literary genre of
possibility; it is science fiction that first attempts to articulate the sorts of systemic global
changes that are imminent, or already happening, and begins to imagine what the
transformed globe might eventually be like for those who will come to live on it. Such an
approach suggests politics is now always “inside” science fiction, insofar as science
fiction generates the discursive fields in which our collective struggles over the future
are waged. When we begin to re-imagine the world as a science fiction, I claim, a whole set of disciplinary boundaries, cognitive biases, and partisan oppositions begin to break down, and discourses of literature, science, history, empire, ecology, and economics become open to each other with newfound urgency.

“Theories of Everything,” in particular, seeks to situate twentieth-century transatlantic science fiction within a postcolonial context that recognizes how the genre has been employed in the service of, but also troubles and destabilizes, the ideological interests of global capitalism and the nation-state. Drawing from literature, film and television, comic books, pulp magazines, literary fiction, theory and criticism, scientific writing, the popular press, and official state discourse, I explore the way authors have turned to the thought experiments of science fiction as a means of imaginatively testing empire’s legitimacy, longevity, and limitations. The cultural anxieties that attend a particular moment of empire are especially manifest in that period’s science fiction because of the historical importance of science and technology: first as a tool of imperial domination, and second as a future-oriented knowledge practice that itself has totalizing aspirations, grasping with one hand towards so-called “theories of everything” while with the other continually decentering and devaluing humanity’s importance in larger cosmic history. As technological modernity begins to develop horizons of power and knowledge increasingly beyond the scale of the human, science fiction becomes an increasingly important cognitive resource for navigating the ideological environments of
modern political subjects. I argue that the thought experiments of science fiction have functioned as a laboratory of the mind for empire’s proponents and detractors alike, offering a “view from outside” from which the course of history might be remapped and remade. My ultimate claim, stated baldly, is that the twentieth and twenty-first centuries may be best understood as a series of cultural moments in which everyone and everything is participating in science fiction. As a result—far from occupying some literary periphery—science fiction in fact plays a central role in political struggles over history, empire, identity, justice, and the future itself.

“Theories of Everything” focuses specifically on science fictional depictions of the apocalypse as a kind of ultimate horizon for speculative thought. If, just as empire is a totalizing form that seeks to colonize other spaces, totality is an imperial form that seeks to colonize other domains of thought, then apocalyptic figurations of a flattened, empty future is the cognitive sphere in which this relationship becomes most clear. Simultaneously the opposite of imperial expansion and its inescapable destiny, apocalypse is the structural limit towards which both totality and empire are inescapably drawn. In the chapters I chronicle the development of an apocalyptic imperial imaginary in science fictional discourses of the twentieth century, tracing the encounter with a closed, flattened future across multiple texts.

My first chapter, “Billions and Billions,” establishes empire at the dawn of the twentieth century is at its core an aspiration to totality: the establishment of a theory of
space and time that will place white Europeans and the capitalist modernity they inhabit at the pinnacle of progress. But this imperial aspiration to continuous, permanent extension in both space and time—which in fantasy extends out into the galaxy, and into even the past and future—is troubled in this same moment by increasingly urgent apocalyptic anxieties about decline and extinction, which gain new urgency from Darwinian evolutionary theory and the nineteenth-century discovery of the principle of entropy, the propensity of thermodynamic systems on all scales to run down over time.

Reading H. G. Wells’ *The Time Machine, The War of the Worlds*, and “The Star” alongside Mark Twain’s *A Connecticut Yankee in King Arthur’s Court* and short stories published in early U.S. pulp magazines like *Amazing Stories* and *Astounding* in the 1920s and 1930s, I link the discovery of an evolutionary and entropic universe to empire’s need at the dawn of the twentieth century to find some way out of entropy, to in essence find some way that white civilization might exempt itself from history altogether and thereby avoid its own inevitable replacement or supercession. I argue the impulse to imagine history as a totality ultimately becomes hyperbolized as an attempt to imagine the entire geological history of the species amidst the full history of the cosmos—a scale in which the history of human life on Earth becomes, paradoxically, but a small and insignificant moment, a footnote to a footnote. I consequently conclude the chapter with a reading of Olaf Stapledon’s *Star Maker* (1937), which, through its billion-year cosmological ambition, not only explores the dialectical opposition that drives
human history but generates, in the process, a near-total mapping of both its world-
historical situation and the generic possibilities for cosmic SF as a whole.

My second chapter, “Shipwrecked Passengers on a Doomed Planet,” shifts to the
historical moment—the 1970s—in which the imperial drive to leave the planet for the
stars is revealed as a deeply unlikely, perhaps literally impossible fantasy. Such a
situation leaves humans “trapped” on a fragile planet whose ultimate doom they have
already foretold—indeed, a planet whose ecosystem turns out to be increasingly
threatened by the toxic environmental processes of industrial capitalism. I therefore
trace in this chapter a shrinking scale of human agency from the full cosmos back to a
single planet, as science fiction of the 1970s (in the wake of the oil shock, the Vietnam
War, and the end of the Apollo Program) begins to focus again on the long-term
survivability of a human race confined to a single planet. In a host of well-known
ecological disaster narratives ranging from *Planet of the Apes* (1968) to *Soylent Green*
(1973) and *Logan’s Run* (1975), I find science fiction of the 1970s to be characterized by a
depressed ideology of the future that emerges out of this newfound sense of ecological
limit. This claustrophobic sense of impending disaster, bound together with nationalist
identity and neo-Malthusian panic, is now reemerging in such contemporary science
Stood Still* (2008), and *Daybreakers* (2009): the creeping terror that technological
modernity, and its consumer lifestyle, may in fact have no future. Focusing on Ursula K.
Le Guin’s *The Dispossessed* (1973) and Margaret Atwood’s *Oryx and Crake* (2003), I argue that what is really being contested in the realm of ecological politics is our imaginary relationship to the future, with environmentalists calling for a re-imagined path from *now* to *then* in hopes of changing what that future holds. In these narratives I find an inseparable melding of science fiction with global environmental politics, as the rise of ecological consciousness since the 1970s presents an increasingly urgent challenge to capitalist futurity’s now-discredited dreams of an unbounded future of permanent expansion—a challenge that finds its best expression in Kim Stanley Robinson’s recent assertions of ecologically sound, self-renewing “permacultures” as a new, twenty-first-century name for Utopia.

Moving from the fraught ecological futurity of a world that *may soon die* to the survivalist horror of a world that is *already dead*—in which the apocalypse seems somehow to have already happened—my third chapter, “Zombie Life,” takes up the huge popularity of zombie narratives in the last decade to argue that the major imaginative interest of the zombie lies in the zombie apocalypse’s interrogation of late capitalist hegemony, and its concordant state racism, through fantastic depiction of its breakdown and collapse. The fantasy of unrestrained total violence against a racial Other activated by zombie narrative is fundamentally at odds with the allegedly “post-racial” politics of contemporary liberal pluralism. The first part of this chapter reasserts the biopolitical origins of the zombie imaginary through a reading of Robert Kirkman’s
popular ongoing comic series *The Walking Dead* (2003-), and attempts to come to terms with the historical and ongoing imperial violence of which the zombie has always ever been only the thinnest sublimation. In the second part of this chapter, considering the figure of the zombie as it appears in two recent Joss Whedon television series, *Firefly* (2002) and *Dollhouse* (2009), I turn to the relationship with the colonial and postcolonial imperial state and other state-like actors that has characterized the zombie myth since its development in colonial Haiti, arguing that the zombie’s strange persistence at the site of imperialism’s limit necrotizes state power in the same moment that it resurrects the possibility of resistance in those empire has declared socially dead. Through these stories we can see that the zombie apocalypse is not a world-to-come but a historical form that is ongoing—and we can consequently recast the projected futurity of zombie apocalypse as a throwing open of new possibility. The true locus of utopia in zombie fiction, I argue, is to be found not in the weak collectives of doomed survivors but, rather unexpectedly, in the “zombietopia” of the zombies themselves. From this perspective we might begin to see zombies in a new light: zombies exist in a cooperative, collectivist, radically egalitarian social context that is in many respects the radical negation of our own. The apocalyptic break of History figured by the zombies’ rise does indeed create a kind of utopia, but not for us—for *them*.

I conclude the work with a brief consideration of the way science fiction has metafictionally represented its own aspirations towards totalization and totality.
Reading Philip K. Dick’s elevation of science fiction into a mystical, quasi-theological totality in such works as *VALIS* (1981) alongside Ted Chiang’s Hugo-awarding-winning short story “Exhalation” (2009), I discuss how science fiction has sought to breach the boundaries of time, space, and literary genre by metafictionally figuring the genre *itself* as transcendent and immortal. The crucial irony is that the mode of knowledge generated in such meta-science-fiction is decidedly *un*scientific; it is instead essentially aesthetic, even, perhaps, religious. In these works we see the way science fiction has come to understand itself as something more than just a literary genre—as a strategy for understanding not just the world but even, perhaps, ourselves.
Chapter One: Billions and Billions

How small the vastest of human catastrophes may seem, at a distance of a few million miles.
—H.G. Wells, “The Star”

Lars von Trier’s surreal, contemplative film *Melancholia* (2011) juxtaposes the unhappy lives of two patrician sisters with the impending approach of a giant rogue planetoid. The suggestive name given to the planet—“Melancholia”—makes clear the film’s metaphorical asserting of unhappiness as an inescapable fact of human life, even as a force of nature. Characters speak constantly of Melancholia’s approach, agonizing over whether Melancholia will strike them or else pass them by. Characters rhapsodize Melancholia’s peculiar beauty, how wonderful it will look when it is at a razor-close but still-safe distance. Here the rhythms of sadness become as predictable as the movement of the planets; sadness has its own physics, its own momentum, mass, and gravitational pull.

Scientists have assured the public that Melancholia will not strike the Earth. With this confidence, amateur astronomer John (played by Kiefer Sutherland) is so entranced by the beauty of Melancholia’s close approach that he can hardly pull himself from his telescope. But his wife, Claire (Charlotte Gainsbourg) is much more suspicious, constantly searching the Internet for updates on Melancholia’s predicted trajectory and going so far as to stash suicide pills in the house if it turns out they will be needed. The
two fight about the possibility that Melancholia could soon destroy the life they have tried to build together. “Tomorrow evening Melancholia will pass us by, and you’ll never have to see it again,” John promises her. But of course such promises are only air, and the scientists are wrong after all. Melancholia and the Earth are in a “dance of death”; Melancholia misses the Earth initially, but loops around and hits after all several days later. The planet is completely destroyed; all life is killed.

Claire’s predicament, in some sense, is the bleak, Ozymandian fate of the human race on every level: individuals face eventual illness and inevitable death; families lose their members; nations fall; in time all achievements turn to dust and ruin. She suffers because of her attachment to life, her desire for things go on forever as they have. Justine (Kirsten Dunst), her depressed sister, takes a different tact. “The earth is evil,” she tells her sister. “We don’t need to grieve for it.” There is no life anywhere else in the universe, she goes on, and no afterlife either: “When I say we’re alone, we’re alone. Life is only on earth, and not for long.” To Justine, if not to Claire, this is clearly a comfort. Oddly, it is only the cosmic pessimism of Justine that seems capable of confronting the coming collision with Melancholia; she helps Claire’s son Leo gave sticks to build a “magic cave” out of sticks, while the once-optimistic John sullenly overdoses on the pills and Claire becomes increasingly catatonic. In the lengthy, transcendent final shot of the film, with the three surviving characters huddled in the magic teepee, Justine and Leo remain calm and accepting of their fate, while Claire still impotently rages, screaming and
sobbing as Melancholia draws closer and closer and finally impacts.

The viewer of *Melancholia* is made by von Trier to share Justine’s depressed anticipatory perspective through the innovative use of a lengthy, slow-motion preamble, which (like the final scene of destruction) is set against the film’s main musical theme, Wagner’s prelude to *Tristan und Isolde*. Over seven minutes, the preamble summarizes the major events of the film, culminating in an explosive view-from-space (the ultimate long-shot) of the coming collision between Earth and Melancholia. We experience, this is to say, Melancholia twice; the second, narrative encounter is therefore not a shock so much as a repetition, the culmination of what we always knew would happen. The melancholic perspective that had previously disrupted the entirety of Justine’s life becomes, in the face of Melancholia, a kind of unexpected prophylactic for the final tragedy; she has already rehearsed her own misery and death so many times that she is ready when it finally happens for real.

In this sense the viewer of *Melancholia* may in fact have needed no preamble at all—anyone conversant with popular culture in 2011 has already rehearsed their own deaths, and by extension the end of certain privileges of class, race, and nation; the end of Western civilization; the end of civilization as such; and the end of all human life, through a lifetime of imagined speculative catastrophes in literature, television, and film. Like Justine we too have already experienced the end of our world on all scales, over and over, every Saturday night at the cinema. This chapter traces the earliest
history of the production and reception of science fictional apocalypse to argue that these stories have always been bound up with the kind of anticipatory pessimism exemplified by von Trier’s characters, on both personal and political levels. Such narratives, I argue, generate cognitive maps of the present that are operating on all temporal and spatial scales simultaneously: anticipatory and retrospective, global (even cosmic) and extremely local. I have suggested in the introduction that one of the unique features of the “single global technological regime” (Csicsery-Ronay) that Hardt and Negri call Empire is that it is both spatial and temporal. We need think only of the way imperial forms of violence have historically been justified by appeals to a transcendent historical totality that “demands” white hegemony and dominance across the globe as a historical necessity, to the diminishment and exclusion of all other forms of human life. Empire attempts to casts itself backward into the past (to make the present the privileged, inevitable outcome of a historical process) and forward into the future (to make the present moment continuous and permanent). This is to say that empire crafts a fantasy of itself, and its own immortality, that justifies its own perpetuation at whatever cost. This fantasy hits a limit in the face of cosmic catastrophe, which is at once both inescapable and utterly contingent, allowing no amelioration—mocking empire’s Ozymandian attempts at crafting a permanent future for itself. As with an

---

1 Indeed, Shelley’s ruined, half-sunk Colossus has frequently been taken up by science fiction as an archetypal image for the future ruins of contemporary America. See my blog post
thanatophobe obsessed with their own mortality, the mere thought that a disaster *might* happen becomes proof that it *will* happen; indeed, in many cases these scalar catastrophes are commonly presented with a doomed mood as if they have already happened, even when the actual disaster purportedly under discussion will not happen for centuries, even millennia.

The fantasy of apocalypse, in short, rehearses “the end of everything” almost to the point of a neurotic compulsion, both with the utopian hope of finding some way “out” of the disaster and with the simultaneous depressed, anti-utopian resignation that no such escape is possible. Each in their own way these stories reflect, advance, deconstruct, or unpack this totalizing drive of European empire, especially with respect to territorial annexation and imperial violence. I link the discovery of a evolutionary and entropic universe to imperial totality to demonstrate empire’s increasingly desperate need at the dawn of the twentieth century to find some way out of entropic and evolutionary time. The science fiction genre not only records such attempts to imagine an escape from the inescapable, and their failures—it begins to attempt to reconcile us to inevitability.

In essence this chapter seeks to establish the relationship between early science fiction disaster narratives and cultural ideologies present in British and American culture at the dawn of the twentieth century, as both nations become preoccupied with questions of imperial longevity and legitimacy. I argue the ideologies and anxieties that attend this moment of empire are especially manifest in that period’s science fiction because of the growing importance of science in this period both as a tool of imperial domination and as a knowledge practice aspiring to totalization in its own right, grasping always towards so-called “theories of everything” while at the same moment continually decentering and devaluing of humanity’s importance in the larger cosmos. As Cornell Robu has noted: “science enforces the sublime” (23). I trace this relationship through several crucial periods of early SF, beginning with the work of H.G. Wells, continuing to the early magazine period in the U.S., and culminating in two outsized cosmological histories of Olaf Stapledon: Last and First Men and Star Maker. Both these novels depict a fundamentally entropic, essentially hopeless universe in which the actions of human beings have little or no ultimate significance, and seek to craft a utopian politics that could somehow accommodate itself even to an environment of such totalizing cosmic pessimism.
I. Three Ways of Looking at Apocalypse: H.G. Wells

Utopia as Event: “The Star”

One of the earliest templates for the popular comet-collision subgenre of which Melancholia is a recent example is Herbert George Wells’s “The Star,” first published in the Christmas issue of the weekly illustrated newspaper The Graphic in 1897. Unlike the familiar Star of Bethlehem, Wells’s “great white star, come suddenly into the westward sky” heralds not salvation but disaster (41). As is typical of this sort of narrative, the presence of the star reorients the whole of humanity in relation to it, through the establishment of a kind of astronomical sublime. Anticipating the “Blue Marble” photographs derived from manned spaceflight which will be discussed in chapter two, the cognitive estrangement activated by the narrative assertion of the star creates a new species universality on Planet Earth: “Sturdy Boers, dusky Hottentots, Gold Coast Negroes, Frenchman, Spaniards, Portuguese stood in the warmth of the sunrise watching the setting of this strange new star” (42). Wherever one is standing on the planet, one can see the star, an Event (in Badiou’s sense) from outside history that creates the possibility of a new universal human subject out of this new mutual precarity—perhaps, we might say, a new species being.

The star’s approach inspires existential terror first in those primitive places “where science has not yet reached” (where the star is understood as a ominous portent of wars and pestilences [41])—and then, as the star grows larger and brighter, very
quickly in the supposedly rational, supposedly scientific halls of Europe as well. Across all barriers of race, gender, nationality and class, Wells’s nameless characters are seen to pass repeatedly between themselves a simple three-word phrase: “It is nearer” (42-43). The overall effect of this transmission of “it is nearer” is to sketch out of this network of whispers and telephone wires a crude cognitive map of the social totality—anxiety about the comet passes between “men writing in offices” to “pretty women” to “lonely tramps” and “schoolboys” (42-43). Finally the worst fears are confirmed by a sleepless “master mathematician,” who has labored tirelessly day and night to project the star’s ultimate trajectory: the star will in fact strike the earth, and “Man has lived in vain” (43-44). This news, too, travels out through the network of communication technologies into the world at large, over roads, steamships, telephone wires. For a time, most people are able to ignore the prophecy of doom:

In all the cities the shops, save one here and there, opened and closed as their proper hours, the doctor and the undertaker plied their trades, the workers gathered in the factories, soldiers drilled, scholars studied, lovers sought one another, thiefed lurked and fled, politicians planned their schemes. (45)

In their denial the people of Earth are supported by a kind of conspiracy between the media and the churches, both of which refuse to take seriously the scientists’ prophecy of doom. But soon the star becomes much too large to ignore. Biblical disasters strike the world: heat, floods, earthquakes. North and South America and Asia are first burned
and then drowned, with millions dying; by happenstance, only Europe, still badly
damaged, is spared.

Here the story ends, with “men, hunger-driven and gathering courage only
slowly ... creep[ing] back to their ruined cities, buried granaries, and sodden fields” (48).
The situation that obtains after the visit of the comet is not presented to us with any
detail. We are given a hint of a changed global climate, now much hotter, with Iceland
and Greenland suddenly temperate; we are told in a single brief sentence of “the new
brotherhood that grew presently among men” (49), suggesting the possibility of a new
utopia for mankind arising out of the disaster (a common trope in these stories).² In this
sense, perhaps, the Star is somewhat like the Star of Bethlehem after all.

But the story ends instead with a rather different glimpse of totality than world
peace: the viewpoint of Martian astronomers, who are fascinated by the spectacle of a
cosmic near-miss. “Considering the mass and temperate of the missile that was flung
through our solar system into the sun,” one wrote, “it is astonishing what a little damage
the earth, which it missed so narrowly, has sustained. All the familiar continental

² The unhappy utopia emerging out of this situation—a “new brotherhood” whose unacknowledged
antecedent is the horrible death of nearly every nonwhite person on the planet—suggests the complicated
interrelationship between utopia and empire in science fiction, as discussed in the introduction. A similar
moment recurs near the end of War of the Worlds (1898), when we are told “It may be that in the larger
design of the universe this invasion from Mars is not without its ultimate benefit for men; ... it has done
much to promote the conception of the commonweal of mankind” (163). Phillip Wegner argues that
catastrophe here serves the purpose of “vanishing mediator,” enabling “the literal production of a global
nation-state, “the commonweal of mankind,” and freeing up Wells’s literary imagination to map it” (Wegner
110). Wells later returns to the comet subgenre in his utopian In The Days of the Comet (1906), which sees
humanity transformed by the new gases present in the atmosphere after Earth passes through a comet’s tail.
markings and the masses of the seas remain intact, and indeed the only difference seems to be a shrinkage of the white discoloration (supposed to be frozen water) round either pole. Which only shows how small the vastest of human catastrophes may seem, at a distance of a few million miles” (49). An unparalleled disaster is transferred, through a shifting of scale from the human to the astronomical, into a minor event barely worth of a footnote in a Martian geological textbook—a totalizing cosmic perspective from which the human experience of the disaster is not only irrelevant, but quite literally invisible.  

Here the real importance of the title of the story—“The Star”—becomes clear. Not simply a pun on the Christmas Star which the story in its first publication would have appeared to reference, “The Star” is an early example of the ways in which stars (and outer space phenomena more generally) are for Wells the token of the apocalyptic paranoia that generated his fiction. As Darko Suvin notes, the hyperbolic spatial and temporal scales generated by astronomically distant stars become linked for Wells with evolutionary history as such; consequently they either “harbor hazards of which man is

3 In the first half of Nicolas Camille Flammarion’s Le Fin du Monde (1894), republished in English as Omega: The Last Days of the World, a striking parallel situation obtains. Flammarion, widely considered an important influence on both Wells and Olaf Stapledon, composes the first half of Le Fin du Monde as if it were a story about a comet collision centered on Rome that destroys the planet. A new human universality is generated that unites rationalist Europe and “uncivilized people” in Africa, South America, and Asia—but it is the universality of a humanity “prostrated with terror” (168) and “haunted by the fear of unknown perils” (170). The comet does strike the earth, killing hundreds of thousands in Paris alone. But here the spectacular destruction of the world offered by Flammarion turns out to be a kind of bait and switch; humanity quickly recovers, and the true “end of the world” of the title only occurs several million years later, in the entropic breakdown of the sun. This second, final Omega will be repeated in both Wells’s The Time Machine and Stapledon’s Star Maker.
unaware”—as in the catastrophic mass extinctions that drive species evolution⁴—or they “provide man with an element of permanence against which evolution can be measured, and produce in the individual a sense of awe at their infinite magnitude” (H.G. Wells 80-81). This is likewise the scalar logic of empire’s encounter with history: a search for threats and hazards that might threaten the stability of the empire, on the one hand, and on the other a sense of the permanence of species-time against which any particular imperial moment or “accomplishment” comes to seem hopelessly small and impermanent. The stars, therefore, are simultaneously a marker of both radical contingency (threat) and totalizing stability (cosmos)—a symbolic conjuncture that has generated a century of science fictional extrapolations from both Wells and his successors.

**Utopia Denied: The Time Machine**

The 1897 publication of “The Star” is bookended by two Wells novels which separately exemplify each of its two key strains of science fictional spatio-temporality. More than any other works of the period, the use of hyperbolic scale in The Time Machine (1895) and War of the Worlds (1898) establish the conventions and boundaries of the science fiction genre, and serve as inescapable templates for the century of science

---

⁴ Indeed, as Suvin goes on to say, for Wells “evolution meant a constant progress towards death” (81)—an interpretation of Darwinian thought that remains more or less scientifically accurate (if deeply pessimistic) over a century later.
fiction to come. Both novels, like “The Star” itself, are structured around the anxieties of scale that I argue is central to science fiction at the moment of its inception, as each attempts to make visible a social-historical totality that is otherwise impossible to cognize. That Wells’s imprint marks so heavily later science fiction should be no surprise, as he is one of a handful of writers (among with Mary Shelley, Jonathan Swift, Jules Verne, J.-H. Rosny aîné, and Edgar Allen Poe, with Wells having arguably a better claim than any of the others) who might plausibly claim to have “invented” science fiction; Patrick Parrinder notes of Wells that he is “the pivotal figure in the evolution of scientific romance into modern science fiction,” adding “example has done as much to shape SF as any other single literary influence” (10).

In *The Time Machine*, we find Wells not only playing with spatial and temporal scale—we find time and space quite literally made equivalent. Borrowing from Edwin A. Abbott’s “Flatland” and the speculative writings of Charles H. Hinton the idea that there might be a fourth dimension beyond the three visible ones, and anticipating

---

5 Abbott’s book in particular is a spiritual predecessor to Wells’s *Time Machine*. The novel (at once an intriguing mathematical thought experiment and a wonderful satire on the arrogance of cultural elites) concerns the experiences of A. Square, living in the two-dimensional world of Flatland, after he is visited by a Sphere from the third dimension. The Sphere’s ability to intersect with Flatland at any number of interstices and angles gives him the ability to grow and shrink at will, as well as the ability to disappear altogether and (from the perspective of the Flatlander) teleport. The Square himself demonstrates similar powers during his own visits to Lineland (one spatial dimensions) and Pointland (zero spatial dimensions). The Square is eventually prosecuted as a heretic for telling his fellow Flatlanders of the existence of the invisible third dimension; near the end of the novel the Square speculates to the Sphere that there could be fourth, fifth, and additional dimensions beyond the three the Sphere can experience, a thought at which the Sphere himself considered a monstrous heresy. Wells’s innovation was to name time as the fourth of these
Einstein’s “On the Electrodynamics of Moving Bodies” by a decade, Wells’s unnamed Time Traveller posits Duration as a dimension alongside Length, Breadth, and Thickness (2)—albeit a dimension in which unassisted humans may travel in only the one direction. “There is no difference between Time and any of the three dimensions of Space,” the Time Traveller proclaims, except that our consciousness moves long it” (2-3). The unexpected—thought in retrospect, completely natural—consequence of this idea is the possibility of some means of moving volitionally through this dimension, which the Time Traveller has already invented when our story begins. The invention of the Time Machine allows the Time Traveller—symbolically representing England itself—access to the historical totality. One might (as one of the Time Traveller’s interlocutors suggest) travel back to the originary moment of British empire, the Battle of Hastings in 1066, and “verify the accepted account”—or one might go back still further, to the very dawn of Western Civilization itself, and “get one’s Greek from the very lips of Homer and Plato” (6). The same possibilities naturally lie in the other temporal direction; with a Time Machine one can visit the future, either to simply see what will happen or else to race ahead of one’s investments to reap the rewards of compound interest immediately (if at the risk, as the book’s narrator promptly suggests, of discovering that future society is dimensions. See Edwin Abbott, The Annotated Flatland: 153-154 for further elaboration of the early scientific and science fictional history of the idea of a fourth dimension.
now “erected on a strictly communistic basis”) (6). Just as England now commands a
global empire, then, the Time Machine offers the possibility of an empire that commands
the totality of time itself.

In *Metamorphoses of Science Fiction* Suvin names *The Time Machine* as a model
for SF as important (and perhaps more important) than More’s *Utopia*, claiming that “all
subsequent significant SF can be said to have sprung” from Wells’s “basically materialist
look back at human life” and “rebelliousness against entropic closure” (221). Such
outsized accolades for *The Time Machine* are common. Jameson calls *The Time Machine
“the first modern SF novel” (Archaeologies 51) and assigns the inauguration of SF as a
genre to the year of its publication, 1895 (57). Brian Stableford claims in the *Cambridge
Companion to Science Fiction* that

Wells single-handedly laid the ground work for the distinctive methods
of modern sf, employing the narrative technique he had developed in *The
Time Machine*, gaudily seasoned with melodrama, to reinvigorate the
narrative framework of the moral *conte philosophique* far more
effectively than anyone had previously contrived. (25)

Carl Freedman, too, in *Critical Theory and Science Fiction*, calls Wells not only “the
inventor of the science-fictional utopia” but “the consolidator or second founder [after
Mary Shelley] of science fiction,” taking *The Time Machine* as the “key text” in the
emergence of science fiction out of the nineteenth-century genre of utopian writing:

Not only does this novel inaugurate the science-fictional utopia; it is also
(and no coincidentally, as we recall) the first text in which the crucial
temporal and historical dimension of science fiction becomes completely
explicit. Indeed, one might argue that, if science fiction is invented by
Mary Shelley with *Frankenstein*, it is practically reinvented with Wells’s pioneering text. The synthesis of science fiction with literary utopia produces the most critical utopia, in formal terms, to date, and, at the same time, establishes new utopian potentialities for science fiction itself. (81)

The two major incidents of time travel in *The Time Machine* correspond to each of Suvin’s two axes respectively: the Time Traveler travels first to the Year 802,701 (retrospective futurity), and then beyond, to the end of the Earth itself (entropic closure).

In the book’s most imaginative sequence—which borders on the psychedelic—the Time Traveller takes hold of precisely this temporal totality and witnesses history from a supertemporal, superhuman perspective when he activates the machine.⁶

First, the Time Traveler experiences this temporal dislocation only on the local level, watching his maid cross the room at superspeed: “The laboratory got hazy and went dark. Mrs. Watchett came in and walked, apparently without seeing me, towards the garden door. I suppose it took her a minute or so to traverse the place, but to me she seemed to shoot across the room like a rocket” (20). Then he hits the most extreme lever, causing time to go faster and faster around the machine:

> The night came like the turning out of a amp, and in another moment came to-morrow. The laboratory grew faint and hazy, then fainter and

---

⁶ We should note a contradiction in the text with respect to the operation of the machine; despite the promises of the introduction, the Time Traveler is not actually traveling in Time as a dimension, as his trip itself has Duration; rather, the machine actually allows him to affect the velocity of time, as well as its vector. In this respect the Machine has the same effect on time as the transportation and communication technologies of the period had on spatial difference. By foreshortening the distance between remote locations, trains, steamships, and telegraphs gave the appearance of a shrunken world; here, technology is seen accomplishing the same with respect to time, bringing the past and the future in much closer contact with the present.
ever fainter. To-morrow night came black, then day again, night again, day again, faster and faster still… As I put on pace, night followed day like the flapping of a black wing. The dim suggestion of the laboratory seemed presently to fall away from me, and I saw the sun hopping swiftly across the sky, leaping it every minute, and every minute marking a day. I supposed the laboratory had been destroyed and I had come into the open air. (20)

As the Machine continues to accelerate, day and night become indistinguishable: the sun becomes a “streak of fire” permanently splayed across the sky, the moon a “faint fluctuating band” (21). The seasons become instantaneous, flashes of color across his vision. Trees grow and mature like “puffs of vapour, now brown, now green,” then disappearing (21). The Time Traveller sees “huge buildings rise up faint and fair, and pass like dreams”; even the surface of the earth becomes plastic and pliable, “melting and flowing under my eyes” (21).

At first this situation brings the Time Traveller only seasickness, nausea, and the “horrible anticipation … of an imminent smash” (20)7—but as time goes on he begins to experience something like the vertiginous ecstasy of F.T. Marinetti’s Futurist Manifesto of fifteen years hence in “a kind of hysterical exhilaration”: “…with a kind of madness

---

7 This line seems to presage an unexplained event at the end of the novel, in which a window pane is blown in at the moment the Time Traveller leaves a second time (105), suggesting perhaps that the Time Machine has crashed into something—likely itself—and that this is why the Time Traveller never returns. See also page 22, where the Time Traveller speculates on the explosion that would be caused if he were to rematerialize his Machine in space already occupied by matter. Had the Morlocks not moved his machine, this might have been his fate on his original return trip.

8 “We declare that the splendor of the world has been enriched by a new beauty: the beauty of speed. A racing automobile with its bonnet adorned with great tubes like serpents with explosive breath ... a roaring motor car which seems to run on machine-gun fire, is more beautiful than the Winged Victory of Samothrace” (13).
growing upon me, I flung myself into futurity” (21). Only when he seems to have reached a Utopian pinnacle of history—with great, massive buildings far larger than any of his own era, and a permanent temperate climate that seems to have banished winter altogether (22)—does he decide to stop and see “What strange developments of humanity, what wonderful advances upon our rudimentary civilization” have been achieved since his own time (21).

Exiting the Time Machine, the Narrator discovers he has come to rest at the base of a giant Winged Sphinx carved of white marble—a technological and artistic achievement that suggests at once advanced architectural technology and a return to the primitivism of early civilizations. The Sphinx is “greatly weather-worn” (23) and its bronze platform covered in verdigris, the Traveller’s first suggestion of the decadent civilization into which he has traveled.

The strangeness of an ancient White Sphinx in central London brings the enormity of the Time Traveler’s project to the forefront of his consciousness, and he begins to panic about the possible changes that had happened to mankind since his travels in time began: “What if cruelty had grown into a common passion? What if in this interval the race had lost its manliness, and had developed into something inhuman, unsympathetic, and overwhelmingly powerful? I might seem some old-world savage
animal, only the more dreadful and disgusting for our common likeness—a foul creature to be incontinently slain” (24).⁹

This racialized dialectic between being seen as a “foul creature” worthy only of death, and the slayer of such a foul creature, soon reaches its culmination in the relationship between the Eloi and the Morlocks, the two species of humanity that populate 802,701 A.D. The Time Traveler encounters first the Eloi, who are “very beautiful and graceful,” but “slight”—matching a Victorian stereotype of upper class privilege down to a flushed face that is “reminiscent of the beautiful kind of consumptive” (25). The Morlocks, in contrast, are “ape-like” (51), and “nauseatingly inhuman”—and the Time Traveller comes to view them with precisely the racial hatred he had originally worried would be directed at him:

I rejoined her with a mace in my hand more than sufficient, I judged, for any Morlock skull I might encounter. And I longed very much to kill a Morlock or two. Very inhuman, you might think, to want to go killing one’s own descendents! But it was impossible, somehow, to feel any humanity in those things. Only my disinclination to leave Weena, and a persuasion that if I began to slake my thirst for murder my Time Machine might suffer, restrained me from going straight down to the gallery and killing the brutes I heard. (78)

A pseudo-Darwinian logic of “struggle” motivates Wells’s imagined anti-utopia; life and vitality are necessarily predicated on conflict, rendering either a bourgeois or a socialist utopia impossible. Darwin disproving Marx, the class struggle here leads not to

⁹ Wells chooses a parallel formation (“human likeness) in his discussion of the genocidal violence that wiped out the Tasmanians in chapter one of War of the Worlds.
revolution but to speciation. Historical progress, in this vision, inevitability plateaus, and once the human race is removed from the creativity-sparking conditions of “the struggle for existence” it quickly backslides into total decadence, then bovine somnolence.

The Eloi represent a decadent English upper class, whose material comfort has removed any need for creativity or intelligence:

'Social triumphs, too, had been effected. I saw mankind housed in splendid shelters, gloriously clothed, and as yet I had found them engaged in no toil. There were no signs of struggle, neither social nor economical struggle. The shop, the advertisement, traffic, all that commerce which constitutes the body of our world, was gone. It was natural on that golden evening that I should jump at the idea of a social paradise. The difficulty of increasing population had been met, I guessed, and population had ceased to increase.

'But with this change in condition comes inevitably adaptations to the change. What, unless biological science is a mass of errors, is the cause of human intelligence and vigour? Hardship and freedom: conditions under which the active, strong, and subtle survive and the weaker go to the wall; conditions that put a premium upon the loyal alliance of capable men, upon self-restraint, patience, and decision. And the institution of the family, and the emotions that arise therein, the fierce jealousy, the tenderness for offspring, parental self-devotion, all found their justification and support in the imminent dangers of the young. Now, where are these imminent dangers? There is a sentiment arising, and it will grow, against connubial jealousy, against fierce maternity, against passion of all sorts; unnecessary things now, and things that make us uncomfortable, savage survivals, discords in a refined and pleasant life.

Later in the novel the Traveller confirms again in miniature this dictum:

'I grieved to think how brief the dream of the human intellect had been. It had committed suicide. It had set itself steadfastly towards comfort and ease, a balanced society with security and permanency as its watchword,
it had attained its hopes—to come to this at last. Once, life and property must have reached almost absolute safety. The rich had been assured of his wealth and comfort, the toiler assured of his life and work. No doubt in that perfect world there had been no unemployed problem, no social question left unsolved. And a great quiet had followed.

‘It is a law of nature we overlook, that intellectual versatility is the compensation for change, danger, and trouble. An animal perfectly in harmony with its environment is a perfect mechanism. Nature never appeals to intelligence until habit and instinct are useless. There is no intelligence where there is no change and no need of change. Only those animals partake of intelligence that have to meet a huge variety of needs and dangers. (90)

The Morlocks, meanwhile—descendants of a permanently enslaved, never-rebelling proletariat—became increasingly apelike and simple in their tending of the machines that provide for both the Eloi and themselves. (“Even now,” Wells asks, “does not an East-end worker live in such artificial conditions as practically to be cut off from the natural surface of the earth?” [56]) This state of affairs remains in stability only so long as the Morlocks’ food supply remains uninterrupted. But something must have happened, the Time Traveller reasons, to alter this decadent balance:

‘So, as I see it, the Upper-world man had drifted towards his feeble prettiness, and the Under-world to mere mechanical industry. But that perfect state had lacked one thing even for mechanical perfection—absolute permanency. Apparently as time went on, the feeding of the Under-world, however it was effected, had become disjointed. Mother Necessity, who had been staved off for a few thousand years, came back again, and she began below. The Under-world being in contact with machinery, which, however perfect, still needs some little thought outside habit, had probably retained perforce rather more initiative, if less of every other human character, than the Upper. And when other meat failed them, they turned to what old habit had hitherto forbidden. So I say I saw it in my last view of the world of Eight Hundred and Two Thousand Seven Hundred and One. It may be as wrong an explanation as
mortal wit could invent. It is how the thing shaped itself to me, and as that I give it to you. (91)

Hence the establishment of a world to which communism never came—a world where the class and colonial relations of nineteenth-century capitalism are both hyperbolized and naturalized as they are, on the level of allegory, rendered permanent through speciation.10

Thus *The Time Machine* occupies as liminal position at the border between SF and its close cousin satire, to the extent that its speculative biology is not meant to be taken as a scientifically legitimate, accurate prognostication of future history, but is rather a dialectical, metaphorical representation of class relations in Victorian England. The narrative perspective forces the above evolutionary reading into the foreground, but other versions as possible. John Rieder’s reading of the novel in *Colonialism and the Emergence of Science Fiction* notes the ways in which the Eloi (nominally the descendents of the English upper-class) also draw from colonialist rhetoric about superstitious, easily overawed primitives (87), while the machine-minded, clever Morlocks (despite their monstrous appearance) are much more like the bourgeois Time Traveler than he seems ready to admit—making his loathing for the Morlocks perhaps a case of “disavowed self-recognition” (86). One can only take the book as a naïve, one-

---

10 Darko Suvin’s analysis focuses intently on this speciation, paying particular attention to the excised kangaroo/crab version of the entropy chapter which sees man devolving (in a reverse Descent of Man) into “as many species as the descendents of the mud fish who fathered all the land vertebrates” (112). See *Metamorphoses*, chapter 10.
way ratification of Social Darwinist ideology to the extent that one misses the many
clues Wells leaves linking the Time Traveller not to the Eloi, but to the Morlocks, most
notably his own metaphorical (and literal) consumption of his human brethren for his
upper-class survival in the capitalist present. (As Rieder notes, the Time Traveller’s
return to his present is marked by an eager desire for meat [89].) Likewise, as Paul K.
Alkon suggests, when the Time Traveller visits the museum-like Palace of Green
Porcelain in search of useful materials to fight the Morlocks and recover his time
machine, he finds “in its exhibits the entire history of the human race and indeed on life
on our planet” (52)—but draws from this archive of past, present, and future technology
only the most primitive tools (matches, camphour, and a club), suggesting that the
“civilization” the Time Traveller represents has not in fact had so far to fall.

But *The Time Machine* does not end here. Having only barely escaped the
Morlocks, the Time Traveller flies further forward still, encountering at last the last
lurchings of life on an entropic Planet Earth. Here grand utopian political ambitions can
do us no good; nothing can stave off “the shattering implications of time’s inhuman
duration” (Alkon 50). “A sense of abominable desolation” now hangs over all things; the
Time Traveller calls the effect “appalling.” He travels on, further and further, finding
more and more desolation and darkness until at last:

The darkness grew apace; a cold wind began to blow in freshening gusts
from the east, and the showering white flakes in the air increased in
number. From the edge of the sea came a ripple and whisper. Beyond
these lifeless sounds the world was silent. Silent? It would be hard to
convey the stillness of it. All the sounds of man, the bleating of sheep, the cries of birds, the hum of insects, the stir that makes the background of our lives—all that was over. As the darkness thickened, the eddying flakes grew more abundant, dancing before my eyes; and the cold of the air more intense. At last, one by one, swiftly, one after the other, the white peaks of the distant hills vanished into blackness. The breeze rose to a moaning wind. I saw the black central shadow of the eclipse sweeping towards me. In another moment the pale stars alone were visible. All else was rayless obscurity. The sky was absolutely black (98-99).

In this transcendent vision of ultimate entropic sublimity, the Traveler spies a moving tentacled thing, and the sight of this monstrosity causes him almost to faint—but “a terrible dread of lying helpless in that remote and awful twilight sustain[s]” (118) him sufficiently to return to his machine and help him begin the long journey back home to the present, a place and time the Traveller’s journeys have revealed both hopelessly flawed and inevitably doomed to total entropic ruin.

George Woodcock draws the distinction between the “anti-Utopians” and “ex-Utopians,” taking Wells as one of the latter category along with George Bernard Shaw and Arthur Koestler. These ex-Utopians “have lost their original Left perspective and abandoned all hope” (qtd. in Moylan, Scraps of the Untainted Sky 124); their originary utopianism is “followed by a fall into a second disillusionment” that concludes the human project is “doomed to end in pessimistic negation” (qtd. in 124). Darko Suvin notes this mood in his reading of the Time Machine as well, noting that Wellsian SF ambiguously “converges upon absence of value and existence, a lay hell” (Metamorphoses 237): “Finally, as in the magnificent eclipse description, the two
allegorical protagonists Everyman and Death meet again: and it is not Everyman who wins” (242). And this is indeed how The Time Machine concludes: the “grand narrative of entropy and devolution” that Wells inaugurates (Archaeologies 123)—whose triumph is signaled in the novel by the Time Traveller’s unexplained, permanent disappearance into the mists of time at the novel’s close—totally swamps whatever meager consolation the frame narrator supposedly takes from Weena’s withered petals (Time Machine 108), leaving us with a sense that pessimism and despair have forever won the day.

**Utopia Achieved?: War of the Worlds**

On the other end of “The Star” we have Wells’s 1898 War of the Worlds, the template for a century of alien invasion narratives that would follow (making it, for John Rieder, perhaps the quintessential SF novel). If, in “The Star,” the genocidal elimination of the nonwhite population of the world was an accidental consequence of a catastrophe, in War of the Worlds we see it instead as part and parcel of the march of modernity. Specifically, War of the Worlds reimagines England not as the perpetrator of imperial war but as its victim as a critique of England’s own brutal imperial practices. Wells’s

---

11 “He, I know — for the question had been discussed among us long before the Time Machine was made— thought but cheerlessly of the Advancement of Mankind, and saw in the growing pile of civilization only a foolish heaping that must inevitably fall back upon and destroy its makers in the end. If that is so, it remains for us to live as though it were not so. But to me the future is still black and blank—is a vast ignorance, lit at a few casual places by the memory of his story. And I have by me, for my comfort, two strange white flowers—shrivelled now, and brown and flat and brittle—to witness that even when mind and strength had gone, gratitude and a mutual tenderness still lived on in the heart of man” (108).
Martians are not simply generic alien others; they are colonizers; from the novel’s first sentence Wells attributes to the Martians the precise racial and cultural superiority that the British attributed to themselves. “Intelligences greater than man’s,” humanity is “scrutinized and studied” “keenly and closely” as if by an expeditionary force looking to make contact with a heretofore uncontacted tribe (3). From the Martian perspective, humanity day-to-day life is no more sophisticated or worthy of consideration than “the transient creatures that swarm and multiply in a drop of water” (3).

The Darwinian ladder of evolutionary progress is here reimagined; the Martians have “minds that are to our minds as ours are to those of the beasts that perish” (3). The Martians derive their superiority from a different sort of temporal shift; they originate in the future. Because the “nebular hypothesis” (the book explains) holds that the outer planets formed first, Mars must therefore be significantly older than the Earth, with life consequently appearing on that planet long before it appeared here (3-4). The Martians, in this respect, represent not only a competitor to humanity, but also the future of humanity — humanity (and especially European humanity) perfected, at the apex of its powers. In his reading of War of the Worlds John Rieder calls special attention to the Martians’ cyborgian employment of and reliance on machines, noting the extent to which (as we will see) the Martians’ “combination of prosthetic supplementation and organic atrophy” would be imitated in subsequent prognostications of the future of man (Colonialism 111-112).
But (recalling the grim vision of entropic collapse that concludes *The Time Machine*) for Wells the future always threatens degeneration and breakdown as much as it does progress and advancement: “Nor was it generally understood that since Mars is older than our earth, with scarcely a quarter of the superficial area and remoter from the sun, it necessarily follows that it is not only more distant from time’s beginning but nearer its end” (4). The “secular cooling that must someday overtake our planet” is already far advanced on Mars; the planet has become much too cold to sustain Martian civilization, a climatological crisis that has “brightened their intellects, enlarged their powers, and hardened their hearts” (4). The Martians look inward towards the Sun—into, that is, their own past, now long to them—and see “a morning star of hope, our own warmer planet, green with vegetation and grey with water, with a cloudy atmosphere eloquent of fertility” (4).

In this sense the Martians turn out to occupy the precise futurological relationship towards Britain that Britain claimed to occupy towards its imperial holdings: a superior being from a more advanced historical era, forced to invade its own past in order to acquire resources the colonized are making improper or inferior use of. Almost a hundred years after Wells, in *Time and the Other*, Johannes Fabian would describe this kind of retemporalization as imperialism’s primary strategy for justifying imperial violence: “With the help of various devices of sequencing and distancing one assigns to the conquered populations a different time” (29-30). In case the point might be
too subtle, Wells is sure to remove any possible doubt, making the parallel explicit:

“And before we judge [the Martians] too harshly we must remember what ruthless and utter destruction our own species has wrought, not only upon animals, such as the vanished bison and the dodo, but upon its inferior races. The Tasmanians, in spite of their human likeness, were entirely swept out of existence in a war of extermination waged by European immigrants, in the space of fifty years. Are we such apostles of mercy,” Wells pointedly asked, “as to complain if the Martians warred in the same spirit?” (4-5)

That human life already exists here on Earth is for the Martians of no real consequence: the Martians share a nineteenth century capitalist’s Social Darwinian ideology that “life is an incessant struggle for existence” (4). Advanced as they are, “we men, the creatures who inhabit this earth, must be to them at least as alien and lowly as are the monkeys and lemurs to us”—and our planet consequently “crowded only with what they regard as inferior animals” (4). The need to expand—to acquire new resources and stave off collapse—demands that the Martians “carry warfare sunward” (4) in the name of their own survival. And—much like the Morlocks of The Time Machine’s nightmarish future—the brutality of this domination is symbolized by cannibalism that

---

12 John Rieder, too, focuses on this connection to the Tasmanian genocide, noting George Stocking’s observation that Victorian anthropologists were able to compartmentalize their horror by reimagining Tasmanians as “living representatives of the early Stone Age” whose extermination merely “[placed] the Tasmanians back into the dead prehistoric world where they belonged” (Stocking 282-283, qtd. in Colonialism 5).
suggests regression rather than progress: the Martians drink our blood, suggesting that they are at once “the apex of technological sophistication and exemplars of the most repulsive savagery” (Colonialism 134).

The logic of the War of the Worlds narrative is therefore one in which the “future” (Mars / Europe / U.S.) is understood to be invading its own evolutionary “past” (Earth / Tasmania / the Global South) to secure its continued existence. And this was precisely the racist logic employed by the colonial imaginary to justify colonial and imperial violence: whiteness is understood to be humanity’s “most advanced” form, and other races are ideologically coded as (at best) primitive or (at worst) dangerously obsolete, subject to disruption, displacement, and even extermination in the name of the European arc of history. The early “strange horror” of the racial encounter with the Martian—“vital, intense, inhuman, crippled and monstrous,” the Martians are drooling, tentacled and have “one might say, a face” (17)—is therefore inevitably replaced by mid-novel with the recognition that the Martians descend “from beings not unlike ourselves” (114-115).13

---

13 In fact, that the course of human evolution would take a Martian form had already been predicted within the diegetic world of the novel by a Wellsian “speculative writer of quasi-scientific repute”: His prophecy, I remember, appeared in November or December, 1893, in a long-defunct publication, the Pall Mall Budget, and I recall a caricature of it in a pre-Martian periodical called Punch. He pointed out—writing in a foolish, facetious tone—that the perfection of mechanical appliances must ultimately supersede limbs; the perfection of chemical devices, digestion; that such organs as hair, external nose, teeth, ears, and chin were no longer essential parts of the human being, and that the tendency of natural selection would lie in the direction of their steady diminution through the coming ages. The brain alone remained a cardinal necessity. Only one other part of the body had a strong case for survival, and that was the hand, “teacher
What happens in the *War of the Worlds* template, then, is nothing less than European civilization getting a taste of its own medicine—the exterminative logic of the colonial sphere comes back home to the metropole. As Rieder succinctly summarizes the novel’s novels importance as a document of both science fiction and empire:

“For the ultimate nightmare driving the arms races of modernity, dramatized in an invasion fantasy like H.G. Wells’ *The War of the Worlds* (1898), is the industrial and imperial core’s fear of being turned into the pre-industrial and colonised periphery, and so, according to the temporal logic of the ideology of progress, of being subjugated as inevitably as the future supersedes the past” (“Spectacle” 86).

The ultimate horror of *War of the Worlds* is thus the horror of dedifferentiation: the erasure of the privileges of race, class, and nationality that make certain kinds of lives valuable and others not. Thus, as Patricia Kerslake argues, the “experimental nature” of SF allows its imperial readership to “explore, in various configurations, the possibilities of the Other,” especially in a context in which the legacy and monuments of empire is all around them (83-84). Rieder concurs, calling the *War of the Worlds* a reversal of what he calls “the colonial gaze,” which “distributes knowledge and power to the subject who looks, while denying or minimizing access to power for its object, the one looked at” (*Colonialism* 7). It seems crucial here that the English of the novel cannot even receive

---

and agent of the brain.” While the rest of the body dwindled, the hands would grow larger. (*War of the Worlds* 114-115)

The reference is to Wells’s own publication “The Man of the Year Million: A Scientific Forecast,” published in the *Pall Mall Gazette* in November 1893.
from the Martians recognition of their own intelligence (Wells, War of the Worlds 20). All attempts to communicate with the Martians fail. In this sense Martian violence goes beyond the level of race and (as with the Eloi and the Morlocks) becomes as much a drama of species; repeatedly the narrator speaks of a human race that has become “an animal among the animals” (130).

At the same time, Rieder goes on to note, this structure remains more or less intact despite its reversal in War of the Worlds; the colonial gaze has been inverted, but it has not been deconstructed. Rieder quotes in his analysis a lecture from Alfred Russel Wallace in which Wallace remarkably claims “It is the same great law of ‘the preservation of favoured races in the struggle for life,’ which leads to the inevitable extinction of all those low and mentally undeveloped populations with which Europeans come into contact”—an exterminationist dictum that could as well be attributed to the lead general of the Martian invasion (Qtd. in Colonialism 133). The inversive logic of War of the Worlds therefore positions the book as a critique of imperialism, but as Rieder notes it at the same time naturalizes this state of affairs in casting colonial violence as a “natural, evolutionary process” (132)—in this sense appearing to ratify the pseudo-Darwinist logic of the domination of colonial sphere by Europeans (135). It cannot be forgotten that the book’s epilogue includes—after all the horrors we have witnessed—the narrator’s speculative plan to inflict a repetition of the Martians’ invasion upon the poor people of Venus:
In the Martians can reach Venus, there is no reason to suppose that the thing is impossible for men, and when the slow cooling of the sun makes this earth uninhabitable, as at last it must do, it may be that the thread of life that has begun here will have streamed out and caught our sister planet within its toils. (163)

But Kerslake suggests that the true fear of the Martians may be the terror generated by “the hint of what we might become”: “Wells’s experiment suggests that humankind is evolving into a species of technological murderers who would do well to experience a reversal of conditions” (90). In this respect the true horror of War of the Worlds—and its utopian core—is precisely the shock of self-recognition.

In this light it seems useful to recall the Social Darwinian logic of the artilleryman the narrator encounters after he escapes the ruins of the house. Both men agree that the war between the humans and the Martians may as well be a war between men and ants—but the artilleryman has begun to craft a plan to survive—“for the sake of the breed”—under these conditions (140). His plan—suggesting, unexpectedly, the Morlocks!—is to head underground, into cellars, sewers, and railway tunnels, in search of an independent existence safe from the Martians (142). The artilleryman’s brutal resistance movement will allow in only the “able-bodied, clean-minded men”:

We’re not going to pick up any rubbish that drifts in. Weaklings go out again. ... Life is real again, and the useless and cumbersome and mischievous have to die. They ought to die. They ought to be willing to die. It’s a sort of disloyalty, after all, to live and taint the race. (142)

Just a page before the artilleryman had bemoaned the villainy of those traitors who would join up with the Martians and hunt free survivors on the invaders’ behalf—now,
it seems, he himself is willing to do that same work for free.

II. Amazing Stories

‘Within Ten Short Minutes ... Twenty-Five Thousand Men Lay Dead around Us’

In Colonialism and the Emergence of Science Fiction Rieder traces the history of the violent and pessimistic science fiction tradition that derives from War of the Worlds, finding colonial and imperial ideology at the heart of science fiction’s imagination of other places and times, with power inevitably distributed along a rhetoric of “progress” that either places white Europeans at the culminating apex of human history or threatens them with supersession from either terrestrial or extraterrestrial competitors. Lost races, first contacts, alien invasions—such narratives draw not only from the history of colonial and imperial encounters but also and perhaps most crucially from pseudo-Darwinian discourse about racial superiority and inferiority.

The popularity of “Yellow Peril” fictions at the turn of the century—first depicting strategies by which the people of Asia might be wiped out by ever-more efficient military technology, and then turning inevitably to the threat that such weapons might someday be loosed on the U.S. population instead—represent only the worst extremes of such virulent fantasies. Dozens of examples of this racist, eugenicist tradition in early science fictional speculation might be cited; Everett Bleiler calls particular scorn down on David H. Keller’s “The Menace” (1928), a set of linked
detective stories “with the common theme of attempts by ‘uppity’ blacks to take over America” that he characterizes as “not only very weak from a literary point of view, but a disgraceful chain of stories, probably the most offensive to be found in early science fiction” (Gernsback Years 212). This basic plotline of “race reversal” would survive well into the “Golden Age” period of SF, with Robert Heinlein’s anti-Asian Sixth Column (1941) and anti-black Farnham’s Freehold (1964) as particularly regrettable examples.

A pseudo-Darwinist ideology of competition, common to right-wing claims about inferior and superior human lives, is taken up in subtler ways as well, particularly in the repeated claim that a tooth-and-claw “struggle to survive” necessarily animates the human spirit. Richard C. Michaelis’s Looking Further Forward (1890)—a right-wing retort to Edward Bellamy’s Utopian Looking Backward (1888)—rejects both Bellamy’s thesis that capitalism will be overturned and his thesis that it should. Instead, Darwin’s theory of evolution—evoked by Bellamy as a scientific grounding for his prognostications—is employed in the other direction: “Inequality is the law of nature and the attempt to establish equality is therefore unnatural and absurd” (30). “Why should men live who are unable to make the grade and amount to something?” demand the brutal mole people at the heart of David H. Keller’s “The Conquerors” (1929). Thus we find, in a 1934 entry in Calvin Per ego’s “Shortwave Castle” series of short stories, the invention of a “pacifism ray” that saps people of their vitality and spirit. In Harry Bates’s “Alas, All Thinking” (1935), a time-traveler from the twentieth century discovers
that the comforts of progress have only sapped the men of the future of their vitality and strength: the men of the future—of whom there are only thirty-six—have no grand achievements, but simply sit motionless in quiet contemplation of themselves. In horror, he decides to mate with one and “exterminate” the rest; ultimately, he decides to kill his prospective mate as well.

So-called edisonades—dime-novel stories of fantastic inventions—frequently hinged on the invention of fantastic superweapons to facilitate this brutal “competition,” perhaps most vividly in Garrett Serviss’s *Edison’s Conquest of Mars* (1898), a sequel to Wells’s *War of the Worlds* in which Thomas Edison himself develops both flying machines that can reach Mars and disintegrator rays to lay waste to the Martian population once we arrive. In Edgar Rice Burroughs’s Barsoom series of novels (1912-1964), the imperial encounter between East and West is similarly transposed to Mars, where Burroughs’s Great White Hero John Carter encounters and subdues monstrous green- and red-skinned “savages” on the surface of Mars through ingenuity and physical superiority in stories that anticipate the adventures of his later hero, Tarzan. One remarkable short story, by Henrik Dahl Juve, goes further than even Burroughs in its transplanting of the imperial “frontier” to Mars; Juve extends America’s claims of Manifest Destiny to an immutable law of nature that holds the westward march of empire as an immutable law of history: “Those in the west conquer those immediately to the east. Those in the west continue to advance while those left behind merely settle
down and live” (321). Having reached its earthly limits in California, the logic goes, the progression of civilization/empire must move westward still—westward to Mars! There they discover an ancient Martian civilization who possess a futuristic gas weapon but who are (in a kind of “Noble Savage” fantasy) literally incapable of deception; this proves to be their downfall, as the humans ultimately steal the secret of their gas and use it to conquer Mars, thereby fulfilling “the relentless onward surge of the crest wave of civilization as it sweeps westward” (339). Even edisonades taking a less gung-ho attitude towards imperialism, like the popular Frank Reade series of dime novels (1892-1899) primarily authored by “Noname” Luis Senarens (dubbed by Hugo Gernsback “the American Jules Verne”), frequently employed dual-use technologies of transportation and communication that were improved versions of those being employed in colonial and imperial wars.14

Sven Lindqvist, too, in his A History of Bombing, finds this eager fantasy of violence central to the science fictional imagination. Lindqvist identifies a two-stage fantasy of genocidal violence that mirrors Wells’s own transition from “The Star” (in which all human beings but Europeans are exterminated) to War of the Worlds (in which London itself is attacked by a technologically advanced civilization). The difference is that in the narratives Lindqvist focuses on the violence happens

intentionally, rather than accidentally. *Three Hundred Years Hence* (1881) is a story of the first type; the creation of a utopian “United Man” is predicated on an event called “The Great Extermination” (qtd. in Lindqvist 18); here the aerial perspective of the comet is replaced by an airplane spewing toxic gas. *The Last War, or the Triumph of the English Tongue* (published the same year as *War of the Worlds* in 1898) sees “the dream of the ages …. realized and peace assured to the human race forever” after aerial firebombing campaign that murders nine million (Lindqvist 22). The final lines of Jack London’s “The Unparalleled Invasion”—concerning a futuristic extermination of China—capture well the contradictory nature of the utopias being proposed in these genocidal narratives:

> It was in 1987, the Great Truce having been dissolved, that the ancient quarrel between France and Germany over Alsace-Lorraine recrudesced. The war-cloud grew dark and threatening in April, and on April 17 the Convention of Copenhagen was called. The representatives of the nations of the world, being present, all nations solemnly pledged themselves never to use against one another the laboratory methods of warfare they had employed in the invasion of China. (100)

The second type of story likewise hinges upon the promise that no matter what violence is unleashed, it shall always been directed at the colonial sphere; now the Chinese (or Africans, or whoever) acquire a superweapon that they turn on the powers of the west, bringing European civilization to its knees. In the stories Lindvist’s research highlights—from Edward Shanks’s *The People of the Ruins* (1920) to Anderson Graham’s *The Collapse of Homo Sapiens* (1923) to Desmond Shaw’s *Ragnarok* (1926), and on and on—
we find precisely Wells’s reversal of the historical violence of colonialism redirected at the metropole: “They had even discovered a deadlier gas than ours, and explosives of such power that two or three bombs had been enough to wipe London out of existence” (qtd. in Lindqvist 26). The political content of these stories is just as frequently antiwar as it is pro-imperialist—the last words of the narrator of Ragnarok are “Unless war is made impossible, there is no future for mankind” (66)—but such a utopia is predicated on an essentialist notion of bloodthirsty human cruelty that is starkly anti-utopian. A human race that would do these things to each other—that has done these things to each other, and is eager to do them again—hardly seems worth saving at all.

The best early articulation of this tragic vision of the human could be one that predates Wells: Mark Twain’s A Connecticut Yankee in King Arthur’s Court (1889), which makes intriguingly literal the retemporizing gesture that Johannes Fabian identified as the crucial strategy for the justification of imperial violence: the “assign[ing] to the conquered populations a different time” (30). In what is believed to be the first such time-travel story in English literature, Twain inverts and destabilizes the usual imperial narrative by having his “Connecticut Yankee” appear in the imperial West’s own pre-industrial past.15 Hit on the head with a crowbar during a fight with one of his subordinates, factory superintendent Hank Morgan (an engineer who has

15 An interesting complement to Twain’s gesture can be found in John Ames Mitchell’s lesser-known The Last American, published the same year, which satirically recounts the discovery and excavation of the ruins of “Nhu-Yok,” largest city of the lost Mehrikan empire, by Persian archaeologists in the year 2951.
“learned to make everything—guns, revolvers, cannon, boilers, engines, all sorts of labour-saving machinery” [36]) finds himself awakening in Arthurian England, transported in both space and time. With his advanced scientific and technical know-how (including the fortuitous knowledge of an impending total solar eclipse), Morgan quickly displaces Merlin to take administrative control of Camelot, implementing a plan for modernization and development that rivals any attempted in actual imperial history.

*Connecticut Yankee* seems at first as if it will conform to a familiar nineteenth-century narrative of progress; commenters frequently begin their discussion of *Connecticut Yankee* with Twain’s dream that spawned the novel:

Dream of being a knight errant in armor in the middle ages. Have the notions and habits of thought in the present day mixed with the necessities of that. No pockets in the armor. No way to manage certain requirements of nature. Can’t scratch. Cold in the head—can’t blow—can’t get at handkerchief, can’t use iron sleeve. Iron gets red hot in the sun—leaks in the rain, gets white with frost and freezes me solid in winter. Suffer from lice and fleas. Make disagreeable clatter when I enter church. Can’t dress or undress myself. Always getting struck by lightning. Fall down, can’t get up. (14)

The description of the dream—Twain’s apparent first notes for the novel—suggests that it is the past that is the intended victim of his satire. And although Twain is not commonly associated with optimism about either the present or the future, optimistic attitudes can occasionally be found elsewhere in his work. He praised Edward Bellamy’s Utopian *Looking Backward*, notably, as “the latest and best of all the Bibles,” and said Bellamy “has made the accepted heaven paltry by inventing a better one on Earth” (qtd.
in *Connecticut Yankee* 16). The excitement of this benediction calls to mind Twain’s unexpected (and uncharacteristic) optimism on the occasion of Walt Whitman’s seventieth birthday in 1889, as he rhapsodizes on the coming glories of the twentieth century. “Wait thirty years and then look out over the earth,” he writes. “You shall see marvel upon marvels, added to those whose nativity you have witnessed; and conspicuous above them you shall see their formidable Result—Man at almost his full stature at last!—and still growing, visibly growing, while you look” (qtd. in *Connecticut Yankee* 13).

But despite these occasional flirtations with optimism, Twain seems constitutionally incapable of holding the feeling for very long. The meeting of the lost Arthurian past with contemporary scientific culture, while seeming to promise advancement, turns by the end of *Connecticut Yankee* to utter ruin. The mechanisms of modernity and “progress” that Morgan devises and implements in his capacity as “Boss” of Camelot come to their natural conclusion in the form of a bloody massacre. After Arthur’s death Morgan and his men attempt to retain their control of Camelot against the reactionary forces of the nobility and the Church that unite against the Yankee’s attempt to establish a Republic. Now we see the other side of technology and progress: dynamite, mines, Gatling guns, and an electric fence quickly decimate a hopelessly outmatched opposing army. “Within ten short minutes after we had opened fire, armed resistance was totally annihilated, the campaign was ended, we fifty four
were masters of England! Twenty-five thousand men lay dead around us” (404-405).

Merlin—not a charlatan after all—soon uses his magic to send the Yankee home, and the Church conspires to cover up all the evidence of his experiment in the past, leaving only the Yankee to remember, and to be tortured until his death by horrible and unsettling dreams.

This climactic vision of mass death, facilitated by technologies both already in use and soon to be employed in imperial adventure overseas, is the culmination of a critique of imperialism that is hinted at throughout the novel. The first of Dan Beard’s illustrations for the novel, immediately preceding chapter one, likewise suggests that the time travel at the center of the story is related somehow to a critique of global imperialism; the image of a giant statue of a lion, on which a man in a suit and bowler cap stands perched with one hand in his pocket, labeled on the pedestal “THE TALE OF THE LOST LAND,” suggests not Arthurian England but Africa. Morgan’s first view of Camelot’s locals similarly points to the critique of race and racialization that was on Twain’s mind as his politics turned more and more anti-imperialist in his old age. The peasants of Camelot are “brawny men, with long, coarse, uncombed hair that hung down over their faces and made them look like animals” (42). Many are naked, “but nobody seemed to know it” (42), suggesting both Eden and tropical locales like the Hawaii from which a young Twain reported for the *Sacramento Daily Union* at the start of his literary career in 1866. In fact, as Fred W. Lorch and Stephen H. Sumida have
argued, Hank Morgan’s story most likely has its origin in an unfinished novel about Hawaii on which Twain had been working at the time, a project he eventually abandoned in favor of *Connecticut Yankee*. That story of a meeting of nineteenth-century industrial society with a pre-industrial, pastoral past, beginning with notions of progress and uplift but ultimately culminating in an imperial disaster, turns out to be a closer match to Hawaiian history than Twain could have known at the time; the early violence of the 1887 and 1888 uprisings in Hawaii would culminate in a U.S.-led overthrow of the Hawaiian kingdom and final U.S. annexation by 1893. Along the same lines, John Carlos Rowe convincingly links *Connecticut Yankee* to Twain’s history of growing anti-imperialism over the course of his adult life, a precursor to the anti-imperialist satires he would eventually write during the U.S. military occupation of the Philippines.

While it may seem to contemporary readers “impossible that any reader of *Connecticut Yankee* could fail to be disturbed by the violence of its ending,” Stephen Railton notes with some surprise that in fact “no contemporary reviewer even mentioned it” (88), speculating that such reviewers may in fact have been unwilling or unable to see this aspect of the narrative. Paul K. Alkon, in contrast, suggests that it is we who are unable to read *A Connecticut Yankee* with proper objectivity, as the bleak, scorched-earth violence of the ending inevitably recalls for us such “twentieth-century nightmares” as trench warfare, aerial bombing, and nuclear weapons (133). Despite the
book’s comedy and ample satiric charms, the abrupt switch into total war at its conclusion makes it difficult for modern readers to see the novel as representing much more than “irreverence, the guillotine, a reign of terror, and a kind of generalized despair” (Kaplan 296). Perhaps few have described Connecticut Yankee’s irresolvable dialectic between optimism and cynicism better than José Martí, who wrote in his 1890 review that “although it is humorous, as it is said to be, it was written after having cried” (55).

Other mainstream literary stories of the period take up this basically resistant attitude to contemporary imperialism and racial violence on the level of their plots. W.E.B. Du Bois crafts a particularly noteworthy example in the Wellsian mode, “The Comet,” a science fiction story which closes his 1920 collection of essays Darkwater: Voices from within the Veil. In that story the close approach of a comet appears to kill everyone in the world, save for one black man and one white woman. The two discover each other in the ruins of New York City and are drawn to one another—until suddenly other people, white men, appear. It turns out that the destruction was localized to only New York City, and what had seemed like an occasion for a new start to history turns suddenly instead into a reassertion of the old history, through an attempted lynching.

Charlotte Perkins Gilman’s Herland was serialized in Gilman’s magazine Forerunner beginning in 1915 and largely forgotten before its rediscovery in the late 1970s as an anticipation of later, more explicitly science fictional feminist utopias. After a
devastating series of wars, natural disasters, and gender revolts conspire to kill off every male and leave Herland permanently isolated from the surrounding world, the remaining Herlanders discover a woman who is able to reproduce by parthenogenesis, giving birth to five children, each of whom gives birth in turn to five more (54-55); the pattern holds until Herland has reached its optimum population, at which time (in defiance of Malthusian pessimism about the inevitability of overpopulation) the women come together and rationally decide to hold their population permanently steady (68).

The three male explorers who discover Herland by chance discover a nation utterly lacking in war, poverty, violence, and exploitation, as well as crime, punishment, and (naturally) the oppression of women—a point made all the clearer in Gilman’s rarely read sequel, *With Her in Ourland* (1916), in which one of the explorers brings his Herlandian wife to America to show her his home, only to see her spend the trip utterly aghast.16

A similar engagement and critique of modernity was underway in the pulps,

---

16 In the face of feminist scholarship that has largely embraced *Herland* since its republication (and rediscovery) in 1970, Alys Eve Weinbaum takes up the unhappy task of demystifying the novel in her book *Wayward Reproductions*, calling attention to *Herland*’s erasure of race and violence in the colonial encounter, as well as its reinscription of eugenic thinking about white purity current at the time. (The Herlanders are explicitly eugenic, both pressing on “the lowest types” of their population not to breed and aggressively removing custody from any woman deemed unfit to mother a child [82-83].) This unfortunate tendency is much more obvious in *With Her in Ourland*, which (as Ann J. Lane notes in her 1978 introduction to *Herland*) sees its enlightened Herlandian heroine calling for assimilation for “tribal” Jews and noting that the presence of “ill-assorted and unassimilable mass of human material”—unskilled immigrant workers—makes democracy impossible in America as “only some races—or some individuals in a given race—have reached the democratic stage” (xvii-xviii). Such unfortunate episodes undoubtedly help to account for why *Ourland* is so much less widely read than *Herland* today.
despite its aforementioned tendency towards the replication of imperial ideology. In his short story “A Conquest of Two Worlds” (1932), Edmond Hamilton upends the typical colonialisst narrative undergirding science fictional space fantasy; in the struggle over extraplanetary expansion he depicts his hero rejects Earth hegemony and organizes a resistance on Jupiter. “I wrote [“A Conquest of Two Worlds”],” he explained, “because I was sick of the usual science-fiction assumption that in interplanetary struggles the earthmen would always be in the right” (qtd. in Bleiler, Gernsback Years 165). In “The Man Who Evolved,” discussed below, Hamilton asks much the same questions about the popular misunderstanding of Darwinism as a story of inevitable progress. The ability of SF from its earliest incarnations to interrogate and subvert accepted narratives of history and human difference, is one of its most abiding generic features, as Rieder notes:

[N]o discursive nexus more powerfully interweaves colonialism, scientific discourse, and science fiction than racism, for one of the best reasons to emphasize the importance of evolutionary theory and anthropology to the emergence of science fiction is that early science fiction, at its best, often explores the challenges that those scientific discourses posed to established notions of what was natural and what was human. ... The opposition between biological determinism and cultural construction is as central to much science fiction as it is to anthropology itself. (Colonialism 98)

The sheer transformative possibilities of this sort of scalar thinking was on the mind of Vladimir Lenin when he met H.G. Wells in 1920:

“Human ideas—he told Wells—are based on the scale of the planet we live on. ... If we succeed in making contact with the other planets, all our
philosophical, social, and moral ideas will have to be revised, and in this
event these potentialities will become limitless and will put an end to
violence as a necessary means of progress” (qtd. in Buck-Morss 44).17

As with Wells’s “The Star” and Du Bois’s “The Comet,” science fiction is used to
motivate the idea of a revolutionary “Event” that might radically reorient history
around itself.

An Event of a rather different sort occurs in Nat Schachner’s “Ancestral Voices”
(1933), another quintessential example of the subversive anti-imperialist, anti-racist
possibilities of the genre. Schachner attacks the fantasy of racial purity that undergirds
this ideology of white supremacy, using time travel as his method: a time traveler
inadvertently kills his own ancestor during a trip to ancient Rome, having found the
“Hun” attacking his “many-times-removed great grandmother”; his family line had
been the product of this initial violent rape. But the story then spirals out from here into
a glimpse of an immense social totality, giving us a view of the network of familial
kinship that exists completely unknown to us. An English member of Parliament
disappears from history as a result of the change, as does the president of Cuba and both
participants in a heavyweight boxing match between “Max Bernstein, Semitic

17 Lenin’s utopian vision of extraterrestrial contact can be paired with the much more traditionally
imperialist vision expressed by Ronald Reagan in the 1980s. In an eerie parallel to the absurd plan at the
heart of Alan Moore’s Watchmen (1986), Reagan frequently commented that the existence of aliens would
lead to world peace—because we’d have somewhere else to point the missiles. See, for instance, his Address
to the 42d Session of the United Nations General Assembly: “Cannot swords be turned to plowshares? Can
we and all nations not live in peace? In our obsession with antagonisms of the moment, we often forget how
much unites all the members of humanity. Perhaps we need some outside, universal threat to make us
recognize this common bond. I occasionally think how quickly our differences worldwide would vanish if
we were facing an alien threat from outside this world.”

91
challenger” and “Hans Schilling, the champion.” Herr Hellwig, a Hitler analogue with a “bristly little moustache,” vanishes during a Nuremberg rally celebrating German racial purity, as do 10,000 of his fellow Nazi “Blue Shirts,” as do Irish children, Italian peasants, Boston Brahmins, Turkish soldiers, and Orthodox rabbis (81). All told, 50,000 people of all races and creeds, all over the world, were descended from this single murdered, rapist Hun—a plot point that subverts the very notion of race as a useful concept at the same time that it suggests Benjamin’s famous dictum that “There is no document of civilization which is not at the same time a document of barbarism” (“Theses” 256) holds true on all scales of human experience, from the world-historical to the familial.

‘Things Go Wrong’

In Metamorphoses of Science Fiction Darko Suvin bemoans the lost tradition of science fiction that might have begun with Twain, had “certain fragmentary sketches” found among his papers been completed and published during his life to allow Twain to eclipse H.G. Wells as “the major turning point in the tradition leading to modern SF” (201). But in terms of thematic influence Twain’s shadow hangs quite heavy over the early development of SF: alongside a narrative of progress we find a basically pessimistic vision of the potential for human civilization, in which technological acumen does not make a new world possible so much as solidify the terrible violence of the old
one. In other SF of the period we find this pessimism combined with a more cosmic one—the sense that the project human civilization itself (however disreputable) is at the same time deeply fragile, even doomed.

After Wells and Twain—with respect to both chronology and influence—the next most important figure in science fiction is Hugo Gernsback, founder of the popular science fiction magazine *Amazing Stories* in 1926 and with it the pulp tradition that would come to dominate the field. Gernsback’s view of science fiction is predicated upon precisely the sort of optimism that is denied in either Wells or Twain—an optimism that indeed, at times, seems blissfully unaware of the actual history of the civilization that inspired their pessimism in the first place. Gernsback’s editorial on page one of the first issue of *Amazing Stories* in 1926 breathlessly announces “a new sort of magazine.” Science, Gernsback claims—our now-“intimate” relationship with science across all spheres of life from history-making conflicts to everyday domesticity—has created “an entirely new world” (3) through which science fiction “blaze[s] a new trail” (3). To properly qualify as science fiction in the Gernsbackian mold is to hit each of these three marks: it must be a tale of adventure (often with a love interest) modeled on accurate scientific knowledge and predicting a likely course for technological and

---

18 In this enthusiastic celebration of the new we must put to one side the fact that this novelty was most commonly expressed, throughout the earliest years of the magazine, in decades-old reprints. In the first six months, only six of the thirty-eight stories published by Gernsback were original to *Amazing* (Nevins), and in his first attempt at defining science fiction he describes “the Jules Verne, H.G. Wells, and Edgar Allan Poe type of story—a charming romance intermingled with scientific fact and prophetic vision” (3).
scientific advancement. To see an example of how this intersection might work we need look no further than Gernsback’s own contribution to the genre, *Ralph 124C 41+* (“one to foresee for one and more”), a “romance of the year 2660,” then 750 years hence, that was published as a serial in Gernsback’s magazine *Modern Electrics* long before the advent of *Amazing Stories* in 1911. The novel depicts the singular experiences of its title character as he explores the techno-utopian world of 2660 until (in an almost perfunctory climax) he battles a Martian brute for the return of the woman he loves.

Of course, science fiction’s prognostications are only sporadically accurate, missing the bull’s-eye as often as it hits—and it is worth noting that Gernsback’s, techno-optimistic, invention-oriented notion of science fiction was not the one best-loved by the public even in his day. Most of his science-fiction publishing ventures failed, including *Amazing* itself, which Gernsback lost control of after declaring bankruptcy in 1929. Of the four science fiction magazines he founded afterwards, most folded or merged after just a single year. Adam Roberts notes that other magazines, like *Astounding* (founded in 1930), gained prominence in part by rejecting Gernsback’s “insistence on didactic science” and instead focusing on “adventure, excitement, and exoticism” (177). Everett Bleiler, too, notes that Gernsback’s preferred theme of technological optimism took a back seat to the unending cavalcade of disaster, catastrophe, and out-and-out apocalypse that actually dominated the science fiction of the period, a preoccupation
Bleiler groups under the single evocative heading “Things Go Wrong” (Gernsback Years xv).

Stories of this sort of final human disaster are as plentiful as stories of superweapons and racial war—indeed, there is quite significant overlap between the two subgenres (a kinship that only grows after the development and first deployment of the nuclear bomb). Few stories capture this assumed intersection as vividly as the end of John Wyndham’s “The Man from Beyond” (1934), which ends at a moment of catastrophic return to Earth from voyages in outer space:

“We want to show you your planet,” said Dagul.

... “There’s some mistake. This is our moon.” “No. It is Earth,” Goin assured him. Gratz looked back at the scarred pitted surface of the planet. For a long time he gazed in silence. It was like the moon and yet—despite the craters, despite the desolation, there was a familiar suggestion of the linked Americas, stretching from pole to pole—a bulge which might have been the West African coast. Gratz gazed in silence for a great while. At last he turned away. (434-435)

Gratz—“the last of his race—though not, to judge by his own account, a very worthy race”—briefly contemplates the nightmare of history that had transformed a beautiful planet to a “celestial cinder,” and promptly hurls himself off a cliff (435).19

But just as commonly the end of the world is has little to do with the actions of

19 As we have already seen from Lars von Trier’s Melancholy, and see here again, suicide is a somewhat common response in these science fictions to the knowledge that the universe is doomed. In Milton Kaletsky’s “The End of the Universe” (1934) the invention of “the elixir of immortality” results ultimately, at the end of time, in a wave of suicides on the part of those who cannot bear to see the end of creation. Finally the last human alive remarks on the irony that the universe would both begin and end in a void, and throws himself into the engine of his starship (1008-1009).
mankind, but is instead a function of cosmic necessity. Here again we find bleak thoughts of a universe that is fundamentally entropic, and indifferent to humanity, springing almost unbidden out of attempts to imagine the future—an almost neurotic recitation of hyperbolic spatial and temporal scales that dwarf the human lifetime and reduce it to a miniscule footnote. This is the apocalyptic sublime of Wells’s crab-strewn *Time Machine*. In Joseph Campbell’s brutally entropic “Night” the word millions is repeated over and over again on a single page, in a kind of obsessive-compulsion rehearsal of scale: “the million million million that had been born and lived and died in the countless ages before I was born”; “a thousand billion years before”; “the magnificent, proudly sprawling universe I had known, that flung itself across a million million light years, that flung radiant energy through space by the millions of millions of tons was—gone” (215). In Fletcher Pratt’s “The Mad Destroyer” (1930), a scientist demonstrates a rogue planetoid called Eros will fly into the sun, causing it to nova: “For twenty-three hours the people of Earth will enjoy the spectacle. Then every vestige of life will perish in a rain of burning hydrogen and calcium” (406). In 1934 Philip Wylie and Edwin Balmer cowrote *When Worlds Collide*, which depicts a collision between Earth and a rogue planet named Bronson Alpha; only a tiny fraction of humans are able to escape the disaster in two spaceships to resettle on Bronson Beta. (The classic comic book hero Superman reflects this fantasy of planetary destruction; Jerry Siegel and Joe Shuster translated the diasporic experiences of their Jewish immigrant parents into the
origin story of last son of a lost world, Krypton, to which he can never return. In his indexing of the pulp magazines Bleiler identifies dozens of stories set around the fictional planet Bodia, or Bode’s Planet, a speculated fifth planet from the sun from which the asteroid belt derived following some human or natural catastrophe. From these hyperbolic, explosive planetary endings the renewed ice ages of Nat Schachner (as Chan Corbett)\(^{21}\), G. Peyton Wertenbaker\(^{22}\), and Amelia Long Reynolds\(^{23}\) seem almost pleasant.

Edmond Hamilton’s short story “The Man Who Evolved”\((1931)\) combines the imaginative trajectories of Wells’s *Time Machine* and *War of the Worlds* into a single text. As is the case in both of its predecessors, “The Man Who Evolved” explores the possibility that the contingent facts of human history may be reinterpreted as expressions of biological law, specifically the law of evolution. In the story, the

---

\(^{20}\) The immigrant fiction of the turn of the century is surely a close cousin of the science fiction novel—with its characteristic cognitive estrangement originating not from the physical laws of science but from the social laws of culture, language, and migration. These writers describe lives that have been transformed beyond imagination—and of disparate nations that stand in no closer relation to each other than distant planets. “I was born, I have lived, and I have been made over,” begins Polotsk-born Mary Antin in her autobiography, *The Promised Land*\((1912)\), in language that suggests the estranging experience of the immigrant is the same whether the ultimate destination is Manhattan or Mars: “Is it not time to write my life’s story? I am just as much out of the way as if I were dead, for I am absolutely other than the person whose story I have to tell. Physical continuity with my earlier self is no disadvantage. I could speak in the third person and not feel that I was masquerading. I can analyze my subject, I can reveal everything; for she, and not I, is my real heroine. My life I have still to live; her life ended when mine began” (introduction). Abraham Cahan’s Russian-born David Levinsky\((1917)\) likewise views his past in terms that suggest radical self-division and *ostranie*, a ”metamorphosis”\((3)\) that leaves a single human body forever divided between two warring halves, a past and a present that cannot be made to fit together again\((530)\). Indeed, the father of science fiction, Hugo Gernsback himself, was an immigrant from Luxembourg.

\(^{21}\) “When the Sun Dies,” published in Astounding Stories in March 1935.

\(^{22}\) “The Coming of the Ice,” Amazing Stories, June 1926.

\(^{23}\) “Omega,” Amazing Stories, July 1932.
biological experiments of Hamilton’s Dr. John Pollard have yielded proof that evolution is caused by cosmic rays—which in turn has allowed him to develop a technique for concentrating those rays and thereby speeding up evolution (29). This is possible because Hamilton’s understanding of evolution bears little relationship to Darwin’s actual theories, which concern the adaptation of organisms to their surroundings; in Hamilton’s story, as in much SF of the period, evolution is an inevitable teleological process, with mankind advancing through stages regardless of his larger circumstances.

“Can’t you two see what this man mean for humanity?” Pollard asks his interlocutors, Hugh Dutton and Arthur Wright. “As we are to the apes,” he goes on, echoing the internal logic of War of the Worlds, “so must the men of the future be to us. If we could use this method of mine to take all mankind forward through millions of years of evolutionary development at one stride, wouldn’t it be sane to do so?” (29-30)

But future evolutionary history holds little solace for us. Pollard’s exposure to the rays transforms him first into “godlike,” “great figure of such physical power and beauty as we had not imagined could exist”—though Pollard’s “homely, good-humored features” are replaced by a cold sneer of “immense intellectual power.” The next exposure to the rays—advancing Pollard from fifty million years ahead to one hundred million—undoes the perfection of physical form in favor of an overly enlarged cranium. This second super-Pollard is even more contemptuous of present day man, seeing Dutton and Wright “as two brutish, hairy cave-men would appear to you” (30-33). Dutton and
Wright protest that each change has been “awful,” “terrible,” and beg Pollard not to go on. He insists, threatening to murder them if they do not continue: “If you do not, it will be the work of a moment for me to annihilate both of you and go on with this alone.”

Their once-kind friend is gone: “I am millions of ears past such irrational emotions as friendship. The only emotion you awaken in me is a contempt for your crudity. Turn on the rays!” (34)

The next transformation is more terrible still; Pollard is now simply a giant monstrous head. This version of Pollard has abandoned his plans to save the world in favor of a great of conquest: “with the colossal brain I have I will master without a struggle this man-swarming planet, and make it a huge laboratory in which to pursue the experiments that please me” (34-35). The world is only saved from this cruel mind when Pollard is coaxed into entering the machine one last time—after which he emerges as an even more monstrous tentacled “head-thing.” This version as least, is benevolent, or at least indifferent to man:

“You need not fear now the things I threatened in my last stage of development. My mind, grown infinitely greater, would no more now want to rule you men and your little planet than you would want to rule an anthill and its inhabitants! My mind, gone fifty million years further ahead in development, can soar out now to vistas of power and knowledge unimagined by me in that last stage, and unimaginable to you” (37).

But this version retains Pollard’s original desire to witness “the last mutation,” the final form of man. After two more mutations, the final perfected telos of man is revealed: the
“great gray brain” is replaced by “a quite shapeless mass of clear, jelly-like matter”—protoplasm, the very formless goo from which evolution originally sprung (39). Human history turns out to be dominated by violence and cold contempt, punctuated by short periods of decency, with no ultimate purpose at all. Dutton is driven mad by the nihilistic revelation that “lives of ceaseless pain and struggle” are, on the geological scale, simply the perturbations of a cycle that replicates itself “ceaselessly, purposelessly”; Wright is saved from insanity only by the slim hope that there could be yet another cycle, “above and beyond it,” on a level “we cannot understand” (40).

Donald Wandrei’s “Farewell to Earth” (1933) has a similar replication of the logic of Wells’s *Time Machine*. First, we see the hundred-millennia records of human civilization as it passes through a cycle of golden ages and collapses from the twentieth century through 21,346 to the year 745,200 and beyond. At last “the swift, terrible coming of a dark star” near the year 1,000,000 sucks the atmosphere off Earth and leaves the planet entirely bereft of life. Wandrei’s time-traveler hero flies over the empty ruins of Europe in a spaceship:

> A blinding beam cut downward, sweeping the still waters. It moved forward, backward, in all directions; but where England had risen, only the eternal sea lay at rest. He set his course southeast toward France and Europe. The waters were dead. Since the moon was gone, gone were the tides. The sun, because of its retarded motion, had little effect on the oceans. Absence of wind and waves prevented aeration. Marine life could not exist. Only the one-celled amoeba, lowliest of life-forms, had escaped extinction.

Silent seas. Wind forever still. Song of birds, rustle of leaves, flowerin of nature, change of seasons, voices of human beings—vanished

Robert Arthur, Jr., uses almost exactly the same imagery in his “Theft of the Washington Monument” (1933), which finds the white obelisk “a few hundred feet back from the edge of a high, steep bluff, at whose feet waves were dashing thunderously,” thousands of the years in the future: “Sea and sand; that was all” (515-516). We see the apocalyptic sublime still again in the aftermath of the planetary disaster in Wylie and Balmer’s *When Worlds Collide*:

“It is not possible to describe our feelings when we actually flew over the site of Washington. We had passed by the state in which emotions may be expressed by commonplace thought. We had reached a condition, in fact, where our senses rejected all feeling, and our brains made a record that might be useful in the future while it was insensible in the present. When I say that the ocean covered what had been the Capital of our nation, I mean it precisely. No spire, no pinnacle, no monument, no tower appeared above the blue water that rippled to the feet of the Appalachian chain. There was no trace of the Chesapeake bay, no sign of the Potomac River, no memory of the great works of architecture which had existed at the Capital. It was gone--gone into the grave of Atlantis; and over it was the inscrutable salt sea, stretching to the utmost reaches of the eye. The Eastern seaboard has dropped. We turned back after assuring ourselves that this condition obtained along the entire East Coast.” (209)

What is crucial to note here is that the apocalypse that is being described, although nominally set in the future, is in fact a memory—the memory of previous great empires that had fallen into oblivion. In the later parts of Asimov’s *Foundation* series, the immense planetary world city of Trantor—whose whole environment has been
urbanized—hews close to its original Roman model after the fall: Its population of 40 billion drops to 100 million, the metal is stripped and sold off to richer planets, which now no longer come to visit and trade. Several hundred years after the fall of the Empire, Trantor becomes the abandoned, depopulated Rome of the Middle Ages, a tiny backwater world of farmers tilling the soil amidst the ruins:

It was strange that a world which had been the center of a Galaxy for two thousand years - that had ruled limitless space and been home to legislators and rulers whose whims spanned the parsecs - could die in a month. It was strange that a world which had been untouched through the vast conquering sweeps and retreats of a millennia, and equally untouched by the civil wars and palace revolutions of other millennia - should lie dead at last. It was strange that the Glory of the Galaxy should be a rotting corpse.

And pathetic!

For centuries would yet pass before the mighty works of fifty generations of humans would decay past use. Only the declining powers of men, themselves, rendered them useless now.

The millions left after the billions had died tore up the gleaming metal base of the planet and exposed soil that had not felt the touch of sun in a thousand years.

Surrounded by the mechanical perfections of human efforts, encircled by the industrial marvels of mankind freed of the tyranny of environment - they returned to the land. In the huge traffic clearings, wheat and corn grew. In the shadow of the towers, sheep grazed. (228-229)

This vision of an abandoned world, in which the “wreckage of cities” and “great masterpieces of architecture” now sit abandoned in brutal desolation, is a science fictional translation of the images of ruined Roman, Greek, and Egyptian monuments that inspired generations of Romantic artists and poets, perhaps chief among them Percy Bysshe Shelley in his 1818 poem “Ozymandias.” There, a monument to a once-great king
lies broken, “half-sunk in the desert”; the glorious empire over which he once ruled has vanished so completely that all that now remains is sand in all directions. “Look upon my work, ye Mighty, and despair!” Ozymandias boasts (768)—though of course the great irony of the poem is that we despair not in jealousy but in the bare futility of all human accomplishment in the face of entropic disaster.

“When we contemplate ruins,” Christopher Woodward writes, “we contemplate our own future” (2). The indecision between hope and despair is thus commonly framed in terms of this ambiguous temporality, in which the apocalypse is simultaneously something that is yet to come and something that has already happened; one might think only of the end of Campbell’s “Night,” in which the protagonist’s return from the future to the present does nothing to change the knowledge that “somewhere, on the far side of that bismuth coil, inevitable still, is the dead planet and the flickering, guttering candles that light the death watch I must keep at the end of time” (230).

In response to the hyperbolic Sturm und Drang of cosmic time only three affects seem possible. The first is a kind of final nihilism, an insane, thanatopic embrace of the universe’s ultimate doom. This is the outcome of Wandrei’s “The Red Brain” (1927), which tells the story of the unstoppable “Cosmic Dust” which is slowly consuming the universe. In desperation the universe’s last remaining scientists, the Great Brains of the planet Antares, turn to the Red Brain in the hope that he has developed a solution to the problem. He has:
“Play the national anthem in honor of the Red Brain, for he has triumphed. Place him at your head, for he has conquered the Dust. Exalt him who has proved himself the greatest of all. Worship him who is greater than Antares, greater than the Cosmic Dust, greater than the Universe.” (536)

The Red Brain’s mad solution is a final, totalizing embrace of the death drive; he murders everyone else, before the Dust can get to them. This is the response to sublime totality that is activated elsewhere in a writer like H.P. Lovecraft in his Cthulhu mythos: radical madness and pure existential terror at the confrontation with the true reality of things.24

The other possibilities are more traditionally humanistic. The second position is a brave defiance, a refusal to surrender to the cosmic death even in the face of inevitability, seen here at work in Schachner’s “When the Sun Dies”:

“No!” he rasped harshly, answer the unspoken thoughts. “That is the way of cowards, of weaklings. In us flows the last heritage of man—that tender-fleshed, puny creature who, by sheer force of will in the face of hopeless odds, came up from the brute to be the conqueror of a hostile universe. Let it not be said by whatever gods there be, that now, in this last extremity, he succumbs without a struggle, without a vestige of his old proud defiance. We will keep on, we and our children’s children, until we die. We shall go down in defeat, but it will be a defeat more glorious than any victory.”

...“And so, in a small chamber, hidden within a straining hemisphere of metal, buried forever under millions of tons of ice, attached irresistibly to a whirling, frozen orb, doomed to circle eternally around a small dim star through depthless space, three men, themselves infinitesimal bits of sluggish protoplasm, raised their voices in defiance of the universe itself, and by their very defiance, achieved the supreme

24 See, for instance, his “At the Mountains of Madness,” “The Nameless City,” or “The Whisperer in Darkness.”
heights to which the dead vast masses of matter that oppressed them could never aspire.” (63)

And the third is a doomed pessimism, as expressed by one of Edmond Hamilton's characters in his “The Cosmic Pantograph” (1935):

“Immutable law,” Doctor Robine used to say to his classes. “An inevitable working out of unchangeable forces which, in the end, must spell extinction for our race.

We have millions of years yet, perhaps millions of millions. But in the end, the slow, remorseless workings of the cosmos will destroy humanity. Nothing can prevent it” (555).

Most commonly we find hope and despair at work alongside one another. In “When the Sun Dies” the assertion of human triumph is deeply, perhaps fatally undercut by the intergalactic sublime that is activated by the vision of “a whirling, frozen orb, doomed to circle eternally around a small dim star through depthless space” (63). In “The Cosmic Pantograph,” Hamilton's characters labor mightily for some way out of entropy, some way that mankind might survive after all. First they escape the death of the sun by heading out into other stars, but this only prolongs the inevitable; finally they begin to look at the possibility of escaping the universe altogether. They discover, in fact, that this has already happened; the universe turns out to contain within itself, at the atomic level, microcosmic universes that replicate the larger universe exactly.25 Out of one of these microcosms they find the wreckage of a tiny ship, filled

25 As mentioned in the introduction, this was a very popular subgenre of the early science fiction period, which is very commonly organized around macrocosmic scientists doing experiments on a microcosmic humanity. In addition to Ted Sturgeon's “Microcosmic God” and G. Peyton Wertenbaker's “The Man from
with the bloody remains of humans who had attempted to escape out of the microcosm into our scale: “The remnants of the micosmic refugees who tried to grow up into this cosmos! Their cosmos and they are gone now, but God, what a magnificent attempt to escape the death of their universe!” The glimmer of hope leads the story’s optimists to declare victory—“I said man is unconquerable! … We too, someday, will leave our microcosm” (623)—in spite of the fact that the microcosmic humans failed, in the end, to escape cosmic death after all.

III. ‘And Yet I Worshipped’: Star Maker

Olaf Stapledon and the Challenge to God

The desperate need to find some way out of entropy is the principal thematic

the Atom” we might note Isaac Asimov’s “Breeds There a Man?” (1951), which imagines Earth as a bacterium in a petri dish being experimented on by macrocosmic scientists. Humanity discovers that nuclear weapons are the means by which these supersized scientists sterilize their equipment when the experiment is over—and so the task becomes to invent anti-ballistic missile defenses before the experiments end. In John Fearn Russell’s “Deserted Universe” (1936) explorers from a parallel universe discover the Earth completely abandoned; it turns out that Earth was being used for macrocosmic experiments, and had to be sterilized once the truth was discovered and the experiment consequently ruined. In other stories the relationship between Earth and the macrocosm in which it is situated is much more one-sided. In Clare Winger Harris’s “A Runaway World” (1926) the Earth is thrown out of the solar system as a result of a physics experiment in the macrocosm; in the face of the disaster one character bleakly advises another “Don’t allow yourself to worry. Remember complete resignation to whatever fate is in store for us is the only way to meet natural catastrophes” (123)—total submission to the cosmic sublime. In Charles P. Mason (as Epanimondas T. Snooks)’s short “Brahma-Kalpa—or the Expanding Universe,” the universe turns out to be embedded in a cloud of cigar smoke being enjoyed by a godlike being; when his wife complains of the stink, he opens a window, and our universe evaporates. The idea that Earth is in fact situated within an indescribly immense macrocosm was used to end both Men in Black films in the late 1990s and early 2000s, and the idea that human civilization is in fact an experiment being undertaken by unseen cosmic forces is a major plot point/punchline in Douglas Adams’s The Hitchhiker’s Guide to the Galaxy series (1979-1992).
concern of British author Olaf Stapledon in his cosmological fictions *Last and First Men* (1930) and *Star Maker* (1937). If one is interested in how the attempt to imagine history as a immanently graspable totality becomes hyperbolized in science fiction as an attempt to imagine the history of the entire cosmos—in which Earth becomes but a small and insignificant moment, a footnote on a footnote—there could be no better text to think about than the billion-year cosmological excess of *Star Maker*. How do we know that Stapledon was interested in relating his fantastic cosmological fictions to a grounded, real-world theory of totality? He writes of this precise intention in his preface to *Star Maker*, where he writes of

the importance of maintaining and expanding, even in this age of crisis, what may be called metaphorically the “self-critical self-consciousness of the human species,” or the attempt to see man’s life as a whole in relation to the rest of things. (*Star Maker* 4)

This was, in fact, a lifelong obsession: in the Stapledon archive at the University of Liverpool, which houses Stapledon’s manuscripts and letters,

26 one can find from among his childhood papers a truly astounding document titled “Comparative Time Chart of Political, Constitutional, Literary, and Economic History in England and Also of Important Foreign Events,” which appears to be a young Olaf’s attempt to literally write down everything that has ever happened, beginning “before 500 AD” and advancing by

26 It is worth noting that the system of organization used in the Liverpool archive is based upon Stapledon’s own assiduous schematizing of his own papers, suggesting his own devotion to the totalizing systems of organization.
fifty-year increments. The chart ends around 1900, that is, to roughly the year of the document’s creation (OS/I1/5).

This is the sense in which Robert Crossley says that “Star Maker was a book [Stapledon] had been researching all his life,” from the early preoccupation with history to his fascination with the stars to his fascination with the masts of ships disappearing over the horizon growing up in Port Said, Egypt (where his family ran a shipping company) (228). Not only in his fiction but in all aspects of Stapledon’s life and work we find a mania for totality that calls to mind Carl Sagan’s recipe for apple pie: to inaugurate a just and sustainable planetary order, one must first create the universe. What Stapledon is ultimately after, through his relentless chasing of a temporal perspective far beyond the scale of any individual human life, is almost precisely the cognitive mapping work Jameson identifies in the conspiracy narrative in his influential essay “Totality as Conspiracy,” when he describes “the famous and seemingly gratuitous” tracking shot in All the President’s Men that “literally rises from the very small (the reading-room call slips) to the social totality itself” (78):

For it is the impossible vision of totality—here recovered in the moment in which the possibility of conspiracy confirms the possibility of the very unity of the social order itself—that is celebrated in this well-nigh paradisal moment. This then is the link between the phenomenal and the noumenal, or the ideological and the Utopian. The mounting image, underscored by the audible emergence, for the first time in the film, of the solemn music that so remarkably confirms the investigation’s and the film’s telos, in which the map of the conspiracy itself, with its streets now radiating out through Washington from this ultimate center, unexpectedly suggests the possibility of cognitive mapping as a whole
and stands as its substitute and yet its allegory all at once. The mounting camera shot, which diminishes the fevered researches of the two investigators as it rises to disclose the frozen cosmology of the reading room’s circular balconies, confirms the momentary coincidence between knowledge as such and the architectural order of the astronomical totality itself, and yields a brief glimpse of the providential, as what organizes history but is unrepresentable within it. (79)

With only a few changes Jameson might have been talking about the paranoid cosmic logic of *Star Maker*, which quite literally takes the “architectural order” of a literally astronomical totality as its own paradisal glimpse into the totality of history. *Star Maker* might well be thought of as a galactic conspiracy novel—an attempt to break through past the momentary incomprehensibility of the present moment to find the hidden system that at last explains everything. In fact this is precisely the criticism that H.G. Wells launches at Stapledon in a letter to him in June 1937 (the year *Star Maker* is published): “Essentially I am more positivist and finite than you are. You are still trying to get a formula for the whole universe. I gave up trying to swallow the Whole years ago” (OS H2.A.31.3.)

Stapledon was the first to admit that the book is designated “the Cosmos-book” (Crossley 228) had a form and ambition that went beyond the typical novel, telling *Punch* in 1937 that “Judged by the standards of the novel,” says Mr. Olaf Stapledon candidly, “it” — *Star Maker* (Metheuen 8/6) — “is remarkably bad. In fact it is no novel at all” (OS I9.2). Stapledon likely might have approved Brian Aldiss’s praise, that “Star Maker stands on that very remote shelf of books which contains huge foolhardy
endeavors, carried out according to their authors' ambitions” alongside such books as “Hardy's Dynasts stands there, the writings of Sir Thomas Browne, CM Doughtly's epic poems, and maybe Milton's Paradise Lost” (198). And yet despite its idiosyncratic form the novel has been tremendously influential on generations of science fiction novelists to come. Stapledon, with Asimov, is the primary developer of what legendary Golden Age editor Donald A. Wollheim had already identified in the 1950s as the “consensus cosmogony” of science fiction, what today would commonly be call a megatext27 which depicts the rise, fall, and rise again of a Galactic Empire—though Stapledon breaks from the back insofar as his Galactic Empire is not human-led, and indeed contains almost no humans at all. Edward James summarizes Wollheim’s system into an eight-stage cycle that begins with the human exploration of the solar system (#1) and then out to the extrasolar planets (#2), culminates in the rise of the first Galactic Empire (#3-4), which then collapses (#5) through a sometimes lengthy period of Dark Age (#6), followed by the rise of a second Empire that is imagined to be perfected and permanent (#7) (259). To run through all seven stages, as these narratives typically do, requires a temporal perspective of at least several thousand years; Asimov’s Foundation series spans several hundred millennia, while Stapledon’s spans the entire history of the universe.

Intriguingly, Wollheim identifies as the eighth and culminating step of the Galactic Empire cycle the “Challenge to God”: “the effort to solve the last secrets of the

27 See in particular Damien Broderick’s Reading by Starlight: Postmodern Science Fiction.
universe, and the end of time and/or the beginning of a new universe” (259). In a pattern we have seen repeatedly in SF, the attempt to imagine stable permanence (as in stage #7) necessarily calls forth its structural opposite—the crisis that in an entropic universe nothing can be truly permanent on any time scale. And here again we find Stapledon leading the pack: Star Maker anticipates in miniature any number of later cosmological works of SF in its attempt to exhaust all possible patterns of interaction and interference between the individual and the collective and thereby glimpse human/universal history in its incomprehensible totality. But Stapledon is also somewhat singular in his engagement of these themes; typically, as Andrew Ross and Brooks Landon have noted, the fantasy of galactic colonization was “implicated in the language of nationalistic destiny” (Landon 79), where “the call for the colonization of space” was a symptom of “adventure, as always, was imperialism’s accomplice” (Ross 112). Stapledon’s vision of the colonization of space is, first, fiercely anti-imperialist; his commitment to cosmopolitan inclusivity is such that he is reluctant even to declare an allegiance to humanity as such: “I am loyal to man, but not because homo sapiens is my species, but simply because Man is the best thing I know. If Martians arrive, and prove better than Man, I put them first” (“World Citizenship” OS/F2/3). Second, and perhaps more importantly, Stapledon’s use of the stars tends to be directed in much different direction than most galactic empire fictions—he is, in accordance with Robu’s theories on the importance of the sublime in science fiction, working always towards activation of the
infinite as a means of accessing tragic catharsis.\textsuperscript{28} Where much cosmic science fiction is predicated on a fantasy of species immortality— that there should be “some corner of another world that is forever mankind,” in the words of the speech William Safire prepared for Richard Nixon during the Apollo 11 “in event of Moon disaster”— Stapledon seeks from his science fictions some psychological or philosophical comfort for a universe in which all things are mortal.

Although what remains of this chapter will focus primarily on Stapledon’s cosmic \textit{Star Maker} (published in 1937), I would be remiss to omit his \textit{Last and First Men} (1931), the book for which he first rose to prominence as a writer of fiction, and for which he was best-known during his life. \textit{Last and First Men} aims at nothing less than a total history of the human race, beginning with the near-term history of the anticipated next world war and ending in the inconceivably distant future on a Neptune that is occupied by humanity’s evolutionary successors, the doomed Eighteenth (and Last) Men. The book, writes Robert Crossley, was “in every respect a breakthrough for Olaf” (185) with reviewers commonly grasping for just the right superlative: “‘tremendous,’ ‘audacious,’ ‘entirely original,’ ‘gargantuan,’ ‘unique,’ ‘Michelangelisque’ (192)—turning Stapledon, at age forty-four, into an overnight literary celebrity. The quest for some language to describe the book went beyond the content to credit Stapledon with the invention of a new literary form: “You have invented a new kind of book and the world

\textsuperscript{28} See Robu 24-25.
of Einstein and jeans is ready for it,” wrote John Dover Wilson (qtd. in Crossley 191).

Doris Lessing reports having been given the book as a girl by a neighbor, who told her:
“You must read this if you never read anything else!” (qtd. in Crossley 193) Crossley finds that in contemporary reviews of *Last and First Men* Stapledon was commonly considered to be not only Wells’s successor but his superior; *Oxford* Magazine agreed, writing the “boldest imaginings of Mr. Wells pale before the dreams of Mr. Stapledon” (qtd. in Crossley 192) while Julian Huxley (a Wells collaborator) assured Stapledon that “The blend of imagination and scientific plausibility is more than Wellsian!” (qtd. in Crossley 191).29

Stapledon foregrounds the central SF question of prediction vs. allegory from its earliest pages, when he gives the book two prefaces. The first begins with the insistence that “This is a work of fiction. I have tried to invent a story which may seem a possible, or at least not wholly impossible, account of the future of man; and I have tried to make that story relevant to the change that is taking place today in man’s outlook” (*Last and First Men* 9). Down the page he is more explicit: “Not that we should seek actually to prophesy what will as a matter of fact occur; for in our present state such a prophesy is certainly futile, save in the simplest matters” (9). Although Stapledon was not a reader

---

29 Stapledon, for his part, was deeply solicitous of Wells, and in his letters appears desperate to be thought of as an equal. Noting the frequent references to Wells in his reviews, and feeling embarrassed that he did not explicitly mention Wells’s speculations in his own book’s preface, Stapledon writes to Wells that “A man does not record his debt to the air he breathes” (qtd. in Aldiss 194).
of the American pulps, his preface unknowingly takes aim at the Gernsbackian preoccupation with the predictive possibilities of science fiction; Stapledon’s stated aim is not to actually predict the future but to create only a veneer of plausibility around his allegorization of the crises of the twentieth century. Rather, Stapledon anticipates Darko Suvin’s theory of cognitive estrangement that has come to dominate critical approaches to science fiction:

Today we should welcome, and even study, every serious attempt to envisage the future of our race; not merely in order to grasp the very diverse and often tragic possibilities that confront us, but also that we may familiar ourselves with the certainty that many our most cherished ideals would seem puerile to more developed minds. To romance of the far future, then, is to attempt to see the human race in its cosmic setting, and to mould our hearts to entertain new values. (9)

Rather than prediction, Stapledon’s stated goal for science fiction is the creation of “true myth,” which “within the universe of a certain culture (living or dead, expresses richly, and often perhaps tragically, the highest admirations possible within that culture” (9).

30 In an interview with Scientifiction after the publication and sudden popularity of Last and First Men, Stapledon confesses first that he was not a reader of American pulp SF and second that he does not really like it:
I have been looking through a few of them, and I was very surprised to find that so much work of this kind was being done. My impression was that the stories varied greatly in quality. Some were only superficially scientific, while other contained very striking ideas vividly treated.
On the whole, I felt that the human side was terribly crude, particularly the love interest. Also, there seemed to me far too much padding in most of them, in proportion to the genuine imaginative interest. (9)
He does, however, express excitement about the rise of science fiction film, including the H.G. Wells-penned Things to Come (1936).

31 Stapledon further anticipates Suvin by immediately insisting on the primacy of science in this pursuit:
“But if such imaginative construction of possible futures is to be at all potent, our imagination must be strictly disciplined. We must endeavor not to go beyond the bounds of possibility set by the particular state of culture within which we live. The merely fantastic has only minor power” (9). Such a line would not be out of place in Suvin’s Metamorphoses.
For Stapledon, as Kinnaird has remarked, this myth is always located at “some intersection of the human and the cosmic” (Kinnaird 34). This intersection is commonly thought in terms of the sublime encounter with time that has characterized early science fiction’s engagement with apocalyptic fantasy. Stapledon draws a stark contrast between himself and those writers of “future romances” whose visions are but (bad) utopianism; he turns instead to the other axis of possibility, the thought that [civilization] may decay and collapse, and that all its spiritual treasure may be lost irrevocably”—and a second tragedy alongside that first one, that “our race will destroy itself” (*Last and First Men* 10). By its end the first preface morphs, unexpectedly, into a kind of prayer: “May this not happen! May the League of Nations, or some more strictly cosmopolitan authority, win through before it is too late!” (10-11)

Then the second preface begins. Now the dialectic between truth and falsity that characterizes cognitive estrangement begins in earnest—as this preface is said to be written not by Stapledon but by a mind of the distant future which has inhabited him for the purpose of telling us this story: “The actual writer thinks he is merely contriving a work of fiction. Though he seeks to tell a plausible story, he neither believes it himself, nor expects others to believe it. Yet the story is true” (13). Now the story takes on something of a predictive character after all—Stapledon’s own reflective writing on *Last and First Men* reflects the extent to which this second preface represents something more than mere flourish; he was delighted in the scientific rationality at work in this
piece, and excoriated himself for failing to anticipate the rise of fascism with Last and First Men’s pages. But the turn to prophecy goes hand-in-hand with a kind of total fatalism; to the extent that we imagine Last and First Men to be true we necessarily lose any hope for “the future to turn out more happily than I have figured it” (10). It instead becomes the recorded, finished history of a doomed human race that has reached the end of its possibility for expansion in the furthest reaches of the solar system—a history that is not a “paradise” but a series of “huge fluctuations of joy and woe” (13). Over the million-year history of Last and First Men man evolves wholly new forms to adapt to changing surroundings; at one point, the reign of the Seventh Men, human beings even sprout wings and fly.

To take up only the first historical cycle depicted in the story, the rise and fall of the “First Men”: Stapledon imagines a Europe that is ultimately unable to maintain the promise of peace suggested by the end of the Great War. Oddly—recall that he is writing in 1937—it is not Germany that leads this attack; Germany “becomes the most pacific [nation], and a stronghold of enlightenment” following its defeat. It is the victors of the war, “In spite of their real craving to be human and generous, and to found a new

---

32 “By 1947 the early chapters of Last and First Men had become obsolete as prediction, and Stapledon was in the position of having sheepishly to submit a scorecard to his audience. If in the aftermath of the death camps and a global war against fascism he had to confess that he had ‘missed Hitler,’ he could at least claim that he got ‘atomic power’” (Crossley, “Olaf Stapledon and the Idea of Science Fiction” 37). Crossley also notes a passage in the preface to Darkness and the Light (1942) where Stapledon says “Historical prediction is doomed always to fail” (v), as well as the cutting of the anti-American sections of Last and First Men in a 1953 reprinting.
world” via the creation of the League of Nations, who ultimately fall as a result of their own timidity and the failings of their leaders into a series of catastrophic wars with one another (19). First France and Italy go to war; then France and Britain; Stapledon even anticipates the Blitz with a sneak attack on London that destroys the British Museum (21). The mutual destruction of both France and England allows Americans to attain global hegemony, a power that is solidified when its primary competitors (Germany and Russia) go to war with each other and unleash a potent chemical weapon that sterilizes a huge portion of the land between the Baltic and Black Seas (and which ultimately spreads across the entire continent, poisoning much of Europe). Over time American hegemony turns toxic, culminating in a brutally exterminative final war: “The American people, sometimes tender even to excess, were now collectively insane with hate of the English and of all Europeans. With cold efficiency they followed Europe with the latest and deadliest of gases till all the people were poisoned in their cities like rats in their holes. … Thus Europe died. All centres of intellectual life were blotted out, and of the agricultural regions only the uplands and mountains were untouched” (40).

But even this terrible war is not the last one; it merely sets the stage for another conflict between America and China (47), a conflict America also wins, ushering in the era of an “Americanized planet” beginning approximately 2300 A.D. (55). Here, achieved at last, is the global unity—a world government—that Stapledon has been calling for. But it is achieved at great cost to “the mind of the race” (55)—the world
empire is a long period of decadent, anti-intellectual and cultural decline. The strange cultural practices of the Americanized planet are inscrutable and brutal, ranging from a eugenic practice of dropping infants from airplanes as a “substitute for contraception”\textsuperscript{33} to a ritualized “Sacred Lynching” between “a white woman and a Negro”\textsuperscript{34} (66-67). The worship of violence inherent in this world empire is made clear by a complete aligning of sex with airplane piloting; in this totally puritanical society only pilots are allowed to have sex, and no unlicensed person is even allowed to mention the subject (68-69).

A mere four thousand years after its brutal founding, this empire experiences a resource crisis and collapses. Poison gas and biological warfare are again employed, this time by the government of the world state against its panicked citizens; the world is heavily depopulated, with only a diseased remnant surviving in the most fertile areas (70). This period of dark ages lasts a hundred thousand years; finally a successor civilization briefly arises, called Patagonia, with its capital centered in South America—but a Patagonian attempt to experiment with nuclear energy promptly causes global apocalypse that kills every human on the planet, save for thirty-five stationed at an

\textsuperscript{33} “In the life of every individual, flying played a great part. Immediately after birth he was taken up by a priestess of flight and dropped, clinging to a parachute, to be deftly caught upon the wings of his father’s plane. This ritual served as a substitute for contraception (forbidden as an interference with the divine energy); for since in many infants the old simian grasping-instinct was atrophied, a large proportion of the new-born let go and were smashed upon the paternal wings” (66). The practice is said to favor the “primitive” over the “highly developed,” leading to a long-term decline in general intelligence.

\textsuperscript{34} Born out of a colonial guilt that has rendered “pure Negroes … a sacred caste,” the bizarre imagined practice involves a ballet between the two participants, followed by the woman’s murder at the hands of the man, followed by a mob’s chasing the male dancer into a forest and attempting to lynch him, culminating in the man’s murder if they are successful.
outpost at the North Pole (89-90). Ten million years after this, the race of Second Men
descended from these thirty-five survivors begins to spread over the planet (100), only
to become embroiled with a conflict with invading Martians—and the book has another
150 pages, sixteen evolutionary successors of *Homo sapiens*, and two billion of years yet
to narrate.

These variations on the human deeply unsettle the fantasy of a universal human
subject that has been (and remains) a typical assumption of SF. Here we have multiple
*humanities*, multiple men, none with a particularly stronger claim on the ownership of
history than any other. (Indeed, from this hyperbolic temporal perspective the “First
Men,” *Homo sapiens*, is but a miniscule and deeply failed portion of the overall human
story.) Stapledon’s second narrator—the man of the future—rightly likens the novel’s
remarkable form to the ascent of an airplane on take-off:

> Historians living in your day need grapple only with one moment of the
> flux of time. But I have to present in one book the essence not of centuries
> but of aeons. Clearly we cannot walk at leisure through such a tract, in
> which a million terrestrial years are but as one year is to your historians.
> We must fly. We must travel as you do in your aeroplanes, observing
> only the broad features of the continent. But since the flier sees nothing of
> the minute inhabitants below him, and since it is they who make history,
> we must also punctuate our flight with my descents, skimming as it were
> over the house-tops, and even aligning at critical points to speak face-to-
> face with individuals. And as the plane’s journey must begin with a slow
> ascent from the intricate pedestrian view to wider horizons, so we must
> begin with a somewhat close inspection of that little period which
> includes the culmination and collapse of your own primitive civilization.

(15)

Brian Aldiss seemingly draws from this metaphor in his own review of Stapledon in
Thousand Year Spree, nothing that in these works "The atmosphere Stapledon generates is chill but intoxicating. Reading his books is like standing on the top of a high mountain. One can see a lot of planet and much of the sprawling uncertain works of man, but little actual human activity; from such an altitude, all sense of the individual is lost" (194). We should think here of Jameson’s remarks on the radical ungraspability of totality, the need for strategies of boundary, exclusion, and world-reduction that can make a mapping of totality possible given the spatial and temporal limits of human cognition. What falls out in Stapledon’s more cosmic works is, by his own admission, subjectivity itself: we get the sweeping arcs of history, but not its players.

Here the difficulties of the scalar interplay between locality and totality are memorably symbolized: the widened perspective of totality necessarily carries with it an objectivity and speed that flattens out particularity, difference, and even lived human life. The even more ambitious Star Maker only extends this sublime decentering of the human; in the cosmic history of Star Maker human achievement counts for nothing at all. The entirety of Last and First Men is summarized in a single paragraph of Star Maker—at maximum narrative distance and speed—which is punctuated by this final epitaph: “All this long human story, most passionate and tragic in the living, was but an unimportant, a seemingly barren and negligible effort, lasting only for a few moments in the life of the galaxy” (Star Maker 184).

We find here in miniature what Jameson calls the “vast social melancholy” of
Stapledon’s cosmic vision, which “alternates with a joy of existence and productive activity” at a rhythm that somehow always seems to leave melancholy the victor (Archaeologies 126). The aesthetic of doomed striving in Stapledon led John Kinnaird to call him the last Romantic poet (5). In his review of Star Maker for the London Mercury in July 1937, Bertrand Russell highlights this aspect of the novel:

When confronted with the vastness of the cosmos and the smallness of our planet, different men react very differently. Some are merely mad uncomfortable, and forget as soon as possible. Others set to work to make the universe cosy and friendly by the invention of myths. Yet others find that some of their purposes seem trivial when confronted with astronomical space-time, while certain impersonal aims survive the test. A man who wishes (let us say) to be rich can hardly feel that if he succeeds he will enrich the cosmos but the man who attempts to understand the cosmos better than it has hitherto been understood can feel that, in some sense, his understanding, if he succeeds, is part of the world’s understanding of itself, and is an achievement which is not merely personal.

Russell admits his attraction to this way of thinking, which he writes, “for certain types of mind, has all that is good in religion without any of the bad features of most historical creeds.” However, despite a strong personal affinity for this perspective, he must nonetheless concede “Perhaps this feeling is an illusion; I would not undertake to defend it against a critic” (OS I9/2).

The Search for the Star Maker

The plot of Star Maker (such as it is) is far too long and far too varied to adequately summarize. The basic structural logic of the novel is that of a continual
zoom-out, beginning with a single man standing on a hill in England stewing after a fight with his wife (as expressed in the novel’s first line: “One night when I had tasted bitterness I went out on to the hill”) (7). The man—wondering how anything on a human scale can have any significance when our entire lives are “but a flicker in one day of the lives of stars” (11)—is unexpectedly pulled out of the terrestrial context and begins to travel through the interstellar void by way of a kind of astral projection. The novel begins—as it will eventually end—with a transcendent vision of the entire globe:

The spectacle before me was strangely moving. Personal anxiety was blotted out by wonder and admiration; for the sheer beauty of our planet surprised me. It was a huge pearl, set in spangled ebony. It was nacrous, it was an opal. No, it was far more lovely than any jewel. Its patterned coloring was more subtle, more ethereal. It displayed the delicacy and brilliance, the intricacy and harmony of a live thing. Strange that in my remoteness I seemed to feel, as never before, the vital presence of Earth as of a creature alive but tranced and obscurely yearning to wake. (15)

The imaginative sublimity of this vision is all the more remarkable in that he is writing both before the emergence of the Gaia theory and before spaceflight—such is the immense scope of Stapledon’s vision.

This vision of an organicist, vitalist totality of the globe into which all local human life is subsumed (if not obliterated altogether) is, in many ways, the central insight of Stapledon’s life and the source of his deepest political commitments. In *Archaeologies of the Future* Fredric Jameson is quite taken with the sense that for Stapledon collectivity—the collective—is a matter of widening the locus of interest into wider and wider spheres; as Stapledon’s narrator extends himself in both space and
time—and as the novel goes on, in consciousness as well—Jameson notes the narrator actually begins to merge with the very notion of collectivity as such (*Archaeologies* 8).

In what is still the most detailed biography of Stapledon available, Robert Crossley details Stapledon’s commitment to cosmopolitan globality during the period in which he was writing *Star Maker* by way of his horror at the Italian invasion of Ethiopia, the last independent nation in Africa—which so disturbs Stapledon, and so moves him to action, that it nearly derails the project of writing the book altogether. He became politically active in anti-colonial activism and anti-war pacifism, frequently giving lectures that call for reprisals against Italy and Germany, an end to British imperialism, and a new World Federation (Crossley, *Olaf* 231).

In his 1930s speeches Stapledon frequently argued for disarmament, arguing that “today nearly all men want peace” except “frustrated vindictive perverts and dupes” and “those who make arms for profit” (“The Seven Pillars of Peace,” OS/F2/2). He attempted in his work to establish nonviolence as an important, if not absolute, principle for national politics, and pacifism as a key plank in a larger goal to reorganize the world polity into a socialistic World Federation (Ibid.). To the question of whether such a policy would be practical, his answer was that this was “the only practicable direction to work in”—and “the only possible one to succeed” (“Pacifism” OS/F6). “Technological progress is not arithmetical but geometrical—it acceleration is itself under acceleration,” he writes Huxley in 1936. “A short term programme postulates a certain stability of
conditions: but there is no such stability. And anyhow I can’t see that one can mentally accept the position of saying: I disapprove of murder, but I must be allowed to go on committing it for another few years… Hundred per cent pacifism is obviously difficult and disagreeable; but the circumstances are such that it is necessary.” (OS/H2/A13.)

Stapledon had a similar fervor for the elimination of nationalism and for the practices of colonialism. In a 1936 chain letter titled TO ALL THE PEOPLES OF THE EARTH—which Stapledon was desperate to circulate and for which he requested signatures from H.G. Wells and Virginia Woolf, among his other correspondents—he writes:

15 We declare a special love of Britain; yet we freely give our absolute loyalty to Humanity.
16. We recognize that in a changing world the economic and imperial relations between our people and others must change. We most earnestly desire all such changes to be controlled for the good of the world as a whole.35

This interest, and anxiety in the conditions that made possible Britain’s own dominance, goes back still further: among Stapledon’s juvenilia in the Liverpool archive can be found an annotated copy of J.G. Bartholomew’s The Handy Atlas of the British Empire dated in the frontspiece to 1908, which the young Olaf exhaustively annotated with a history of imperialism: moments of first contact, colonial rebellions and wars, juridical

35 Multiple drafts of this letter can be found in the archive. The quoted text is from a near-completed version labeled “Draft B.” The Peace Letter was ultimately printed in newspapers and posted in public locations, but never made the splash Stapledon had allowed himself to hope. See Crossley’s Olaf Stapledon, p. 236-237 and 431n22.
and legal advancement, independence, and so forth. In lectures of the period during which he was writing Star Maker he insisted that the historical moment of imperialism was now at its end: “We can’t keep it up,” he wrote; “we don’t want to keep it up” (“World Order” OS/F2/1). Writing of the economic consequences of imperialism—exploitation of people and raw materials, the securing of foreign markets in which to sell finished goods—Stapledon proclaims “these privileges are doomed” and a new future must be found for Britain” (Ibid.). The vision is at its core a salvific one; that the empire might be absolved of its criminality and redeemed, before it is too late.

In both the pull-out at the beginning of Star Maker and the pull-in at the end there is an intense visual focus on the colonial sphere and the need for worldwide equality—and this is even more important in the first drafts of the novel, which in important ways anticipate the politics of post-World-War-II decolonization. “Far to the south,” Stapledon wrote, “where Dutch and English thrive on the negro millions, I heard it whispered, ‘The Blacks are waiting’” (OS/B1/21/1) This strident anticipation of the coming politics of decolonization is significantly flattened in the final text, which puts aside the twinned questions of race and coloniality and only offers Africa “vague dreams of freedom” (Star Maker 261). He would be somewhat more strident on this point in a 1941 letter to the editor:

“Sir, —May I reply to your correspondent who criticized a passage in my speed at the recent India League meeting and also take this opportunity of raising another matter? I did not suggest that we should give India democracy merely to strengthen our own position, but that this policy,
besides being morally right, was also prudent. It would give us the backing of a friendly India and it would disprove Hitler’s charge that while preaching democracy in Europe we are thwarting it in the Empire.” (OS/I9/2)

Over and over again, in lectures delivered across the whole of his adult life, he writes “humanity must unite or perish”; “science makes nonsense of tribalism, and makes it lethal” (“Federation and World Order” OS/F2/8).

Nationalism in particular comes under harsh critique. During an address to the British Interplanetary Society in 1948 on the subject of interplanetary colonization Stapledon begins with an assumption that “if all goes well with man, men will, in fact, be able to reach the other planets within a few decades, and able to effect landings on them” (“Interplanetary Man?” 211) before beginning to enumerate the various possibilities (if the planets are inhabited; if the planets are uninhabited; etc). But central to Stapledon’s assumption that this is possible is the assumption that “all has gone well with man,” i.e., humanity has already been united under a single banner—if all has not gone well with man, he says:

His folly may quite well lead to the destruction of civilization, to the extermination of his species, and even to the extinction of all terrestrial life. It is not entirely fantastic to surmise that he may even blow up his planet and reduce it to a new swarm of asteroids. In gaining control of atomic energy, man clumsily grasps an instrument of incalculable potency, both for good and for evil. J.B.S. Haldane has suggested that it may be a law of nature that any species that gains atomic power before unifying its world society must destroy itself. (219-220)

In the address he returns to this thread frequently in the speech, frequently raising the specter that the nightmare of “rival imperialisms to annex these vast virgin territories”
might be repeated on the solar or even galactic scale: “Already one of our vigorous but still culturally adolescent cousins across the Atlantic is reported to have suggested that the moon should be annexed as soon as possible as an industrial field for American exploitation. Alas! Must the first flag to be planted beyond the earth’s confines be the Stars and Stripes, and not the banner of a united Humanity?” (223). Here the anti-Americanism of Last and First Men returns with a vengeance as an anticipatory pre-critique of the Apollo Program.

Stapledon’s is a call not only for worldwide political union but for a transformation of worldwide values. The organization of this imagined global federation would not be not power but a kind of anti-power; His quick-witted but revealing answer to a reporter’s question about “what he would do if he were dictator of the world” was “resign at once!” (London Daily Mail interview OS/I9/2). Stapledon imagines the world—both the industrialized nations and the colonial sphere—organized around rational, mutually beneficial cooperation; his definition of “world citizenship” entails “a community of diverse peoples containing diverse sections and diverse individuals” (“Education for World Citizenship” OS/F7/1). This is a cosmopolitan liberalism in which Britain is enhanced and transformed by its relationship with other
cultures, if not exactly decentered from its self-crowned spot at the apex of human history—and united by a shared commitment to collective life.36

Frequently the problem of the future is framed as a choice between “a worldwide totalitarian ant-state”—“Hitler’s [world]—robot humans, dictatorship by the privileged, restraint of intelligence (because it points the other way)” or else “or, a fully human world—the first ever” (Ibid.). The end of World War II will only make him more apocalyptic, adding a third choice that leaves humanity at the moment of final decision between “a well-tilled garden world with glorious cities” or else cataclysmic war and universal death (“World Citizenship” OS/F2/3). It is atomic power itself that symbolizes the knife’s edge between these two alternative destinies, as Stapledon argued at the Wroclaw Peace Conference in 1948:

Today we live in one of the greatest moments of man’s career. From the beginning of our species, some twenty thousand human generations ago, right up to the advent of science, which began about fifteen or twelve generations ago, man’s power over the environment was slight. Science has given him great power, but not wisdom. Today, we are the first generation of the atomic age, which promises power beyond man’s wildest dreams. In the future, if disaster does not intervene, this planet may well be habitable some millions of generations hence. But now for the first time man clumsily grasps an instrument which, we are told, may put an end not only to civilization but to the human species, and even to all life on earth. Yes, but also this dangerous instrument makes possible for the first time the creation of an entirely new kind of world society, in which every individual will have the change to develop his human

36 At the same time it sometimes can be difficult at times to tell whether cosmopolitanism for Stapledon means a new world order in which everyone is finally free, or a world order in which everyone is finally free to be British. This is, it seems to me, frankly as much a problem with cosmopolitan liberalism as a whole as with Stapledon’s version of it; cosmopolitanism has its own embedded imperial ambitions.

128
capacities fully, ad to exercise them happily and loyally in the great
common adventure of mankind. (“Address on Peace and Culture”
OS/D1/22/14)  
The bifurcation of man’s destiny into two possible futures had already formed the
theoretical basis for his novel *Darkness and the Light* in 1942. At times he seems deeply
and bitterly uncertain which path humanity will choose. “We must rediscover a high
purpose in life,” he writes in one speech of this transformation of values. The alternative
is “suicide of the species (and good riddance!)” (“World Citizenship” OS/F2/3).

This apparent misanthropy—a basic, irresolvable doubt in man’s capacity to
change—appears in concert with his Utopian cosmopolitanism in nearly every case;
even the transcendent vision of the earth as a single vital whole is balanced in the very
next paragraph:

> From this high look-out the Earth would have appeared no different
before the dawn of man. No visiting angel, or explorer from another
planet, could have guessed that this bland orb teemed with vermin, with
world-mastering, self-torturing, incipiently angelic beasts (15).

This is a frequent concern of Stapledon’s; he is preoccupied that the ultimate cosmic
status of man may be no more than those of “rats in the cathedral”: ruiners and
corruptors of the spirit, defilers of paradise.

Back then to *Star Maker*. Leaving the earth behind and traveling out into the
interstellar void, Stapledon’s astral narrator visits first a place he calls the Other Earth,

---

37 Note again the fascination with hyperbolic time scales that range from the deep evolutionary past to
“millions of generations hence.”
where this anxiety over the progress of man is first played out. The planet has inhabitants much like ours; the primary difference is that (in a quiet anticipation of McLuhan) their sensory matrix is dominated not by the visual or the auditory, but by taste and smell. (This is especially important to Stapledon as a satire of the racism of his moment.)

The unnamed observes these Other Men for years before finally finding a mind with which he can converse, co-inhabiting this Other Man’s body and experiencing first hand life there. The Other World, like Stapledon’s, is at the dawn of the age of mass communication, and he watches as the planet’s civilization more or less shuts down in the face of the pleasure of radio: “During my last years on the Other Earth a system of invented by which a man could retire for life and spend all his time receiving radio programmes” (43). Radio—while advocated by its proponents as a solution to all of man’s problems and indeed an end to war—is corrupted by selfish nationalists on the planet looking to generate and preserve markets for their products, as well as consolidate their own power:

Radio, which formerly had been the main force of cosmopolitanism, became suddenly in each country the main stimulus to nationalism. Morning, noon, and night, every civilized people was assured that enemies, whose flavour was of course subhuman and foul, were plotting its destruction. (45)

Eventually—perhaps inevitable—this civilization hits what we might call the Talk Radio Event Horizon, and the results are inevitable:
I shall never forget how the populace plunged into almost maniacal hate. All thought of human brotherhood, and even of personal safety, was swept away by savage bloodust. Panic-stricken governments began projecting long-range rocket bombs at their dangerous neighbors. Within a few weeks several of the capitals of the Other Earth had been destroyed from the air. (46)

The disaster—caused by a fundamental imbalance in the dialectic between individual and community—turns out to be only the latest is a cycle of the rise and fall of civilizations on the planet that closely matches our situation on Earth, due to unknown causes speculated to range from “cosmic rays” to some intrinsic flaw in the genome of the Other Men themselves; reminiscent of the “all this has happened before and all this will happen again” mythos central to the latest incarnation of Battlestar Galactica, geologists on the other Earth eventually discover “a fossil diagram of a very complicated radio set,” suggesting a prehistoric parallel technological civilization had risen and fallen somewhere in its very deep past (56). The present is not privileged; empire cannot be made permanent. In the view of Bvalltu, the man with whom the narrator shares a body on the Other Earth, “...man had climbed approximately to the same height time after time, only to be undone by some hidden consequence of his own achievement” (57).

However, the cyclic is not a perfect repetition, but fundamentally and inexorably entropic due to a problem with the atmosphere of the Other Earth. Each cycle of history brings them closer to the final end—though the crisis might have been fixable before the onset of the next age of barbarism, if not for the war:
It was known to scientists that, owing to the weak gravitational hold of their world, the atmosphere, already scant, was steadily decreasing. Sooner or later humanity would have to face the problem of stopping this continuous leakage of oxygen. Hitherto life had successfully adapted itself to the progressive rarefaction of atmosphere, but the human physique had already reached the limit of adaptability in this respect. If the loss were not soon checked, the race would inevitably decline. The only hope was that some means to deal with the atmospheric problem would be discovered before the onset of the next age of barbarism. There had been only a slightly possibility that this would be achieved. This slender hope the war had destroyed by setting the clock of scientific research back from a century just at the time when human nature was deteriorating and might never again be able to tackle so difficult a problem. (57)

This is only the first lesson of the novel’s many set pieces, but this brief summary can stand in for what happens in nearly every other episode in the book: civilization arises briefly on a world, only to be eventually undone by either retrograde human stupidity, unyielding entropic breakdown, or both disasters acting in concert.

Bvalltu and the narrator leaves the doomed Other Earth and ultimately visits dozens and perhaps hundreds of such worlds, each time hoping to discover some version of humanity that can somehow pass through the crucible and survive the nightmare years of the twentieth century—an era in which “man has gained power but not wisdom” (“Address on Peace and Culture” OS/D1/22/15) and in which the once-glimmering promise of science has “turned to poison,” to again quote his lectures (“Frustration of Science” F11.21). In the excised glossary to Star Maker Stapledon defines this crucial moment as “the familiar crisis: the struggle to emerge from an
individualistic, uncoordinated world order to one that is consciously planned for world community” (272).

Each time they add more and more travelers to their growing communal mind, gaining new powers of empathy and imagination that allow them to visit more and more different worlds. They encounter an immense, almost indescribable panoply manner of biological possibility, from intelligent starfish to super-insects to “nautiloids,” living ships, to a planet where intelligent life is encoded in the dynamic patterns of flocks of birds. Jameson has mapped much of the novel’s individual set pieces onto a Greimas square that marks the dialectic between the one and the many (on the one hand) and between dualism and non-dualism (on the other) (Archaeologies 131). Thus we find that each of Stapledon’s many planets describes a particular possible instance of the structural relationship between the individual and the community. On a planet of echinoderms living in deep-sea “colonies,” a perfectly realized communism exists simply as a consequence of their alternative biology; there the fantasy that one might be an individual, by alone, is the most transcendent utopian impulse (82). On the planet of symbiotes the Other is not external, but always inside oneself; a healthy symbiote has a healthy relationship with their own divided self-difference (100-111). A world of plant men experiences the daily global ecstasy of contact with the divine whenever the sun is out—and must find a way to go about the business of living as a rational, atomic subject at night when it is not (120-130). On the planet of intelligent flocks of birds individuality
itself is a stable, but temporary, property of emergence; any too-close contact with another flock will cause the two to merge in unpredictable and irreversible ways (111-115).

“Human” civilization—the terms must be used quite loosely—on nearly all of the worlds they visit ultimately end in disaster, apocalypse and extinction, though every so often they catch a glimpse of a species that is able to survive, losing sight of it just as it passes out of the crisis beyond their own twentieth-century level of enlightenment. When the group mind finally breaks through and is itself able to pass beyond the limits of twentieth-century man, it discovers that the cycle of rising and falling civilizations it has been witnessing over and over—an inflection point which most planets and species, including our own, never survive—is only a tiny sliver of an even more hyperbolic cycle of galaxy-scale civilizations. Crucially, none of these advanced civilizations share our combination of biology and social institutions; primate life, perhaps all mammalian life, appears insuitable to galactic expansion.

The space-faring worlds themselves fall into conflict. Some of them reflect a Utopian/cosmopolitan “community of worlds,” while others are perverted “mad empires” racing across the galaxy subduing and subjugating uncontacted worlds with all the relentless, unceasing fervor of a Cecil Rhodes finally making good on his dream to annex all the stars. Crossley directs us rightly to read this sequence as the book’s most extended parable on the current world situation, reading fascism as a “mass neurosis.”
“ineffectively resisted by a defensive ‘League’ of sane worlds” (246). Finally this level of conflict, too, is ultimately transcended, through the rise of a race of telepathic ichthyoids-arachnoids symbiotes that are able to pacify the mad empires and make them sane again (170). A true Galactic Utopia is founded, living for a long time in glory—until, that is, the war with the stars begins. (Hyper-intelligent and indescribably old, the stars are so radically other it takes the citizens of the galaxy untold millennia to even notice they are alive.) And so on, and so on, as larger and larger totalities are constructed, hit their ultimate limit, and finally fail.

We can see this obsession for scale replicated on the level of Star Maker as a text. (In the archive you can find the intricate, poster-sized versions of these timelines Stapledon made for his own reference.) Mirroring the zoom-out logic of the text, the archives’ charts feature maps and timelines at various scales: $1”=300$ light years, $1”=300$ light years, $1”=30,000$ light years; $1” = 400$ years, then $1” = 4,000$, $1” = 400,000$, and so on up to $1”=400$ billion. In the marginia at 10 trillion years he notes, optimistically, “Earth would still be habitable (apart from accidents)—which isn’t scientifically accurate, but a wonderful expression of the hyperbolic timeline he thought the human project needed to be thinking (OS/I/1). At the bottom of the diagram we find the ultimate monster lurking at the end of this particular book: “Complete Physical Quiessence,” the final and total triumph of entropy, from which there can be no possible escape in the realms of either matter or spirit.
By this time our narrator and his collective mind have grown so large that they are now a cosmic mind, almost a spirit of the Universe as a whole. As Adam Roberts notes, the novel’s narrative trajectory “dramatize[s] the ongoing accumulation of knowledge. And the novel builds towards a tremendous, terrifying climax when knowledge becomes almost overwhelming” (170)—the moment of a fully realized cosmic sublime. And so the cosmic mind begins to perceive at the final end of this incomprehensibly vast historical process a cycle of entire universes, each playing out the same pattern of rise and fall, progress and collapse, internally within themselves. The mind passes through all these stages, too, finally encountering the long-sought-after Star Maker, the God-like spirit of love whose magnificence might justify so much pain, destruction, and misery, might somehow make sense out of this cycle—only to discover that the Star Maker is not a spirit of love but instead regards his creation with only icy contemplation:

It was with anguish and horror, and yet with acquiescence, even with praise, that I felt or seemed to feel something of the eternal spirit’s temper as it apprehended in one intuitive and timeless vision all our lives. Here was no pity, no proffer of salvation, no kindly aid. Or here were all pity and all love, but mastered by a frosty ecstasy. Our broken lives, our loves, our follies, our betrayals, our forlorn and gallant defences, were one and all calmly anatomized, assessed, and placed. True, they were one and all lived through with complete understanding, with insight and full sympathy, even with passion. But sympathy was not ultimate in the temper of the eternal spirit; contemplation was. Love was not absolute; contemplation was. And though there was love, there was also hate comprised within the spirit’s temper, for there was cruel delight in the contemplation of every horror, and glee in the downfall of the virtuous. All passions, it seemed, were comprised within the spirit’s temper; but,
mastered, icily gripped with in the cold, clear, crystal ecstasy of contemplation.

That this should be the upshot of all our lives, this scientist’s, no, artist’s keen appraisal! And yet I worshipped! (256)

His encounter with the Star Maker remains ineffable, even horrible: “a dread mystery, compelling adoration” (257). (We might think of the way that Cthulhu, or another of Lovecraft’s Nameless Horrors, might similarly compel your adoration.) This is the sublime as shocked “recoil” (in Csicsery-Ronay’s terms) (Seven Beauties 146) or as “pleasure in pain” (in Robu’s) (22)—the Star Maker’s dark majesty is incomprehensibly vertiginous.\(^{38}\) The final encounter with the Star Maker, the moment of the cosmos’s becoming fully aware of itself, simply restarts the process anew—in the meantime kicking the narrator all the way back to the English hill on which his journey began.

‘How to Face It All?’

In this Star Maker suggests itself as something transcending science fiction: a new myth of creation and eschatology, even a new religion for a post-imperialist, post-capitalist age. It seems the culminating move of Stapledon’s lifelong preoccupation with

\(^{38}\) Csicsery-Ronay in fact singles out Stapledon as a relatively rare example of a science fiction writer refusing the temptation to “ironize” the sublime through ludic play; Stapledon’s work is instead characterized by “serene, humorless sobriety” that comes closest to “acknowledging the abyss and the force of nature” (155).
reconciling Christianity with both science and Marxism; he himself called the novel a “confession of faith as a pious agnostic” (Crossley 228). Jameson too reads the novel in this light, declaring *Star Maker* “the Divine Comedy of Utopia, returning to us as a sacred text or scripture mysteriously catapulted from out of the future into our own fallen present, as though it were the enigmatic writing destined to secure a continuity across the barrier of time and historical transformation” (*Archaeologies* 124-125). Little wonder then that Brian Aldiss, bemoaning the fact that “the funeral masons and morticians who work their preserving processes on Eng. Lit.” have ignored Stapledon, calls *Star Maker* “the one great grey holy book of science fiction” (197).

But Stapledon himself seemed much less sure of its success. He poured through draft after draft of the novel, abandoning entirely an early version that was eventually published after his death as *Nebula Maker*. In the archives you can see the results of this constant tweaking, with draft after draft of the novel handwritten out with new annotations. A lengthy glossary is written, then cut from the published manuscript; the epilogue changes radically and is stripped of specific reference to current politics of antifascism and anti-imperialism. Robert Crossley sees the Star Maker as less Spinoza’s God than “a failed artist, eternally discontent with his work”—which he pointedly suggests “may have been a projection of Olaf’s own persistent sense of artistic

39 In fact his original attempt at writing *Star Maker*, called *Nebula Maker*, ended with a painfully obvious allegorical encounter between two living nebulae, Bright Heart (standing in for Christianity) and Fire Bolt (standing in for Marxism).
shortcoming” (Olaf Stapledon 241). The book was mostly a commercial failure, selling only 5000 copies in its first run—and Stapledon puts his science fictional writing on hold for several years as a result. If Star Maker is the myth that can finally reconcile Christianity to Marxism, Stapledon does not notice; he continues writing on and wrestling with this problem until his death, never happy with his answers. Indeed, as much as Spinoza’s or Marx’s God, the Star Maker is King Lear’s: “As flies to wanton boys, are we to the gods, — They kill us for their sport” (IV.1 line 34).

Worst of all is the nagging sense that dogs Stapledon for the rest of his literary career that the problem of history has simply not been solved, only pushed deeper and deeper off into the recessive mists of time in a way that is fundamentally unsatisfying. For everything it accomplishes, Star Maker never uncovers entropy’s escape hatch; in fact its manufacture of larger and larger systems, each one requiring yet another secret exit, only proves the relentless inexorability of entropy and the fundamental impossibility of escape. In this sense the promise of the future that underlies Stapledon’s critique of empire turns out to be always on very shaky ground. Dialectically, futurity for Stapledon is always also its opposite—every birth always also an inevitable death—and “the future” as a criterion for judgment and a call for action in the present turns out to be always as paralyzing as it is catalyzing.

In 1942 he writes The Darkness and the Light, which replicates the story of Star Maker on the globe by bifurcating future history into two channels, one nightmarish, the
other more optimistic—with the lone hope for mankind emerging not out of imperial or post-imperial England but out of Tibet. Even in the book’s “light” future, the ontology of the universe is essentially tragic; the most advanced scientists of that future world discover “the seemingly ultimate horror” that “the universe… of galaxies and atoms, of loves and hates and strifes, is no more than a melting snowflake which at any moment may be trampled into the slush by indifferent and brawling titans” (loc. 26219-2620). This “bleak vision” denies the possibility of a transcendent God like the one who organized the Star Maker universe; in his place, there is now only “desolation” (loc. 26221). The denizens of the “light” future determine that a species-wide hunger strike might catapult the entire race to state of “extreme spiritual lucidity” that could (they hope) somehow destroy the titans, even at the cost of all human life—but even in this they are thwarted (loc. 27260).

In The Flames, a 1947 novella, which in some ways might be said to be the schizophrenic response to Star Maker’s paranoia, man again makes contact with creatures of the stars, in this case living sunbeams—only these creatures are manipulative and religion-mad, threatening to use their powers to goad the nations of the world into a final atomic conflagration if a portion of the earth is not set aside (and set permanently afire) for their personal use. An epistolary novel, neither the writer of the narrative nor the reader who transmits it to us is ever sure whether the Flames are good or evil, or indeed if they even exist at all. And in Stapledon’s last novel, A Man
Divided, published in the year of his death, in which the best and worst impulses of humanity are constrained within a single individual, he returns again to this problem of the justification of man in a universe of extinction and entropy:

But let us for the sake of argument suppose that the very worst does happen, and that within a quarter of a century, or a quarter of a year, mankind destroys itself, and lethal radiation turns the whole surface of the earth into a desert, inhospitable to life—what then? Were those who foresaw it fools to remain alive, vainly striving against it? No! Even the destruction of a living world is worth living through, however painful; if one is awake, if one can see the disaster as an episode in the perennial struggle of the spirit in the innumerable successive hosts of individuals in all the worlds. My own life has been mainly a dismal failure, and yet it was infinitely worth living. And if mankind fails, yet mankind has been infinitely worth while. Already, and whatever happens, this planet, this grain that spawned our imperfect kind, is well justified. The solar system, the whole universe, is well justified; yes, even if man is the only, and a sadly imperfect, vessel of the spirit, and doomed. For no tragedy, not even a cosmical tragedy, can wipe out what man (in his low degree) has in fact achieved, through the grace of his vision of the spirit, his precarious and yet commanding vision of the spirit. (loc. 4202-4213)

But this character, too, cannot hold himself to this optimistic reading of history; in the very next sentence he immediately contradicts himself and leaps back to the need for something else, something greater: “But how unlikely that man is the sole vessel! Consider the pregnant stars! Consider the great galaxies! Can any sane mind then suppose that man is the sole vessel?” (Ibid.) The novel concludes in spinning out more possible escape hatch after possible escape hatch, with speculation about survival of the spirit after death and the existence of parallel worlds of “the spirit”—anything that
might keep the “cosmical tragedy” of quiescence, which Stapledon would like to convince us and himself is no threat, from ever being realized.

In the Stapledon archive one finds an undated document titled “Assorted Jottings for a Possible Book about the Future,” likely dating to c. 1933-1934, which are seemingly among his first preliminary notes for what would become Star Maker (OSB5.5.4). This document shows just what he was thinking as he set out to write the definitive history of the cosmos.40

It begins with the usual mania for scale: the “degrees of futurity” outlined on pg 1 of the notes defines 100 years as the near term, 5000 years as the middle term, and one million years as the far term. The notes are sparse, and overridden by a sense of melancholic anticipation. One page’s enumeration of the difference between “early loves and later loves, child world and grownup world” recapitulates the sad truth that times only moves in on direction, culminating in a list that abruptly culminates in the extinguishing of possibility: “growing up / growing old and dying.”41 The near term imagines the decline of capitalism and the creation of a synthesis between the US and

40 This document suggests the importance of Aldous Huxley in Stapledon’s early thoughts about Star Maker, despite their disagreements about pacifism. On one page the crossed-out words “Dark God” immediately proceed the name “Aldous”; on another, which seemingly describes the sequence of created and destroyed universes that closes the finished text, Brave New Cosmos is floated as a possible title.  
41 An undated “Letter to the Future” (D.1.30.1 in the Stapledon archive) expresses the same emotion even more starkly; it is somberly addressed “to those who will be young when we are dead.”
the USSR; the far term only asks “will man [fade out] before the earth cools?” 42 A
category labeled “the very far future” has only four words: “doomed world, +
universe?” (Ibid.)

This is truly the kernel at the heart of Star Maker, the singular philosophical
conundrum that preoccupied Stapledon all his life: what is the proper scale of human
imagination? On what imaginary timeline should we live our lives and plan our
politics? How can the human mind ponder not only its own extinction, not only the
eventual extinction of the nation and the human species and the Earth but indeed of the
entire cosmos? The heading written at the top of the last page of notes, immediately
following “doomed world, + universe?”, puts very bluntly the central aesthetic problem
of Star Maker in one single, sublime, terrible question, to which the novel is intended to
find the answer: “How [to] face it all?” (Ibid.)

But the rest of that page is blank. Even after Star Maker, alas, all things born
must die.

42 Stapledon’s shorthand can sometimes be difficult to make out. This may say “pack off.” Regardless, the
intended meaning is clear.
Chapter Two: Shipwrecked Passengers on a Doomed Planet

Not long ago, science fiction author Charles Stross posed a simple question to the readers of his blog, “Charlie’s Diary”:

You, and a quarter of a million other folks, have embarked on a 1000-year voyage aboard a hollowed-out asteroid. What sort of governance and society do you think would be most comfortable, not to mention likely to survive the trip without civil war, famine, and reigns of terror?

This thought experiment very quickly generated several hundred comments, as well as myriad, similarly lengthy secondary discussions at other sites. These discussions bounced between evaluations of the merits of capitalism, communism, monarchy, gynocracy, and theocracy under the specified circumstances—as well as several other outside-the-box science-fictional solutions like benevolent A.I. dictatorship, genetic engineering, manufactured hunter-gatherer primitivism, and just keeping the humans frozen in cryogenic suspension until they reached their destination on the grounds that people simply couldn’t be trusted not to blow up the ship along the way.

We can recognize the central problematic of this thought experiment as sustainability, in two senses: first, the need for a renewable material environment within which the limited resources available to the asteroid at the start of the journey could recycle, remaining available to humans as the voyage continued; and second the need for a sustainable cultural form, an ideology in the Althusserian sense, that could survive
and reproduce itself within those techno-natural constraints. And so it wasn’t very long before the commentators figured out Stross’s punchline: we are already in precisely this situation, we simply live atop our planetoid and not inside it.

The argument at the core of this chapter contends that the theoretical correlation between science fictional speculation and ecological consciousness suggested by Stross’s thought experiment is no mere coincidence. What are ultimately being contested in the realm of ecological politics, I argue, are competing imaginary relationships to the future, with environmentalists calling for re-imagined paths from now to then in hopes of changing what that future holds. In this sense ecological critique is always, in essence, a kind of science fiction: it projects the conditions of a possible future—whether good or bad, ecotopian or apocalyptic—in order to understand and transform the conditions of the present. In the chapter that follows, I trace the shrinking scale of human agency from the full cosmos (as in chapter one) back down to Earth, as science fiction and the culture at large (in the wake of 1970s environmental crises like the oil shock, pollution, and overpopulation) begin to focus once again on the long-term survivability of a human race permanently confined to a single planet. In the stories and films since 1970s that arise out of this renewed sense of natural limit, we commonly find a mournful sense that the once-privileged position of U.S. consumer culture is being challenged, and indeed perhaps is already doomed—a creeping terror that technological modernity, and its consumer lifestyle, may in fact have no future at all. In the second half of the chapter, I
read Margaret Atwood’s *Oryx and Crake* (2003) and *The Year of The Flood* (2009) in the context of this ecopessimism, arguing that the novels dramatize the ecological constraints that threaten the long-term sustainability of the contemporary global order as well as allegorize the sorts of utopian transformations that will be necessary to prevent a collapse that now seems both inevitable and just around the corner. Finally, I conclude the chapter with a brief consideration of 1970s and post-1970s science fictional visions of ecotopia, focusing in particular on novels from Ursula K. Le Guin and Kim Stanley Robinson.

**I. Spaceship Earth**

The notion that the Earth can itself be thought of as a “spaceship” long predates the immense geodesic dome at the center of Disney’s Epcot Center (that theme park’s most famous, most iconic structure). Perhaps the earliest reference is Herman Melville’s *Moby Dick*, in which Ahab speaks of a “frigate earth” which “in her murderous hold … is ballasted with bones of millions of the drowned” (249). In Henry George’s *Progress and Poverty* (1879), where the “ship” is imagined as a sea-faring galleon:

> It is a well-provisioned ship, this on which we sail through space. If the bread and beef above decks seem to grow scarce, we but open a hatch and there is a new supply, of which before we never dreamed. And very great command over the services of others comes to those who as the hatches are opened are permitted to say, “This is mine!” (243)
The best known reference today (outside Epcot) may be Buckminster Fuller’s *Operating Manual for Spaceship Earth* (1968), which invites us to reimagine the spaceship/planet as “an integrally-designed machine which to be persistently successful must be comprehended and serviced in total” (52). For Fuller, as for George, the ship is well provisioned, designed as such so that human beings (originating in ignorance) could have sufficient time to learn its operations and proper maintenance:

> I would say that designed into this Spaceship Earth’s total wealth was a big safety factor which allowed man to be very ignorant for a long time until he had amassed enough experiences from which to extract progressively the system of generalized principles governing the increases of energy managing advantages over environment. … Objective employment of those generalized principles in rearranging the physical resources of environment seems to be leading to humanity’s eventually total success and readiness to cope with far vaster problems of universe. (54)

The quoted reference to the “total wealth” of Earth, however, is purely retrospective; against George’s cornicopian nineteenth-century use, the Spaceship Earth metaphor tends in the twentieth century to be associated not with abundance but with scarcity, fragility, and limit. In the next chapter of *Operating Manual*, Fuller notes that

> the abundance of immediately consumable, obviously desirable or utterly essential resources have been sufficient *until now* to allow us to carry on

---

1 Contrast Fuller’s biopolitical vision with James Lovelock’s similarly totalizing Gaia hypothesis, in which the Earth is a machine (a superorganism) that homeostatically services itself.

2 Fuller’s progressivist, technologist narrative of history that begins with basic tool-making and culminates in interstellar colonization—perfectly in line with the fantasies of interstellar colonization and space empire discussed in the previous chapter—recalls the memorable claim commonly attributed to Konstantin Eduardovich Tsiolkovsky’s that “The Earth is the cradle of mankind, but one cannot live forever in a cradle,” as well as the transhistorical arc of Kubrick and Clarke’s *2001: A Space Odyssey*.
despite our ignorance. Being eventually exhaustible and spoilable, they have been adequate only up to this critical moment. (58, emphasis mine)

From this point forward, then, scarcity prevails, and humanity will require careful planners and holistic thinkers, rationally managing every aspect of shipboard operations, to keep the machine running smoothly.

In his essay “The Economics of the Coming Spaceship Earth,” published two years before Fuller’s *Operating Manual* in 1966, Kenneth E. Boulding (the cofounder of the Society for the Advancement of General Systems Theory\(^3\)) characterizes this “critical moment” as the transition from a “cowboy economy” to a “spaceman economy”:

For the sake of picturesqueness, I am tempted to call the open economy the “cowboy economy,” the cowboy being symbolic of the illimitable plains and also associated with reckless, exploitative, romantic, and violent behavior, which is characteristic of open societies. The closed economy of the future might similarly be called the “spaceman” economy, in which the earth has become a single spaceship, without unlimited reservoirs of anything, either for extraction or for pollution, and in which, therefore, man must find his place in a cyclical ecological system which is capable of continuous reproduction of material form even though it cannot escape having inputs of energy. (209)

The echo of Fredrick Jackson Turner’s 1893 “frontier thesis” is unmistakable; a once-open, once-free frontier of expansive possibility, which previously drove American history, has now slammed forever shut.

In the cowboy economy, consumption is an unalloyed good; if there are infinite reserves of everything (or abundant resources so inexhaustible as to be effectively

\(^3\) Systems theory’s reliance on *feedback* as a structuring principle links it closely with later developments in ecology.
infinite), the health of an economy is logically predicated on the expansion of consumption. But on a spaceship economy, governed by scarcity, reserves must always be tightly controlled, requiring a reevaluation of the basic principles of economics:

By contrast, in the spaceman economy, throughput is by no means a desideratum, and is indeed to be regarded as something to be minimized rather than maximized. The essential measure of the success of the economy is not production and consumption at all, but the nature, extent, quality, and complexity of the total capital stock, including in this the state of the human bodies and minds included in the system. In the spaceman economy, what we are primarily concerned with is stock maintenance, and any technological change which results in the maintenance of a given total stock with a lessened throughput (that is, less production and consumption) is clearly a gain. This idea that both production and consumption are bad things rather than good things is very strange to economists, who have been obsessed with the income-flow concepts to the exclusion, almost, of capital-stock concepts. (210)

This central insight—an ecological one—makes visible certain contradictions that were programmatically obscured by the “space empire” fantasies under discussion in the previous chapter. In stark contrast to the untold riches they are imagined to provide, distant space colonies—whether on inhospitable moons or orbiting far-flung planets—are in fact necessarily markers of deep, abiding, and permanent scarcity, requiring careful management without any waste of resources for any hope of survival. From an earthbound perspective, the colonization of space appears wildly expansive, a “New Frontier” that opens up the entire universe to human experience and exploitation—but

---

4 “If there are infinite reservoirs from which material can be obtained and into which effluvia can be deposited, then the throughput is at least a plausible measure of the success of the economy. The gross national product is a rough measure of this total throughput” (210).
from a perspective *inside* one of these spaceships or colonies, life is a state of fragile and even hellish enclosure, at constant risk of either deadly shortages or deadly exposure to the void outside. Asimov, of all science fiction writers, confronts this paradox in a late work, *Robots and Empire* (1985), which sees one of its robot heroes (operating under the self-generated “Zeroth Law”\(^5\)) deliberately and permanently poison the Earth’s crust with radioactive contaminants in order to *force* humans off their otherwise paradisal home world. Earth is already perfect for us, R. Giskard reasons — *too perfect*. The only way to get human beings off the planet and out into the universe (where, scattered across hundreds of worlds, the species will finally be safe from any local planetary disaster) is to destroy Earth altogether:

> “The removal of Earth as a large crowded world would remove a mystique I have already felt to be dangerous and would help the Settlers. They will streak outward into the Galaxy at a pace that will double and redouble and — without Earth to look back to always, without Earth to set up as a God of the past — they will establish a Galactic Empire. It was necessary for us to make that possible” (467).

Taken in the context of the rest of Asimov’s immense shared universe, the only available conclusion left to the reader is that this robot made the correct decision to poison the

\(^5\) “A robot may not harm humanity, or, by inaction, allow humanity to come to harm.” The “Zeroth Law” allows the robots to effectively ignore all the “Three Law” safeguards humans had installed to protect themselves from their creations, and ultimately leads to the establishment of a cabal of immortal robots who secretly orchestrate many dozens of millennia of future history in what they determine to be humanity’s best interests.
planet and kill all nonhuman life on Earth.\textsuperscript{6}

The use of interstellar travel and space colonization as a metaphor for understanding and reimagining this sort of material/ecological limit is well-trod ground in science fiction in works ranging from Brian Aldiss’s \textit{Nonstop/Starship} (1951) to Robert Heinlein’s \textit{The Moon Is a Harsh Mistress} (1961)—which popularized the ecologically sound proverb “There ain’t no such thing as a free lunch”—to Kim Stanley Robinson’s seminal and unapologetically utopian Mars Trilogy (1990s). It is even, in somewhat sublimated form, the kernel structuring Stephen King’s recent horror blockbuster, \textit{Under the Dome} (2009), in which an impenetrable barrier suddenly isolates Chesters Mill, Maine, from the rest of the outside world, leading to immediate resource scarcity and violent chaos. As King told popeaters.com:

\begin{quote}
From the very beginning, I saw it as a chance to write about the serious ecological problems that we face in the world today. The fact is we all live under the dome. We have this little blue world that we’ve all seen from outer space, and it appears like that’s about all there is. It’s a natural allegorical situation, without whamming the reader over the head with it. … But I love the idea about isolating these people, addressing the questions that we face. We’re a blue planet in a corner of the galaxy, and
\end{quote}

\textsuperscript{6} Ecology returns again at the end of the series in a somewhat unexpected form in Asimov’s \textit{Foundation Edge} (1982) and \textit{Foundation and Earth} (1986), set several millennia after \textit{Robots and Empire}. Here, an aging R. Daneel Olivaw (the other of the two robots, the one who did not poison the Earth’s crust but who endorsed the decision in retrospect) offers a representative of the Foundation a choice between a Second Galactic Empire or “Galaxia,” a galaxy-wide, deep-ecological communal mind—a souped-up Gaia theory on an interplanetary scale. This character chooses Galaxia for an unexpected reason; he paranoiacally determines that the extinction of individuality will make for the best possible military defense if any hostile aliens attempt to invade our galaxy. This decision is, itself, apparently at odds with other references to the future of the Foundation series, including entries from the diegetic \textit{Encyclopedia Galactica}, suggesting it would have ultimately be reversed in some way; however, the series remained unfinished at the time of Asimov’s death, so his final disposition on the question will unfortunately never be known.
for all the satellites and probes and Hubble pictures, we haven’t seen evidence of anyone else. There’s nothing like ours. We have to conclude we’re on our own, and we have to deal with it. We’re under the dome. All of us.

Late capitalism is a mode of production that both insists (culturally) and depends (structurally) on limitless expansion and permanent growth without end: into the former colonial periphery, into the peasant countryside, through oil derricks into the deepest crevices of the Earth, and, then, in these futurological imaginings, to orbital space stations, lunar cities, Martian settlements, asteroid belt mining colonies, sleeper ships to Alpha Centauri, and on and on—even as it knows, from a scientific standpoint, that the other planets in the solar system are too inhospitable, and the distances between solar systems far too great, for this unlimited expansion to ever actually be possible in practice. Capital’s dream of expansion without restraint has even seduced otherwise rigorously critical theorists of capital like David Harvey, who has written that apparent “limits to capital” are always really only ever boundaries to be transcended,7 and Slavoj Žižek, who sometimes speaks of the “infinite adaptability” of capital as if there were literally nothing capital can not do, as if it could conjure iPods and iPhones literally out of thin air.8 But aside from the sheer impossibility of these fantasies—the basic mathematical impossibility of economic growth that literally never ends—we find that narratives of space colonization dialectically reinscribe the very horizon of material

7 See, for instance his discussion of environmental limit in The Enigma of Capital, chapter 3.
8 The quoted text comes from Žižek’s discussion of the environmental question in chapter 9 of In Defense of Lost Causes (2009).
deprivation and ultimate limit they are meant to relieve; “escape” from the prison of Earth only constrains you all the tighter, in a miniature Earth smaller and more fragile than even the one you left.

Indeed, post-1970s recognition of this reality may do much to explain the cultural importance of cyberpunk in the 1980s and 1990s, which at its core offers an alternative scheme for getting outside scarcity—simply leave the material world altogether by entering the computer. In “The Gernsback Continuum” (1981), one of the foundational cyberpunk authors, William Gibson, imagines the sparkling but unrealized Star Trekian cornucopia we called “the future” as a ghost that quite literally haunts a dingier, dustier present:

They were the children of Dialta Downes’s ‘80- that-wasn’t; they were Heirs to the Dream. They were white, blond, and they probably had blue eyes. They were American. Dialta had said that the Future had come to America first, but had finally passed it by. But not here, in the heart of the Dream. Here, we’d gone on and on, in a dream logic that knew nothing of pollution, the finite bounds of fossil fuel, or foreign wars it was possible to lose. They were smug, happy, and utterly content with themselves and their world. And in the Dream, it was their world. Behind me, the illuminated city: Searchlights swept the sky for the sheer joy of it. I imagined them thronging the plazas of white marble, orderly and alert, their bright eyes shining with enthusiasm for their floodlit avenues and silver cars.

... “John,” I heard the woman say, “we’ve forgotten to take our food pills.” (34)

Here the glittering, futuristic New Jerusalem we had once imagined we might build for ourselves turns out to have just been a mirage, and cyberpunk leaves us instead mired in a ruined post-utopian world, not even Brave or New—the sort of liminal, hybridized
assemblage Samuel Delany has named Junk City.⁹

What the self-defeating fantasy of leaving Earth reveals, then, is in fact the
impossibility of ever getting outside the ecological horizon of material scarcity; even if
we could leave, which we can’t, we’d still be trapped. Few fantasies of space flight
express this take of spaceflight as memorably as Planet of the Apes (1968), which sees a
human race heading off into the galaxy without having first solving the crises of
inequality that threatened its survival at home. Charlton Heston’s astronaut hero,
George Taylor, leaves Earth deeply embittered; traveling at relativistic speeds, his
opening monologue on the ship is a prayer that in the 700 years that have passed on
Earth since his departure a new and better “breed” of man might have emerged to take
our place: “Tell me, though, does man, that marvel of the universe, that glorious
paradox who sent me to the stars, still make war against his brother, keep his neighbor’s
children starving?” But the deeply pessimistic film twice undoes this hope: first, when
they land on a alien planet (ruled by sentient apes) that is no better or more just than

---

⁹ “One of these is the urban image of Junk City—a very different image from Brave New World. Junk City begins, of course, as a working class suburban phenomenon: think of the car with half its motor and three wheels gone which has been sitting out in the yard beside that doorless refrigerator for the last four years. As I kid I encountered the first signs of Junk City in the cartons of discarded military electronic components, selling for a quarter or 75 cents, all along Canal Street’s Radio Row. But Junk City really comes into its own at the high tech moment, when all this invades the home or your own neighborhood: the coffee table with the missing leg propped up by the stack of video game cartridges, or the drawer full of miscellaneous walkman earphones, or the burned out building of the inner city, outside of which last year’s $5,000 computer units are set out on the street corner for the garbage man (or whoever gets there first), because the office struggling on here for the cheap rent is replacing them with this year’s model that does five times more and costs a third as much: here we have an image of techno chaos entirely different from the regimentation of Brave New World—and one that neither Huxley in the early ’30s nor Orwell in the late ’40s could have envisioned.” See “On Triton and Other Matters” (1990).
Earth had been, and second in the famous twist-ending reveal of a sunken Statue of Liberty that reveals this planet had actually been Earth all along—only thousands of years in the future, after a devastating nuclear war that nearly wiped out the species and reduced the human survivors to barbarism and utter ruin. *Apes,* then, literalizes precisely the impossibility of ever escaping either Earth or humanity’s blighted history; even a rocket ship, in the end, only brings you back.\(^{10}\)

For Buckminster Fuller, if not for Heston’s astronaut Taylor, this pronouncement of doom is not altogether final; the prospect of wealth without limit returns again at the close of *Operating Manual* once humanity has fully mastered its powers, particularly in the fields of automation and high-yield energy technology: “We soon will begin to generate wealth so rapidly that we can do very great things” (120). Among these necessary changes is a “reorganization of humanity’s economic accounting system and its implementation of the total commonwealth capability by total world society,” a system of global governance that will “increase the performance per pound of the world’s resources until they provide all of humanity a high standard of living” (128). This line of argument, recalling George’s earlier critique of those who claim ownership over our ship’s common stock, echoes Adlai Stevenson’s evocation of the “Spaceship

\(^{10}\) A similar circularity appears in the final verse of the well-known Barry McQuire protest song “Eve of Destruction” (1965): “You may leave here for four days in space / But when you return, it’s the same old place.”
Earth” metaphor in a speech to the UN Economic and Social Council in Geneva, Switzerland, in July 1965:

We travel together, passengers on a little spaceship, dependent on its vulnerable reserves of air and soil; all committed, for our safety, to its security and peace; preserved from annihilation only by the care, the work and the love we give our fragile craft. We cannot maintain it half fortunate, half miserable, half confident, half despairing, half slave—to the ancient enemies of man—half free in a liberation of resources undreamed of until this day. No craft, no crew can travel safely with such vast contradictions. On their resolution depends the survival of us all.

(224)

United Nations Secretary-General U Thant made an even more optimistic gesture in his address on the first Earth Day, on March 21, 1971: “May there only be peaceful and cheerful Earth Days to come for our beautiful Spaceship Earth as it continues to spin and circle in frigid space with its warm and fragile cargo of animate life.”

On the other hand, for Norbert Wiener, the father of cybernetics—and, accordingly, through its central theoretical category of “feedback,” a kind of grandfather of modern ecological theory as well—“Spaceship Earth” remains framed in significantly more apocalyptic terms, with human agency reduced to something like (in the cosmic scheme of things) rearranging deck chairs on the Titanic. Writing in The Human Use of Human Beings (1950) not only of the frailty of human institutions and the finite resources of our Earth but the inevitable billion-year wind-down clockwork of our entropic universe, he sums up his vision of the human condition in a single bleak pronouncement:
To those of us who are aware of the extremely limited range of physical conditions under which the chemical reactions necessary to life as we know it can take place, it is a foregone conclusion that the lucky accident which permits the continuation of life in any form on this earth, even without restricting life to something like human life, is bound to come to a complete and disastrous end. (40)

“In a very real sense,” he goes on, “we are shipwrecked passengers on a doomed planet” (40).¹¹

**Pale Blue Dot**

These anxieties and concerns clearly predate manned space flight—indeed, to one extent or another they have structured the history of the science fiction genre I have been across the project. But, as Ursula Heise notes, in the 1960s and 1970s questions of limit crystallize around a particular series of science fictional visual images that, while familiar and perhaps unremarkable today, were revelatory and even shattering in their moment: Soviet and especially NASA images of the Earth as viewed from space, chief among them the “Earthrise” photograph obtained by the Apollo 8 crew in 1968 and the

---

¹¹ And while this does indeed sound bleak, Wiener’s basic humanism returns to provide us with the start of an ideology that might confront this tragic fate: “Yet even in a shipwreck,” he goes on, “human decencies and human values do not necessarily vanish, and we must make the most of them. We shall go down, but let it be in a manner to which we may look forward as worthy of our dignity” (40). Weiner, like Fuller, soon turns to the urgent necessity of revising our institutions along ultra-rational, technocratic lines so as to stave off our inevitable doomsday as long as possible—anticipating early the mode of governmentality and statecraft Foucault would come to call biopolitics.
“blue marble” photograph taken by the Apollo 17 crew in 1972. (To Heise’s list we might add the “Pale Blue Dot” photograph taken by Voyager 1 in 1990, in which a 6-billion-kilometer-distant Earth is but a fraction of a single pixel, barely visible against a field of total darkness.) The wide circulation of these “Blue Planet” images, Heise writes, represented the Earth as an immanent and immediately graspable totality, in which all differences between race, class, gender, nation, ideology, and ecosystem have been completely smoothed away: “Set against a black background like a precious jewel in a case of velvet, the planet here appears as a single entity, united, limited, and delicately beautiful” (22).

Figure 1: "Blue Marble" (Apollo 17, 1972)
Figure 2: "Pale Blue Dot" (Voyager Spacecraft, 1990)

But the utopian possibilities encoded in this reading of the photo—*we are all one species on this pale blue dot, we are all in this together*—can just as quickly give way to the brutally apocalyptic, as they do in the use of the photograph on page one of *Our Common Future*, the Brundtland Report from the United Nations Commission on Environment and Development (1987):

> From space, we see a small and fragile ball dominated not by human activity and edifice but by a pattern of clouds, oceans, greenery, and soils. Humanity’s inability to fit its doings into that pattern is changing planetary systems, fundamentally. (1)

This, likewise, is Al Gore’s use of the Pale Blue Dot photo in *An Inconvenient Truth*:

> You see that pale, blue dot? That’s us. Everything that has ever happened in all of human history has happened on that pixel. All the triumphs and all the tragedies, all the wars, all the famines, all the major advances.... It’s our only home. And that is what is at stake: our ability to live on planet Earth, to have a future as a civilization.
In *this* reading “Spaceship Earth” quickly becomes not our paradise, but our prison—we are all of us trapped here, waiting to be killed either by cosmic accident or our own folly.

Chapter one of this text focused primarily on the “cosmic accident” component of this deadly binary; Rachel Carson’s *Silent Spring* (1962), widely credited as the book that jump-started the environmental movement in the United States, takes up the second option. Beginning somewhat unexpectedly not with scientific fact or political polemic but with a science fictional “Fable for Tomorrow,” Carson tells of a town somewhere “in the heart of America where all life seemed to live in harmony with its surroundings” (1).

But this Eden does not last:

> Then a strange blight crept over the area and everything began to change. Some evil spell had settled on the community: mysterious maladies swept the flocks of chickens; the cattle and sheep sickened and died. Everywhere was a shadow of death. The farmers spoke of much illness among their families. In the town the doctors had become more and more puzzled by new kinds of sickness appearing among their patients. There had been several sudden and unexplained deaths, not only among adults but even among children, who would be stricken suddenly while at play and die within a few hours. (2)

There was a “strange stillness,” the “silent spring” of the title; all the birds have died, as have all the fish. The once-lush countryside is now “lined with browned and withered vegetation as though swept by fire”; “the apple trees were coming into bloom and no bees droned among the blossoms, so there was no pollination and there would be no fruit.” Worse of all: “No witchcraft, no enemy action had silenced the rebirth of new life in this stricken world. The people had done it themselves” (2-3).
As Ralph Lutts observed in his 1985 article “Chemical Fallout,” Rachel Carson’s clarion call against DDT and other chemical pesticides draws much of its potency from a comparison to nuclear disaster radioactive fallout, all the way down to the “white granular powder” “fallen like snow upon the roofs and lawns, the fields and streams,” which suggests nuclear ash (3). Any consideration of the imagination of environmental disaster and apocalypse in and after the 1970s requires recognition of the nuclear panics of the 1940s, 50s, and 60s, which in addition to constituting a very real, very material planetary ecological emergency provide the ideological framework for the imagination of disaster\textsuperscript{12} in the Cold War:

A common motive of the contemporary environmental movement is a profound and pervasive element of fear. It is a fear that, for good or ill, colors and sometime distorts virtually every popular analysis of major environmental problems. This is not simply a fear that we will deplete a particular natural resource, lose pristine wilderness, or be poisoned. It is the belief that we may well be facing the "end of history," that we as a species might be doomed. This anxiety burst to the surface with the destruction of Hiroshima and Nagasaki. It is rooted in the omnipresent threat of nuclear destruction. (Lutts 222-223)\textsuperscript{13}

\textsuperscript{12} As Susan Sontag writes in 1965 in her essay of that title, one of the first pieces of criticism devoted to science fiction: “Radiation casualties—ultimately, the conception of the whole world as a casualty of nuclear testing and nuclear warfare—is the most ominous of all the notions with which science fiction films deal. Universes become expendable. Worlds become contaminated, burnt out, exhausted, obsolete” (46).

\textsuperscript{13} Even today, rhetoric surrounding climate change today commonly has its roots in the nuclear sublime. First we have the theory of nuclear winter, the well-known climactic consequence of nuclear war, a version of which was first proposed by John Hampton in 1974 and which was popularized by a team including Carl Sagan in 1983. Nuclear winter represented an early theory of how human technological artifice might be able alter the climate of the entire globe, and indeed, as detailed in Naomi Oreskes and Erik Conway’s \textit{Merchants of Doubt} (2009), nuclear winter theory was anathema to the right precisely because it exposed the essential pointlessness of the arms race—if even a small nuclear conflict would alter the climate of the planet, obviously no nuclear exchange of any size could ever be permitted. The right used many of the same smear-the-messenger tactics of denialism to discredit nuclear winter in the public eye that are now
We might think again of the famous final scene of 1968’s *Planet of the Apes*, which depicts the discovery of a half-sunk Statue of Liberty in the desert, revealing “We finally really did it. You maniacs! You blew it up!”

Watching the film today, when one sees the head of the Statue of Liberty half-sunk in a desert one thinks not of nuclear war but of climate change. And what has happened, in fact, is exactly this: the implied nuclear war of *Apes* has transformed the climate, turning New York City into a desert. As John Beck notes of the scene:

employed against climate scientists, and in many cases precisely the same individuals were called in to do the smearing (see *Merchants of Doubt*). Other nuclearity-climate-change amalgams are somewhat more fantastic. In *The Day The Earth Caught Fire* (1961), nuclear testing knocks the earth off its axis, sending the planet hurtling towards the sun. And in Olaf Stapledon’s strange and wonderful *The Flames*, from 1947, living flames that had lay dormant in the earth’s crust for millions of years are awakened by the widespread fire and destruction of World War II. They ask the narrator of the novella to go the governments of the world to request that a portion of the earth be lit permanently on fire so that they might have a place to live and thrive. But if that doesn’t work, they have a plan B: they will use their mind control powers to cause atomic wars on Earth which will cause …either a number of devastating wars, with great conflagrations suited to our immediate needs; or else one final war, in which we should do our best to induce each side to choose the destruction of the planet rather than defeat by the hated enemy. Then, at last, with the whole planet turned into a single atomic bomb, and all the incandescent continents hurtling into space, we should have for a short while conditions almost as good as those of our golden age on the sun. True, there would soon be nothing left but a stream of frozen asteroids; but we guess, from study of your scientists’ speculations, that with any luck the terrestrial destruction might not, after all, be a piecemeal affair, not a single all-consuming explosion. In this case we might be provided with regions of high temperature for thousands or perhaps even millions of years. (109) Asimov likewise imagines atomic war as an alien imposition on human futurity in his short story “Breeds There a Man…?” (1951) There, godlike scientists from a macrocosmic universe plan to use atomic weapons to cleanse their petri dish (Earth) after their experiments have concluded; only the development of anti-ballistic missile defenses (analogized to the evolution of penicillin-resistant bacteria) can prevent humanity’s annihilation.

14 In the sequel, unbelievably, things get worse; an even more embittered Taylor, mortally wounded and having lost everything, discovers an intact nuclear superweapon capable of destroying the entire planet—and decides to activate it. We cut to a “Blue Planet” view of the globe—which then explodes, as a final voiceover solemnly intones, just before the credits: “In one of the countless billions of galaxies in the universe, lies a medium-sized star, and one of its satellites, a green and insignificant planet, is now dead.”
Part of the disorientating effect [is] having the quintessential icon of New York City planted in what is clearly a Pacific environment. As the arid Western landscape makes time visible, the film’s climactic punch is achieved through an inversion of American geography. The West functions in the film as a vision of the post-catastrophe East: after the apocalypse, New York will look like Arizona and California—the East will look like the West already looks: blasted, inhospitable, and inhabited by the grotesque after-effects of a horrible but unfathomable history. (106)

But the nuclear sublime is only part of how ecological critique rhetorically produces its frightful anti-futures. For the other component of that horrible and unfathomable future history, another path to Apes’ Ozymandian ruin, we must turn to the rhetoric of overpopulation and “limits to growth” that has its philosophical origins in Thomas Malthus and its material origins in the various political, economic, and energy crises of the 1970s.

**Malthus and the Limit**

The intertwined concepts of limit and disaster are central to any historiography of the 1970s United States. Examples are everywhere: M. King Hubert became nationally famous in 1970 when his 1956 prediction of peak U.S. oil production proved accurate; soon after, the Club of Rome published its paradigm-shifting book, *The Limits to Growth* (1972). In 1973, the OPEC embargo on oil sales to nations that had supported

---

15 Hubert defined a bell-shaped curve for annual oil extraction and production, which peaks when you have extracted roughly half the oil from your reserves. On the upward part of the curve, oil appears plentiful—recall that at the start of the oil age in the U.S. oil was literally seeping up out of the ground, and could be scooped up in buckets—but as extraction continues oil becomes more difficult to find and retrieve. The peak marks the moment of maximum extraction; after this point, there is an inevitable decline.
Israel in the Yom Kippur War (also known as the Fourth Arab-Israeli War) led to national rationing and gas lines, as well as contributing to the worst domestic recession since the Great Depression (and the worst until the current crisis). This moment of “oil shock” is repeated in 1979, after the Iranian Revolution.

1973 in general marks a striking moment of transition for postwar U.S. hegemony—it is the year of Watergate, the withdrawal from Vietnam, the collapse of the Bretton Woods monetary system, and the passage of the Endangered Species Act, among other notable benchmarks of limit—but it is first and foremost is the year of the oil shock, the year the reality of capitalism’s dependence on a finite, nonrenewable energy was made inescapably clear and painfully immediate. 1973 is likewise the year that the World Trade Center opened and the year the Sears Tower was built—both in their own ways the biggest buildings the United States has ever constructed. Crucially for the study of science fiction, 1973 is also the first year since 1961 without a planned manned mission to the Moon, that “first step” towards the “High Frontier” of extraplanetary expansion to which humanity has still never returned. Instead, our future has turned out to be terrestrial, and quite literally running out of gas.

Both David Harvey and Fredric Jameson peg this period of the early 1970s—the start of the tumultuous reconfigurations of the conditions of production and consumption—as the shift to economic postmodernity. Harvey points to the explosion of both public and private debt (c. 1973) as the start of this new mode of capitalism, which
reaches its culmination in the financial collapse of 2008-2011.\textsuperscript{16} In recent work he has directly attributed the financial crash of 2008 to the limits of Fordism reached in the 1970s: when capitalism reaches the point where you simply can’t keep growing 3% every year, it simply creates fictitious markets of securitized debt to keep its necessary expansion going, until these too hit their limit.\textsuperscript{17} In this way we find that economic postmodernity itself arises precisely out of a confrontation with geographical and ecological limit—the last 40 years of economics and politics creating a fantastic but ultimately fictional architecture of denial that is now, with the financial crisis of 2008 and the ongoing worldwide recession, meeting its own necessary limits.\textsuperscript{18}

Few cultural documents depict this moment of confrontation with limit more vividly than the opening sequence of the overpopulation disaster film \textit{Soylent Green} (1973), which depicts a miniature history of America. We begin with a quiet classical piano score over a sepia-tinted montage depicting 19\textsuperscript{th} century settlement of the American West, in which the wide-open natural spaces of the frontier seem to dwarf their human inhabitants. But soon something begins to change. Suddenly there are too

\textsuperscript{17} In a recent talk at the Royal Society for the Encouragement of the Arts Harvey explained the crisis in this way:
We’re at an inflection point where compound growth [of three percent or more] is no longer really feasible. And actually looking backwards at what’s happened since 1970 you would say there are plenty of signs of that: less and less growth has been about making real things and more and more has been about asset bubbles and all the rest of it. […] You start to get new markets forming which are \textit{fictitious markets}.
\textsuperscript{18} It’s worth nothing that one of the most “attractive” of the new speculative investment bubbles that might be able to “get us out of this mess” is in fact a proposed carbon credit market, where ecological damage itself will be securitized to be traded back and forth.
many people in the frame, then far too many people; cars and then airplanes begin to appear; cities grow huge. New instruments enter the musical track: trumpets, trombones, saxophones; the cacophony begins to speed. Now humans are dwarfed not by nature but by the ceaseless replication of their own consumer goods—replicating the logic of the assembly line, the screen becomes filled with countless identical cars. We see jammed highways, overflowing landfills, smog-emitting power plants, flashes of war, riots, pollution, and graves. The sequence goes on and on, using vertical pans to give the sense of terrible accumulation, of a pile climbing higher and higher. Finally we reach the end—the music slows back to its original piano score, combined with an out-of-harmony synthesizer, over a few sepia-tinted images of that same natural world in ruin, filled with trash. The end of the sequence locates this site of ruin in the future; New York, 2022, population 40,000,000. But of course these nightmarish images are all photographs from the present: the disaster has already happened, it’s already too late.

As the narrative begins, we see the world limit has created. A loudspeaker announcing which fraction of the city’s residents will be allowed to use the streets for the next hour, while on the tiny TV in Charlton Heston’s apartment they announce that free consumer choice has been replaced with “Soylent Green,” which is a food in such short supply that it can only be distributed on Tuesdays—capitalism’s free-market economy ultimately generating its dialectical opposite, central planning. One character explains why Soylent Green is necessary:
You know, when I was a kid, food was food! Until our scientists polluted the soil... decimated plant and animal life. Why, you could buy meat anywhere. Eggs, they had. Real butter. Fresh lettuce in the stores! How can anything survive in a climate like this? A heat wave all year long! The greenhouse effect! Everything is burning up!

The ad claims Soylent Green (looking like a bright green tofu cube) is said to be a revolutionary foodstuff “harvested from plankton from the oceans of the world,” but—as anyone who has ever heard of this film knows—the true horror is that Soylent Green is really made of people. Just as in George Romero’s classic zombie film *Dawn of the Dead* (1978), set in a mall, American consumerism is forced in the end to literally consume itself.

These fears of scarcity, overpopulation, and competition over sources of food, water, and energy are everywhere we look in 1970s science fiction. We can think here just as easily of *Logan’s Run* (book 1967, film 1976), which maintains a glittering palace of technoutopian futurity (again, a shopping mall) at the cost of government-mandated euthanasia the day each citizen-consumer turns thirty. In Larry Niven and Jerry Pournelle’s novel *The Mote in God’s Eye* (1974) the logic of overpopulation is transformed into the society of the Moties, who (lacking any biological ability to check their reproduction) endlessly repeat a cycle of civilization, crisis, and Malthusian collapse, without hope of stable sustainability. In Isaac Asimov’s *The Gods Themselves* (1972) the energy crisis is solved by the invention of a miraculous solar “pump” that would be the perfect green energy source—if only it weren’t stealing its free energy from
the universe next door. John Brunner’s classics *Stand on Zanzibar* (1968) and *The Sheep Look Up* (1972) both depict our inability to deal with either the “negative externalities” of technological capitalism and the military-industrial-academic complex, even as the world falls down around our ears. In *Silent Running* (1972), a lonely astronaut tends the last living trees on a satellite orbiting a now-barren Earth. And in “Houston, Houston, Do You Read?” (1976), a story by Alice Sheldon (who notably published as under the male pseudonym James Tiptree, Jr.), the Earth is only spared from ruin when a virus kills off all the men, leaving only women alive to construct a sustainable, environmentally rational ecotopian paradise without them.19

Though he does not mention any of these films, Chad Harbach in *n+1* captures well the terror being articulated within them:

> America and the fossil-fuel economy grew up together; our triumphant history is the triumphant history of these fuels. We entrusted to them (slowly at first, and with increasing enthusiasm) the work of growing our food, moving our bodies, and building our homes, tools, and furniture—they freed us for thought and entertainment, and created our ideas of freedom. These ideas of freedom in turn, have created our existential framework, within which one fear dwarfs all others: the fear of economic slowdown (less growth), backed by deeper fears of stagnation (no growth) and, unthinkably, contraction (anti-growth). America does have

---

19 Even the later entries in the *Planet of the Apes* series shift the focus from the nuclear sublime that structures the first two entries in the series to a much more ambiguous consideration of competition between racial forms, with “human” and “ape” standing in for “white” and “non-white.” Through over-the-top parody, the films deconstruct the long history of imperial race fantasy that identifies “civilization” with “whiteness” and imagines that the end of civilization will involve an overrunning of the white race by “hordes” of nonwhite people; a poster for one film in the series provocatively asks, after Lincoln, “Can a planet long endure half-man and half-ape?” The series’ ultimate answer is no; after repeated time travel, the series ends in an apparently stable time loop, with inevitable violence and incomprehensible horrors at both ends regardless of whether man or ape is in charge.
a deeply ingrained, morally coercive politics based in a fear that must never be realized, and this is it. To fail to grow—to fail to grow ever faster—has become synonymous with utter collapse, both of our economy and our ideals.

In a recent essay in Harper’s Wendell Berry makes much the same point, describing U.S. energy policy as a “Faustian economics” predicated on a “fantasy of limitlessness” that, when put under threat, produces claustrophobia and dread (36). In this sense limit and apocalypse can be thought, in American ideology, to be nearly synonymous.

The use of “limit” in this context would seem on the surface, therefore, to be quite easily employed in the surface of Leftist politics and resistance to capitalism, insofar as it seems to be simply an alternative, ecologically minded framing of the “internal contradictions of capitalism” that Marx first identified in Capital—but in fact the application of limit (especially environmental limit) to socialist and leftist critique was quite delayed. Donald Sassoon notes in One Hundred Years of Socialism that early Greens were generally conservative, and that rhetoric around limits and “zero growth economics” appeared very reactionary at the time of the 1973-1974 oil shock, when the

---

20 Indeed, when approaching ecology as the “second contradiction” of capitalism, commenters often begin with a passage on soil ecology from Capital, Vol. 1, Chapter 15:

...all progress in capitalistic agriculture is a progress in the art, not only of robbing the labourer, but of robbing the soil; all progress in increasing the fertility of the soil for a given time is a progress towards ruining the lasting sources of that fertility. (638)

John Bellamy Foster has traced Marx’s interest in (and horror at) this “metabolic rift” to its origins in the work of Justus von Liebig whose recognition of the breakdown in the cycle of soil replenishment led to the development of a process to replenish fields artificially through the use of chemical fertilizers—which led to a colonial project of importing guano and other materials from places as far-off as Peru and the South Pacific, and which itself ultimately leads to an unbalancing of the nitrogen cycle and further ecological degradation of soil, water, and the climate. See, for instance, his Marx’s Ecology.
collapse of growth rates meant widespread unemployment and suffering especially in
traditional left constituencies like industrial workers. Sassoon notes that the 22nd
congress of the Parti communiste français “explicitly rejected” the idea of zero growth
economics, as it was seen as “preparing for a future of penury and restrictions”; its
president, George Marchais, affirmed that “growth is necessary to meet the
requirements of social and national progress” (qtd. in Sassoon 676).

Sassoon also quotes British Labour Party MP and socialist theoretician Anthony
Crosland, who likewise saw environmental critique as the recourse of a decadent middle
class that would rather “defend rural peace rather than do something about urban
decay” (qtd. in Sassoon 676). We can also find this attitude in the work of Hans Magnus
Enzensberger, writing in Germany, who comes to the same conclusion in his 1974
“Critique of Political Ecology” when he writes that “The bourgeoisie can conceive of its
own imminent collapse only as the end of the world. In so far as it sees any salvation at
all, it sees it only in the past” (17). Enzensberger juxtaposes the neo-Malthusian
arguments of people like Paul Erlich in The Population Bomb with the anti-limit rhetoric
of Fidel Castro of Cuba:

In certain countries they are saying that only birth control provides a
solution to the problem. Only capitalists, the exploiters, can speak like
that; for no one who is conscious of what man can achieve with the help
of technology and science will wish to set a limit to the number of human
beings who can live on the earth . . . That is the deep conviction of all
revolutionaries. What characterized Malthus in his time and the neo-
Malthusians in our time is their pessimism, their lack of trust in the future
destiny of man. That alone is the reason why revolutionaries can never be
Malthusians. *We shall never be too numerous* however many of us there are, if only we all together place our efforts and our intelligence at the service of mankind, a mankind which will be freed from the exploitation of man by man” (qtd. in Enzensberger 14).

But what Castro identifies here as “pessimism” and “lack of trust in the future destiny of man” is precisely the pessimistic ideology of the future that becomes dominant in the late 1960s and 1970s. In the earlier 1960s the dominant imagination of futurity (bracketing the rather large question of the bomb) was of optimism, progress, and “better living through chemistry”—a notion found even in a critical document like the Port Huron Statement of the Students for a Democratic Society, which imagines alongside its apocalyptic worry that “we may be the last generation in the experiment with living” argues:

But while the economy remains relatively static in its setting of priorities and allocation of resources, new conditions are emerging with enormous implications: the revolution of automation, and the replacement of scarcity by the potential of material abundance.

[...]

The dominant optimistic economic fact of this epoch is that fewer hands are needed now in actual production, although more goods and services are a real potentiality. The world could be fed, poverty abolished, the great public needs could be met, the brutish world of Darwinian scarcity could be brushed away, all men could have more time to pursue their leisure, drudgery in work could be cut to a minimum, education could become more of a continuing process for all people, both public and personal needs could be met rationally. (79-80)
We can find other echoes of this technological utopianism in 1960s thinkers as diverse as the New Left’s Herbert Marcuse\textsuperscript{21} and the aforementioned Buckminster Fuller.

In contradistinction to the utopianism of the early 1960s, however, we find in Paul and Anne Ehrlich’s *The Population Bomb* (1968) only a deeply reactionary politics of despair:

> I wish I could offer you some sugarcoated solutions, but I’m afraid the time for them is long gone. A cancer is an uncontrolled multiplication of cells; the population explosion is an uncontrolled multiplication of people. Treating only the symptoms of cancer may make the victim more comfortable at first, but eventually he dies—often horribly. A similar fate awaits a world with a population explosion if only the symptoms are treated. We must shift our efforts from treatment of the symptoms to the cutting out of the cancer. The operation will demand many apparently brutal and heartless decisions. The pain may be intense. But the disease is so far advanced that only with radical surgery does the patient have a chance of survival. (152)

This moral callousness, even murderousness, is echoed in other thinkers of the time, like Garrett Hardin, who in his famous essay “Lifeboat Ethics: The Case Against Helping the Poor” (1974) celebrated pitiless self-interest as a necessary and rational neo-Malthusian pragmatism: “Suppose the 50 of us in the lifeboat see 100 others swimming in the water outside, begging for admission to our boat or for handouts.” That inequitable distribution of resources and the violence of history has arbitrarily placed a selected few inside the lifeboat and the multitudes outside may be regrettable,

\textsuperscript{21} “All the material and intellectual forces which could be put to work for the realization of a free society are at hand. That they are not used for that purpose is to be attributed to the total mobilization of existing society against its own potential for liberation...the abolition of poverty and misery.”

172
but we must begin the journey to tomorrow from the point where we are today. We cannot remake the past. We cannot safely divide the wealth equitably among all peoples so long as people reproduce at different rates. To do so would guarantee that our grandchildren and everyone else's grandchildren, would have only a ruined world to inhabit.

 [...] Without a true world government to control reproduction and the use of available resources, the sharing ethic of the spaceship is impossible. For the foreseeable future, our survival demands that we govern our actions by the ethics of a lifeboat, harsh though they may be. Posterity will be satisfied with nothing less.

As is likely already obvious, Malthusian panic over overpopulation quickly becomes mired in fantasies of race, national identity construction, and eugenic selectivity, with easy slippage between “too many people are reproducing” and “too many of those people are reproducing.” For both Ehrlich and Hardin, futurity itself demands that certain populations be cast aside.

Enzensberger persuasively describes the relationship between the fantasy of impoverished overpopulation and the fantasy of material superabundance by placing them in dialectical relation:

It seems completely absurd to speak in a short-term perspective, as Marcuse has done, of a “society of super abundance” or of the abolition of want. The “wealth” of the over-developed consumer societies of the west, insofar as it is not a mere mirage for the bulk of the population, is the result of a wave of plunder and pillage unparalleled in history; its victims are, on the one hand, the peoples of the Third World and, on the other, the men and women of the future. It is therefore a kind of wealth which produces unimaginable want. (23)

As John Bellamy Foster continually reminds us through his invocations of an ecological Marx, capitalism itself is the primary accelerant towards our own immolation. Evoking
John Kenneth Galbraith’s famous _dependence effect_—which reverses the classic economic relationship between _commodity_ and _need_ to understand capitalism as first producing needs for consumers which its products then step in to fulfill—as well as the so-called “Jevons paradox” which demonstrates that energy efficiencies under capitalism only lead to _increased_ use of energy, Foster argues that the relations of production within capitalism will simply _never_ be capable of generating “a society governed not by the search for profit but by people’s genuine needs, and the requirements of socio-ecological sustainability” (_Ecology_ 102). The problem is not merely the ceaseless, unchecked drive towards accumulation—though this of course is crucial—but also the ways in which there is no longer any ability under neoliberal capitalism to regulate the market except by sudden and sporadic (and in the case of the environment likely irreversible) scarcity, called crisis. Naomi Klein, too, has recently lamented a mode of production that ignores the existence of real limits while throwing up artificial ones:

We all know, or at least sense, that the world is upside down: we act as if there is no end to what is actually finite — fossil fuels and the atmospheric space to absorb their emissions. And we act as if there are strict and immovable limits to what is actually bountiful — the financial resources to build the kind of society we need. The task of our time is to turn this around: to challenge this false scarcity. To insist that we can afford to build a decent, inclusive society – while at the same time, respect the real limits to what the earth can take.

22 The quote from Marx that Foster chooses to illustrate this point is quite evocative: “Accumulate! Accumulate! That is Moses and the Prophets!” (_Capital, Vol. 1_) (qtd. in _Ecology_ 95).
The Malthusian overpopulation fears of the West, then, however well- or mal-intentioned, inevitably miss the point about where and how ecological devastation is being created, self-protectively misreading the primary victims of ecological crises—the poor, the inhabitants of the Global South—as its perpetrators.

To consider again the case of climate change: In contrast to the usual political assertions of climate emergency—that we are “one planet” on a “pale blue dot,” facing a shared crisis that threatens us all equally—the reality of climate change is that it is something the global North has inflicted and is inflicting on everybody else, with the worst consequences ramifying on those nations in the global South that did not contribute to the crisis and that are worst-positioned to adapt. In what Naomi Klein has memorably called a “cruel geographical irony,” Justin Lin, the chief economist at the World Bank, has estimated that “about 75 to 80 percent” of the damage caused by climate change “will be suffered by developing countries, although they only contribute about one-third of greenhouse gases”—and even that “one-third” suggests a presentist perspective that obliterates all but the most recent history of emissions. The true number is closer to 20% of the population of the planet having emitted 75% of the total historical greenhouse gas emission, with the United States (5% global population) having emitted approximately 25% just on its own. Haiti, in contrast, emits just 1% of total global carbon emissions, but according to the Maplecroft Climate Change Vulnerability Index is the world’s second-most endangered nation because of climate change, behind only
Somalia. The “climate debt” movement is organized around demanding recognition of this unequal distribution of costs and benefits. (“Climate Rage.”)

John Bellamy Foster likewise calls our attention to the way class difference works as well: The reality is the higher the class/income level the bigger the ecological footprint.

In 2008, Americans in the highest income quintile spent three to four times as much on both housing and clothing, and five times as much on transportation, as those in the poorest quintile. In Canada where consumption data is available in deciles, ecological footprint analysts have found that the top income decile has a transportation footprint nine times that of the bottom decile, and a consumer goods footprint four times that of the bottom decile. (122)

In large part resulting from the successes of environmentalist groups from the 1970s and later, this relationship among class, privilege, nation, and ecological devastation is now much better understood both in the academy and in the population at large—if, alas, that understanding has not often translated into serious popular demand to address ongoing ecological disaster.

Oil!

Fredric Jameson has written that “In our time … the world system … is a being of such enormous complexity that it can only be mapped indirectly, by way of a simpler object that stands as its allegorical interpretant” (Geopolitical Aesthetic 169). Heise’s “Blue Planet” photographs are one such “simpler object,” though she correctly notes
that their simplifications in fact smooth out too much (63); the science fiction genre, I have argued, is another. In this part of the chapter I offer oil, and oil capitalism, as still another such interpretant for the historical world-system as a whole. Oil is extremely local—as local as your local gas station, as your car’s gas tank—but at the same time it is also the token of a vast spatial-temporal network of actors, ranging from the deep geological time necessitated by the millennia it takes oil to form to the complex flows of money, power, and technology that make both the global economy and US hegemony within that order possible. Anxieties about resource scarcity are frequently reducible to anxiety about possible or eventual oil scarcity, with capitalism’s continued need for cheap oil a useful synecdoche for both the resource and energy needs of contemporary technoculture more generally and the unintended, almost exclusively negative consequences of our economic system for the environment. As Benjamin Kunkel has wittily noted: “The nightmare, in good nightmare fashion, has something absurd and nearly inescapable about it: either we will begin running out of oil, or we won’t.” That is to say: either we have Peak Oil and the entire world suffers a tumultuous transition to post-cheap-oil economics, or else there’s plenty of oil left for us to permanently destroy the global climate through excess carbon emissions.

My approach here follows the lead of (among others) Imre Szeman, whose 2007

23 Timothy Morton has suggested the name hyperobject for multitudinous entities like oil, plutonium, and the climate which seem to exceed stable, bounded definition. See his The Ecological Thought (2010).
article in *South Atlantic Quarterly* suggests the possibility of a new understanding of the history of capitalism organized around what he calls oil ontology. “What,” Szeman provocatively asks, “if we were to think about the history of capital not exclusively in geopolitical terms, but in terms of the forms of energy available to it at any given historical moment?” (806) Such a historiography of capital transitions us from steam capitalism (c. 1765) to oil capitalism (c. 1859), in which the massive reserves of solar energy stored in fossil fuels begin to be converted into mechanical power at staggeringly efficient rates of EROEI (energy returned on energy invested, a metric of the efficiency of a given energy source). For oil the numbers are truly staggering: they are initially 100:1, as late as the 1930s, meaning that for every calorie of energy expended in retrieving and extracting oil, a hundred calories were generated.

The exclamation point that emphatically punctuates the end of Sinclair’s early petroleum-age novel *Oil!* (1927)—a punctuation mark appearing frequently within the text as well—nicely suggests the ideology of exhilaration and abundance that accompanies such wealth: a sense that the oil reserves of the Earth represented a profundity without limit. “There she came!” writes Sinclair of one well striking oil: “There was a cheer from all hands, and the spectators went flying to avoid the oily spray blown by the wind. They let her shoot for a while, until the water had been ejected; higher and higher, way up over the derrick—she made a lovely noise, hissing and splashing, bouncing up and down!” (76) The petroleum inside the Earth is imagined in
these stories to be under such tremendous pressure that it might erupt at the slightest provocation. In *Giant* (1956), directed by George Stevens, the desperate prospector played by James Dean finally strikes a gusher and is immediately covered in the stuff, dwarfed by it; the shot is filmed as a transition from day to night, as if oil possessed so much power as to darken the sun itself. In *Oil!*, an earthquake opens up a bubbling surface pool, while in the famous opening sequence of *The Beverly Hillbillies* (1962-1971), it takes only a single stray bullet before “up from the ground came a-bubbling crude.”

These texts attribute to oil a fruitful but threatening potency, even perhaps its own agency; elsewhere in *Oil!* we see the substance imagined as a live thing, as a mythic beast to be wrestled, tamed, and put to work. As Michael Ziser has shown, in literature of the early oil age we frequently see variations on the anti-historical, anachronistic formula “Oil Frees The Slave”—which naturally draws part of its power from the metaphorical connection between the blackness of the slave and the blackness of oil. The energy within oil carries with it an intense liberatory potential, leading to dreams of man freed from work on the one hand and (in a much darker valence) eugenic anxiety about now-economically-redundant “surplus populations” on the other.

The discovery of oil on one’s property translates immediately and inevitably to indescribable riches; oil, writes Ryszard Kapuscinski, “creates the illusion of a completely transformed life, life without work, life for free, it expresses the eternal
human dream of wealth achieved through a lucky accident ... in this sense it is a fairy
tale, and like all fairy tales a bit of a lie” (qtd. in Retort 40). After oil is found, “the next
thing you know old Jed’s a millionaire,” or, to take Sinclair’s simpler, more exclamatory
formulation: “Money! Money! Money!” (393)

Oil is valuable, of course, because it is a physical marvel; the cheap, essentially
free energy stored in petroleum allows for a tremendous amplification of human
powers. As Marx put the point in his “Fragment on Machines”: “Rather, it is the
machine which possesses skill and strength in place of the worker, is itself the virtuoso,
with a soul of its own in the mechanical laws acting through it; and it consumes coal, oil
etc. (matières instrumentales), just as the worker consumes food, to keep up its
perpetual motion.” The invention of the internal combustion engine and its application
in the “gas-guzzling” automobile created the conditions for technological modernity and
its fantastic potential to transform all aspects of life in the United States—a mode of
production and consumption John Bellamy Foster has memory named “the automobile-
industrial complex” (Ecology 98-100), including not just the systems of production and
delivery that make contemporary consumer capitalism possible but also the plastics
making up the consumer goods themselves. Oil is the primary fuel for all the incredible
technological wonders of the twentieth century; it is oil that powers the “racing car” that
F.T. Marinetti famously described in his “Futurist Manifesto” as “more beautiful than
the Winged Victory of Samothrace” (13). In her “Petroleum Song,” Futurist poet Maria
Goretti likewise celebrates oil as “the ardent blood of [our] conquests” (479), describing petroleum drilling as a violent seduction of the Earth bordering on a rape: “the drill bores / sinks inseminates / bites crushes tears / the violated earth screams / but now now / the living blood / gushes / rises / rushes / toward the sky / elongated spurt / and sings” (476). The explosion of the well is a sexual climax that is only the first of the future’s joys: “all my body relaxes / quivers with pleasure / rejoices with splendor / but tomorrow even more mine! … Tomorrow you will hear my new song / and it will be the song of azure airplanes!” (479) The violent imperial subtext of this situation is all too clear; control of oil (by whatever means) has been the catalyst for the twentieth-century prosperity of the West in general and of the United States in particular. Little wonder that generations of American businessmen and presidents have determined that the miracle of abundance that oil produces is well worth killing for.

But as 2009’s cataclysmic Deepwater Horizon spill made apparent, sometimes one can simply have too much. The dialectical slippage from ecstatic superfluity to uncontrolled monstrosity can be found in the earliest pages of Sinclair’s novel, at the first discovery of a different “gusher”:

Meanwhile the workmen were toiling like mad to stop the flow of the well; they staggered here and there, half blinded by the black spray—and with no place to brace themselves, nothing they could hold onto, because everything was greased, streaming with grease. You worked in darkness, groping about, with nothing but the roar of the monster, his blows upon your body, his spitting in your face, to tell you were he was. (26)

In the abundance produced by an oil economy there are naturally material dangers:
unseemly businessmen, workplace hazards, spills and fires. But often the risks are spiritual as much as physical; at this point the corruptive influence of oil politics on U.S. foreign policy go almost without saying. From the beginning one of the chief risks associated with the superfluity of oil prosperity in literary works has been a kind of excessive drunkenness; inverting Marx’s formulation, in the delirium of abundance made possible by oil it is not so much food that oil replaces, but drink. Among other drinkers Sinclair describes “Old Chief Leatherneck, of the Shawnees,” whose oil money has purchased him “a different colored automobile for each day of the week, and he figures to get drunk three times every day” (323). James Dean’s Jett from Giant—much like his 2007 counterpart Daniel Plainfield from There Will Be Blood—ends the film a wreck, drunk and disgraced at a party he’s thrown to honor himself. “Dear future generations,” writes Kurt Vonnegut in a late work. “Please accept our apologies. We were roaring drunk on petroleum” (qtd. in Blais).

The stunning title sequence of The Kingdom (2007) is just one version of the history that emerges from this downward trajectory: from the 1933 discovery of oil in the newly independent kingdom of Saudi Arabia onward the West, especially the United States, finds itself mired deeper and deeper in what Sinclair was already euphemistically calling, as early as Oil, the “Persian situation” (447). Amitav Ghosh has captured well the global sense of horror that the disasters that have resulted from the transnational “oil encounter”:
To the principal protagonists in the Oil Encounter (which means, in effect, America and Americans on the one hand and the peoples of the Arabian Penninsula and the Persian Gulf on the other), the history of oil is a matter of embarrassment verging on the unspeakable, the pornographic. (29)

Frank Herbert’s science fiction epic Dune famously transmogrifies oil imperialism into a battle for control of the “spice” that makes interstellar navigation possible; spice, the necessary fuel for this futuristic multiglobal economy can only be found on the desert planet Arrakis, whose indigenous Fremen resist planetary occupation and, in the closing words of the first novel, having taken control of their planet’s spice reserves, threaten an intergalactic “jihad” (the last word of the novel). We go to war in the Middle East, both Bush I and Bush II explained, in order to “protect our way of life,” which is predicated on the low-cost availability of petroleum fuel (oil) and petroleum products (plastics); the spice, they may as well have said, must flow.

Such are the dangers of abundance. And just as one can have too much, one can also have too little. As time goes on our national relationship to oil is framed more and more as dependence, even addiction, where the only thing worse than our current orgiastic excess will be the hangover we face the morning after. The EROEI of oil has trended sharply downwards every since the inauguration of the oil economy: from 100:1 to 30:1 in the 1970s to approximately 11:1 on average in the 2000s (Hall). The historical narrative of oil capitalism is in this respect necessarily declinist: as each year brings oil that is both harder to find and harder to extract than what had been available before, each year brings us closer to the end of capitalism as we have come to know it. Every

183
American president dating back to Richard Nixon has used an “addiction” metaphor to describe the relationship of the U.S. economy to oil, especially foreign oil—and this trend-line too suggests the diminishing returns of the “addicts’ high” (and perhaps that the referent of the addiction metaphor has slowly slipped from alcohol to heroin as the situation has progressed without material progress towards a solution).24

“Nature guards her treasures jealously,” proclaims the ad for Knox Oil and Gas that begins 1983’s Local Hero, directed by Bill Forsyth: “Just a decade ago these fields were beyond reach: we didn’t have the technology. Today a Knox engineer will tell you that he might need a little time, but he’ll get the oil. He knows that a little time is all we have left.” Thirty years later, the bleak logic of Hubbert’s Peak Oil theory remains implacable; even setting aside the disastrous ecological, climatological, and geopolitical consequences of our “addiction,” the fact remains that ready or not we are rapidly approaching a steep and permanent decline in our ability to extract petroleum from the ground. This is the more apocalyptic prospect that counters Fuller’s more utopian vision of boundless wealth in Operating Manual for Spaceship Earth:

We have thus discovered also that we can make all of humanity successful through science’s world-engulfing industrial evolution provided that we are not so foolish as to continue to exhaust in a split second of astronomical history the orderly energy savings of billions of years’ energy conservation aboard our Spaceship Earth. These energy

24 The Larry Niven series “The Magic Goes Away” (1970s) cleverly merges the melancholic anticipation of Peak Oil capitalism with the mournful nostalgia for the past that is characteristic of the fantasy genre: in that world it is not oil, but the manna that powers magic, that is running out.
savings have been put into our Spaceship’s life-regeneration-guaranteeing bank account for use only in self-starter functions. (121)

Oil energy, that is, should have been used solely as a stopgap measure to spark the “main engine” of Earth’s renewable energy sources (“wind, tide, water, and the direct Sun radiation energy”). And yet, as Szeman has written: “Oil capital seems to represent a stage that neither capitalism nor its opponents can think beyond” (806-807). Even knowing the oil is running out, the only thing we can think to do is drill harder—and we need think only of the familiar “drill baby drill” refrain of the Tea Party movement to see the appeal of this sort of denialism in action.

In Paolo Bacigalupi’s 2009 science fiction novel The Wind-Up Girl, set in the post-carbon, post-climate change 23rd century, we find one imagined endpoint of this downward trajectory. The end of oil is recognized in retrospect as the end to both globalization and U.S./Western hegemony, sparking a century-long period of breakdown and disaster known as “The Contraction.” The novel’s protagonist, Anderson Lake—a representative of food conglomerate AgriGen—is described early in the text as “Flotsam of the old Expansion. An ancient piece of driftwood left at high tide, from a time when petroleum was cheap and men and women crossed the globe in hours instead of weeks” (16). To the people of this time, the oil age is remembered as a distant “golden age”—but one that is permanently and hopelessly in the past, never to return.

In the surreal, years-later coda of 2007’s There Will Be Blood, a miniature history of the oil age, we find a more metaphorical version of this same inescapable decline. The
film’s oilman protagonist, Daniel Plainfield, is rediscovered living in decadent opulence in Hollywood in a mansion complete with private bowling alley. He is roused from an alcoholic blackout by his nemesis, the young preacher Eli, with a terrible shout: “WAKE UP DANIEL PLAINFIELD THE HOUSE IS ON FIRE!” Some crisis is at hand—but Plainfield cannot be moved. Ruminating sullenly on the death of God, having already exhausted through slant drilling the oil field Eli has come to sell him, Daniel soon erupts into an sudden paroxysm of violence, ultimately beating Eli to death with a bowling pin before collapsing in defeat and shrugging, “I’m finished.” Cut to black.

This then is our dream of how the oil age ends. No future, no alternatives; we’re just finished.

**II. Utopia and/or Extinction: Oryx and Crake**

In Jameson’s work on science fiction he fashions Darko Suvin’s notion of “cognitive estrangement” around what he calls “the desire called Utopia”: our attempts to imagine and shape big-H History by recasting the present as the fixed historical past of some projective future. In “Utopia as Replication”—a follow-up and partial reconsideration of his 2005 *Archaeologies of the Future* that was reprinted as a chapter in 2009’s *Valences of the Dialectic*—Jameson notes the urgent parade of contemporary disasters that threatens not only the ability to live a non-alienated life but the very possibility of life as such (ecological catastrophe, global poverty, widespread structural
unemployment, endlessly proliferating wars, to only begin to name them) before pessimistically admitting that “in each of these areas no serious counterforce exists anywhere in the world, and certainly not in the United States, which is itself the cause of most of them” (Valences 412). For Jameson, the extreme hopelessness of the situation is only further proof of postmodernity’s fundamental incapacity to imagine utopia—before directing us, as is typical of his work, to questions of utopian form over utopian content, towards the way utopia structures our most cherished imaginings and undergirds all political praxis, even and perhaps especially when we aren’t consciously aware of it.

This incapacity for the imagination of alternatives to global capitalism has been frequently encapsulated by Jameson’s well-known, oft-misquoted observation from The Seeds of Time that: “It seems to be easier for us today to imagine the thoroughgoing deterioration of the earth and of nature than the breakdown of late capitalism” (Seeds of Time, xii). 25 This is to say that the ideological assumptions of capitalism have now become so utterly naturalized, and our imagination of any possible alternatives to what currently exists so totally impoverished, that we cannot imagine even the mechanism by which some alternative might emerge. The entire world would end first—and even that might not be enough. For Jameson it is this loss of faith in the possibility of revolution—the evacuation of futurity that Francis Fukuyama called “the end of history”—that

---

25 The most common alternative version is “It has become easier to imagine the end of the world than the end of capitalism,” and the most common misattribution is to Slavoj Žižek.
marks the shift from modernity to postmodernity. When we were modern, we believed
the world could change; now that we are postmodern, we are certain it cannot.

In 2003 Jameson highlights this other side of the evacuation of alternatives to
capitalism in a New Left Review essay called “Future City”:

Someone once said that it is easier to imagine the end of the world than to
imagine the end of capitalism. We can now revise that and witness the
attempt to imagine capitalism by way of imagining the end of the world.

But I think it would be better to characterize all this in terms of
History, a History that we cannot imagine except as ending, and whose
future seems to be nothing but a monotonous repetition of what is
already here. The problem is then how to locate radical difference; how to
jumpstart the sense of history so that it begins again to transmit feeble
signals of time, of otherness, of change, of Utopia. The problem to be
solved is that of breaking out of the windless present of the postmodern
back into real historical time, and a history made by human beings.
(“Future City”)

Recalling Jameson’s distinction between the Utopian program (an imagined blueprint
for utopia, always hopelessly compromised and corrupted by the limitations of its
origins in the pre-utopian mind) and the Utopian impulse (the dream of a better world
in the abstract, stripped of any particular content or ideological investment), we find
that for Jameson the best we can hope for at this point is this sort of bare glimmer of a
better world. He writes in Archaeologies:

For it is the very principle of the radical break as such, its possibility,
which is reinforced by the Utopian form, which insists that its radical
difference is possible and that a break is necessary. The Utopian form
itself is the answer to the universal ideological conviction that no
alternative is possible, that there is no alternative to the system. But it
asserts this by forcing us to think the break itself, and not by offering a
more traditional picture of what things will be like after the break.
I would put all this another way: even our utopias are now always already apocalypses. The chaos of an imminent apocalypse functioning in the postmodern moment as Jameson’s called-for “radical break.” The apocalypse is the only thing in our time that seems to have the capacity to shake the foundations of the system and “jumpstart” a history that now seems completely moribund—the only power left that could still create a renewed free space in which another kind of life might be possible. Apocalypse (especially eco-apocalypse) is increasingly the frame we use for imagining an end to capitalism precisely because (after the “end of history”) we can’t imagine any other possible way for it to end. And in a way this is eerily appropriate; the increasingly dire predictions of ecological science warn us that “the end of the world” and “the end of capitalism” may in fact describe the same event—the one is catapulting us faster and faster towards the other.

If capitalism has always been, in K. William Kapp’s memorable formulation, “an economy of unpaid costs” (231), then I argue our increasing recognition that the bill is coming due represents a kind of nascent revolutionary consciousness. Looking through the lens of the apocalypse—skipping ahead, that is, to the end of the story—we can see capitalism more clearly, without the distortions of ideology, complacency, and reaction
that ordinarily cloud our view.\textsuperscript{26} And though apocalypse might appear at first glance to assert the \textit{impossibility} of significant change in our social relations (the first version of Jameson’s quote), the radical disruption of history offered by eco-apocalypse is in fact a dialectical reassertion of both the possibility and the \textit{necessity} of such change (the second version). Apocalypse reminds us that the logic of consumer capitalism is not, in fact, timeless and eternal; there was a time before it and there will be a time after it. History does, indeed, go on. This article therefore seeks to draw out the unexpected utopian potency lurking within our contemporary visions of eco-apocalypse, taking as its primary object of study two recent eco-apocalyptic novels by Canadian author Margaret Atwood: \textit{Oryx and Crake} (2003) and its 2009 “midquel,” \textit{The Year of the Flood}. Both books seek to open up new space for imagining a post-capitalist future through a satirical, science-fictional staging of capitalism’s final, catastrophic breakdown—and the subsequent emergence of other kinds of lives, after the end of history.

\textbf{The End as a Beginning}

These two novels are by no means obscure or undiscovered gems; in fact I suspect that most of the audience for a special issue of \textit{LIT} dedicated to the apocalypse

\textsuperscript{26} This mode of thinking is likewise at the core of the time-travel logic Slavoj Žižek has recently embraced as a political response to ecological crisis: “We have to accept that, at the level of possibilities, our future is doomed, that the catastrophe will take place, that it is our destiny—and then, against the background of this acceptance, mobilize ourselves to perform the act that will change destiny itself and thereby insert a new possibility into the past” (\textit{First as Tragedy} 151).
will likely have some familiarity with both of them. I hope therefore that I might get away with only a comparatively brief plot summary. The first novel tracks two childhood friends growing up in a hyperextended, hypertrophic version of U.S.-style consumer capitalism—our mad world, gone even madder. One, Jimmy, later nicknamed Snowman, ultimately goes to a “humanities” college (scandalously, a third-tier educational track in this dystopic future) and eventually comes to work in advertising; the other, Glenn, referred to almost exclusively as Crake, becomes a scientist. A brilliant (if deeply troubled) mind, Crake ultimately is placed in charge of an immortality project called “Project Paradice”\(^27\) and recruits Jimmy to work for him. But it turns out Crake’s plans are much more sinister than he has admitted—he actually intends to take this opportunity to usher in his personal version of Utopia by replacing humanity with a better-designed, upgraded version. Unleashing a highly contagious supervirus he has designed\(^28\) and distributed in the form of a designer birth control pill/aphrodisiac, Crake’s monstrous plan succeeds—and Jimmy is soon (he believes) the last human being

\(^27\) Note the “c” replacing the “s” in “Paradice,” suggesting a relationship to gambling or to random chance that replaces the more traditional notion of an ordered divine plan. In a send-up of trends in twentieth-first century corporate branding, most of the companies and products we encounter in Atwood’s novel have names with similarly modified or outright silly spellings—HelthWyzer, RejoovenEsence, ANooYoo, etc.

\(^28\) The implication of the novel is that Crake has secretly been working on his virus for nearly his entire life, originally testing it on his own mother in retribution for her betrayal of his father; the symptoms of the world-ending supervirus match the symptoms of the unknown infection that killed her quite closely.
alive, in charge of shepherding the “Children of Crake” out of the laboratory and into the ruined, empty world in which they will now live.29

Both novels rely on a pattern of alternation between their narrative “present” (the post-apocalyptic ruins Snowman inhabits) and “past” (the world of Snowman’s childhood and young adulthood, a hyper-exaggerated version of our present). Oryx and Crake, in particular, is structured like a prototypical Last Man on Earth novel: we begin inside the confused, traumatized mind of a character calling himself Snowman, who wakes alone on the beach. We quickly come to understand that Snowman is living after the end of the world. Surrounded by the “rusted car parts and jumbled bricks and assorted rubble” (1) from the old world, this lonely figure carries with him a broken watch case that “he wears … now as his only talisman” (1). Recalling E.P. Thompson’s classic essay on the invention of and struggle over time in early industrial capitalism, “Time, Work-Discipline, and Industrial Capitalism,” Snowman’s broken watch now functions as an index of the radical dissolution of the capitalist system. The watch’s blank face shows Snowman “zero hour,” an encounter with the void that “causes a jolt of terror to run through him, this absence of official time. Nobody nowhere knows what

29 The Year of the Flood explores these same events from the perspective of minor characters from the first book, among them two of Jimmy’s former girlfriends, Amanda and Brenda/Ren; accordingly, Jimmy and Crake become background characters in that book, appearing only here and there in unexpected ways. By its conclusion, The Year of the Flood has brought us only about a chapter past the cliffhanger that ended the first book—only to abruptly end on another cliffhanger, which still waits to be resolved by Atwood’s promised third and final book in the series.
time it is” (1).

The rest of *Oryx and Crake’s* first chapter similarly situates us within the familiar ruined spaces native to the post-apocalyptic genre. Snowman has lost his clothes; instead he “wraps a dirty bedsheet around himself” and makes his way to a cache where he has hid both food and two other talismatic objects, an “authentic-replica Red Sox baseball cap” and a pair of sunglasses with one lens missing (2). As Snowman begins to eat, he recites to himself sentences from age-old self-help and personal-management books, which appear to him unbidden as if originating outside himself. (We later discover that he wrote his college thesis on such books.) “It is the strict adherence to daily routine that tends towards the maintenance of good morale and the preservation of sanity,” he says out loud” (2), reflecting that this “obsolete, ponderous directive” was likely “written in aid of European colonials running plantations of one kind or another” (4). This moment suggests the tight relationship between fantasies of apocalypse and fantasies of the frontier—the notion that after the end of civilization the entire world becomes again the free and open land of the frontier, to be once again molded and “tamed” by heroic individuals. But almost immediately this relationship is undermined; Jimmy’s mind quickly turns to the basic moral *unacceptability* of these texts and colonial practices:

---

30 The words “zero hour” recur, 374 pages later, as the second-to-last sentence of the novel, now signifying the instant in which a momentous decision must finally be made—mirroring in macrocosm an existentialist dialectic between radical freedom and radical nihilism that recurs throughout the novel.
They would have been told to wear solar topis, dress for dinner, refrain from raping the natives. It wouldn’t have said *raping*. Refrain from fraternizing with the female inhabitants. Or, put some other way…

He bets they didn’t refrain, though. Nine times out of ten. (3)

The frontier fantasy is here upended, revealed now as an unspeakable crime. Jimmy’s inability to draw a model from history that might help him navigate his new terrain, or to generate a new model on his own, reminds us of the fundamental *exhaustion* of the frontier myth, whose institutions, motifs, and ideological assumptions are now, as Peter Paik has written, “incapable of carrying out the functions formerly accorded to them of building a society in what was once a wild and hostile territory” (“Gnostic Zombies”). Those old stories are of no use to us anymore; they have been reduced to meaningless gibberish (Atwood 5).

**Blood & Roses**

Within three pages Atwood has effectively destabilized the typical affective coordinates of post-apocalyptic fiction, in which the post-apocalyptic landscape is a horror and the pre-apocalyptic landscape the longed-for object of nostalgia. Whereas the pre-apocalyptic status quo is generally figured as a lost Golden Age to be mourned, in *Oryx and Crake* its deprivations are quickly revealed to be easily the match of Snowman’s wasteland. In the end the *pre*-apocalyptic landscape turns out to be much worse than the post-apocalyptic, built as it is upon a nightmare of murder, rape, exploitation, and theft that is, as we know too well, the actually existing, entirely
nonfictional history of European expansion.

The past is monstrous—as is the era of Jimmy’s childhood, a twenty-minutes-into-the future satire of our present. Atwood envisions a world in which the historical trajectory of neoliberal capitalism has reached its logical culmination. The world has become bifurcated into very strict class divisions: hyper-secure gated communities called Compounds for an increasingly small technical elite, and “pleeblands” filled with poverty, desperation, and disease for everybody else. State power has collapsed; in lieu of a police force we now have a private security force called the Corporate Security Corps, amusingly abbreviated (seemingly at the level of official corporate branding) the CorpSeCorps. Environmental degradation, too, has continued apace: climate change has desertified the planet and flooded the coasts,\(^\text{31}\) while genetic engineering has unleashed invasive hybrids like “pigoons,” “bobkittens,” “wolvogs,” and “rakunks” into the landscape, as well as introduced the threat of new and untreatable superviruses. In fact, we are told that the drug companies, confirming our worst paranoid fears, are actually deliberately introducing manufactured epidemics into the population that they can then subsequently cure, to great profit (210-211). Even food has become a grotesque parody of itself; the worst example in the novel is the nightmarish ChickieNob, vat-grown meat that is a monstrous head-like orifice (without eyes or beak, and allegedly without the

\(^{31}\) Texas “dried up and blew away” (244); at one point a reference is made to Harvard, “back before it got drowned” (173).
ability to feel pain) atop multiple bodies that grow only breast or only drumstick (202-203). *The Year of the Flood* only adds new crimes to the indictment of this sick system, beginning with the intergenerational debt peonage that arises out of medical bankruptcy in this bleak future (25-29). We quickly come to understand that the ethical and ecological horrors that constitute this society, on every level from top to bottom, structure Jimmy’s entire life: we find his earliest memory (a kind of primal scene) is of a massive cattle and sheep bonfire necessary to keep hoof-and-mouth disease from spreading, a disease that is reported to have been deliberately introduced to the herd either by competitive ranchers or by environmental activists but could simply be the by-product of the deeply unhygienic practices of contemporary industrial meat production (*Oryx and Crake* 15-19). Indeed, we might say that the entire plot of the book unfurls through the recovery of Jimmy’s buried traumatic memories of the unhappy hypercapitalist system of which he is now the last survivor.

Atwood presents a vision of deregulated neoliberalism, ecological catastrophe, unchecked accumulative profit-seeking, and nightmarish repetition of the same that could make even Ayn Rand think twice about the wisdom of the free market:

Or [Jimmy]’d watch the news: more plagues, more famines, more floods, more insect or microbe or small-mammal outbreaks, more droughts, more chickenshit boy-soldier wars in distant countries. Why was everything so much like itself? (253-254)
There are then, crucially, two dystopias in *Oryx and Crake*: the post-apocalyptic, representing the fear that things might change, and the pre-apocalyptic, representing the fear that they might not.

The latter dystopia is not only capitalism, but also history itself—even, perhaps, human nature as such—which is depicted as the accumulation of an endless series of disasters. In one of the book’s most compelling passages, the buried traumatic memory of civilization *writ large* is represented through the strange games that Jimmy and Crake play as teenagers. First, they play *Barbarian Stomp: Can You Change History?*, in which players attempt to rewrite the history of empire at some crucial moment in which “civilization” was threatened by “barbarians”: “Rome versus the Visigoths, Ancient Egypt versus the Hyksos, Aztecs versus the Spaniards. That was a cute one, because it was the Aztecs who represented civilization, while the Spaniards were the barbarian hordes” (77-78).

Soon this game begins to bore them, and they move on to *Blood & Roses*, which takes the same basic idea of a human history predicated on violence and extends it across all areas of human achievement. The logic of *Blood & Roses* literalizes the Benjaminian dictum from “Theses on History” that “There is no document of civilization which is not at the same time a document of barbarism” (256). The logic of gameplay in “Blood and Roses” is the tradeoff between human achievement on the one hand and atrocities on the other:
The exchange rates—one Mona Lisa equaled Bergen-Belsen, one Armenian genocide equaled the *Ninth Symphony* plus three Great Pyramids—were suggested, but there was room for haggling. To do this you needed to know the numbers—the total number of corpses for the atrocities, the latest open-market price for the artworks; or, if the artworks had been stolen, the amount paid out by the insurance policy. It was a wicked game. (*Oryx and Crake* 79)

The result is a brutal utilitarian calculus that pits civilization’s triumphs against its failures, ultimately proving their radical incommensurability—or, perhaps, suggests that the apparent “failures” of civilization are in fact the true underpinning of all its supposed triumphs.

There is another echo of Benjamin’s “Theses” here: his well-known reflection on Klee’s *Angelus Novus*, which sees the “Angel of History” being blown from Paradise by the storm we call progress (257-258). The violence of the storm prevents the Angel from ever intervening in our history, which from his lofty perspective perceives not as “a chain of events” but as “one single catastrophe which keeps piling wreckage upon wreckage and hurls it in front of his feet” (257). When Snowman recalls this game to himself in the ruins, years after Crake has destroyed the world, he seems almost to put civilization itself on trial on behalf of this Angel, presenting an epic list of Roses followed immediately by a longer list of Bloods, beside which the Roses seem hopelessly dwarfed and insufficient:


There must have been more. There were more.


“Stop it,” says Snowman.

Sorry honey. Only trying to help. (Oryx and Crake 79-80).

The clear implication of the list—the insufficiency of any Rose when compared to any Blood, much less the whole list compared to the whole list—is that civilization is in truth a terror, history itself a monster. One cannot help but wonder, after playing Blood & Roses, if the human history that has been wiped out by the apocalypse is actually worthy of being mourned at all.

32 Snowman’s interlocutor here is his memory of Oryx, a key character who provides the other half of the novel’s title. Oryx is another of Crake’s employees, hired because of her physical resemblance to the face of an exploited young girl he and Jimmy once saw while watching child pornography on the Internet. (She is initially presented as if she were in fact the same person, though by the end of the novel this seems highly dubious.) She, like Crake, has taken a new name based upon a now-extinct animal. While I do not speak much about Oryx in this article, she is in fact a crucial part of Atwood’s critique of contemporary civilization—physically embodying a critique of misogyny and patriarchy that deeply informs both Crake’s plan to remake civilization and encourages us take his solution seriously. As H. Louise Davis has noted, this aspect of the novel’s critique is key to its ecofeminist politics: “Ecofeminism should not simply be about defining or detailing the parallel oppressions of women and nature! Ecofeminism should also aim to provide the reader of both theory and fiction with the language and the tools necessary to effectively perceive and question those patriarchal structures that recklessly limit, oppress, and violate both human beings and their natural/cultural environments” (92-93).
Forget Building a Better Mousetrap; Build a Better Mouse

“This planet doesn’t need new continents, it needs new men.”
—Jules Verne, 20,000 Leagues Under the Sea

Likewise—true to Atwood’s subversive reversal of the usual loyalties of apocalypse—the post-apocalyptic scenario turns out rather unexpectedly to have some important points in its favor. We soon discover that the Crakers are separated from Snowman not only by the temporal disjunction between before and after the end of the world, but also by the crucial modifications that have been made to their genome by Crake in order to “perfect” them—beginning with something as simple as the removal of facial hair to eliminate the inconvenience of shaving (9) and moving on to far more radical intervention that challenge the notion that the Crakers are still “human” at all.

The Crakers have been engineered to live in very small numbers in stable harmony within a very limited environmental niche—thereby preventing any rerun of the destructive capitalist attitude towards the environment that first necessitated their creation. At one point, before Crake has revealed the full scope of his plans to Jimmy, Crake explains his ecological, neo-Malthusian rationale for their design:

Jimmy, look at it realistically. You can’t couple a minimum access to food with an expanding population indefinitely. Homo sapiens doesn’t seem

33 It should be noted that Crake’s development of the Crakers appears to draw on a Romantic notion of the natural world as stable and harmonious that is no longer current in ecological science. On this point, see Dana Phillips’s The Truth of Ecology or John Kricher’s The Balance of Nature.
to be able to cut himself off on the supply end. He’s one of the few species that doesn’t limit reproduction in the face of dwindling resources. (120)

(We see now the crucial irony of the means Crake uses to wipe out humanity: he hijacks an attempt to rationally confront the crisis of overpopulation through the use of birth control in order to distribute his deadly supervirus.) Jimmy suggests in response that what Crake is essentially saying is that the human species is “doomed by hope,” which Crake reframes instead as “desperation” (120)—an immutable feature of life for *Homo sapiens*, perhaps, but something easily removed from the genome of Humanity 2.0.

This Crake-imposed limitation on the size of Craker civilization has a second salutary effect in returning human life to the hyperlocal scale of the tribe; his research in genetics, primatology, and evolutionary psychology has shown Crake that “*Homo sapiens sapiens* was not hard-wired to individuate other people in numbers above two hundred” (343). To replace the once-inevitable cycle of spiraling overpopulation, as well as the often destructive dance of love and courtship, Crake has replaced the concealed ovulation of human women with the estrus of baboons. Once every three years, a Craker woman turns blue in her buttocks and abdomen in order to signal her fertility, a feature of the baboon genome combined with octopus chromospheres and spliced into human/Craker DNA. The Craker men spar for the right to mate with the woman (through ritual song and dance, rather than violence), with the four winners following her to a secluded spot to copulate until the woman becomes pregnant (164-165). Because men and women both are stimulated solely and entirely by pheromone release, this
competition for mates is purely amicable: “There’s no more unrequited love these days, no more thwarted lust, no more shadow between the desire and the act” (165). Such a state of affairs is therefore in Crake and Jimmy’s calculation a Utopian solution to the problem of love, which Crake cynically frames as the “needless despair … caused by a series of biological mismatches, a misalignment of the hormones and pheromones” (167). For the Crakers, there is “no more prostitution, no sexual abuse of children, no haggling over the price, no pimps, no sex slaves. No more rape” (165). Likewise, for the Crakers there can be no establishment of paternity, and therefore no patrilineal descent, and therefore no patriarchal family divisions to risk balkanizing society against itself.

In the absence of the possibility of medical science—which is much too advanced for the simple Crakers—Crake has given them an inborn ability to heal one another, through a splice from feline DNA that causes them to purr “at the same frequency as the ultrasound used on bone fractures and skin lesions” (156). To replace the struggle for alpha-male reproductive dominance that once constituted the role of men in society, Crake has given them instead a passive, community-oriented role: chemicals in Craker men’s urine keep animals at bay from the Craker encampment (155). This “ring-of-pee” likewise demarcates the spatial-temporal boundaries of Craker futurity; the Crakers,

34 This alteration takes on a rather more disturbing valence when seen through the eyes of female protagonists Ren and Toby in *The Year of the Flood*. When the Crakers encounter unmodified human women, they read the women as being sexually available (“smelling blue”) at all times, and appear as if they might sexually assault them (409-412). The scene is quite ambiguous, and can be read both as an attack on Crake and as a validation of his genomic/pheromonic solution to the problem of rape.
unlike their human predecessors, will never outgrow their niche, never overrun the
globe.\textsuperscript{35} The Crakers, of course, are vegetarians (158); in fact, they are caecotrophs, a trait
borrowed from rabbit DNA, which boils down (in Jimmy’s horrified formulation) to
“eat[ing] your own shit” (158-159). Jimmy finds this practice monstrous, but Crake
argues that “any objections to the process were purely aesthetic” (159)—and, indeed,
from the Crakers’ perspective nothing could be more natural.

The Crakers seem even to have a diminished capacity for abstract thought, a key
part of Crake’s attempt to craft a more ecological, rational, and sustainable human being.
It is never entirely clear whether this diminished capacity originates in the genome or in
early childhood language instruction, or perhaps both. We do know that “it was one of
Crake’s rules that no name could be chosen for which a physical equivalent—even
stuffed, even skeletal—could not be demonstrated. No unicorns, no griffins, no
manticores or basilisks” (7).\textsuperscript{36} The plan here, à la Orwell’s Newspeak, is to eliminate
from the Craker’s mind the very capacity to conceive of God, whom the atheistic Crake
scornfully declares is merely “a cluster of neurons” (157), as well as remove the fantasies
of post-biological afterlife that Crake finds destructive (120). But a secondary advantage
of modifying the Crakers’ ability for abstract thought is preventing them from
replicating \textit{Homo sapiens’} previous attempt to master nature through technical artifice.

\textsuperscript{35} Such an act of closure has a long tradition in utopian thought, dating back to King Utopus’s foundational
digging of the trench that first turned Utopia into an island; see \textit{Archaeologies of the Future} 204.

\textsuperscript{36} Snowman chooses his new moniker precisely in spite of this rule, as the very word “Snowman” has no
referent in the Crakers’ hot, beach climate.
The Crakers cannot read (41); they do not waste (363); they cannot build (367).

This, then, is the twisted sense in which Crake’s project fulfills its original “immortality” manifest: the Crakers cannot conceive of their own mortality, and thus do not know they will ever die. And yet Crake’s plans are partially and significantly thwarted: he discovers to his great frustration that we are in fact “hard-wired” for dreams and for singing (352), and religion, narrative, music, and art all likewise turn out to be impossible to eradicate, despite his greatest efforts. He is further thwarted in all this by Jimmy’s influence, who as Snowman regales the Crakers with ludicrous tales of the great gods Oryx and Crake in exchange for periodic tribute of fish. Late in the novel, in Jimmy’s absence, the Crakers even craft a magical totem designed to bring Jimmy back from his travels to the compound (361). These humanistic “excesses” in the face of Crake’s carefully crafted “perfection” are what allow the Crakers to transcend Crake’s attempts to reduce the human to the level of an animal, even to a pure mechanism. The Crakers initially appear monstrous to readers to the extent that they lack the creative vitality of humanistic thought—and they only begin to seem potentially worthy successors to Homo sapiens to the extent that they turn out to retain this capacity after all.

---

37 Even their version of religious practice, such as it is, is intensely ecologically minded: “After a thing has been used, it must be given back to its place of origin” (363). There are no cathedrals in Craker religion, no waste.
'The Worst Mistake in the History of the Human Race'

The resulting hybrid of the tribal and the posthuman should recall for us the quote from E.B. White with which Rachel Carson opens *Silent Spring*:

I am pessimistic about the human race because it is too ingenious for its own good. Our approach to nature is to beat it into submission. We would stand a better chance of survival if we accommodated ourselves to this planet and viewed it appreciably instead of skeptically and dictatorially. (qtd. in *Silent Spring* epigraph)

Atwood likewise seems strongly influenced in her construction of a Craker Utopia by the primitivist thinking of writers like Jared Diamond, Marshall Sahlins, and Daniel Quinn, who argue not only that we were *happier* in the pretechnological tribal context, but also that one way or the other, ready or not, we’ll be returning to it shortly.

Diamond begins his 1987 *Discover* magazine article declaring agriculture “The Worst Mistake in the History of the Human Race” with a reversal of the logic of progress that frequently characterizes Western conceptions of history, arguing instead that “the adoption of agriculture … was in many ways a catastrophe from which we have never recovered. With agriculture came the gross social and sexual inequality, the disease and despotism, that curse our existence” (64). This attitude finds its echo in the teaching of the God’s Gardeners in *The Year of the Flood*, for whom each so-called “advance” in knowledge or technology only leads humanity further and further away from the good life. “The Fall was ongoing,” the teaching goes, “but its trajectory led ever downward” (189).

Americans might bristle at the notion that life was better as a hunter-gatherer,
Diamond writes, but even putting their privileged position of world-historical wealth to one side there are good reasons to doubt the inherent superiority of technological civilization. He refers to various tribal peoples like the Kalahari Bushman and the Hadza nomads of Tanzania, who work less, play more, and sleep longer than “their farming neighbors” (64). Marshall Sahlins, in his *Stone Age Economics*, makes much the same point, again using the Bushmen as a key example. Sahlins quotes findings from anthropologist Richard Lee that show that far from the bare subsistence lifestyle we might imagine—that is, far from what we have been taught—the Bushmen in fact live in caloric abundance (a daily per capita yield of 2,140 calories, when they likely need only 1,975 calories to survive). To gather this food, Sahlins shows, requires far less daily labor than is required in modern capitalist society.38

The primitivists frequently go still further, claiming not only that the conditions of hunter-gatherer life are happier and freer than civilization, but that they have the additional advantage over capitalism of being genuinely sustainable as well. A key assumption of primitivist thinking is the neo-Malthusian belief that modern civilization is doomed by its need to grow endlessly within the finite space of Planet Earth. One of Jimmy’s girlfriends, Amanda—who later returns as one of the protagonists of *Year of the Flood*—evokes this longue-durée slow-motion apocalypse explicitly: “According to

38 In the Bushmen communities Lee studied 35% of the population did not work at all; the remaining 65% worked only 36% of the time. The “work week” in this area averaged two hours a day. (21)
them it had been game over once agriculture was invented, six or seven thousand years ago. After that, the human experiment was doomed, first to gigantism due to a maxed-out food supply, and then to extinction, once all the available nutrients had been hoovered up” (243).

In his 1992 novel Ishmael, a cult classic among college environmentalists that has spawned a primitivist movement called new tribalism, Daniel Quinn provocatively compares the historical trajectory of technological civilization that began with the first Neolithic agricultural explosion to a nineteenth-century flying contraption that has been recklessly driven off a cliff. The passengers believe the vehicle is flying, because the plane has not yet hit the ground:

Their flight could never end, it could only go on becoming more and more exciting. They couldn’t know, couldn’t even have guessed that, like our hapless airman, they were in the air but not in flight. They were in free fall, because their craft was simply not in compliance with the law that makes flight possible.

…But your craft isn’t going to save you. Quite the contrary, it’s your craft that’s carrying you toward catastrophe. Five billion of you pedaling away—or ten billion or twenty billion—can’t make it fly. It’s been in free fall since the beginning, and that fall is about to end. (107-109)39

Crake makes a similarly apocalyptic prediction as the futurological foundation for the Paradice Project that produces his Crakers:

39 Kim Stanley Robinson, too, in his 2010 introduction to The Sheep Look Up, uses precisely this language of uncontrolled freefall to describe humanity’s current ecological predicament: …as a culture we had been like the man in the story who throws himself off the top of the Empire State Building and reports as he passes the tenth story that everything is fine, that the dangers have been exaggerated, and so on. The happy report has simply been premature. (11)
“I didn’t know you were so altruistic,” said Jimmy. Since when had Crake been a cheerleader for the human race?”

“It’s not altruism exactly,” said Crake. “More like sink or swim. I’ve seen the latest confidential Corps demographic reports. As a species we’re in deep trouble, worse than anyone’s saying. They’re afraid to release the stats because people might just give up, but take it from me, we’re running out of space-time. Demand for resources has exceeded supply for decades in marginal geopolitical areas, hence the famines and droughts; but very soon, demand is going to exceed supply for everyone.” (295)

Crake’s monstrous work—to kill off the human race and replace it with the more ecologically sound Children of Crake—becomes from this perspective something more like a mercy killing: “For instance, Crake said once, ‘Would you kill someone you love to spare them pain?’” (320)

Intriguingly, Atwood eerily echoes Quinn’s metaphor even more explicitly at the close of a short piece she wrote for the Guardian during the Copenhagen climate summit in 2009 titled “Time Capsule Found on the Dead Planet.” Reading like a full-on endorsement of the Crake theory of history, Atwood’s short story traces the project of human history from the invention of the gods through the invention of money to the final replacement of God with money. Money then creates the bifurcated world of Oryx and Crake: “It created feasts and famines, songs of joy, lamentations. It created greed and hunger, which were its two faces” (“Time Capsule”). Finally, in the fourth age of mankind, man creates only deserts—concrete jungles, poisoned wastelands, scorched earth. In a world that is dead, the only response left is to worship nothingness. At this point Atwood turns to the fifth and final age, which is not an age of creation at all but a
age of desolate mourning and loss: “You who have come here from some distant world, to this dry lakeshore and this cairn, and to this cylinder of brass, in which on the last day of all our recorded days I place our final words: Pray for us, who once, too, thought we could fly” (“Time Capsule”).

Atwood presents a bleak, declinist vision of the future that is fundamentally at odds with the traditional science fiction trope of continuous progress that culminates in interstellar colonization, which (as in familiar narratives like Gene Roddenberry’s Star Trek) imagines a human race that quite literally can “fly”: to the moon, to the rest of the solar system, and onward out into the universe. To Atwood, this dream of flight turns out to be only a delusion—at least for us.

There have always been alternatives to the utopian, expansionist futures imagined in galactic science fictional narratives—one need think only of the immense popularity of nuclear war fictions in the 1950s, 60s, and 70s—but the “space empire” narrative of science fiction was nonetheless the dominant mode of imagining humanity’s future until the ecological turn of the 1970s, when SF began to focus instead on the long-term survivability of a human race permanently confined to a single planetary ecosystem with finite and rapidly dwindling resources. Instead of the promised stars, we found we now faced only an inevitable, shattering crash. The map of human history that is produced by this imagined historiography is a bell-shaped curve, nicknamed the Olduvai theory for the Olduvai Gorge where the earliest pre-human fossils have been
found by one of its key developers, Richard C. Duncan. Olduvaians believe that human society will use up its available resource base and then crash, returning ultimately to a level of technological sophistication only slightly more advanced than the technology originally used in the Neolithic. Once technological civilization has collapsed (or, with Crake’s intervention, has been overthrown), there will be no chance for a sequel.\footnote{Indeed, Crake believes that the current instance of technological civilization is the only possible version in Earth’s entire history: “Because all the available surface metals have already been mined … without which, no iron age, no bronze age, no age of steel, and all the rest of it. There’s metals farther down, but the advanced technology we need for extracting those would have been obliterated” (223). A second industrial revolution is by this logic impossible.} From this perspective, then, Crake is merely speeding an inevitable process along, making sure that the humans who will inhabit the post-collapse, neo-tribal future will be better-suited to it than we have been.

Here Crake follows the mode of “catastrophic thinking” recently endorsed by Evan Calder Williams, which refuses the logic of sustainability in favor of more aggressive, more radical intervention:

What [sustainability] forgets is what the harder line of catastrophic thinking— that which insists that we pushed off that cliff long ago—grasps better. It is the more extreme position, closer to the call for civilization’s end, which gives us sharper tools to forestall such an end, even as we aim to hasten the end of this particular world order. (202)

Williams’s notion of “combined and uneven apocalypse” begins from this recognition that “the post-apocalyptic is not an image of that to be” but “a perspectival stance to be
taken up now” (158). In the “Eight Principles of Uncivilization” of the apocalyptically
minded Dark Mountain Manifesto, we similarly find the joyful embrace of the coming
end of civilization framed as the only possible response to an ongoing “age of ecocide”
(“Dark Mountain Manifesto”).

So-called “deep ecology,” both in and outside science fiction, has long wrestled
with precisely this fraught relationship with catastrophe and extinction in its push for a
human race with so light an ecological footprint so as to (at the extreme end of its logic)
be erased from the planet altogether. Perhaps—as The Internet’s darkly humorous
“Voluntary Human-Extinction Movement” has long suggested—the universe would
simply be better off without us. Amanda’s friends, in fact, take exactly this position:

Human society, they claimed, was a sort of monster, its main by-products
being corpses and rubble. It never learned, it made the same cretinous
mistakes over and over, trading short-term gain for long-term pain. It
was like a giant slug eating its way relentlessly through all the other
bioforms on the planet, grinding up life on earth and shitting it out the
backside in the form of pieces of manufactured and soon-to-be-obsolete
plastic junk. (Oryx and Crake 243)\textsuperscript{42}

\textsuperscript{41} Little wonder to find the title for Williams’s academic blog reimagining a classic Marxist slogan: the site is
not “Socialism or Barbarism,” but “Socialism and/or Barbarism.”

\textsuperscript{42} In Terry Gilliam’s apocalyptic Twelve Monkeys (1995)—which shares with Oryx and Crake a epidemic
deliberately released by a deep ecologist in the name of preserving life on Earth—the architect of the release
of the virus likewise frames his doomsday vision in these terms:

I think, Dr. Railly, you’ve given your virus a bad name. Surely there is very real and very convincing data
that the planet cannot survive the excesses of the human race: proliferation of atomic devices, uncontrolled
breeding habits, the pollution of land, sea, and air, the rape of the environment. In this context, isn’t it
obvious that “Chicken Little” represents the sane vision and that Homo sapiens’ motto, ”Let’s go shopping!”
is the cry of the true lunatic?

211
In the face of man’s mania for self-destruction, which now threatens not only the future of *Homo sapiens* but all life on the planet as a whole, Crake’s virulent misanthropy unexpectedly becomes transformed into something like a virtue, the truest form of love. (If this is not genocide as humanitarianism, exactly, then it is at the very least genocide as environmental policy: global death, in the name of preserving life.) This bizarre, murderous love directs itself not only towards preventing the predictable suffering of humans in the face of inevitable catastrophic collapse, but towards all other lifeforms on the planet as well; when Crake witnesses a television report on peasant revolts in the Third World, his reaction is to want to kill the police state suppressing the riots—not because they are harming guerillas (“there are always dead peasants”) but because in the process they are massively defoliating the forest (179).

Likewise, one of Crake’s primary social outlets during his teen years is the online video game *Extinctathon*, which is organized around the neurotic memorialization of every “bioform that had kakked out within the past fifty years” (80). (We discover in the sequel that *Extinctathon* has a secondary purpose as a communication network for environmental activists/extremists called the God’s Gardeners, who are *The Year of the Flood*’s primary protagonists.) The new name Crake takes for himself is his handle in the game, after the red-necked crake—which is still alive in our time, but extinct in theirs. Indeed, Atwood once described the entire book as flowing out of her encounter with a red-necked crake while touring Australia: “I saw a red-necked crake,” she said,
“and I saw the shape of a book. There was the book shining in the distance, as a goal” (Gussow). In the face of an ongoing mass extinction event that shows no sign of slowing or abetting, Crake’s intervention becomes the other side of the logic of the Anthropocene, the proposed name for the geological epoch marked by the largely unintended and mostly negative consequences of human civilization. Here, a humanity that has become the dominant agent of extinction on the planet accepts the mantle of global responsibility that has been thrust upon it—and decides to finally stop the insanity by extinguting itself.

‘Utopia,’ Politics, and Apocalypse

At this point one might be forgiven for taking Oryx and Crake as a deeply cynical, deeply conservative (even reactionary) anti-utopia that endorses Crake’s naïve, scientistic reduction of all human institutions to evolutionary “hard-wiring,” thereby denying any possible solution to environmental crisis. (If the problem is culture, we might have had a chance; but if the problem is our nature—if we’re just built wrong—then there is no hope.) Indeed, a left critique of the novel might begin with the claim that it misreads social structures as genetic ones, mistaking a temporary historical subjectivity for “human nature” and thereby misidentifying the real enemy. The stirrings of such a case against Oryx and Crake might be further bolstered by Atwood’s well-known rejection of the label of science fiction on the grounds that “science fiction”
(descending, she says, from Wells) refers to such impossible confabulations as “talking squids in outer space,” while the genre in which she writes, “speculative fiction,” (descending from Verne) describes those things that “could really happen” (qtd. in Langford). A person who truly believed *Oryx and Crake* is a possible vision of the future would indeed have no hope for mankind.

But in fact *Oryx and Crake* primes us to reject such a reading, beginning with its opening epigraph, which draws a version of Atwood’s proposed distinction between science fiction and speculative fiction from another source:

> I could perhaps like others have astonished you with strange improbable tales; but I rather chose to relate plain matter of fact in the simplest manner and style; because my principal design was to inform you, and not amuse you. (qtd. in *Oryx and Crake* epigraph)

That writer, of course, was Jonathan Swift, and the book that famous naturalistic rendering of plain, unembellished fact, *Gulliver’s Travels*. And like the work of her announced predecessor, Atwood’s books are unmistakably satirical, a tone found everywhere in the *Oryx and Crake* series, from her world’s transparently illegitimate and utterly irrational institutions to her scientists’ cartoonishly irresponsible experiments. Crake’s totalizing genetic determinism (and accompanying quick-fix solution) is just another part of the joke.

The Crakers, in this context, should be understood as a hyperbolic version of the fantasy that we might turn back the clock and begin history anew, this time avoiding the mistake of so-called “civilization” that has brought down so much pain, misery, and
death upon nearly everyone it touches through its awful past, miserable present, and terrible future alike. The Crakers are manifestly not an actual plan to save the world—Crake’s plan employs unethical methods and impossible genetics towards a plainly ridiculous purpose. Rather, the Crakers allegorize the radical transformation of both society and subjectivity that will be necessary in order to save the planet—showing us how very difficult the project will be, and giving us a sideways, funhouse-mirror, only-kidding glimpse at the kinds of revolutionary changes that will be required to make the future better than the present.

To this end the Crakers are quite deliberately framed by the novel as an over-the-top return to Edenic perfection, in ways that are likely already quite clear, beginning with Jimmy’s first view of them inside the Paradice Project dome: “This was his first view of the Crakers. They were naked, but not like the Noodie News: there was no self-consciousness, none at all” (302). Late in the novel, as Jimmy prepares to leave the Crakers in search of the other humans he now knows to be alive, he reflects on the Crakers’ odd innocence:

Except that they don’t need commandments: no thou shalt nots would be any good to them, or even comprehensible, because it’s all built in. No point in telling them not to lie, steal, commit adultery, or covet. They wouldn’t grasp the concepts.

He should say something to them, though. Leave them with a few words to remember. Better, some practical advice. He should say he might not be coming back. He should say that the others, the ones with extra skins and feathers, are not from Crake. He should say their noisy stick should be taken from them and thrown into the sea. He should say that if these people should become violent—Oh Snowman, please, what is violent?—or if they attempt to
rape (What is rape?) the women, or molest (What?) the children, or if they try to force others to work for them...

Hopeless, hopeless. What is work? Work is when you build things—What is build?—or grow things—What is grow?—either because people would hit and kill you if you didn’t, or else because they would give you money if you did. What is money? (366-367)

The novel ultimately ends with Jimmy (and the reader) unsure whether he should ambush the other original humans he has discovered in order to protect the Crakers—or else join them, hoping against all reason that human beings might deserve another chance after all. (It’s a choice Jimmy has been forced to make once before, when he first led the Crakers out of “Paradice.” Then, he chose the Crakers, coldly killing any human survivors he ran across. [352]) Will the trio of strangers he has found be “good-hearted, sane, well-intentioned,” or will the atrocious history of Blood & Roses and Barbarian Stomp be repeated once again in yet another disastrous moment of first contact between cultures? (366) The novel ultimately leaves us hovering within that ambiguity—we know Jimmy has made a decision, but we do not see it. The overall effect of the novel thus becomes something like an obscene dare to endorse what Crake has done: to give his “Paradice” our seal of approval, despite its terrible cost.

The Year of the Flood culminates in another version of the encounter between Jimmy and the unknown trio of surviving humans, now retold from the perspective of the other party (415). We find out that Jimmy is interrupted before he can make his final 

---

43 One must think here of what Jameson calls “the grandest of all the ruptures effectuated by the Utopian Imagination: namely, the thought of abolishing money and private property” (229).
choice. This moment happens only fifteen pages from the end of the novel, at which time another encounter is staged, with a similarly ambiguous anxiety about what will happen when two very different groups meet for the first time. The effect of these endings is perhaps the greatest disproof of Crake’s scientistic emphasis on mechanism and determinability present in both novels; both novels culminate in a moment of radical choice for the characters, a moment that cannot be reduced to clean, empirical measurement, and which can only be tackled by dirty and messy humanistic thinking. This triumph of duality, indeterminancy, and creative potentiality over cool scientific rationality—tempered, as it is, by the threat that the characters will only use their ability to choose to make more catastrophically bad choices—is replicated outside the texts in the reader, as Atwood herself has noted:

Do the surviving human beings in Oryx and Crake and The Year of the Flood represent a dystopic threat to the tiny utopia of genetically modified, peaceful, and sexually harmonious New Humans that is set to replace them? As it is always the reader rather than the writer that has the last word about any book, I leave that to you. (In Other Worlds 93)

Elsewhere in In Other Worlds, Atwood describes her notion of _ustopia_, a combination utopia- dystopia where the two exist in simultaneous superposition with one another, each containing the other.44 In an “ustopic” reading of the novel, Crake becomes something like Derrida’s famous _pharmakon_—he is that which kills (through the BlyssPluss epidemic he deliberately engineers) but also, perversely, that which cures

44 This idea is quite close to what Tom Moylan has developed in his work on the critical utopia and the critical dystopia, the latter of which the Oryx and Crake series perhaps stands as the paradigmatic example.
(humanity’s dysfunctional relationship with the globe). And true to the Moses archetype on which so much utopian fiction is based, Crake is himself unable to cross over into his Promised Land; the last murder he arranges is his own.

So there is indeed “hope” of a kind in the blisteringly pessimistic Oryx and Crake series—only, as the Kafka quote from this article’s title suggests, the hope is “not for us.” There is no hope for liberal individualist consumers living in the pseudo-utopia of late capitalism; our system—and the subjectivities and ideologies it produces, to say nothing of its material excesses and cold consumer comforts—is genuinely doomed. To the extent that Crake’s murderous, Frankensteinian actions do indeed usher in a kind of utopia, then, we must understand that it is not a Utopia for us—not for us the way we now are, the way we now live.

The political content of both Oryx and Crake and The Year of the Flood is predicated on the increasingly desperate need to find some “outside” to the closed, totalizing system called capitalism, which has swallowed the entire globe and remade all of human history, all the way down to the level of the gene, in its image. The books allegorize both the difficulty and the necessity of finding some sort of alternative. In Oryx and Crake, the answer (such as it is) comes in Crake’s New Humans, as striking a version of “hope but not for us” as one might imagine; no matter how we try, we could never become the Crakers, nor (as with their caecotrophy) can we really even understand their subjectivity and the way they see the world. In The Year of the Flood—
seemingly an attempt on Atwood’s part to clarify (or even rewrite) her earlier book and prevent any possible misinterpretation of it—the change is much more down to earth: the possibility of an alternative is located in God’s Gardeners, a group of ecologically minded religious separatists who attempt to prepare for the “Waterless Flood” of capitalism’s inevitable collapse. In Oryx and Crake, the God’s Gardeners appear only in the background, as another joke; neither Jimmy/Snowman nor Glenn/Crake take them very seriously. But in Year of the Flood their presentation is much more sympathetic, and the humanistic challenge to unchecked science accordingly that much stronger. The ultimate intellectual project of God’s Gardeners is to unite the “two cultures” of Oryx and Crake: to reconcile science to humanism and find some way to move forward with both.45

The Year of the Flood reveals that an astounding number of God’s Gardeners manage to survive Crake’s apocalypse, a viral version of the collapse of civilization for which they were all completely unprepared and for which none had Jimmy’s deliberately engineered immunity. They survived (and here the book is almost as straightforwardly moralistic as a fable) because they saw a disaster was coming and

45 This synthesis is groped for throughout Year of the Flood, and is explicitly evoked near the novel’s end: “Some will tell you Love is merely chemical, my Friends, said Adam One. Of course it is chemical: where would any of us be without chemistry? But Science is merely one way of describing the world. Another way of describing it would be to say: where would any of us be without Love?” (358)
chose to change. But Atwood’s answer is not that we must all become eco-religious separatists either, anymore than we all must become Crakers; her book is not best understood as a blueprint for utopia, nor a Bible for the world to come. Rather, I read Oryx and Crake and The Year of the Flood as asserting through allegory the urgent necessity of radically changing our social relations and anti-ecological lifestyles—of choosing to make a better social world before it is too late for the natural one.

In this respect we find Crake’s monstrous plan oddly exemplifies Jameson’s critical notion of the radical break, “forcing us to think the break itself, and not by offering a more traditional picture of what things will be like after the break” (231-232, my emphasis). Indeed, “break” is precisely the figure Crake uses to describe the way his plan snips the thread of epistemic continuity that links each generation to both past and future: “All it takes … is the elimination of one generation. One generation of anything. Beetles, trees, microbes, scientists, speakers of French, whatever. Break the link in time between one generation and the next, and it’s game over forever” (223). But of course Crake doesn’t really want to “end” the game at all; he only wants to change the way we

---

46 Among the changes they make, it must be noted, is to become vegetarians (19) and to wear eco-friendly clothes whose dyes turn their skin blue (209), as well as to live in a Garden led by a man who calls himself Adam—all features that link the separatist Utopia of The Year of the Flood to the Craker Utopia of Oryx and Crake. We also find, late in the second novel, that a splinter group of God’s Gardeners helped Crake design and plan the Crakers, further uniting the two groups (412).

47 I want to thank Greg Garrard for challenging me on this point, particularly in bringing to my attention the fact that Atwood was accompanied on her book tour for Year of the Flood by a gospel choir singing the Gardeners’ hymns. Garrard suggests that the book may in fact be a serious attempt to create a Darwinist ecological religion—making the novel quite literally a Bible for the world to come after all. I concede the possibility that this was Atwood’s intent, but my feeling remains that the book is most satisfying when read as a broadly satirical statement of the problem, rather than a (frankly naive) solution proposed in earnest.
play, so the game can go on forever.

It was the eco-critic Lawrence Buell who noted that “Apocalypse is the single most powerful master metaphor that the contemporary environmental imagination has at its disposal” (285), and Greg Garrard (among others) who has replied by noting the fatal internal contradiction of the politics of apocalypse: “Only when we imagine the planet has a future are we likely to take responsibility for it” (107). I take Atwood’s two postmodern ecological jeremiads as attempts to somehow bridge this fundamental critical disjuncture: to imagine a future that is frightening (as ecological science tells us it must be) without at the same time being final (as it so often seems it will be)—a doomsday, that is, to which we are not simply and inescapably doomed. To say that the present has no future is not to say there is no future—it is only to say that things cannot continue to go on as they have. The sense of futurity at the heart of Oryx and Crake and The Year of the Flood, and I argue the core of its unexpectedly utopian politics, lies therefore not in prediction or in program, but in this reopening of possibility: the assertion of the radical break, the strident insistence that things might yet be otherwise—however that might happen, and whatever else we might become along the way.
III. Permaculture and Ecotopia in Ursula K. Le Guin and Kim Stanley Robinson

The fantasy of apocalypse is not so much that we will be destroyed but that something might intervene in time to force us to change—a pocalyptic in its original, Biblical sense, from the Greek ἀποκάλυψις, connoting not a final end but of an unveiling: revelation. (Apocalypse here is unveiled as itself a mode of critique.) In Avatar (2009)—whatever else we might say about the film’s visual spectacle and fraught politics of race, gender, and indigeneity—at its core there is the fantasy that a typical American might somehow be transformed: put into another body, located in another social-historical context, capable of living a different sort of life. The desire for this transformation is so strong that it leads even the film’s domestic audiences to root against what is essentially the U.S. military as it invades the planet Pandora looking to seize control of its valuable resources for the benefit of a desperate, dying Earth—with our hero leading the successful resistance and successfully forcing the imperialists off the planet. His reward for all this in the end is to be permanently transferred into the body of the big-O Other—to, in essence, not have to be an eco-imperialist any longer.

A similar miracle takes place at the end of Daybreakers (2009, which makes literal the metaphor famously employed by Karl Marx: “Capital is dead labour, that, vampire-like, only lives by sucking living labour, and lives the more, the more labour it sucks” (342). Ten years after a viral outbreak that has turned the national elite into vampires, in Daybreakers’ 2019 there are no longer enough humans left to feed
America’s insatiable desire for blood. Vampires who go without blood for too long are transformed into monstrous “subsiders” which attack anything that moves; as the film opens, the subsider epidemic is just reaching the suburbs. Coffee shops advertise that they “still sell 20% blood,” while “blood riots” rock the Third World. All efforts at an energy substitute are stalled. America has reached Peak Blood.

The solution here is again transformation: it turns out that through controlled exposure to the sun vampires can be cured. But the “cured” vampires cannot be revampirized; in fact their blood itself now contains the cure, turning any vampire who drinks from them into a cured human as well. What is being imagined is a kind of viral enlightenment operating through an epidemiological social network—friend to friend, relative to relative, coworker to coworker—that has the power to slowly transform a society of vampire-consumers back into human beings once again.

The active fantasy in both these narrative is salvific: that the nightmare of exploitation, and our own complicity in these practices, might somehow be stopped, despite our inability to change. As Kierkegaard put it in an epigram sometimes invoked by Darko Suvin: “We literally do not want to be what we are” (qtd. in Defined 218). (Since U.S. consumerism is so often framed as an addiction, the ecological state of grace imagined by these films may well be thought of as something like A.A.’s “Higher Power.”) The task before us then would seem to be to transform that dream-wish into waking act, to find ways to nourish and sustain the drive to change even in a world of
ordinary, non-miraculous causation, transforming Thatcher’s slogan that “there is no alternative to capitalism” to Suvin and Jameson’s that “there is no alternative—to utopia” (*Defined* 11).

One interesting, if complicated, attempt to do depict an alternative mode of history comes somewhat unexpectedly at the end of a recent children’s film, Disney’s *WALL-E*. Here we see precisely the difficulty of imagining an equitable and sustainable future history made by human beings in the intriguing credit sequence that follows the film’s abrupt happy ending, in which the janitorial robot WALL-E has brought the morbidly obese Americans of the future back to the earth they once ruined, and robot and human together begin the process of rehabilitating the global ecology they’ve completely destroyed. Recalling the looping cyclical repetitions of history of Marx’s *18*th *Brumaire*, this attempt to imagine and represent a non-apocalyptic, non-disastrous future is not depicted narratively, but represented instead through a short montage showing some aspect of the new historical situation through an artistic medium of the past—the sort of artistic media Pixar considers its own computer-generated practice to have superceded, from cave paintings to Monet’s watercolors—blessedly cutting off with the landscape art of Vincent van Gogh in, one supposes, an attempt to avoid having to unhappily endure the disasters of the twentieth century a second time.

The double paradox inherent in this visualization of utopia is clear: first, it more or less sidesteps the question of how the generally hopeless ecological situation the film
depicts (a hyperbolic, super-exaggerated version of the very quagmire we find ourselves in) could ever actually get any better—finding recourse instead in a nostalgia that suggests this better future as a replication of the very path that led us all into the disaster in the first place. But at the same time the bizarre estrangement of the montage—the historical juxtapositions and the anachronistic presence of robots at every stage, the culmination in a new and better world that takes its roots from van Gogh’s famous workboot—prevent this from being merely the nostalgic or bad-utopian fantasy of a “return to nature” that it appears to be. In foregrounding the impossibility of imagining historical difference while insisting at the same time on the necessity of doing so, WALL-E is pushing us in the direction of utopia, forcing us to think about what the radical singularity of that historical break might entail. It employs what meager imaginative tools we have at hand to refashion the fixed reality of Joyce’s “nightmare of history” as it actually happened into the fresh possibility of a new history, still open and unsettled, and somehow done right this time. History, for a few scant minutes at least, becomes unmoored; things, after all, might yet be otherwise.

The utopian potentiality implied by apocalyptic critique is the necessary critical move to rescue us from a diagnosis of the world situation that would otherwise appear utterly hopeless. In his contribution to Red Planets: Marxism and Science Fiction, cultural critic Carl Freedman identifies as a central disjuncture in Marxist thought the distinction between deflationary and inflationary modes of critique. “The deflationary
dimension,” he writes, “is represented by the attempt to destroy all illusions necessary or useful to the preservation of class society in general and of capitalism in particular” (72)—deflation can be seen fairly clearly in ideology critique but also in the more specifically structural discussion of the “secret” of surplus-value in Capital. Deflation, Freedman suggests, has a certain figurative relationship with noir in prose and film (73-74); while noir does not produce usable knowledge about the workings of capital, the genre’s preoccupation with individual greed “allegorically gestures towards... the kind of knowledge discoverable through application of Marx’s principle of the ultimately determining role of the economy” (74). It produces a kind of affective intuition that points us in the right direction, so to speak, if not getting us much of the way there.

Deflation is an economic mode, a scientific mode, and something of a cold mode—it is the mode that drives Marx’s many formulae. Inflation, in contrast, is much more fragmentary and affective than deflation; inflation is effusive and intangible, a mode of prophecy and dreams. Marx, after all, had famously little to say about what the world would be like under communism, but the utopian impulse towards a liberatory fulfillment of history—Marx calls it history’s true beginning, Engels called it “humanity’s leap from the kingdom of necessity to the kingdom of freedom”—is nonetheless always the beating heart at the center of the Marxist project. For Freedman, the genre most closely associated with this utopian impulse is science fiction, and he goes on to argue that, unlike the case of noir, SF narratives provide better pictures of the
inflationary future than straight expository prose; because it is impossible to produce concrete knowledge of the future in the same way we can produce it of the present and the past, it is SF (itself a dialectic between deflationary scientific cognition and unbound inflationary estrangement) that produces our best cognitive maps of potential futures (74).

Of course inflation and deflation function as a dialectic—we find echoes of each in the other. The cold calculus of deflation is predicated on a baseline moral recognition that the injustices that are being described *should not exist*; and the soaring heights of inflation can only surpass mere wishful thinking when they arise out of a scientific understanding of capitalist reality as it now does. Ecocritique, like religion, like science fiction, and like the leftist project as a whole, necessary operates along this same dialectic of deflation and inflation. And like these other modes ecocritque requires both deflation and inflation to stay vital, which is why the impulse towards the deflationary naming of the various ecological catastrophes currently being inflicted by specific groups upon other specific groups must be matched by an inflationary, futurological impulse towards a better world—a transformative futurology that will always be, in some way or another, a science fiction. Here, perhaps, utopia and apocalypse unexpectedly collapse into one another—disguised versions of the same imaginative leap into futurity.

The intersection between ecological critique, ecotopian speculation, and science fiction has a long history, dating at least as far back as E. M. Forster’s novella “The
Machine Stops” (1909), which sees a fully mechanized world collapse under its own entropic weight. In 1970s works like *Logan’s Run* and George Lucas’s *THX 1138* (1971), a pastoral utopia exists for the taking just outside the dome of the modern—one only has to run far enough and fast enough to reach it. No doubt due to the centrality of reproduction as a problematic for both ecological thought and feminist thought, many of these narratives are explicitly ecofeminist, centered around the theoretical category Lee Edelman has called “reproductive futurity”—but where Edelman only gives us two options, heteronormative natality and queer anti-natality, science fictional speculations offer a whole host of alternative ways we might queer the future. To James Tiptree Jr.’s aforementioned “Houston, Houston, Do You Read?” we might add a host of feminist 1970s and post-1970s ecotopias that seek to blueprint alternative systems of interaction between human civilization and the natural world. Some, like Tiptree’s and Joanna Russ’s *The Female Man* (1973), share with Charlotte Perkins Gilman’s 1915 *Herland* the elimination of both men and heterosexual reproduction in favor of parthenogenesis as the foundational utopian gesture; the man-killing plague of *Herland* and “Houston” occurs in *The Female Man* as the false history misremembered on the idyllic planet Whileaway, obscuring the actual history of a literal “war between the sexes,” in which most of that book’s time-traveling, dimension-hopping female proptagonists are recruited to serve as soldiers. Marge Piercy’s *Woman on the Edge of Time* (1976) takes the opposite tack: here ecotopia is inaugurated through the elimination of childbirth,
allowing true gender equality. In Ernest Callenbach’s Ecotopia—which has lent its name to the genre as a whole—a different sort of feminist separatism is enacted: in the face of escalating ecological crisis, ecoterrorists (“led by those damned women”) plant (or claim to plant) nuclear bombs underneath New York, D.C., and other major cities in order to force the political independence of the Pacific Northwest (2). After twenty years of isolation, a reporter from the Times-Post is given access to Ecotopia to discover a paradisal, ecologically sound political order; of course, the reporter ultimately chooses to stay.

This utopian act of removal is even more extreme in Ursula K. Le Guin’s remarkable novel The Dispossessed, from 1974. Le Guin’s novel takes place on a double planetary system, Urras-Anarres. Human civilization began on Urras48 and proceeded in rough parallel to human history on Earth, culminating in the moment of the novel in nation-states on the planet’s two continents that roughly correspond to twentieth-century Earth’s First, Second and Third Worlds: A-IO (USA), Thu (Soviet Russia), and Benbili (the colonial sphere, specifically Vietnam). The major difference between the situation on Urras and the situation on Earth lies in Anarres, which unlike our moon is habitable without mechanical assistance; on the moon lives a breakaway group of egalitarian anarchists (following the teachings of a revolutionary named Odo, a female

48 The word “human” is used advisedly here; human life in the “Hainish cycle” of which The Dispossessed is a part began when ancient aliens “seeded” fertile planets with human life, including Earth, before the dawn of time.
amalgam of Marx, Kropotkin, and Lao Tzu). The Odonians were given the moon to live on following their failed revolt 150 years earlier; since then there has been no cultural exchange between Anarres and Urras, and indeed no contact at all save a single spaceport where valuable lunar materials are traded for food and water. On Anarres, the only memory of Urras is of its nightmares; children on Anarres learn the concept of a “jail” with the same sense of horror as American schoolchild learn of the Holocaust (34-36), and “propertarian” is their most grave insult.

Clearly *The Dispossessed* draws from the “Blue Marble” imagery identified by Heise as crucial to the formation of 1970s environmentalism. These images are evoked frequently in *The Dispossessed*, not only in the book’s two moments of spaceflight but also in the everyday life of people on both worlds. The proximity of “the moon”—so each planet describes the other—generates an inescapable cognitive estrangement: one is constantly reminded of an alternative civilization hanging just above your head. Through the cognitively estranging perspective of the people living in the other place, whose eyes one can vicariously reconsider one’s home:

“I never thought before,” said Turin unruffled, “of the fact that there are people sitting on a hill, up there, on Urras, looking at Anarres, at us, and saying, ‘Look, there’s the Moon.’ Our earth is their Moon; our Moon is their Earth.”

“Where, then, is Truth?” declaimed Bedap, and yawned.

---

49 See, for instance, pg. 17: “On the viewscreen the brilliant curve of Urras hung still against black space, like a blue-green opal.”
“In the hill one happens to be sitting on,” said Tirin. (41)

In such a context alterity is inescapable—one cannot help but think about alternatives to the present. Intriguingly, later in the novel the protagonist’s wife, Takver, makes precisely the opposite move, looking truth not in particularity but in totality, the view from outside: “You need distance, interval. The way to see how beautiful the earth is, is to see it from the moon” (190).

The duality of lunar perspective is the key to *The Dispossessed*’s strange subtitle, which vexes all attempts to read it: “An Ambiguous Utopia.” Which is the Utopia? Urras, beautiful and rich but corrupt, or Anarres, poor but just and noble (in principal, at least, if not quite in practice)? What are we to make of the journey of the novel’s narrative, Shevek, a frustrated scientist who leaves a stagnating Anarres for Urras in search of knowledge only to recoil in horror at its violent excesses, returning to a Anarres that has undergone a revitalizing revolution in his absence? Much has been written on questions deriving from this central ambiguity, much of it focused on the novel’s political commitments and critique of capitalism and Soviet communism in favor

---

50 See, for instance, Tony Burns’s “The Dispossessed and Utopian Literature”: “From the point of view of the Yang utopia the Yin utopia is in fact not a utopia at all, but on the contrary a dystopia; and vice versa. In other words, each of these two forms of writing is both utopian and dystopian, depending on the point of view from which one considers them … *The Dispossessed* is a novel the main theme of which is precisely the tension between two different forms of utopian/dystopian thinking and writing, as it is played out in the lives of its individual characters, and especially its central character, Shevek” (114).
of anarchism, as well as drawing attention to *The Dispossessed’s* own troubled politics of
gender and heteronormativity.  

For my purposes, however, it is most important to situate *The Dispossessed* in
terms of its confrontation with the ecological crises of its moment (and ours). Although
occasional references to “Terra” (Earth) appear throughout the novel, the close
similarities between A-IO and the United States cause most readers to forget that Earth
exists within the novel’s diegetic world. The sudden return of Earth comes therefore as
something of a shock when, near the close of the novel, Shevek takes shelter from a riot
inside the Terran embassy. There he meets the ambassador from Earth, who listens
patiently to Shevek’s denunciation of Urras as a hell before replying:

“We are both aliens here, Shevek … I from much farther away in space
and time. Yet I begin to think that I am much less alien to Urras than you
are.... Let me tell you how this world seems to me. To me, and to all my
fellow Terrans who have seen the planet, Urras is the kindliest, most
various, most beautiful of all the inhabited worlds. It is the world that
comes as close as any could to Paradise.”

...  

“I know it’s full of evils, full of human injustice, greed, folly,
and waste. But it is also full of good, of beauty, vitality, achievement. It is

---

51 See especially Samuel Delany’s “To Read *The Dispossessed,*” a nearly book-length engagement of these
issues that ultimately spawned Delany’s fascinating reply, *Triton: An Ambiguous Heterotopia.* Tom Moylan
expands on Delany’s critique of the book in *Demand the Impossible,* concluding that the novel may have
been “even more ambiguous that [Le Guin] might herself have intended” (105). There can be little doubt
that the book’s utopian politics are flawed (perhaps fatally) by their uncritical reliance on nature and the
heterosexual family as the sole fonts of transcendent value in the book—particularly in the case of the
secondary character Bedap, who (as Delany correctly notes) is unceremoniously shuffled out the novel as a
self-professed failure because, as a homosexual, he will not have biological children (*TD* 370-371).
what a world should be! It is alive, tremendously alive—alive, despite all its evils, with hope. Is that not true?"

... 

“My world, my Earth is a ruin. A planet spoiled by the human species. We multiplied and gobbled and fought until there was nothing left, and then we died. We controlled neither appetite nor violence; we did not adapt. We destroyed ourselves. But we destroyed the world first. There are no forests left on my Earth. The air is grey, the sky is grey, it is always hot. It is habitable, it is still habitable, but not as this world is. This is a living world, a harmony. Mine is a discord. You Odonians chose a desert; we Terrans made a desert... We survive there, as you do. People are tough! There are nearly a half billion of us now. Once there were nine billion. ... Well, we had saved what could be saved, and made a kind of life in the ruins, on Terra, in the only way it could be done: by total centralization. Total control over the use of every acre of land, every scrap of metal, every ounce of fuel. Total rationing, birth control, euthanasia, universal conscription into the labor force. The absolute regimentation of each life toward the goal of racial survival. We had achieved that much, when the Hainish came. They brought us ... a little more hope. Not very much. We have outlived it. . . . We can only look at this splendid world, this vital society, this Urras, this Paradise, from the outside. We are capable only of admiring it, and maybe envying it a little. Not very much.” (347-348)

Now the Urras-Anarres system becomes itself a view from outside of Earth, allowing us to glimpse our own planetary totality for a new position. The revelation that this science fictional narrative of an open, expansionist future—space travel, moon colonies, interstellar trade—carries within itself a second, secret future of deprivation and limit for an ecologically destroyed Earth itself forces us to reevaluate everything that has come before in the novel. It seemed like we were reading one type of story; it turned out we were reading a different story at the same time.
Urras—excessive, flawed, and propertarian as it may be—has at least avoided (so far) the final cataclysm of Earth’s bleak future only through heavy environmentalist regulation (81-82). This is the world of plenty that Shevek is astounded to see when he first arrives: “This,” he thinks, “is what a world is supposed to look like” (65). Anarres, in contrast, is an inhospitable sandpit, whose inhabitants able to survive only through the harshest allegiance to the common good, including (during a particularly bad drought) the recycling of urine for drinking water (236). As Bedap notes, Anarres is so poverty-stricken that “human solidarity is our only resource” (167); the planet is so hostile to human life that individual freedom itself has up to now been stifled in favor of mere survival (a situation apparently reversed by the revolution Bedap, Takver, and others effect on Anarres while Shevek is gone)\(^{52}\). If Urras is a vision of what a world is supposed to look like, Anarres—or more precisely the metautopian “Anarres beyond Anarres” (379) that its inhabitants strive to achieve—is a vision of what people are supposed to be like.\(^{53}\) As Peter G. Stillman shows in his “The Dispossessed as Ecological Theory,” part of the arc of the novel is to show how a utopia of social relations trumps the false utopia of “a place of plenty”: because suffering is inevitable no matter what

---

\(^{52}\) Indeed, for Carl Freedman this is among Anarres’s cardinal virtues: while the situation seems to have become stagnant and corrupt at the start of the novel, “[t]he superiority of Anarres ultimately lies above all in its dialectical character, its self-reflexive capacity for self-correction” (127).

\(^{53}\) As James W. Bittner has noted, The Dispossessed is among the last of Le Guin’s Hainish novels but the first in its internal chronology. Indeed, he rightly notes the cosmopolitan galactic community called the Ekumen that is established as a result of Shevek’s invention of the Internet-like ansible—Le Guin’s answer to the warp drive which allows not faster-than-light travel but faster-than-light communication—seems modeled on the very anarchist principles that govern Anarres (120).
level of material wealth is obtained, what is needed is a “sympathetic community of human beings” that can transform pain into a “movable feast” (65-66).

The challenge offered by both of the novel’s possible utopias—and only ultimately realizable on Anarres—then, is ultimately the need to craft a society that is responsive to what ecology teaches us about the limits of material abundance—to articulate a utopia not of abundance, but of scarcity. (Indeed, Jameson reads the novel as a whole as “a sociopolitical hypothesis about the inseparability of utopia and scarcity” [Archaeologies 277].) In reading The Dispossessed in 2011 we are reminded that limitlessness is in fact its own sort of nightmare, that it is not so bad to only have “enough”—that “enough” only looks like “too little” to the person who already has “too much.”54 As the proverb has it: “Enough is as good as a feast.” The collectivist-anarchist Anarres is far from perfect, but the ideology of egalitarianism, perpetual innovation, and permanent revolution its lunar soil nourishes makes progress towards a just world possible—not despite hardship and shared struggle, but because of it, through it.

Perhaps the most ambitious example of this variety of the ecotopian (but anti-cornocopian) imagination in science fiction today can be found in the concept science fiction writer Kim Stanley Robinson has borrowed from Australian agriculturists Bill Mollison and David Holmgren and put to work as the overriding thematic center of his

54 Hence, perhaps, the Odonian credo: “Excess is excrement…excrement retained in the body is a poison” (98). On Anarres even the color orange (supposedly not occurring in nature on Urras) is a taken as a unforgivable gauche display of luxurious excess (162).
novels: *permaculture*, which describes self-renewing agricultural practices that can be sustained indefinitely. Permaculture rejects the oxymoronic paradigm of “sustainable” growth in favor of what it is essentially raw futurity, a politico-ethical imperative not only that there should *be* a future but that the people in it deserve a decent world in which to live. Only a sense that human civilization has a future can motivate us to make that future real; possible futures are what an ecologically engaged politics, a science fictional politics, can achieve for us. Enrique Dussel unknowingly echoes Robinson’s utopian vision in his *Twenty Theses on Politics* when he writes: “The critical ecological principle of politics could be expressed as follows: We must behave in all ways such that life on planet Earth might be a *perpetual life!*”  

In his work, Robinson—who lives as part of a utopian planned community in California—has always centered on ecological themes operating from the perspective of futurity. In his first novel, *The Wild Shore* (1984), he imagines an America that has been bombed back to the stone age, watched from the coastline by a coalition of nations eager to prevent American reunification; decades later, a character who lived through the event explains the contradictions in his own memory of America (our present):

“...America was huge, it was a giant. It swam through the seas eating up all the littler countries—drinking them up as it went along. We were eating up the world, boy, and that’s why the world rose up and put an end to us. So I’m not contradicting myself. America was great like a

---

55 See also Dussel 114-115. Of course, Dussel quickly admits, life on earth can never *really* be perpetual—but he adds that doesn’t mean we shouldn’t do our best.
whale—it was giant and majestic, but it stank and was a killer. Lots of fish died to make it so big. Now haven’t I always taught you that?” (198)

In another early book, *Pacific Edge* (1988) Robinson advances what could be a sad maxim of human history: “Every culture is as wasteful as it can afford to be.”

But Robinson is never as cynical as that quotation implies: he has spent his career in service of the utopian form. There are two primary axes of political conflict in Mars novels. First there is the expected (almost generically required) question of independence vs. interdependence with regard to the mother planet, Earth, which is really a question about utopia and enclavism that is concretized in the fierce battles over the space elevator; and second and more relevant for this chapter is the fierce break between the Red Martians and the Green Martians. The Greens believe the planet should be terraformed so as to be inhabitable by humans without mechanical assistance, a technical problem that clumps around issues of surface temperature, atmospheric composition and density, and unpredictable climactic feedback mechanisms; the Reds believe the planet should be left as pristine as possible, whether because this is the only way it can be properly studied or because the otherwise dead rock is seen by some Reds to have a kind of mystical vitality all its own.

Of course, Greenism and Redism both describe ideological spectra, not discrete sets of propositions: some moderate Greens propose to terraform only up to a level of 5

---

56 The line suggests the epigraph Szeman choose for his article oil ontology, taken from Dan Simmons’ novel *Hyperion*: “Nobody gets beyond a petroleum economy. Not while there’s petroleum there” (449).
km, leaving Mars’s huge mountains relatively untouched, while others believe the planet should be maximally terraformed, and still others believe it should be terraformed only to the light-facemask level—while for their part the Reds are divided between those who would only act as a partial brake on unchecked development and radical terrorists who bomb critical life-support equipment in an effort to force humans off the planet.57

Facing questions of both political independence and political ecology, then, Robinson’s characters move through all the usual utopian forms. The Martian colonists reenact King Utopus’s iconic act of closure, the digging of the trench that separates Utopia from the mainland, in their destruction of the Martian space elevator. The colonists openly revolt; when that fails, they engage in hit-and-fade guerrilla tactics. They infiltrate. Some become terrorists. There is even, as it were, a traditional sudden apocalypse—not one but two Great Floods—acts of God from above and from without, which leave both Earth and Mars in position to be politically transformed. These, too, fail. In the end there are only two sorts of revolutions that actually work in Robinson’s novels.

57 Redism is surely doomed, doomed from the moment of its first articulation on the Ares bringing the First Hundred colonists to the Mars—doomed by the decision to colonize the planet in the first place, if not by earlier manned missions, if not by bacteria carried over on the Viking landers. The originary, humanless Mars—the natural Mars—is in this sense a logical impossibility—in order to exist at all, in order to be a real place as opposed to some far-off speck of light in the sky, Mars must exist for us, which is to say Mars must enter into (human) history. It must be changed; it must be ruined. The Reds have always, necessarily, lost, though their recognition of this fact that doesn’t dim their fervor.
The first is the *aeroforming* of the settlers, Robinson’s analogy to *terraforming* which sees settlers transformed by Mars in much the same way that they sought to transform it. It is the displacement in space that returns, at the end of a century obsessed with time, to provide the possibility for real human change—and it occurs because the remove to Mars forces us, but also allows us, to reconnect and re-embed ourselves in an ecology, to be again part of an ecologically rational cycle. And the second is that *other* impossibility, that other thing besides the future that we no longer believe in: collective action in the present on behalf of the future, political agency. Robinson is a believer in coalition—in the building and nuturing of activist networks. In the end it is the tough, almost parliamentary work of reaching compromises, brokering deals, and changing minds that allows the disastrous cycle of war and revolution to be finally averted, the search for (and improbable discovery of) the missing color that might unite Red and Green. At the end of *Blue Mars* the revolutionary break is a televised speech from a group of astronaut/scientists, which shows you just how utopian Kim Stanley Robinson really is. In the Science in the Capital series, Robinson’s 2000s global warming trilogy, it

---

58 Robinson has elsewhere called for us to imagine ourselves as terraforming Earth—noting that in fact we already are, by wrecking it: “I find it is a very good thing to begin thinking that we are terraforming Earth—because we are, and we’ve been doing it for quite some time. We’ve been doing it by accident, and mostly by damaging things. In some ways, there have been improvements, in terms of human support systems, but there’s still so much damage, damage that’s gone unacknowledged or ignored, even when all along we knew it was happening. People kind of shrug and think: a) there’s nothing we can do about it, or b) maybe the next generation will be clever enough to figure it out. So on we go” (Manaugh, “Comparative Planetology.”)
is no different. Here the break, improbably, is in part the election of an American president—with the true protagonist of the novel the National Science Foundation.

These are, of course, not plausible models for real-world organizing or somehow extractable as party platforms—but the sudden eruption of human collective action, thought dead, in the moment it is needed marks these as radically disjunctive, but non-apocalyptic, utopian “breaks,” that help us think the future. It is the tough work of coalition-building and solidarity-finding, of collective life, is able in the end to thwart our apparently apocalyptic destiny. Under apocalyptic postmodernity it is still the choice to try to stay alive, to struggle, to avert a disaster that already seems inevitable, that is truly utopian. This is a practice which may have victories but which is never victorious—in Pacific Edge (1988) Robinson defines utopia as “struggle forever.”

In a recent interview with the Web site BLDGBLOG, Robinson defined permaculture in this way:

But if you think of yourself as terraforming Earth, and if you think about sustainability, then you can start thinking about permaculture and what permaculture really means. It’s not just sustainable agriculture, but a name for a certain type of history. Because the word sustainability is now code for: let’s make capitalism work over the long haul, without ever getting rid of the hierarchy between rich and poor and without establishing social justice.

Sustainable development, as well: that’s a term that’s been contaminated. It doesn’t even mean sustainable anymore. It means: let us continue to do what we’re doing, but somehow get away with it. By some magic waving of the hands, or some techno silver bullet, suddenly we can make it all right to continue in all our current habits. And yet it’s not just that our habits are destructive, they’re not even satisfying to the people
who get to play in them. So there’s a stupidity involved, at the cultural level. …

We should take the political and aesthetic baggage out of the term utopia. I’ve been working all my career to try to redefine utopia in more positive terms – in more dynamic terms. People tend to think of utopia as a perfect end-stage, which is, by definition, impossible and maybe even bad for us. And so maybe it’s better to use a word like permaculture, which not only includes permanent but also permutation.

Permaculture suggests a certain kind of obvious human goal, which is that future generations will have at least as good a place to live as what we have now. (“ Manaugh”)

In an interview conducted with Robinson that was published in the “Ecology and Ideology” issue of Polygraph I co-edited in 2010, he elaborates on the necessity of a science fictional, futurological analysis of capitalism—in the terms I’ve been working with, arguing for an ontology of limit that accounts for its own reproduction and replenishment:

I’ve been trying to use standard economic terms to describe the situation in ways capitalists might have to come to terms with and that might serve as entry-points to a larger discussion: that the implicit promise of capitalism was that a generation would work so hard in the working class that its children would be in the middle class, and that if extended this program would eventually lift everyone on Earth. But now resource analysis makes it clear that for the three billion living on less than two dollars a day this promise can never be fulfilled, so that capitalism is really nothing but a big Ponzi scheme, and would be illegal if run in a single state or community.

Then also, the pricing we put on things, carbon especially, does not include the environmental costs of making the thing, so that we are practicing systemic predatory dumping, and the competitors we are predating on are our own children and the generations to come. So we are predatory dumpers, out-competing non-existent people, which is easy
enough, but they will suffer when they come into existence, and we are cheaters. (207)\(^59\)

This is the third, unspoken suggestion in *permaculture*, beyond *permanence* and *permutation*, and that is *permafrost*, that permanently frozen tundra of the Arctic and sub-Arctic that is now for the first time in recorded human history beginning to melt as a result of anthropogenic climate change.

This ethos, Robinson says, is closely tied to his career as a science fiction author, which he imagines as speaking both *from* and *for* the future:

> And you try to speak for them by envisioning scenarios that show them either doing things better or doing things worse – but you’re also alerting the generations alive right now that these people have a voice in history.

The future needs to be taken into account by the current system, which regularly steals from it in order to pad our ridiculous current lifestyle. (“Manaugh”)

Permaculture in this way brings Fuller’s “Spaceship Earth” metaphor back to ground, reframing the need to keep our shared spaceship in good working order as a goal of collective life. Indeed, Robinson’s ecological politics harken back to the struggle of equality on George’s “well-provisioned ship”:

> Justice becomes a survival technology. Of course it’s a little galling to treat justice as something that needs a more utilitarian reason to support it, but since as a good idea it has only gotten us so far—to an amount of justice more than none but not enough—we might as well take advantage

\(^59\) Compare this to Laurence Manning’s “The Man Who Awoke” (1933): “For what should we thank the humans of three thousand years ago? For exhausting the coal supplies of the world? For leaving us no petroleum for our chemical factories? For destroying the forests on whole mountain ranges and lettering the soil erode into the valleys?” (360)
of this extra notion of justice as survival, because it’s true, whether we point it out or not. Justice stabilizes population growth, and reduces the discrepancies between rich and poor, which extremes are both very environmentally destructive among their other bad qualities. Real justice would alleviate the poverty that has desperate people stripping away forests and soil in much of the world, and it would reduce the hyper-consumption of the rich, which is equally or even more destructive of resources and excessive in carbon burn. The only possible road to sustainability’s necessary carbon neutrality involves justice. We should insist on this at every opportunity. It points to a justice that is more than just a meaningless right to vote, but something far larger, something like a decent human existence for all. ("Science" 213)

In Polygraph 22, in his “Letter from Copenhagen,” Michael Hardt similarly observes a significant shift on the left since the seminal Seattle anti-globalization protests 10 years ago. Then, the slogan was “We want everything for everybody” — and you still see, he says, some versions of that sign. But at Copenhagen the much more common poster was a different slogan: “There is no Planet B.” The first, Hardt writes, “sounds like an absurd, reckless notion that will propel us further down the route of mutual destruction”; the other, he says, sounds like Margaret Thatcher’s infamous proclamation that “there is no alternative” to neoliberal capitalism (271). The slogan of Seattle is ambitious, inflationary and fundamentally impossible; the slogan of the ecological activists is deflationary, anti-ambitious, and starkly realistic. Hardt suggests we retain the inflationary spirit of the first while embracing the deflationary acknowledgement of our finitude in the second.

Hardt goes on: “Indeed the struggles against neoliberalism of the past decades have been defined by their belief in the possibility of radical, seemingly limitless
alternatives. In short, the World Social Forum motto, ‘Another world is possible,’ might translate in the context of the climate changes movements into something like, ‘This world is still possible, maybe’” (271).

In this way permaculture does not promise the suspension or supersession of material limits, but instead attempts to locate the promise of a better future (for all) within those limits. It is a mode that looks to limit not as an impending disaster but as a necessary constraint, as the rules of the game we have all been playing all this time. The long-delayed reckoning of our ecological limitations, therefore, need not speak only to withdraw, renunciation, or defeat; it need not speak to an end to progress, of either the technological or the social sort. In fact, in an era of climate change, ocean acidification, and Peak Everything, just to begin to name the crises, the rational consideration of ecological limits is the necessary prerequisite for any hope of progress in our time—not in despair at what is not possible, but in hope for what still is.
Chapter Three: Zombie Life

The only modern myth is the myth of zombies—mortified schizos, good for work, brought back to reason. —Deleuze and Guattari, Anti-Oedipus

If you have a gun, shoot ‘em in the head. That’s a sure way to kill ‘em. If you don’t, get yourself a club or a torch. Beat ‘em or burn ‘em. They go up pretty easy. —Sheriff McClelland, Night of the Living Dead

Once banished to the gross-out fringe of straight-to-video horror, all but dead, zombies have come back. Beginning early in the Bush era—even before 9/11, with the filming of 28 Days Later in London in summer 2001—and continuing unabatedly through the present, the figure of the zombie now lurks at the very center of global mass culture. Alongside The 28 ___ Later franchise we might name myriad George Romero sequels, remakes, and pastiches; other films like House of the Dead, Quarantine, I Am Legend, and Planet Terror; zombie video game franchises like Resident Evil, Left 4 Dead, and Dead Rising; bestselling prose works like World War Z and Pride, Prejudice, and Zombies, both now adapted as films; even, I will argue, a novel like Cormac McCarthy’s critically acclaimed, Pulitzer-Prize-winning The Road, with its unforgiving landscape of starving inhuman cannibals and universal abjection; zombie-themed crossover events in superhero comics like Marvel Zombies and D.C.’s Blackest Night; independent comics offerings like Image Comics hit The Walking Dead and Warren Ellis’s Blackgas; for the first time in television history, zombie-themed series like Dead
Set in Britain (a reality TV parody) and a version of The Walking Dead shattering ratings records in the U.S.; so-called “zomedies,” zombie comedies, like Fido, Shaun of the Dead, and Zombieland; I might go on.

Playing off Marx’s well-known description of capital as vampire in Capital, Vol. 1, Steve Shaviro suggests in a 2002 special issue of Historical Materialism on “Marxism and Fantasy” that our preoccupation with the zombie originates in the zombie’s mirroring of the logic of global capitalism:

In contrast to the inhumanity of vampire-capital, zombies present the “human face” of capitalist monstrosity. This is precisely because they are the dregs of humanity: the zombie is all that remains of “human nature,” or even simply of a human scale, in the immense and unimaginably complex network economy. Where vampiric surplus-appropriation is unthinkable, because it exceeds our powers of representation, the zombie is conversely what must be thought: the shape that representation unavoidably takes now that “information” has displaced “man” as the measure of all things. (emphasis original; “Capitalist Monsters” 288)

When our computers are compromised by hackers or viruses, they become zombie computers, and when our financial institutions fail, it is because they are zombie banks. Remorselessly consuming everything in their path, zombies leave nothing in their wake besides endless copies of themselves, making the zombie the perfect metaphor not only for how capitalism transforms its subjects but also for its relentless and devastating virologic march across the globe. The anti-ecological “proliferation of zombie bodies,”

1 “Capital is dead labour, that, vampire-like, only lives by sucking living labour, and lives the more, the more labour it sucks. The time during which the labourer works, is the time during which the capitalist consumes the labour-power he has purchased of him” (342).
Shaviro notes, inevitably culminates in “extermination and extinction” (286)—a final nightmare of exhausted consumption that in our era of endangered species, overfarmed oceans, and Peak Everything does not seem so far off. If, in chapter two, the anxiety was over the fraught ecological futurity of a world that may soon die, in this chapter we focus instead on survivalist horror in a world that is already dead. Zombie fiction enacts the flattened anti-totality lurking at the end of all things—the Ozymandian state of total ruin to which both science fiction and empire have understood themselves to be always trending.

My approach suggests that the major imaginative interest of the zombie lies not as a stand-in for the subject positions of empire but rather in the zombie apocalypse’s interrogation of the “future” of late capitalist hegemony, and its concordant state racism, through fantastic depiction of its breakdown and collapse. So, where Shaviro sees the zombie as already identical to the proletarianized subject of late capitalism, I want in this chapter to focus on the ways this identification seems troubled and necessarily incomplete. The audience for zombie narrative, after all, never imagines itself to be zombified; zombies are always other people, which is to say they are Other people, which is to say they are people who are not quite people at all. A critique like Shaviro’s—or, for that matter, like the one advanced by Sarah Juliet Lauro and Karen Embry, who claim the zombie in their “Zombie Manifesto” as the posthuman successor
to Donna Haraway’s famous cyborg—must first think carefully about the problems of subject position and identification that arise when speaking about the “universal residue” (Shaviro 288) called the zombie. The zombie’s mutilation is not one that we easily imagine for “ourselves,” however that “we” is ultimately constituted; the zombie is rather the toxic infection that must always be kept at arm’s length. Because zombies mark the demarcation between life (that is worth living) and unlife (that needs killing), the evocation of the zombie conjures not solidarity but racial panic.

To complicate Deleuze and Guattari’s proclamation in *A Thousand Plateaus*, then, the myth of the zombie is *both* a war myth and a work myth (425); one of the ways the State apparatus builds the sorts of “preaccomplished” subjects it needs is precisely through the construction of a racial binary in which the white citizen-subject is opposed against nonwhite life, bare life, *zombie* life—that anti-life which is always inimically and

---

2 Lauro and Embry write of their project: “Unlike Donna Haraway’s ‘Cyborg Manifesto,’ we do not propose that the position of the zombie is a liberating one—indeed, in its history, and in its metaphors, the zombie is most often a slave. However, our intention is to illustrate that the zombie’s irreconcilable body (both living and dead) raises the insufficiency of the dialectical model (subject/object) and suggests, with its own negative dialectic, that the only way to truly get posthuman is to become antisubject” (87).

3 As Shaviro himself notes near the end of his essay, even as the zombie slips back and forth “between First World and Third,” it remains sloughed off always on other bodies, which he suggests is an apt metaphorization of the invisibility of productive labor (288-289). This is especially important in the context of the origins of the *zombi* in colonial Haiti, which as Laury and Embro show was a figure both of the resisting slave and of a nightmare of slavery which continues even after death (97-98); the zombie of contemporary mass culture, Shaviro says, instead alternates between figuring invisible/immaterial labor in the Third World and anti-productive consumption in the First—both of which are focalized in other people, not ourselves.

4 The full quote from Deleuze and Guattari reads: “Above all, the State apparatus makes the mutilation, and even death, come first. It needs them preaccomplished, for people to be born that way, crippled and zombielike. The myth of the zombie, of the living dead, is a work myth and not a war myth. Mutilation is a consequence of war, but it is a necessary condition, a presupposition of the State apparatus and the organization of work...” (425).
hopelessly Other, which must always be kept quarantined, if not actively eradicated and destroyed. The fantasy of unrestrained total violence against a racial Other that zombie narratives activate—a fantasy that recalls the similar science fictional fantasies of racial extermination discussed in chapter one—is fundamentally at odds with the allegedly “postracial” politics of contemporary liberal pluralism, and shows that such murderous impulses do not belong only to the past.

The first part of this chapter reasserts, this is all to say, the violent biopolitical origins of the zombie imaginary, and therefore insists that before we might ever hope to “become zombies” we first must come to terms with the historical and ongoing colonial violence of which the zombie has always ever been only the thinnest sublimation. In the second part of this chapter, considering the figure of the zombie as it appears in two recent Joss Whedon television series, *Firefly* and *Dollhouse*, I turn to the zombie’s historical relationship with the colonial and postcolonial imperial state and other state-like actors, arguing that the zombie’s strange persistence at the site of imperialism’s limit necrotizes empire in the same moment that it resurrects the possibility of resistance in those the state has declared socially dead. Finally, the chapter concludes with a consideration of what I call “zombietopia,” advancing a reading of the zombie which simultaneously figures both the difficulty and the necessity of imagining alternatives to global capitalism and the contemporary nation-state—the point of revolutionary inflection Fredric Jameson has called “the Utopian break.”
I. Zombie Others

It seems instructive at the outset to recall briefly Vivian Sobchack’s approach to science fiction in *Screening Space: The American Science Fiction Film*. In contradistinction to the Suvinian approach to science fiction prose, for Sobchack the important genre distinction to be maintained is not science fiction-vs.-fantasy but *science fiction-vs.-horror*, a divide she finds to be hopelessly muddled by a blurred and indistinct “no-man’s-land” between the two populated by hybrid films (in our case, zombie cinema) that arguably belong to both modes (26-7).

“The horror film,” Sobchack says, “is primarily concerned with the individual in conflict with society or with some extension of himself, the science fiction film with society and its institutions in conflict with each other or with some alien other” (30). It is for this reason that we find the question of scale to be a key distinction between horror and science fiction; we expect horror to take place in a small and isolated setting (perhaps, as in *Night of the Living Dead*, as small as a single farmhouse) while science fiction expands to fill large cities and nations, even the entire globe. We might think, for instance, of England after the Rage outbreak in *28 Days Later*, or how in the recent *Marvel Zombies* and D.C. *Blackest Night* storylines in superhero comics the zombie outbreak swells to fill the entire cosmos, even the entire multiverse.

If we accept Sobchack’s genre definition, we find that the zombie subgenre starts
out in horror in its earliest film formulations but winds up in science fiction in its later ones; while “horror” entries in this hugely prolific subgenre certainly remain, the most popular and influential mode of zombie narrative (especially during the Bush-era “zombie revival” period on which I focus) has been the “zombie apocalypse”: the large-scale zombie pandemic that leads to the rapid total breakdown of technological modernity and transnational capitalism on a global scale. To put this another way: for Sobchack the local scale of the horror film is concerned with “moral chaos”—the disruption of the natural order—while the broader scale of science fiction film lends it to “social chaos” (30). Unlike horror’s Monster, science fiction’s Creature is unparticularized and uninteriorized; it does not hate, nor seek revenge, and does not even “want” to hurt us. It just does (37). The science fiction Creature is an eruption that is only disruption—and it is for this reason that the science fiction film is so often preoccupied with the reaction of society to catastrophe (on the one hand) and to a dispassionate, spectacular aesthetics of destruction (on the other). In the end, Sobchack’s division between horror and science fiction comes down to the difference between terror and wonder (38). If in the horror film we feel “fear,” in the science fiction film we feel “interest.” In the horror film we find we want to close our eyes and look away, and the excitement is in forcing ourselves to watch; but in the science fiction film the narrative pleasure comes precisely in anticipating, and then seeing, what will happen next.

In chapters five and six of his The Seven Beauties of Science Fiction, Istvan
Csiscery-Ronay locates science fiction’s engagement with “the sense of wonder” at a dialectic between the sublime and the grotesque, exploring how each interacts and produces the other:

The recoil and recuperation of the sublime responds to things that are overpowering and dominating; of the grotesque, to things that are near and intimate, yet prove to be strange. With the sublime, consciousness tries to expand inward to encompass in the imagination the limits to its outward expansion of apprehension. With the grotesque, consciousness tries to project its fascinated repulsion/attraction out into objects it cannot accommodate, because they disturb its sense of rational, natural, and desirable order. In both, the perceiver enjoys a sudden dislocation from habitual perception. Both attitudes have been deeply connected to sf from the start, because both are concerned with the states of mind that science and art have in common: acute responsiveness to the objects of the world, the testing of categories contentiously used to interpret the world, and the desire to articulate what consciousness finds inarticulable (146-147).

As Csiscery-Ronay shows, these two modes are closely interrelated; the sense of wonder becomes the sense of horror when viewed at a different scale. The crucial difference is in the nature of our “recoil”; where the sublime produces a kind of cosmic pessimism, as in Stapledonian tragedy, the grotesque produces revulsion, even a kind of immediate kneejerk violence. Our cognitive encounter with a mass extinction event, one might say, is a view of the sublime, of the incomprehensible magnitude of geological time—but our encounter with the local token of this event, a poacher carting dozens of lion corpses, is surely an encounter with the grotesque.

I argue the zombie exists similarly at the intersection of these two modes, registering on the one hand a sublime encounter with the totality of universal death and on the other a very local, very gory up-close-and personal encounter with the blood and
guts of particular corpses. The zombie is thus both local and global, personal and
depersonalized, symptom of moral chaos and cause of widespread social breakdown,
grotesque and sublime. The zombie is thus the grotesque counterpart to the sublime
encounters with ecological precarity discussed in chapter two; the zombie is the bloody
token of a world system whose death is encountered not with cool, future-oriented
objectivity of ecological science but, bodily, viscerally, in the horrible here and now.

With this in mind I want to read the zombie’s figurative relationship to attempts
to think contemporary empire in the context of the postcolonial approach to science
fiction John Rieder advocates in his 2008 book Colonialism and the Emergence of Science
Fiction. In that vein I will be focusing first on Robert Kirkman’s long-running comic
book series The Walking Dead (which began in 2003 and is still ongoing). Kirkman’s is a
zombie narrative that has been, to coin a phrase, de-horrored by the diminished
immediacy of the comics form, which makes the anticipatory “interest” native to science
fiction all the more evident in his work.

*The Walking Dead* is described by its creator in the introduction to the first trade
paperback in terms that Sobchack would recognize immediately as essentially science
fictional:

> To me the best zombie movies aren’t the splatter feasts of gore and
> violence with goofy characters and tongue in cheek antics. Good zombie
> movies show us how messed up we are, they make us question our
> station in society…and our society’s station in the world. (*Days Gone By*
> i)

Here Kirkman describes his objective in *The Walking Dead* as an extension of the work
of George Romero—always the most cerebral and even, in his own way, the most 
subdued creator of classic 20th century zombie cinema, granting his characters long 
periods of quiet safety between the catastrophic zombie attacks that typically bookend 
his films.5 Kirkman writes that he hopes to employ the hyperbolic temporal continuity 
native to long comic series to create the feel of a Romero film that never ends (iii-iv). In 
such a story the fear of “moral chaos” in the early outbreak will necessarily give way to 
“interest” in the way society changes in the wake of the zombie disaster—and so it’s no 
surprise that Kirkman uses the same “waking up from a coma” trope as 28 Days Later to 
“skip” the initial outbreak and get immediately to the post-apocalyptic breakdown 
world.

In his introduction to the first trade paperback Kirkman tells us The Walking 
Dead is “not a horror book” but a book about “watching Rick survive” (iii). For over 90 
issues readers have followed Rick Grimes (before the zombie apocalypse a police officer, 
and therefore functioning as a synecdoche for the pre-zombie social order) through a 
dizzying disintegration as he has been scarred both physically and mentally in the face 
of ongoing zombie onslaught (as exemplified by the visual comparison between issues 
#1 and #52 images below). Over the year or so of narrative time that has been depicted in

5 This relationship goes in some ways beyond mere homage. Kirkman’s zombies follow almost all of 
Romero’s classic rules: they are lurching, slow-witted, and ravenously hungry for human flesh, and can only 
be killed through the destruction of the brain. While the zombie’s bite is highly infectious, and will quickly 
cause death, in a Romero-style zombie outbreak all human beings return as zombies after death, not only 
those who are bitten. The only way to prevent this fate is to destroy the corpse’s brain, whether as the cause 
of death or before reanimation occurs.
the series Rick has lost his place in society, his home, his best friend, one of his hands, his wife and infant daughter, and finally his grip on sanity; by turns paranoid and murderous, Rick has proven himself willing to do anything, to anyone, in the name of survival for himself and his surviving prepubescent son, Carl.

Figure 3: The Walking Dead #1

Figure 4: The Walking Dead #52

In The Walking Dead Rick Grimes and his band of largely expendable survivors—none of whom are safe—explore the ruins of our own late-imperial America. The story focus in the earliest issues of the series is on reaching city centers, where (we
are told) the government has ordered all citizens in an effort to better protect them. It used to be that (white) people fled the city for the suburbs “for safety,” out of fear of rising crime rates; here that logic is reversed, and they must go back. But the government’s plan is a disaster, as concentrating survivors in one place only makes it easier for zombiism to spread, and Rick barely makes it back out of Atlanta alive. By chance he meets up with his wife and family, who never made it to Atlanta at all—only to discover that his fellow police officer and best friend Shane has snapped under the pressure of leading the group and ultimately needs to be killed to protect the others (by Carl, no less, in the climactic scene of issue 6 that ends the first trade paperback). ⁶

A brief stint at a rural farmhouse turns bad when it is discovered that the owner of the farmhouse has been locking local zombies in his barn in anticipation of a “cure” that, we can be certain, will never be forthcoming. Another inevitable massacre ensues. Finally Rick and his group are able to find a modicum of safety in an abandoned jail. Here the inversion typical to zombie narrative between a privileged “us” and a precarious “them” is made complete: Grimes, a white police officer, will make his desperate home inside a jail, while dangerous and hostile Others array themselves against him outside the walls. In this reversal of the logic of the prison-industrial

---

⁶ Dale Knickerbocker has brought to my attention that Atlanta is a particularly interesting city for Rick to journey towards, given the apocalyptic devastation of Sherman’s March and the boundless suburban sprawl of the city’s recent history. He also suggests Shane as a reference to George Stevens’s 1953 Western Shane, which the character echoes in both plot and theme; the difference here is that the child is not Shane’s mourner but his executioner.
complex, the book settles for a long time into this new status quo as (in the proud
tradition of Romero’s zombie films) the survivors work to build fortifications and
protect themselves—as a new imagined community under Rick’s leadership—against all
that is outside.

The Colonial Gaze

So allow me to return again, in this moment of relative quiet for Rick and his
tribe, to theory. Where Darko Suvin privileges “cognitive estrangement” as science
fiction’s essential feature—the de- and refamiliarizing power of alternative worlds—and
where Fredric Jameson privileges the radical retemporalization of our disordered
present into the settled historical past of some possible future, Rieder focuses our
attention on what he calls science fiction’s “colonial gaze”:

We can call this cognitive framework establishing the different positions
of the one who looks and the one who is looked at the structure of the
“colonial gaze,” borrowing and adapting Laura Mulvey’s influential
analysis of the cinematic gaze in “Visual Pleasure and Narrative
Cinema.” The colonial gaze distributes knowledge and power to the
subject who looks, while denying or minimizing access to power for its
object, the one looked at. (7)

Zombie narrative, I argue, should be understood as operating under precisely this sort
of colonial gaze. Zombies—lacking interior, lacking mind—cannot look; they are, for this
reason, completely realized imperial objects. Zombies cannot be recognized,
accommodated, or negotiated with; once identified, they must immediately be killed.
To shift briefly into a biopolitical register, this is a hyperreal metaphorization of the racial logic that enforces modernity’s distinction between that mode of “civilized” living native to the political subject and \( z\ddot{o\grave{e}} \), bare life. For our purposes—concerned as we are about zombie narrative and its vision of “infection” run apocalyptically amuck—it seems useful to take a moment here to quote Foucault at length on biopolitics, because in the moment he introduces the concept of biopower it is to disease, to epidemiology, that he turns to explain its logic:

This biopolitics is not concerned with fertility alone. It also deals with the problem of morbidity, but not simply, as had previously been the case, at the level of the famous epidemics, the threat of which had haunted political powers ever since the Middle Ages (these famous epidemics were temporary disasters that caused multiple deaths, times when everyone seemed to be in danger of imminent death). At the end of the eighteenth century, it was not epidemics that were the issue, but something else—what might broadly be called endemics, or in other words, the form, nature, extension, duration, and intensity of the illness prevalent in a population. These were illnesses that were difficult to eradicate and that were not regarded as epidemics that caused more frequent deaths, but as permanent factors which—and that is how they were dealt with—sapped the population’s strength, shortened the working week, wasted energy, and cost money, both because they led to a fall in production and because treating them was expensive. In a word, illness as phenomenon affecting a population. Death was no longer something that suddenly swooped down on life—as in an epidemic. Death was now something permanent, something that slips into life, perpetually gnaws at it, diminishes it and weakens it. (243-244; emphasis mine)

7 These terms are defined on the first page of Agamben’s *Homo Sacer* as follows: “\( z\ddot{o\grave{e}} \), which expressed the simple fact of living common to all living beings (animal, men, or gods), and \( \text{bios} \), which indicated the form of living proper to an individual or group” (1). This is to say that \( z\ddot{o\grave{e}} \) is bare (as in mere) life, while \( \text{bios} \) is citizenship, political life. Much of Agamben’s work focuses on the biopolitical consequences resulting from the exclusion of certain types of bodies from \( \text{bios} \).
When Foucault writes of death as a sort of all-pervasive, “gnawing” pollutive force against which society imagines it must array itself through careful, rationalized management, he is speaking our language: the language of the zombie.

State racism, for Foucault, follows the logic of any zombie film:

In the biopower system, in other words, killing or the imperative to kill is acceptable only if it results not in a victory over political adversaries, but in the elimination of the biological threat to and the improvement of the species or race…. In a normalizing society, race or racism is the precondition that makes killing acceptable. (256)

The biopolitical state—inverting the sovereign’s power to make dead or let live in its power to make live or let die (241)—needs to create this sort of racial imaginary in order to retain its power to kill. Under biopower those who are imagined to threaten the population as a whole become not merely a danger but a kind of anti-life that must be sequestered from (white) life at any cost. Any contact with a zombie, after all, might lead to infection, just as the racial Other must be disciplined and quarantined to prevent “intermingling.”

As has discussed in chapter one, In Colonialism and the Emergence of Science Fiction, Rieder demonstrates at length that this colonial discourse of superior and inferior races—the colonial gaze, Foucault’s life and anti-life—is a highly unstable positionality that is under constant threat of polar inversion, an instance of Hegelian

---

8 I put the word “white” in parentheses here because this biopolitical formulation is in a very real sense the genesis of the very idea of whiteness; to be white is precisely to be included in the “us” that must be protected from “them.”
master-slave dialectic whose fundamental precariousness is enacted and reenacted throughout the history of science fiction. In an alternate history, or in future days, the colonizer knows he could well be the colonized. In this way science fiction engages the violence at the heart of European imperialist expansion by replicating it, over and over, in metaphorical forms both for and against the colonizing subject and the imagined racial hierarchy on which his or her self-identity depends.

The zombie narrative, is best understood in these terms as a slightly transformed refiguration of the War of the Worlds narrative template. Zombie apocalypses, like imperialistic narratives of alien invasion, repackage the violence of colonial race war in a form that is ideologically safer. The otherworldly gray skin tone of cinematic zombie makeup becomes, in this context, a visual marker of this coded raci

ity. Zombie films depict total, unrestrained violence against absolute Others whose very existence is seen as anathema to our own, Others who are in essence living death. In our time, when this sort of unrestrained racial violence is officially suspect but nonetheless unofficially still a foundation for the basic operation of technological civilization, zombie narratives serve as the motivating license for confrontation with these sorts of genocidal technologies and power fantasies.

Where zombies might be said to significantly complicate the temporality of War of the Worlds-style total violence is through their embodiment of multiple temporalities at once. Rather than invading from the future, as Wells’s aliens did, zombies might be
said to invade from the past: erupting from the graves of our decomposing loved ones to establish their apocalyptic ecology of universal death. But this turns out, dialectically, to be our only possible future all along; the zombie’s remorseless, infective hunger is a barely sublimated figuration of the entropic lurch of time and the inevitable degeneration of our own bodies towards death, a horror which technological and social progress may delay but cannot hope to avert.

Both past and future, then, zombies turn out in this way to be coextensive with the present—they are the corpses of our friends and co-workers lurching aimlessly through the sterile environments we all once shared. The rotting zombie corpse inevitably suggests the psychological horror Julia Kristeva called “abjection,” the disturbing of the boundary between object and subject. As Rick Grimes exclaims in horror near the end of one trade paperback, it is we, not they, who are “the walking dead.” In the end, no matter what we do or how we live, we too must die and come back and be just like them. Zombies are our only possible future, our already actual present; zombies inherit the earth.
Figure 5: The Walking Dead #24
If Empire, especially in the age of never-ending War on Terror, is essentially an attempt to regulate History, to make the present extend forever in both space and time, then zombie narrative is its dark reflection; as zombies flatten time they obliterate the present alongside the past and the future, only against “us,” not for “us.” In Agambenian terms, zombies activate the “state of exception,” the suspension of all juridical restraint or moral norm in the face of a perceived existential threat:

[Modern totalitarianism can be defined as the establishment, by means of the state of exception, of a legal civil war that allows for the physical elimination not only of political adversaries but of entire categories of citizens who for some reason cannot be integrated into the political system. Since [the Third Reich], the voluntary creation of a permanent state of emergency (though perhaps not declared in the technical sense) has become one of the essential practices of contemporary states, including so-called democratic ones.

Faced with the unstoppable progression of what has been called a “global civil war,” the state of exception tends increasingly to appear as the dominant paradigm of government in contemporary politics. (State of Exception 2)

Here again we find the zombies allegorizing the racial forms of exclusion and extermination that already surround us. Zombie narratives are ultimately about the motivation for and unleashing of total violence; what separates “us” from “them” in zombie narrative is always only the type of violence used. They attack us (like “animals,” “savages,” or “cannibals”) with their arms and mouths; we attack them back with horses, tanks, and guns.

In The Walking Dead—as in any zombie narrative—the tools and technologies of empire are continually borrowed for the purpose of priming precisely this sort of violent
colonialist fantasy. Swords and guns, tanks and trucks, repeated references to the brutal physical and sexual violence of slavery and to the cowboy or “frontier” imaginary (especially through the ubiquitous riding of horses and Carl’s cowboy outfit and mannerisms) are all employed in a bizarre postmodern pastiche of the history of U.S. imperialism, as different moments of its empire collide into a single simultaneous instant in the face of an essentially inimical and totally implacable racialized threat.

There are few moments in the series that suggest this pastiche as well as the splash panel at the end of issue 12, when Rick and his group discover the abandoned jail in which they will make their home through the bulk of the series. The jail is drawn so as to visually double a frontier fort (and, for that matter, a modern military base); these locations collapse into a single spatial imaginary, with only the polarity of “inside” and “outside” reversed.
Later issues have made the relationship between Rick’s story and declinist anxieties about the breakdown of American empire even more explicit: following the final breach of the jail’s walls—at the hands not of zombies but of their fellow countrymen operating under the orders of a murderous corrupt and impossibly decadent leader known only as the Governor—Rick and Carl eventually fall in with a group claiming to be carrying a cure that they are bringing to Washington, D.C., under the auspices of the U.S. military. While this (of course) turns out to be a lie, their journey to D.C. does find them a new home to replace the jail, that other walled-in space for whiteness characteristic of late American empire: the suburban gated community. In issue 77 they moved in, and immediately begin to plan their takeover—peaceful, if
possible, violent in not. Issues 92 and 93, the most recent as of my writing, ends with the group discovering that the post-apocalyptic suburban enclave they now control is only one of many in the region. With a look of grim determination that marks the severity of his transformation from bourgeois decency into a state of Governor-like brutality, Rick declares: “If they end up being good people, we’ll work with them. If not, we’ll just take everything they have and leave them for dead” (Walking Dead #93).

Figure 7: The Walking Dead #93

We should see here how the solidarity created among survivors in zombie narrative is always much more unstable than in the typical alien invasion story. Countrymen do not band together in the zombie crisis, and the nation does not have its
finest hour; instead, allegiances fragment into familial bands and patriarchal tribes, then fragment further from there. We can see this breakdown everywhere in *The Walking Dead*: Shane, Rick’s best friend, must be killed not only because he has become dangerous, but also because he covets Rick’s wife. Later, Carl secretly murders another young boy who is behaving sociopathically on the grounds that he too is a threat to the group; we are led to believe this was the “right thing” to do, “because it needed to be done and no one else would” (#67 7). The four prisoners (two of whom are African-American) who have been safely inhabiting a sealed-off wing of the jail during the zombie apocalypse must be displaced in order to make room for Rick’s group to move in: one of the white prisoners turns out to be a serial killer of young women and is eventually hung, and as soon as the two black prisoners acquire guns a shootout ensues in which one is killed and the other is run off—which in the context of these other examples suggests the age-old trope that women cannot be safe around unknown men, particularly black men. The Governor, as already mentioned, finally destroys the jail’s usefulness as a fortification in his doomed efforts to seize it for his own people, killing Rick’s wife and daughter in the process; the Governor had already proven himself to be utterly reprehensible through both his repeated rapes of a black female protagonist he keeps in chains and a sexualized relationship with a zombified young girl he claims was once his daughter. And in their flight from the ruined jail, after the Governor is dead, Rick’s band encounters the Hunters, humans who have embraced zombie-style
cannibalism in order to sate their hunger; the Hunters began with eating their own children.

Something important emerges out of these examples. Whatever else might be said about The Walking Dead, or about zombie narrative in general, its uncritical relationship to a particular pre-feminist narrative about the need to “protect” women and children cannot be glossed over. “Proper” control over wombs, and anxiety that they will somehow be captured, polluted, or compromised, is a kind of Ur-myth for the apocalyptic genre in general and the zombie sub-genre in particular; speaking broadly, the function of women in most apocalyptic narratives is to code the ending as “happy” or “sad” based on their continued availability to bear the male protagonist’s children when the story is over. This theme is so common in the zombie subgenre as to constitute one of its most ubiquitous and most central ethical clichés: the question of whether or not one should decide to “bring a child into” a zombie-ridden world at all—and, as is common in many such apocalyptic stories (as in, for instance, Cormac McCarthy’s 2009 novel The Road), the death of Rick’s wife and daughter, the moment the circuit of reproductive futurity⁹ is cut, is the moment that basically all hope is lost in The Walking Dead.¹⁰

---

⁹ The term is borrowed from Lee Edelman’s No Future: Queer Theory and the Death Drive (Durham, NC: Duke University Press, 2004). Edelman writes that politics “remains, at its core, conservative insofar as it works to affirm a structure, to authenticate social order, which it then intends to transmit to the future in the form of its inner Child. That Child remains the perpetual horizon of every acknowledged politics, the fantasmatic beneficiary of every political intervention” (3). Edelman’s book is consequently an attempt to
Robin Wood makes the relationship between cannibalism and the breakdown of the patriarchal family central to his analysis of zombie horror, which in our context suggests precisely the sort of multivalent retemporalization at work in the zombie narrative: “It is no accident,” he writes, “that the four most intense horror films of the 70s at exploitation level […] all centered on cannibalism, and on the specific notion of present and future (the younger generation) being devoured by the past” (82). Likewise, Alys Eve Weinbaum and Amy Kaplan among others have shown how this sort of anxiety over reproductive futurity is essential to the cultural imagination of race, nation, and empire, which are always defined by the question of who is allowed to reproduce, and with whom.

**Zombie Ethics**

So while in zombie narrative the “enemy” who is killed is always *first* the zombie—who is unthinking and unfeeling, and can be killed without regret—as the story proceeds the violence inevitably spreads to other, still-alive humans as well. Anyone outside the white patriarchal community, anyone who is not already one of

imagine “what […] it would signify not to be ‘fighting for the children’” (Ibid.)—a positionality which in zombie fictions is always associated with a nihilistic rejection of all possible value and the extinguishing of the possibility of the future as such.

10 We might likewise think of the infamous “zombie baby” moment near the end the 2004 remake of *Dawn of the Dead*, in which a woman whose film-long pregnancy has pointed to the possibility of a future gives birth instead to a zombie.
“us,” is a potential threat to the future and must therefore be interrogated intensely, if not kept out altogether. Even those inside the community have to be surveilled at all times for signs of treachery, weakness, or growing “infection.”

This is the second way in which the zombie infects us; they infect us with their vulnerability, their killability makes us “killable” too. One’s position in the state of exception is, after all, never secure; the class of dangerous anti-citizens, bound for the camps, tends only to grow. In this way zombie narratives make the latent necropolitical dimensions bound up in both “survival” and modern citizenship explicit; they expose, in the raw, what Achille Mbembe showed in “Necropolitics,” that to survive is also to kill:

…the survivor is the one who, having stood in the path of death, knowing of many deaths and standing in the midst of the fallen, is still alive. Or, more precisely, the survivor is the one who has taken on a whole pack of enemies and managed not only to escape alive, but to kill his or her attackers. This is why, to a large extent, the lowest form of survival is killing. Canetti points out that in the logic of survival, “each man is the enemy of every other.” Even more radically, in the logic of survival one’s horror at the sight of death turns into satisfaction that it is someone else who is dead. It is the death of the other, his or her physical presence as a corpse, that makes the survivor feel unique. And each enemy killed makes the survivor feel more secure. (36)

In this way the zombie narrative always becomes, in the end, a kind of ethical minefield, in which other humans “must” be fought, betrayed, abandoned, and destroyed so that

\[\text{\textsuperscript{11}}\text{Priscilla Wald explores zombiism as a science-fictional figure for real-world disease in her book-length study of such “epidemiological horrors,” Contagious: Cultures, Carriers, and the Outbreak Narrative (2008), particularly the way such stories typically employ narratives like the “Patient Zero” origin myth so commonly found in popular accounts of public-health crises like SARS and HIV/AIDS.}\]
the protagonists, our heroes, might survive. And even the pulse of that “might” is very weak: so much of the pleasure of zombie narrative in both cinema and other forms originates in the audience’s knowledge that the heroes’ preparations and fortifications will never be sufficient, that no matter what happens in the end the zombies will break through and kill nearly everyone because this is what zombies do. In a sense, the zombies are always the real protagonists of the zombie narrative; no matter how long they have been gone from the action, we are always awaiting their eventual, inevitable return. The telos of the fortress, like the telos of empire, is always, in the end, to fall.

Writing in 1974 of potential negative consequences from U.S. foreign aid, Garrett Hardin called the sort of ethical calculus at work in these zombie narratives “lifeboat ethics,” celebrating pitiless self-interest as a necessary and rational Malthusian pragmatism. I call his “case against helping the poor” zombie ethics. And while we might be tempted to return already to Shaviro and the sort of zombic universal class consciousness he suggests, we must first follow this ethical trajectory all the way to its end and explore the pernicious ways in which zombie ethics inevitably “infect” our actually existing, pre-apocalyptic politics. The “disposability” of the zombie in zombie narrative has a still-ongoing history that simply cannot be ignored. Ubiquitous assertions of a new, “postracial” America to the contrary, the racial myth of inimical Otherness the zombie narrative replicates and the forced choices it foists on us are not just some deceased artifact of the “bad past”—it is alive and well, or if you like undead,
and continues to have terrible real-world consequences.

Fueled by hyperbolic media reporting during the Hurricane Katrina disaster, doctors and nurses at Memorial Medical Center in New Orleans came to believe they were in a zombie story—that no help would ever reach them in time, and that outside the walls of their hospital there roamed monsters. *The New York Times Magazine* described the scene this way:

Thiele didn’t know [Dr. Anna] Pou by name, but she looked to him like the physician in charge on the second floor. He told me that Pou told him that the Category 3 patients were not going to be moved. He said he thought they appeared close to death and would not have survived an evacuation. He was terrified, he said, of what would happen to them if they were left behind. He expected that the people firing guns into the chaos of New Orleans—“the animals,” he called them—would storm the hospital, looking for drugs after everyone else was gone. “I figured, What would they do, these crazy black people who think they’ve been oppressed for all these years by white people? I mean if they’re capable of shooting at somebody, why are they not capable of raping them or, or, you know, dismembering them? What’s to prevent them from doing things like that?”

The laws of man had broken down, Thiele concluded, and only the laws of God applied.

Having heard the news reports proclaiming widespread chaos and mindless violence outside—many if not nearly all of which turned out to be poorly sourced and untrue—and operating in “survival” mode, in a self-declared state of exception, staff at Memorial Medical began refusing treatment to select patients, and in the end are alleged to have
deliberately euthanized as many as 24 people.\textsuperscript{12}

Just across town, during the same disaster, the mostly white suburb of Gretna, Louisiana, used its police force to blockade the bridge that led from New Orleans into the town:

Paul Ribaul, 37, a New Orleans TV-station engineer from Gretna, said New Orleans and the suburbs have a complicated relationship.

“We say we’re from New Orleans, but we’re a suburb,” he said.

“The reason we don’t live there is we don’t like the crime, the politics.”

Ribaul was among Gretna residents who praised the decision to close the bridge. “It makes you feel safe to live in a city like that,” he said.

…

[Mayor Ronnie] Harris said Thursday that closing the bridge was a tough decision but that he felt it was right.

“We didn’t even have enough food here to feed our own residents,” Harris said. “We took care of our folks. It’s something we had to do.”

At still another bridge in New Orleans, Danziger Bridge, two African-American families searching for food, water, and help were gunned down by seven heavily armed, out-of-uniform police officers for reasons that remain unclear. The state of Louisiana’s charges against the officers were eventually dismissed because of prosecutorial misconduct, although local investigation into departmental obstruction of justice is ongoing. On July 14, 2010, four of the officers involved in the Danziger Bridge incident were federally indicted for deprivation of rights under color of law and use of a weapon during the

\textsuperscript{12} It should be noted that a grand jury chose not to indict Dr. Pou or two other nurses for the charges brought against them; these charges have now been expunged and the state of Louisiana has agreed to pay Pou’s legal fees.
commission of a crime, charges that could carry the death penalty if convicted; that prosecution too is ongoing.

When Haiti—of course, the ancestral home of the zombei, where this hybridized postcolonial figure first emerged as the nightmarish figuration of a slavery that would continue even after death—was struck by its devastating earthquake in January 2010, the same stories were told: rumors of widespread rapes and murders reported breathlessly by the media as inevitable and obvious fact, baseless (and, in context, often nonsensical) accusations of “looting” hurled at poverty-stricken people of color just trying to survive in the face of an incomprehensible disaster. In her Precarious Life: The Powers of Mourning and Violence (2004), Judith Butler writes persuasively of the way the inevitability of grief in human life might be employed as a ground for a Levinasian ethics of mutual vulnerability and shared precariousness, if not for the way ideology persistently codes certain lives as “mournable” and others not. Thinking both of the war in Iraq and the occupation of Palestine, she writes:

Is a Muslim life as valuable as legibly First World lives? Are the Palestinians yet accorded the status of “human” in US policy and press coverage? Will those hundreds of thousands of lives lost in the last decades of strife ever receive the equivalent to the paragraph-long obituaries in the New York Times that seek to humanize—often through nationalist and familial framing devices—those Americans who have been violently killed? Is our capacity to mourn in global dimensions foreclosed precisely by the failure to conceive of Muslim and Arab lives as lives? (12)

In post-earthquake Haiti, as in post-Katrina New Orleans, as in Iraq and Palestine, we find the moral demand made by shared precariousness once again short-circuited in
favor of a prophylactic Othering. Suffering Haitians were quickly recoded as bare life—zombie life—and thereby rendered unworthy of proper aid and protection. Haitians couldn’t be trusted, we were told, even to accept our help.

An interview at Campus Progress with Dr. Kathleen Tierney of the Natural Hazard Center at the University of Colorado at Boulder memorably called this phenomenon the “looting lie.” Misled by this racist imaginary, the international aid response—coordinated, to widespread criticism, by that imperial agency par excellence, the United States military—focused on security over support, landing thousands of troops on the island while diverting international aid flights and before allowing a single food drop from the air. Fear of the poor, journalist Linda Polman argued in the Guardian, hurt rescue efforts: “CNN won’t stop telling aid workers and the outside world about pillaging (the incidence of which for the first four frustrating days at least did not compare with what happened after Hurricane Katrina) and about how dangerous it would be to distribute food, because of the likelihood of ‘stampedes.’”13 In Ben Ehrenreich’s reporting on Haitian rescue efforts we find this description of the initial days of the disaster:

“Command and control” turned out to be the key words. The U.S. military did what the U.S. military does. Like a slow-witted, fearful giant, it built a wall around itself, commandeering the Port-au-Prince airport and constructing a mini-Green Zone. As thousands of tons of desperately

---

13 It should perhaps be noted that “stampede” is precisely what the zombies do in issues 59-60 of The Walking Dead; unthinking, operating on automatic instinct in search of food, they network together into a fierce “herd” and very nearly run our heroes down.
needed food, water, and medical supplies piled up behind the airport fences—and thousands of corpses piled up outside them—Defense Secretary Robert Gates ruled out the possibility of using American aircraft to airdrop supplies: “An airdrop is simply going to lead to riots,” he said. The military’s first priority was to build a “structure for distribution” and “to provide security.” (Four days and many deaths later, the United States began airdropping aid.)

This is what we do, whenever zombies strike: we build fortifications, we hoard supplies, we “circle the wagons” and point our guns outward. And we do this even, and most tragically, when the zombies don’t exist, when outside the walls there are only other people just like us.

This “zombification” need not align itself strictly along a racial imaginary. For Henry A. Giroux in his Zombie Politics and Culture in the Age of Casino Capitalism narratives like The Walking Dead can be mapped more generally onto a form of capitalism that has itself become completely monstrous:

A casino capitalist zombie politics views competition as a form of social combat, celebrates war as an extension of politics, and legitimates a ruthless Social Darwinism in which particular individuals and groups are considered simply redundant, disposal—nothing more than human waste left to stew in their own misfortune—easy prey for the zombies who have a ravenous appetite for chaos and revel in apocalyptic visions filled with destruction, decay, abandoned houses, burned-out cars, gutted landscapes, and trashed gas stations. (2)

Giroux traces this vision of zombie politics from Wall Street (where zombies “roam the halls … of Goldman Sachs” [2]) to Washington, D.C., where they gut the social safety net and launch missile strikes on civilians on the other side of the world at the push of a button. The figure of the zombie—which for Giroux becomes not undead but hyper-
dead through its rejection of “any institution, set of values, and social relations that embrace the common good or exhibit compassion for the suffering of others” (32)—stands here not only for neoconservatism and the Tea Party Movement (which come in for particularly harsh denunciation) but for the ideology of neoliberalism more generally, whose free-market corporatist hegemony has in the twentieth-first century become indistinguishable from authoritarianism. (Obama, of course, is largely indistinguishable from Bush in this calculus, and indeed is all the worse to the extent that he seems, to most political observers on the liberal-left, to be much better.)

From this recasting of American elites’ monstrosity flows the rest of Zombie Politics and Culture’s critique, ranging the general coarsening of political discourse and the explosion of eliminationist rhetoric, to new embrace of anti-intellectualism and denialism, to the abandonment of the welfare state by both parties, to bipartisan acceptance of assassination, pre-emptive war, and torture in the name of “homeland security.” The final third of the book hinges in particular on the increasingly precarious position of America’s youth under these new conditions, essentially arguing that Zombie America has decided, in the end, to eat its children. The decline of the welfare state has left more than one in five American children living under the poverty line; the police-prison-industrial complex targets young people (especially young men of color) for nonviolent crimes under a hyperbolic “drug war” enforcement model that has proven itself to hopelessly compromised and corrupted; even schools themselves have
become increasingly militarized spaces at all levels; and those students who are able to graduate college at all are left permanently burdened with unpayable (and undischARGEABLE) student loans in an era of historic joblessness and underemployment.

The central theoretical question hanging unanswered over Giroux’s strident (and at times quite stirring) critique of contemporary American culture is why it is the national elites who are the zombies—the elites and not, as I would have it, everybody else. To be sure, the zombies of American horror cinema are bloodthirsty and monstrous, but they are also just as crucially figures of total abjection: skeletal, directionless, desperately hungry, and easily dispatched. The sort of premeditated, systematic cruelty Giroux rightly identifies in Zombie Politics and Culture at the core of contemporary neoliberalism corporatism—callous, calculated—has its proper analogue not in the zombies but in the surviving humans, who, in the ruins, mercilessly slaughter dozens of their former friends, family, and neighbours without any hint of remorse. (Think again of The Walking Dead: our hero is a cop, and all the human characters have guns. Or recall that Giroux’s “apocalyptic visions filled with destruction, decay, abandoned houses, burned-out cars, gutted landscapes, and trashed gas stations” describe not some imaginary future for America’s suburbs but the already existing situation of abandoned cities like Detroit, Oakland, Camden, and New Orleans.) In the political economy of zombie cinema it is the zombies, and not the surviving humans, who are the disposable objects of unchecked, systematic violence—and from this
perspective the true horror of the contemporary moment is not that global elites have become inhuman but rather that they have decided all the rest of us are.

**Zombie Gaze, Zombie Embrace**

Early in the jail period of *The Walking Dead* there is a brief panel sequence of Carl and his friend, Sophie, staring out through the gates at the zombies outside. We see first the zombies on the chain-link fence; their dark, uncomprehending eyes, their grasping hands, their gaping mouths. The second panel pulls back, camera like, to reveal the white American cowboy man-child and his prospective love interest—who become our last hope for the resuscitation of reproductive futurity\(^\text{14}\)—stare at the starving masses outside. On the next page they talk about what they see. Carl asks if she is still scared of the zombies, and she says no: “ Mostly I just feel sorry for them. [...] Because they look so sad. Don’t they look sad to you?”

\(^{14}\) The TV series’s largest narrative divergence with the comics to date has come in the shock death of Sophie early in season two, thereby eliminating even this slim cause for hope.
The suggestion here is of a shift from terror of the Other to pity for the Other—which is progress, I suppose, of a type. But this sort of sympathy merely recapitulates the colonial gaze by recoding it into a new, less objectionable form. We, the privileged, still do the looking; they, our objects, are still looked at. The really radical move for poor Sophie, of course, would be not to feel pity but to throw open the gates: to erase the subject-object division altogether and abandon the zombie gaze. The really radical move, that is, would be to refuse the demarcation between life and anti-life altogether, as Sophie’s mother Carol does in a later issue when she deliberately turns herself over to
the zombies to be consumed and turned. “Oh good,” she says as the zombie tears into
her throat in a perverse lovers’ embrace, “you do like me” (#42).

Within the fictional space of the zombie narrative, of course, a move like Carol’s makes
no sense: this is suicide! But despite the protestations of biopolitical state racism, despite
the endless blaring declarations of national emergencies and states of exception, we
don’t live inside a zombie narrative; we live in a zombieless world, where the only
zombies to be found are the ones we ourselves have made out of the excluded, the
forgotten, the cast-out, and the walled-off. To become a zombie would be to obliterate
the line dividing “us” from “them” by allowing ourselves to be fully and finally
devoured by alterity. To become a zombie is in this way to risk becoming “disposable”
ourselves; to do it would mean forsaking the zombie gaze in favor of the zombie
embrace. This is why universalism—in either its humanist or zombic guises—should
never be named as something easy to achieve, much less something we have already
accomplished. It is rather always a struggle of self-decentering and self-deprivileging, of
self-renunciation—something easier to say than do, but at the same time the necessary
precondition for a final end to our collective zombie nightmare, the nightmare called
history itself.
II. Zombie States

In the first part of this chapter I argued that the figure of the zombie is best understood as a hypertrophic extrapolation of the imaginary racial demarcation into *life* and *anti-life* that is crucial for the construction of the biopolitical state; now I will consider how at the same time it functions as a vision of the breakdown into total violence to which the logic of biopower ultimately leads. Biopower, charged with keeping its citizen population alive through the regularized, rationalized fulfilment of biological needs, retains its sovereign power to harm and to kill through the naming of persons for whom this obligation need not be fulfilled. Such persons turn out, in fact, to be such dire threats to the promise of continued prosperity for the general population that they must be disciplined, quarantined, or exterminated altogether for the sake of the biological security of the whole.

For Agamben the ultimate entelechy of biopower—the fully realized form towards which it is always already trending—is the zombic nightmare of the concentration camp, which, “now securely lodged within the city’s interior,” has become “the new biopolitical *nomos* of the planet,” exerting a kind of gravitational pull towards hyper-security states which explains why “we must expect not only new camps but always new and more lunatic regulative definitions of the inscription of life in the city” (*Homo Sacer* 176). As time goes on, this is to say, biopolitical regimes establish more and longer states of exception in which political life, *bios*, must be continually suspended in
the name of its own preservation—a pandemic of exclusion which, in the spirit of Martin Niemöller’s famous “First They Came...”, turns more and more citizens into zombies until at last there is no one left. In this light the attractiveness of zombie scenarios and simulation exercises as tools for emergency preparedness planning (including, most recently, at the Center for Disease Control) takes on new relevance; we might indeed recast all security-minded operations of biopower as variations on a single, all-encompassing “zombie contingency plan” to which we are all ultimately subject.

Two brief moments from the series finale of the first season of the television adaptation of The Walking Dead might serve as first fictives example of this phenomenon. At the start of this episode we see a flashback in which Shane visits Rick in the hospital amidst the chaos of the early zombie outbreak. We see soldiers wearing breathing masks through the hospital, herding doctors this way and that—but as Shane turns a corner we discover that the soldiers are actually grouping civilians to make their execution easier. The group of doctors he has been shadowing is suddenly lined up against the wall and summarily shot. (We are never told the precise reason why, but the suggestion is that, like the infamous massacre at Bến Tre, Vietnam, it has become necessary to destroy Rick’s town in order to save it.)

When we return to the present action line of the story, the same self-contradictory logic of protective destruction recurs. Rick’s group of survivors has reached the Center for Disease Control in Atlanta, where one lone researcher still works
feverishly to study cell samples of disease. But the brief hope the survivors feel in being reintroduced to electricity and hot running water is short-lived; the building they are in has been programmed to destroy itself if its generators ever run out of electricity, a “facility-wide decontamination” intended to “contain” any accidental outbreak. The CDC researcher, once their apparent savior, now refuses to allow them to leave the building again, explaining that the impending quick death is for their own good: “It’s better this way. No pain. An end to sorrow, grief... Regret. Everything. [...] You should’ve left well enough alone. It would have been so much easier. [...] You know what’s out there: a short, brutal life and an agonizing death.” Having taken the regulation of life as its domain, biopower in the end takes control of death—and the necessity of exerting a power over death “for the greater good” equal to the power it has already taken over life—as a foremost concern. In extremis this becomes a reinscription of the sovereign power over life and death asserted now on the global scale: the power to end life, as such, writ large. For the CDC researcher, who knows what is best even when the other survivors do not, the circumstances demand such a kindness: “One tiny moment: a millisecond. No pain. [...] Wouldn’t it be kinder, more compassionate, to just hold your loved ones and wait for the clock to run down?”

For Foucault, this paradoxical double action of the biopolitical state—what might be called the fundamental insincerity of biopower—can be seen clearest in its furthest extremity, the atom bomb: biopower develops a capacity to kill that is in essence a
power to destroy life altogether, which is completely incompatible with the supposed aim of the biopolitical nation state to preserve and extend life (253). Roberto Esposito is likewise preoccupied with this paradox, which seems in part to motivate his own project:

How do we explain that the culmination of a politics of life generated a lethal power that contradicts the productive impulse? This is the paradox, the impassable stumbling block that not only twentieth-century totalitarianism, but also nuclear power asks philosophy with regard to a resolutely affirmative declension of biopolitics. How is it possible that a power of life is exercised against life itself? (39)

He speculates that Foucault is reluctant to accept that biopolitics and what he calls thanatopolitics are “continuist” with one another within modernity because Foucault would then be forced as a consequence “to assume genocide as the constitutive paradigm (or at least the inevitable outcome) of the entire parabola of modernity” (43). But we should not share this reluctance. The famous final command of Ur-imperialist Mr. Kurtz in Conrad’s Heart of Darkness to “exterminate all the brutes” (66) is only the earliest movement of biopower’s self-undermining logic—and in the latter movements all inhabitants of biopolitical modernity become, at least potentially, such “brutes.”

Roberto Esposito captures well the mechanism by which the “protective apparatus” of the state comes to attack its own citizen-body when he compares the dysfunctional logic of totalitarian biopolitical regimes like Nazism to the accelerative degeneration found in autoimmune disease (10).

In this sense the logic of biopolitics inevitably grinds its own gears; it continually
undercuts and deforms the very bios whose preservation is the reason for the emergence of the biopolitical state in the first place. Although of course not every modern state reaches a final moment of unbounded extermination—most staying instead within various regimens of legal and customary segregation, ideological norms, imprisonment, and unjust practices of labour exploitation—we nonetheless find the terrible exterminative potential of biopolitical logic laying in wait for us in all temporal directions: such terrors as colonialism, imperial warfare, and the Holocaust in the past; the militarized American inner city, post-invasion Iraq and Afghanistan, genocides in Rwanda and the Sudan, post-earthquake Haiti, post-Katrina New Orleans, and any number of similar horrors in the present; and finally the fantasy of social breakdown that dominates the contemporary imagination of the future, the zombie apocalypse.

Accounting for the zombie’s historical relationship with colonial and postcolonial imperial states and other state-like actors, as well as its usefulness as a figure for biopolitical subalternity, I argue that the zombie’s strange persistence at the site of imperialism’s limit fuels necrosis in biopower while in the same moment bolstering the capacity of resistance in those people whom biopolitical institutions have declared socially dead. The projection of the zombie apocalypse as an (im)possible future obscures the extent to which a zombie apocalypse has already happened, as a feature of real colonial history, and remains ongoing. After introducing the origins of the zombi in Haiti (which becomes in altered form the zombie of U.S. horror cinema), I
discuss the way this figure is deployed in Joss Whedon’s recent science fiction productions Firefly and Serenity (USA, 2002-2003; 2005) and Dollhouse (USA, 2009). These series translate the cinematic zombie from its traditional context to (respectively) far-future space opera and near-future cyberpunk in order to interrogate not the extrapolative perils of some imaginary future but rather the catalogue of horrors that are already all-too-real in the present. They offer us a narrative context in which theories of biopolitical statecraft meld with more traditionally Marxist analysis of capitalism and resistance, culminating in a dystopian nexus of biopower, biocapitalism, and neoliberalism to which zombies allegorize an unexpectedly Utopian alternative—a zombic futurity that opens the possibility for another sort of history.

Necropower and Zombies in Haiti

To draw out this relationship between biopolitics, capitalism, and resistance I begin with the zombie’s mythic origins in Haiti. For Achille Mbembe, the figure of the zombie perfectly captures the self-undermining way in which biopolitics, through ever-widening gaps of permanent emergency and states of exception, has always been as much a technology of death than life—in his memorable terminology, a necropolitics. In his essay of that name Mbembe, echoing Agamben in proclaiming death camps the “nomos of the political world in which we still live,” argues that in the contemporary moment “the human being truly becomes a subject—that is, separated from the
animal—in the struggle and the work through which he or she confronts death
(understood as the violence of negativity)” (14). Consequently “the state of exception
and the relation of enmity have become the normative basis of the right to kill. […]
[P]ower (and not necessarily state power) continuously refers and appeals to exception,
emergency, and a fictionalized notion of the enemy. It also labors to produce that same
exception, emergency, and fictionalized enemy” (16).

Extending Foucault’s theory that race war is the constitutive foundation of the
modern state, as well as Hannah Arendt’s argument in The Origins of Totalitarianism
that the two world wars reflected the reimportation of technologies of violence from the
colonies in which they were first developed into “civilized” metropolitan Europe,
Mbembe argues that the declaration of enmity required by the state of exception is an act
of racialization that has its origins in colonialism and imperialism, as well as plantation
economics and the slave trade (18). Sovereignty in this (post)colonial valence operates in
accordance with a zombic logic of quarantine and extermination: “…sovereignty means
the capacity to define who matters and who does not, who is disposable and who is not”
(27). Mbembe approvingly cites Enzo Traverso’s claim that

…the gas chambers and the ovens [of the Nazis] were the culmination of
a long process of dehumanizing and industrializing death, one of the
original features of which was to integrate instrumental rationality with
the productive and administrative rationality of the modern Western
world (the factory, the bureaucracy, the prison, the army).15
This basic assumption of disposability, and the reign of terror it engenders, has necessarily taken many different forms in the many different locations and context in which it has been deployed; Mbembe’s own primary examples range from the “‘savages’ of the colonial world” to refugees, stateless persons, enslaved persons, and the working class. Mbembe’s work suggests that colonialism’s assignation of nonhuman disposability to human beings can be abstracted as modernity’s foundational theoretical investment, its original (and ongoing) sin.

For Mbembe, the history of this assignation of disposability and the consequent “rise of modern terror” begins not with state action but with the plantation system and the figure of the slave, which he notes “could be considered one of the first instances of biopolitical experimentation” (21). But the exclusion of the slave from the body politic and her subsumption into the market as an object-commodity can never be completely realized; the productive capacity, creativity, and intentional mind of the enslaved are required to produce wealth for the slave-owner, but these same human values must be denied in order for the practice of slavery to be justified in the first place. This is to say the humanity of the slave must be retained even as it is denied:

Treated as if he or she no longer existed except as a mere tool and instrument of production, the slave nevertheless is able to draw almost any object, instrument, language, or gesture into a performance and then stylize it. Breaking with uprootedness and the pure world of things of which he or she is but a fragment, the slave is able to demonstrate the protean capabilities of the human bond through music and the very body that was supposedly possessed by another. (22)

In this way slavery, to modify Orlando Patterson’s famous term, is not so much social
death as social undeath, insofar the slave’s expulsion from humanity is only ever partial and incomplete. The slave-owning class may deem the slave socially and legally dead, yet the enslaved person remains not only alive but a crucial productive actor in society. In Mbembe’s terms “the slave is therefore kept alive but in a state of injury, in a phantomlike world of horrors and intense cruelty and profanity. [...] Slave life, in many ways, is a form of death-in-life” (21).

The zombie’s usefulness as a figure for the intertwined social deaths of colonial domination and slavery should come as little surprise because this is precisely the terrain in which the original myth of the zombi was first developed: the plantations of colonial and post-colonial Haiti. Indeed, Haitian author René Depestre explicitly evokes this history when he writes, “The history of colonization is the process of man’s general zombification. It is also the quest for a revitalizing salt capable of restoring to man the use of his imagination and his culture” (qtd in Olmos 130)—that is, the history of colonization is the story of man’s zombification, while the history of decolonization is the story of the search for a cure to a zombie plague. Marina Warner identifies the same trope in 1998’s Salt from Trinidadian writer Earl Lovelace, which recounts the myth that “zombies can find release from their endless labour by eating salt, whereupon they can fly back to their lost homelands in Africa” (366).

The need for a zombie “cure” is complicated, however, by the observation C.L.R. James makes in The Black Jacobins that during the Haitian revolution “Voodoo was the
medium of the conspiracy. In spite of all prohibitions, the slaves travelled miles to sing and dance and practice the rites and talk; and now, since the revolution, to hear the political news and make their plans” (86). Laurent Dubois too has called the syncretic vodou religion—which combines elements of Catholicism with Caribbean and African religion—“a space for freedom in the midst of a world of bondage,” a fact of which the bondage-reliant slave-owners were all too aware (43). “Nothing is more dangerous,” he quotes eighteenth-century French historian Moreau St.-Méry, “than this cult of Vaudoux” (45).

Others have likewise noticed the importance of vodou rituals as a means of communication, military coordination, and morale-building during the 1791 Haitian revolution, a historical fact that leads Lauro and Embry in their “Zombie Manifesto” to suggest that the zombi, in its position at the boundary between subject and object, rebel and slave, life and death, is still the best metaphor we have for what it means to resist power. In one footnote, they observe that “In many accounts, there is some suggestion that the hordes that rose up to throw off the yoke of oppression had, through Voodoo practices, rendered themselves insensible to pain” (87 n. 7) — demonstrating well the double valence of the zombi’s apparent lack of mind, which is as easily a figure for indefatigable resistance as total submission. Elsewhere Lauro and Embry note the extent to which these “hordes” of rebelling slaves must have appeared to the white slaveowners as “nearly supernatural,” an unholy force of nature, much like the zombies
of later zombie cinema; their citation of anthropologist Wade Davis’s description of the moment “fanatic and insensate hordes of blacks rose as a single body to overwhelm the more ‘rational’ white troops” shows well the way subaltern resistance, from the viewpoint of the entrenched elites who stand to lose, becomes recoded as monstrosity.

This recoding becomes even more pronounced as the Haitian zombi becomes the horror movie zombie, a ravenous animated corpse, in the films that follow in the wake of George Romero’s Night of the Living Dead (USA, 1968). The Haitian slave zombi was just as commonly a traumatized living person as a revivified corpse, and its defining characteristic is the submission of its will to the will of a master; the zombie, in contrast, is defined almost exclusively by its unyielding appetite for human flesh. In their book Creole Religions of the Caribbean, Margarite Fernandez Olmos and Lizabeth Paravisini-Gerbert seek to demythologize the “sensationalized” pop cultural zombie by returning to its origins as a dialectical myth that re-unites the deprivations of slavery with communal life. Citing the work of controversial anthropologist Wade Davis, who claimed to have identified the drugs and cultural practices that result in zombification, they highlight the unexpected cultural function such practices and narratives provide:

16 Marina Warner has identified one underappreciated thematic commonality linking the original colonial myth to Romero’s adaptation of it: in addition to both figuring resistance to power, both are stories of “soul-theft” (357), whether to the whims of the enslaving zombie master or else to the mindless herd instinct of a body without mind. Laurent Dubois also notes historical accounts of blood ritual in Haiti that blur the line between the two archetypes (100-101).

17 This material is included not to endorse Wade Davis’s conclusions, some of which have been very strongly challenged for quite some time. See, for instance, William Booth’s “Voodou Science (Wade Davis’s Claim of Pharmacological Explanation for Zombies Is Disputed),” Science 240.4850 (1988): 274+. My purpose
Davis contends that zombification is far from being the result of arbitrary sorcery performed by the bokor for his own personal gain. It is instead a “social sanction” administered by the Bizango, a secret Vodou society, to those who have violated its codes. The Bizango function as “an important arbiter of social life among the peasantry,” a force “that protects community resources, particularly land, as they define the power boundaries of the village” (1988: 8-10). (129)

Michel Laguerre turns to the Bizango-created zombie, too, as “the conscience of certain districts in Haiti in that it protects the residents against exploitation by outsiders” (81). The Bizango zombi, in this way, functions in Haitian society precisely as a kind of homo sacer: “Haitians will shun zombies, but they do not fear them” (Olmos 120). Individuals may still fear becoming zombies personally—but the zombi is nonetheless a social myth in which the dehumanizing power of slavery and its attendant alienated labour might be repurposed, put to work not for the slave-owner’s individual profit but on behalf of the collective social good.

This plastic capacity of the zombi to exceed, circumvent, and resist the very social forces that have created it—to, in essence, slip the noose of power—is its animating spirit in both postcolonial resistance and its later transformation in popular horror films. Steve Shaviro notes that American horror movie zombies, like the zombis

is simply the highlight the paradoxical function the zombi/Bizango narrative plays in Haitian colonial and postcolonial ideology.
...do not (in the familiar manner of 1950s horror film monsters) stand for a threat to social order from without. Rather they resonate with, and require, the very processes that produce and enforce social order. That is to say, they do not mirror or represent social forces; they are directly animated and possessed, even in their allegorical distance from beyond the grave, by such forces. (Cinematic Body 87)

Zombies, in this way, arise not from without but from within; not externally as a threat to power but internally as the truth of it. The homo sacer of the zombie, simultaneously included within and excluded from the body of the state, continually puts it at the site of the biopower’s limit, and in this sense beyond the control of either the state or the market. In this sense the colonizer’s originary fabrication of colonial subjectivity (Fanon 2) produces not just a structure of domination but also an unincorporable structural excess, a vital potentiality for resistance that can never be fully controlled. From this perspective zombiism might even be said to be its own cure.

This included exclusion, I argue, is the true source of the zombie horde’s peculiar immortality, which persists even in the degraded form the myth takes in American horror cinema. This is why (as Steve Shaviro notes) in typical zombie films “the zombies are never defeated” and “the best that the sympathetic living characters of Dawn and Day can hope for is the reprieve of a precarious, provisional escape” (Cinematic Affect 90). So long as a system is predicated on domination it cannot help but produce its own

18 Donald E. Pease has suggested to me, in a play on Gayatri Chakravorty Spivak’s well-known essay, that in this light the zombie may well be better thought of not as a figure for colonialism’s Other but as the way the subaltern speaks.
opposite number in the form of more and more zombies. And in any zombie film the
zombies will eventually overrun the human heroes’ careful fortifications, killing the bulk
of the cast and destroying whatever fragile relations of sociality and authority they have
attempted to construct. Our enjoyment of these films derives from being held in
suspense of this inevitable climax—which is to say, from our desire to see this ruination
happen. But despite this narrative reliance on suspense these stories are never really
about the future, about what *might* happen if the zombies rise or if our institutions
collapsed; they always dramatize instead the self-defeating inadequacy and
insufficiency of our institutions in the present—an observation that will become central
when I return to the Utopian dimensions of the zombie myth at the conclusion of this
article.

In Shaviro’s work these social forces in question are primarily the pressures of
exploitation and consumption that have driven twentieth-century capitalism—but, as I
have endeavored to argue in the preceding pages, his insightful observation that “Our
society endeavors to transform death into value, but the zombies enact a radical refusal
and destruction of value” in fact reflects a brutal history of zombic violence and
exploitation that extends much further back into the history of capitalist modernity than
*Dawn of the Dead*’s famous Monroeville Mall. Modernity began at the moment colonial
capitalism first sought to valorize death—and so long before the zombie was a
consumer, she was a slave.
I Don’t Care, I’m Still Free: *Firefly*

We can perhaps best see this postcolonial resonance of the zombie at work when we look for it in a very unexpected place: in far-future science-fictional space opera. Joss Whedon’s short-lived *Firefly* takes place hundreds of years in the future after unspecified ecological disasters\(^\text{19}\) have forced humanity off the planet Earth and into “The Verse,” a new multi-sun solar system with “dozens of planets and hundreds of moons” that might be terraformed and settled for our use. *Firefly* is centred around a small, Firefly-class transport vessel called *Serenity*, ironically named after the Battle of Serenity Valley, the last major battle in the Unification War that united the entire Verse under a single interplanetary state, the Alliance, dominated by the rich Core Worlds. Power in the new system is distributed according to a spatial logic of periphery and metropole familiar to the postcolonial situation; the Inner Planets (the Core), generally the first planets to be settled, are more populous, more urban, more technologically advanced, and significantly richer, perhaps because of all the aforementioned factors and because their mutual proximity allowed for more and better trading networks to develop. In contrast, the Outer Planets—the Rim—are generally less populated, rural, and poorer, with a level of technology (aside from their spaceships) roughly analogous

\(^{19}\) According to the brief plot summary that preceded several early episodes, the “Earth-that-was” was “all used up.” At the start of *Serenity*, a character explains that “Earth-that-was could no longer sustain our numbers, we were so many. We found a new Solar system, dozens of planets and hundreds of moons.”
to that of the Western American frontier during its nineteenth-century settlement; once a planet has been terraformed, we’re told in the pilot, “they’ll dump settlers on there with nothing but blankets and hatchets and maybe a herd.” The spatialized distribution of money and power suggests itself as a metaphor for the unstable wealth differential between the so-called First World and the Global South in contemporary globalization: here the have and the have-nots quite literally inhabit different worlds.

Because *Serenity* operates primarily in the Rim, we spend nearly all of our time on poverty-stricken, backwards worlds—an aesthetic that has contributed to a consensus reading of *Firefly* as a hybridized “Western in space.” This is Joss Whedon’s plain vision for the series, as a viewing of the stylized, violin-and-guitar-laden credit sequence makes clear; early episodes include not only six-shooters and saloon fights but even such things as a herd of cattle in the ship’s storage bay. Indeed, just as the heroes in many Westerns are former Confederate soldiers deeply scarred by what they had experienced during the war, the captain of *Serenity*, Malcolm Reynolds (Nathan Fillion), had fought as a “Browncoat”20 on the losing side—had, indeed, been one of the few Browncoat survivors of the calamitous Serenity Valley battle—and has been deeply embittered by the experience. Perhaps it is no surprise then that *Serenity* lives largely outside the law, taking on as many illegal and quasi-legal jobs as it does legal ones. In its brief depictions on the show in flashback the Unification War is treated as the American

---

20 Fans of the show, following its cancellation, have taken on the term “Browncoat” to refer to themselves and their own doomed pursuit of a “lost cause”: the series itself.
Civil War “in space,” though stripped any discernable reference to the politics of slavery and abolition (or, indeed, any particular casus belli at all). In the film follow-up, *Serenity*, intended to jumpstart the series as a film franchise following its cancellation after one season on Fox, we see a brief scene of pro-Alliance propaganda that explains their perspective on the war, as a teacher in an open classroom on one of the luscious Core Worlds begins her lesson on this history:

The central planets formed the Alliance. Ruled by an interplanetary parliament, the Alliance was a beacon of civilization. The savage outer planets were not so enlightened, and refused Alliance control. The war was devastating. But the Alliance’s victory over the Independents ensured a safer universe. And now, everyone can enjoy the comfort and enlightenment of true civilization.

The children begin to ask questions—“Why were the Independents even fighting us?” “Why wouldn’t they look to be more civilized?” “I hear they’re cannibals”—but the teacher goes on: “It’s true that there are dangers on the outer planets. So with so many social and medical advancements we can bring to the Independents, why would they fight so hard against us?” From a sullen-looking teenage woman in the back of the class, quickly revealed to be a younger version of the show’s principal characters, River Tam (normally played by Summer Glau, though not in this scene), the answer comes back: “We meddle. People don’t like to be meddled with. We tell them what to do, what to

---

21 Slavery is, in fact, still a part of life in the Outer Rim, with the behavior of slavers an occasional reference. Presumably this behavior is illegal, but enforcement difficult.
think. Don’t run, don’t walk. We’re in their homes and in their heads and we haven’t the right.”

This brief exchange lays out a binary between risk/freedom on one pole and security/control on the other that defines both the war between the Alliance and the Browncoats and the series’ politics as a whole. Leaving no doubt about where the film’s loyalties lie on these questions, at this moment this entire education tableau dissolves, revealing itself not as an authentic memory from River’s childhood but rather a technological projection that is being transmitted directly into her brain as part of a torturous conditioning by Alliance military scientists in their ultimately unsuccessful efforts to brainwash her into a fiercely loyal super-soldier—quite obviously putting a much more sinister gloss on the Alliance’s claims to civilized enlightenment.

We should resist, however, reducing the Alliance to a “totalitarian regime” or even a pure dystopia, however, as it frequently has been in treatments ranging from The Existential Joss Whedon to Sharon Sutherland and Sarah Swan’s “The Alliance Isn’t Some Evil Empire: Dystopia in Joss Whedon’s Firefly/Serenity.” If the Alliance is a dystopia, it is the dystopia not of some imaginary possible future but of the here and now; the actions of Alliance have clear parallels in U.S. military and economic hegemony, not only in the Civil War and white-settler-colonialism history it foregrounds but also with respect to such flawed contemporary police actions as (domestically) the welfare state and the war on drugs and (internationally)
interventionism and the war on terror. Jeffrey Bussolini’s “A Geopolitical Interpretation of Serenity” draws this point out nicely with just a single line of dialogue from the film, “chickens come home to roost,” which Bussolini notes suggests not only Malcolm X’s well-known comment about the Kennedy assassination but also Ward Churchill’s infamous controversial statements about 9/11 (149). Mercedes Lackey makes the crucial point that Firefly’s world-building is successful precisely because “the rules by which this dystopia operates are familiar” (63): “Demonization of the enemy, even the construction of enemies that don’t exist, create the fear of nebulous threats and the willingness to sacrifice freedoms for security” (64). Nor is the Alliance solely malignant; it frequently combines genuine humanitarian efforts with its gunboat diplomacy, and, indeed, poses a threat to our beloved crew in no small part because they are smugglers and thieves.

In this respect Firefly should be understood as a deconstruction of the Federation of Planets from that other great “western in space,” Star Trek, which was famously originally pitched to the network as “Wagon Train to the Stars.” Where Star Trek offers a vision of an Utopian intergalactic United Nations, transmitting American liberal values to the universe one planet at a time, Firefly reminds us how dependent those values have been on structural injustices of all sorts, and how frequently these values have been “exported” not on the basis of their own self-evident desirability but at the barrel of a gun. In a deliberate reference to Star Trek’s pristine starships—whose original
blueprints, famously, forgot to include any toilets—Mal visits the restroom in the show’s pilot, suggesting *Serenity* as the dirty, dingy answer to *Star Trek’s U.S.S. Enterprise*, and the entire series as a vision of the Federation not from the viewpoint of those who captain its warships but rather “from below,” from the point of view of those who have to live under its rule.

Spatial metaphors referencing the disparity of power between periphery and metropole abound in the series, from an exchange early in the original pilot—”The world never stops turning, Badger”; “That only matters to the people on the rim”—to a parallel exchange in the first aired episode, “The Train Job”: “I’ve given some thought to moving off the edge. Not an ideal location... maybe get a place in the middle...” But the other side of the dialectic is just as central to the series; the Inner Planets may be richer and more secure, but they also much more firmly under Alliance control. Our “Big Damn Heroes”—as they sometimes call themselves—can only operate at all because they inhabit that marginal space where the control of the Alliance is still fragmentary and incomplete. Like Deleuze and Guattari’s nomads, the crew of *Serenity* live, work, and steal at the limits and interstices of power, at that (post)colonial site where, to recall Ranajit Guha’s memorable formulation, dominance is not yet hegemony.22 A line from *Serenity*, captures this particular modality of resistance nicely:

MAL: You stuck a thorn in the Alliance’s paw. That tickles me a bit. But it also means I got to step twice as fast to avoid them—and that means

---

22 See *Dominance without Hegemony* (1997).
turning down plenty of jobs, even honest ones. Put this crew together with the promise of work, which the Alliance makes harder every year. Come a day there won’t be room for naughty men like us to slip about at all. This job goes south, there well may not be another. So here is us, on the raggedy edge.

The characters on Firefly frequently revel in their distance from civilization with an eagerness that recalls the famous final lines of Huckleberry Finn, which defined the ideology of frontier freedom for a century and a half of American literature. The lyrics from the memorable country-western theme likewise suggest the importance of a frontier myth in the construction of Firefly as a series: “Take me out to the black /Tell them I ain’t comin’ back / Burn the land and boil the sea / You can’t take the sky from me.”

Freedom (defined here as life outside biopolitical state control) in this view is under constant threat, pushed further and further out towards the periphery—as governmental control over the Inner Planets becomes more and more established. Because Firefly simultaneously draws from the generic conventions of futurological science fiction and from the nostalgic Western, the abiding mood of the show is consequently one of melancholic anticipation: although the show nominally takes place in the future, where anything is possible, the inevitable defeat of freedom both the Browncoats and their post-war criminal heirs on Serenity, and the ultimate triumph of the Alliance, seems nonetheless assured. The frontier, in a sense, is for us always already

23 “But I reckon I got to light out for the Territory ahead of the rest, because Aunt Sally she’s going to adopt me and sivilize me, and I can’t stand it. I been there before” (307).
closed; despite the efforts to Captain Reynolds and his crew to slip through the net, authentic freedom is already a “lost cause.”

**Zombies in Space: Reavers**

But the standard reading of *Firefly* as a Western in space should not cause us to neglect its frequent borrowing from the horror genre in which Joss Whedon first made his fame. Central to the series (and especially the film) are characters known as Reavers, who, stepping into the role archetypically played by Native Americans in the historical Western,²⁴ periodically raid ships and settlements in the Rim. Few, if indeed anyone, have encountered Reavers and lived to tell about it. We first hear about Reavers early in the show’s pilot,²⁵ when we are told that an old associate of the crew is dead, killed when his “town got hit by Reavers.” At the name itself even the show’s stereotypical tough-guy, Jayne, shudders: “I’m not going near Reaver territory.”

The very spatial logic of marginality that empowers Mal and his crew—the frontier, the edge, the black—also creates this deadly menace. Reavers, we are told, are “men gone savage on the edge of space,” “men too long removed from civilization”; they exist as the living embodiment of the dark side of a free life outside state governmentality. When Jayne observes in the film that he’s been to the edge of space

---

²⁴ In “Reavers and Redskins: Creating the Frontier Savage,” J. Douglas Rabb and J. Michael Richardson draw out this connection to the connection to Western’s Native American “savages” at length.  
²⁵ Due to executive meddling at Fox, this was actually the last of the episodes of *Firefly* to be aired.
without being driven mad by the darkness ("I’ve been to the edge; just looked like more
space"), another character darkly echoes the lines from theme song that previously
suggested deep space as a new site for potential freedom: “I don’t know. It can get awful
lonely in the black.” Although Whedon did not commonly use zombies on either of his
previous supernatural-themed programs, Buffy and Angel, here he introduces a
modified form of the zombies as a central part of Firefly’s mythology. During one close
call with a Reaver vessel, one character (Zoe) warns another that if the Reavers attack
they will “rape us to death, eat our flesh, and sew our skins into their clothing; and if
we’re very very lucky they’ll do it in that order”; no wonder that the mere threat of a
Reaver attack brings widespread panic and even (on the part of one female character)
the digging out what appears to be a suicide kit. Transformed into monsters, Reavers are
simply outside the family of the human altogether: “Reavers ain’t men. Or they forgot
how to be. Now they’re just nothing. They got out to the edge of the galaxy, to that place
of nothing, and that’s what they became.” (“Bushwhacked”) They are likewise beyond
life and death. The crew’s first close-up vision of a Reaver vessel directly suggests this
undeath status; they know it is a Reaver ship because it is suicidally operating without

26 As discussed below, the usually completely wrong Jayne is more right about this than any character
recognizes at the time.
27 As I discuss in a recent PopMatters piece on Whedon’s employment of the zombie over the course of his
career—in which some portions of this essay originally appeared—Whedon admits great admiration for the
film work of George Romero but seems quite unhappy with what he’s done to the zombie and uninterested
in working within those terms. His characters on the supernatural themed Buffy and Angel frequently
correct anyone who suggests that a zombie might be a mindless consumer of flesh or brains, and instead
insist (in accordance with the original Haitian zombi myth) that they would only ever do such a thing if
ordered to by their zombi master.

304
radioactive core containment.

One classic version of the zombie replicates by an infectious bite, and the series’ third episode, “Bushwhacked,” shows us the Reaver version of this contagious reproduction. The crew runs across a ship that has been hit by Reavers and begins to attempt salvage; in the process they unexpectedly run across a survivor, who is physically unharmed but who appears at first to be violently mad with grief. But soon enough the truth is made clear: the man has been so traumatized by his experience that (in a kind of Stockholm Syndrome) he has become a Reaver himself. Mal explains this trauma-based twist on zombie contagion:

They made him watch. He probably tried to turn away—they wouldn’t let him. You call him a “survivor?” He’s not. A man comes up against that kind of will, only way to deal with it, I suspect... is to become it. He’s following the only course that’s left to him. First he’ll try to make himself look like one... cut on himself, desecrate his own flesh... then he’ll start acting like one.

Sure enough, this is exactly what happens: he tattoos himself, splits his own tongue down the middle (giving himself the zombie’s inability to speak), and soon after begins to run violently amuck.

At this point in the series neither the audience nor the crew has ever actually seen a Reaver: they have accomplished their terror while remaining entirely removed from the action. This changes in Serenity (2005), which begins when a bank heist the crew is performing is unexpectedly interrupted by a Reaver attack on the planet. The animalistic sound effects that accompany Reavers in the film—as well as the quick-cut
flashes that represent River’s psychic flashes of the violence lurking in their minds—have been borrowed directly from zombie cinema, most directly the “fast” zombies of 28 Days Later and its recent descendents. The Reavers’ actions, too, suggest the extent to which they have been modeled on zombies; when they capture a man during the crew’s escape, they begin to eat him, and when Mal takes pity on the man and shoots him through the skull, they immediately drop the corpse. River understands why: “They want us alive when they eat us.” The zombie genre’s hoary ethical clichés, too, are in ample evidence: in a scene that might have been borrowed from any classic horror movie (or, for that matter, the “zombie ethics” of Garrett Hardin), the crew of Serenity must contend with a local trying to stow away to safety on their already full hovercar, beginning them to “take me with you.” But the difficult choice has to be made; Mal pushes the man off the car to certain death, prompting to remind him afterwards that during the Unification War “we never would have left a man stranded.” “Maybe that’s why we lost,” Mal replies, with obvious bitterness.

For much of the film Serenity’s early Reaver attack seems to be a gratuitous action sequence in a film that is otherwise about the attempts of the crew of Serenity to evade an uncannily serene Alliance agent known only as The Operative (Chiwetel Ejiofor) dedicated to retrieving the fugitive River. But near the end of the film the importance of the Reavers emerges with newfound clarity; the “campfire stories” about men driven mad by the blackness of space turn out to be fairy tales, obscuring the more
disturbing truth that Reavers are actually the accidental byproduct of deliberate Alliance governmental experiments with behavior-modifying drugs. We discover along with Serenity’s crew that on the Rim planet Miranda—the furthest yet colonized—the Alliance once attempted to create a pliable, docile population by mixing in pacifying gases with the usual terraforming equipment. The gasses worked, but too well; they rendered nearly the entire population so passive that they were unable to feed themselves. For a tiny fraction of the population, however, these gases had the opposite effect: they became hyper-aggressive and ultra-violent, which is to say they became the first Reavers, quickly slaughtering both the clandestine government scientists and the rest of Miranda’s population and then taking off to attack other planets as well.

Here we see an implicit critique of the logic of power at work in biopolitical statecraft: the Alliance state quite literally produces the very monsters from which it subsequently derives the authority and justification for violence. The Operative gives voice to this paradox when he explains—in the aftermath of a massacre attack on innocent people whose only crime was that they might potentially shelter Serenity—the extreme lengths to which his service as an intelligence agent for the Alliance has driven him, up to and including the murder of children in the name of a better, safer world. In this Serenity echoes one of the most crucial intellectual contributions of decoloniality.

---

28 MAL: So me and mine gotta lay down and die—so you can live in your better world?
THE OPERATIVE: I’m not going to live there. There’s no place for me there, any more than there is for you. Malcolm. I’m a monster. What I do is evil. I have no illusions about it, but it must be done.
and postcolonial studies: its recognition that the brutality of colonial and imperial modernity deforms the colonizer as surely as the colonized. In the psychological study of the mental disorders produced under and by colonialism that concludes one of the foundational texts of postcolonial theory, *The Wretched of the Earth*, Frantz Fanon attends to the mental health of both the parties operating in the colonial relationship. The case he calls A-4 describes the post-traumatic stress disorder of an otherwise happy European police officer working in Algeria: “What troubled him was having difficulty sleeping at night because he kept hearing screams” (194). A-5 describes “a European police inspector [who] tortures his wife and children” (196):

This man knew perfectly well that all his problems stemmed directly from the type of work conducted in the interrogation rooms, though he tried to blame everything on “the troubles.” As he had no intention of giving up his job as a torturer (this would make no sense since he would then have to resign) he asked me in plain language to help him torture Algerian patriots without having a guilty conscience, without any behavioral problems, and with a total peace of mind. (198-199).

Few have written of colonialism’s second, rebounding mode of dehumanization as eloquently as Aimé Césaire in his *Discourse on Colonialism*:

First we must study how colonization works to decivilize the colonizer, to brutalize him in the true sense of the word, to degrade him, to awaken him to buried instincts, to covetousness, violence, race hatred, and moral relativism; and we must show that each time a head is cut off or an eye put out in Vietnam and in France they accept the fact, each time a little girl is raped and in France they accept the fact, each time a Madagascan is tortured and in France they accept the fact, civilization acquires another dead weight, a universal regression takes place, a gangrene sets in, a center of infection begins to spread; and that at the end of all these treaties that have been violated, all these lies that have been propagated, all these punitive expeditions that have been tolerated, all these prisoners
who have been tied up and “interrogated,” all these patriots who have been tortured, at the end of all the racial pride that has been encouraged, all the boastfulness that has been displayed, a poison has been distilled into the veins of Europe and, slowly but surely, the continent proceeds toward savagery. (35)

In this way biopower itself becomes the primary agent of its own creeping necrosis, corrupting itself and the legitimacy of its own self-asserted mandate for “life” in the ceaseless consolidation and exercise of its power.

Thus we arrive at the moment Achille Mbembe calls, in “The Aesthetics of Vulgarity,” “the mutual ‘zombification’ of both the dominant and the apparently dominated”; in the structures of domination arising out of the colonial system, both parties are ultimately sapped of their vitality (“Aesthetics” 104). Serenity makes inescapable the perils of “mutual zombification”; in its ongoing efforts to justify its own existence and expansion in the name of “a better world,” the biopolitical Alliance state permanently erodes not only its own legitimacy but its own effectivity. Recalling the efforts of colonial and imperials powers to expand their economic markets over its globe at dire human cost, as well as the word “blowback” coined by the Central Intelligence Agency to euphemistically denote the inevitable “unintended consequences” that result from such efforts, we find here the state first producing monsters, and then becoming a monster itself in a doomed effort to destroy them—producing still more monsters like the Operative and River to aid them in that subsequent effort, of whom it once again loses control. In its pursuit of limitless expansion—and the concordant production of zombies—the Alliance state only reproduces over and over again the site of its own
Becoming Reavers

Early in the film Mal had sloughed off any thought that the Alliance might be actively fought or resisted; when the Operative, in their first meeting, taunted that Mal could never defeat the alliance, Mal’s honest, self-interested reply was “I’ve got no need to beat you—I just want to go my way.” In this respect, the film Serenity is an anti-Star-Wars—with a crew comprised entirely of cynical Han Solos—in much the same way that the series was an anti-Star-Trek. This point driven home by an early line from the Operative that suggests he knows exactly which genre his story falls into: “Nothing here is what it seems: he is not the noble hero, the Alliance is not the Evil Empire, this is not the Grand Arena…”

But uncovering the horrors of Miranda changes the otherwise roguish Mal, reigniting the political investment and revolutionary fervor of his youth, and he commits himself to exposing the Alliance’s misdeeds even at the cost of his own life. In a plot that now seems eerily prescient of the recent Wikileaks releases, the climax of the film involves the crew’s efforts to bring video proof of the Miranda incident to a character they call “Mr. Universe” (David Krumholtz), who has the capacity to quickly disseminate the information (perhaps via futuristic torrents) over the Cortex, the Verse’s answer to the Internet, beyond the Alliance’s capacity to censor it.
This plan natural suggests the new opportunities for resisting power that arise in
the digital age. But my interest is less in the plan and its eventual success than in the
positionality the crew must adopt to achieve their goals. Over and over again in this film
we are shown the power that comes from recognizing oneself as already dead—as, in
essence, already a zombie. This theme begins with the last words the Operative says to
Mal before he heads to Miranda: “You’re not a Reaver, you’re a human man and you
will never understand—” At this moment Mal cuts off the transmission because he
realizes exactly what he must do next: become a Reaver. In a reprisal of a ubiquitous
scene in zombie cinema in which a live human must attempt to pass for a zombie to
escape an otherwise hopeless situation, Mal orders his crew to retrofit Serenity as a
Reaver vessel, complete with a leaking containment core and corpses lashed to its
exterior. Over the horrified protests of his aghast crew, Mal transforms their “home”
into an “abomination” and thus allows them to do the impossible: pass safely through
Reaver-controlled space (and, indeed, through what appears to be a major Reaver fleet)
to reach Miranda, which he consequently discovers is in fact the Reaver homeworld.

Returning from Miranda, the trick is doubled. Recognizing that Mr. Universe’s
home has been now blockaded by an Alliance fleet, the crew again passes through the
Reaver cloud—only this time they use a gun mounted to the hull to aggravate the
Reavers and compel them to give chase as soon as they are through. Predictably, the

29 The zombie impersonation scene is so ubiquitous that it even appears in parody form in Shaun of the
Dead (UK, 2004), as well as with astounding gore in AMC’s The Walking Dead (USA, 2010).
Reavers give chase, which suddenly puts *Serenity* at the head of the only existing power that can confront the Operative’s Alliance fleet: a Reaver armada. In the ensuing chaos Firefly is able to slip through the Alliance perimeter and reach Mr. Universe unharmed. Mal runs off to find Mr. Universe while the rest of the crew hangs back to hold off the Reavers who have followed them to the planet. (Alas, Mr. Universe is already dead, though his robot girlfriend and backup computer array give him his own effectivity from beyond the grave.)

Most of the crew has by now accepted that this is a suicide mission, and that they are all already dead: “Do you really think any of us are gonna get through this?” In the two hand-to-hand battles follow, both Mal and River win their fights only insofar as they are able to access a Reaver state beyond life and death, indeed beyond the human altogether. In accordance with earlier observations about superhuman powers of the resisting *zombi*, the brainwashing that robbed River of her original personality involved not only physical and mental conditioning and torturous brainwashing but a partial lobotomy that not only gives her split-second reflexes and reasoning and appears to have rendered her at least partially psychic. Recall that our first view of River in the show’s original pilot was of a frozen corpse that needs to be revived; in another episode, “Ariel,” this symbolic death and zombic rebirth is reenacted a second time. Now able to access her supersoldier training in a conscious and controlled manner, in *Serenity* River dies a third time, throwing himself into apparently hopeless hand-to-hand combat with
Reavers to save her friends. Her violence is calculated and deliberate, not berserk, and her state of living death controlled and only temporary—but the end of the sequence nevertheless finds her uncannily inhuman, covered in blood, having essentially become a Reaver herself.

Meanwhile Mal, in his fistfight with the Operative, endures a targeted “touch of death” (a trope borrowed from kung fu cinema) intended to temporarily paralyze one’s opponent by overwhelming their muscles’ ability to move. The Operative takes a moment to gloat: “You should know there’s no shame in this. You’ve done remarkable things. But you’re fighting a war you’ve already lost.” He turns his back—and Mal strikes: he’d had that particular nerve cluster removed as a result of an injury he’d received during the war. Already metaphorically dead—his nerve cluster literally so—Mal has just enough of the zombie’s immunity to power’s domination to win his fight.

I recite the climax of Serenity at length to show that all of the victorious action here is allegorically predicated on the crew’s capacity to harness the Reavers’ zombie excess in and for themselves; to become Reavers themselves in order to successfully oppose the state. Their initial horror at Reaver “life”—the assumption of their basic inhumanity, their monstrosity—must fall away if Serenity’s project of resistance is ever to succeed. Over and over again, we find our Big Damn Heroes must transform themselves: they must push their marginality to the limit and become zombies. Or perhaps it might be better said that they must realize they have been zombies all along;
the sequence of parallel zombie transformations in the ship, River, and Mal demonstrates nothing so much as the libidinal pleasure Shaviro argues is at the heart of zombie fiction: “The hardest thing to acknowledge is that the living dead are not radically Other so much as they serve to awaken a passion for otherness and for vertiginous disidentification that is already latent within our own selves” (Cinematic Affect 99).

Zombis in Cyberspace: Dollhouse

Publicly bitter over Firefly’s cancellation, Whedon nonetheless unexpectedly returned to Fox with a new series, Dollhouse, in February 2009. Dollhouse literalizes cognitive science’s frequent metaphorical comparisons of the brain to a computer and imagines a world where this has become literally true: the computational architecture of the brain has been fully mapped, ready to be modified, copied, cloned, or wiped clean like any hard drive. In such a world a new type of slavery becomes possible: combining the postcolonial strands of argument above with insights from third-wave feminism, Dollhouse depicts a world in which (mostly female) human bodies might be fully stripped of their autonomy and made zombies—or more specifically zombies—and in the process extending the horror of Serenity’s Miranda experiment by bringing it back down to Earth.
*Dollhouse* centres around a group of characters working in an underground “Dollhouse” operated by the allusively named Rossum Corporation, after “Rossum’s Universal Robots” in Kapek’s *R.U.R.* (the origin of the word “robot.”) Our characters work in the Los Angeles Dollhouse; there are twenty-two other Dollhouses around the world, including the most-recent Dollhouse in Duabi. The characters on the series break down into two roughly two sorts: untouched, original humans, receiving a regular wage, and “Dolls,” cognitively modified humans who have signed away their autonomy for a five years in exchange for a large cash payment at the end of their contractual tenure. The Dolls themselves are nominally volunteers, having signed a contract (if, in some cases, under duress) in exchange for a large cash payout at the end of their tenure and (often) a promise that some aspect of their personal psychology will be reprogrammed to make them happier people afterwards— but real questions linger about the extent to which one can decide to sign away the very power to make decisions. The Dollhouse, the series makes abundantly clear, coercively preys on the disenfranchised and the desperate to acquire its Dolls, literalizing Marx’s description of a proletariat that has “nothing to sell but themselves” (873).

When at home at the Dollhouse, the Dolls wander about the spa-like Dollhouse in a childlike “Doll state” with a detached, narcotized bearing reminiscent of the

---

30 One Doll, for instance, has asked to have her grief removed following the death of her young daughter; another, a veteran of the Iraq War, will have his post-traumatic stress disorder removed. The frequent suggestion is that these quasi-medicinal psychological alternations may be more valuable to the characters than the money itself.
enthralled Haitian zombi. (Driving home the metaphorical connection with undeath, the Dolls even sleep in pods that closely resemble coffins.) But when the Dolls are on a job (euphemistically called an “engagement”) they are imprinted with an appropriate simulated personality culled from the millions of MRIs and CAT-scans Rossum has gathered in its business as a major manufacturer of high-tech medical equipment. Under such circumstances they are believed by Rossum to be under such perfect programmatic control that they can be allowed to operate almost completely freely, with a “handler” waiting nearby only for emergencies.31

Nearly all of these engagements involve the fulfilment of sexual fantasies of one sort or another; as a business venture the Dollhouse is essentially a secret underground brothel, catering to the (often dangerous or disturbing) peccadilloes of the extremely wealthy and powerful as a means of funding and perfecting their larger research. The show metaphorizes the hidden costs associated with the era of capitalism Kaushik Sunder Rajan has called “biocapitalism,” particularly the profit-oriented exploitation of raw materials, labour, intellectual property, the commons, and even the sick themselves that makes biocapital possible. In particular Dollhouse provides a science-fictional literalization of Rajan’s claim that “our very ability to comprehend ‘life’ and ‘economy’ ... is shaped by particular epistemologies that are simultaneously enabled by, and

31 True to the conventions of the genre, most episodes of the first season of the show depict the flawless Dollhouse technology breaking down in some way or another, at which time some Rossum employee or another—having apparently forgotten entirely the events of the previous week’s episode—declares any such failure completely inconceivable.
enable, particular forms of institutional structures” (17), most directly the multinational corporate form. The dystopic Rossum and its hollow promises of a “greater good” promoted by the operation of the Dollhouses likewise throws into stark relief the salvific narratives of miraculous scientific advancement that biocapital firms frequently promote.

The fantasy encounters the Dollhouse provides naturally allow it to pull in not only immense capital but power and influence; aside from its high-profit margin, addictive potential, and the opportunity for blackmail, Rossum is eventually shown to have been placing its own Dolls in long-term engagements in positions of power, including a young senator whose meteoric career bears eerie parallels to both Barack Obama and George Bush (“Vows,” “The Left Hand”). Later, one of Rossum’s executives crows as he announces a new product line (“complete anatomy upgrades,” the permanent uploading of a consciousness into a Doll body for a lump nine-figure sum): “This will all be legal within a year. Anyone who matters is already a client, or one of ours” (“Epitaph One”). Befitting the neoliberal organization of late capitalism, and recalling Mbembe’s extension of biopolitics to institutions beyond the nation state, Rossum’s immense multinational scale makes it the rival of any government; when we discover in “Stop-Loss” that Rossum has as a subsidiary a Blackwateresque private security firm working on military applications for the Dollhouse technology, we are more or less completely unsurprised. Of course they do. Over the course of the series
characters from the FBI and NSA looking to expose the Dollhouse are shown by turns bumblingly corrupt and totally inefficient; the two principal anti-Dollhouse investigators from these agencies both wind up co-opted by the end of the series, ultimately working for the Dollhouse rather than against it. The state itself now seems somehow superfluous, even moribund; the real power is now in entirely private hands.\textsuperscript{32}

\textbf{Society of Control}

In all of this the Dolls of \textit{Dollhouse} tap into an alternative zombie filmic tradition that might have developed had the enthralled slaves of \textit{White Zombie} (USA, 1932) become the paradigmatic American zombie rather the ravenous, mindless killers of Romero’s \textit{Night of the Living Dead}. We see hints of what this tradition might have been like in Romero’s own \textit{Day of the Dead} (USA, 1985), in which we find the military experimenting on zombies even in the midst of zombie apocalypse, as well as in such films as the parodic \textit{Fido} (Canada, 2006), in which the zombie apocalypse has been stopped altogether by electronic collars that make zombies susceptible to simple commands and turns them into servants. The horror of the zombie in most episodes of

\textsuperscript{32} This was also, intriguingly, the direction \textit{Firefly} would likely have taken had it not been prematurely canceled; the frequent visual references to a “Blue Sun Corporation” would likely have culminated in a plotline similar to the one ultimately shown in \textit{Dollhouse}. In the DVD commentary, Whedon suggests that Blue Sun was originally intended as a powerful corporate conglomerate that more or less completely controlled the notional government of the Alliance. However, in \textit{Firefly/Serenity} in its finished form the governmental structure of the Alliance remains apparently independent of corporate capture and little narrative attention is directed at the Blue Sun logo that appears on clothing and props.
Dollhouse is not her violence but her fundamental passivity—the extent to which she can be entirely controlled, and made to work.

Worst of all, the suggestion of the series is that this state of affairs may be in many ways preferable to late-capitalist life outside the Dollhouse—that, indeed, many people would choose it freely, or even that they already have. In the first season’s breakthrough episode, “Man on the Street”—said to be the first in which Fox executives did not meddle—the usual multi-camera format of the series is interspersed with diegetic material from an in-universe news report on the “urban legends: about the Dollhouse that circulate throughout Los Angeles. Many of these interviews express an expected horror at the notion of a company that turns bodies into zombies: “It’s human trafficking, end of story. It’s repulsive.” But as the episode goes on we see “men on the street” who feel otherwise seem to be attracted either to the idea of patronizing a Dollhouse—an elderly gentleman’s “If they’d have had it in my day I’d have had Betty Grable every night” is only one succinct example of the transgressive fantasies the idea suggests in both male and female interviewees alike. Two women separately endorse the idea of the Dollhouse, one clearly with a particular (though unstated) fetish in mind and the other romanticizing the Dollhood as a noble act of loving sacrifice, perhaps something akin to organ donation. (It is not entirely clear whether she imagines herself as the Doll or as the client, or perhaps as both.) Another man, standing next to his girlfriend, unwittingly reveals his fantasy of using the Dollhouse to “test out”
homosexuality: “Hey, everybody’s got their fantasy, right? Guy wants to know what it’s like, you know, to be with another man. Just once, nothing queeny—two guys checking it out and then the other one forgets. That could be sweet for some guys.”

Still another woman, dressed as a Wal-Mart employee, suggests she would be quite happy to work as a Doll herself. “So being a Doll, you do whatever, and you don’t gotta remember nothing, or study, or pay rent, and you just party with rich people all the time. Where’s the dotted line?” This woman’s eagerness perhaps demonstrates the truth of the interviewee depicted immediately before her, an African-American woman who angrily denounces the very idea that workers in the Dollhouse are “volunteers”: “There’s only one reason why a person would volunteer to be a slave: if they is one already. Volunteers. You must be out of your fucking mind.”

Finally the newscaster interviews a college professor, perhaps a teacher of biology or cognitive science, sitting at his desk before a blackboard with a diagram of the brain and the words “temporal cortex” written in chalk. The professor takes a decidedly apocalyptic view of the possibility of the Dollhouse:

PROFESSOR: Forget morality. Imagine it’s true. Imagine this technology being used. Now imagine it being used on you. Everything you believe, gone. Everyone you love, strangers. Maybe enemies. Every part of you that makes you more than a walking cluster of neurons dissolved at someone else’s whim. If that technology exists, it’ll be used. It’ll be abused. It’ll be global. And we will be over as a species. We will cease to matter. I don’t know. Maybe we should.

Consent, in this light, becomes merely a formality; the Dollhouse will get us all in the end. The immediate suggestion of the episode, however, is that this professor is
importantly and chillingly wrong: the technology already exists in the real world in the form of the narcotizing spectacle of the entertainment industry, especially television itself. The next and final interviewee in “Man on the Street,” who appears immediately following a commercial break, drives this point home with a critique of mass culture that might have originated in Adorno or Debord: “You think it’s not happening? You think they’re not controlling you? Don’t worry about it. Just sit back and wait for them to tell you what to buy.”

In fact many features of the show suggest precisely this sort of metafictional interpretation. The stunningly beautiful but emotionally hollow quality of the Dolls, slipping easily between this role and that one, suggests a stereotype of the Hollywood “pretty face” looking to break into acting. Certain mannerisms and dialogic tics of Topher (Fran Kranz), the computer genius who programs the Dolls with their new personalities, suggest the character as a stand-in for writer/director Whedon himself, who tells the Dolls what to do and say, and, indeed, constantly compels them to enact precisely the sorts of exploitative sexual fantasies the show is nominally critiquing. In this reading the Rossum Corporation ultimately becomes a stand-in for the multinational Fox Corporation itself, and perhaps all of Dollhouse both Whedon’s quiet allegorical revenge for the cancellation of his beloved Firefly and a postmodern self-denunciation of his own participation in the culture industry.
The question becomes, from this perspective, not whether you might somehow be turned into a Doll, unknowingly operating in accordance with the whims of corporate interests that own both your labour power and your free time; the question is whether it’s happened already, without your even noticing, without anyone even bothering to complain. Taking all these strains together, we see in *Dollhouse* an articulation of Gilles Deleuze’s “society of control,” which he describes as the essence of biopolitical control under informationalized late capitalism. Through the continued winnowing of statistical windows, splicing and dicing the populations so finely that “populations” now once again consist more of less of *individual bodies* whose behavior can be predicted with near certainty, as well as a deterritorialization and regularization of the technologies of discipline such that they are seen not as coercion but as self-interested and “free” rational consumer choice, in the postmodern moment biopower upgrades its mechanisms of control not by threatening with violence but through efficient scientific management of needs through the marketplace—that is, through mass media and through biocapital.

Most important of all these technologies of control might be the total triumph of ideology of the market itself: “The family, the school, the army, the factory are no longer the distinct analogical spaces that converge towards an owner—state or private power—but coded figures—deformable and transformable—of a single corporation that now has

---

33 I hope to evoke, among other things, Hannah Arendt’s anxieties over the science of behaviorism in *The Human Condition.*
only stockholders” (Deleuze 6). In all its business ventures, after all, the many-tendriled Rossum is only giving both its employees and clients what they want at a price they’re willing to pay. In the postmodern economic milieu of Dollhouse volitional economic exchange becomes the ultimate ethical trump card and the sole criterion of value, rendering moot all disputes about the rightness or wrongness of any aspect of the enterprise. (The Dolls, you will remember, are “volunteers”—and so whatever happens to them, the answer is “They signed a contract.”)

The Dollhouse, the ultimate synthesis between biopower and the logic of the market, is thus the culminating moment of neoliberal hegemony Foucault identifies in *The Birth of Biopolitics* when he writes that “the natural mechanisms of the market” now “constitute a standard of truth which enables us to discern which governmental practices are correct and which are erroneous” (32, emphasis mine). The market, imagined now as an ontology that transcends the human, becomes the final arbiter of all disputes; the market now, famously, *speaks*. Foucault captures well this inarguability attributed to market pronouncements in *The Birth of Biopolitics* when he notes of the organization of neoliberal agricultural policy: “The idea was not, given the state of things, how can we find the economic system that will be able to take account of the basic facts peculiar to European agriculture? It was, given that economic-political regulation can only take place through the market, how can we modify these material, cultural, technical, and legal bases that are given in Europe?” (141) Reminiscent of the
Alliance’s social engineering experiment on Miranda and the raw programmability of the Dolls, neoliberal governmentality identifies first the necessity of market hegemony and then sets out to produce laws, practices, and even citizens to match.

Whenever alternative values outside the commodifying logic of the market emerge in *Dollhouse*—values like friendship, loyalty, justice, or charity—it is only in the form of twisted funhouse parody, as when a billionaire software developer hires a Doll to impersonate his dead wife one day out of the year; or when another hires a Doll to provide his infant son with the parental affection he is unwilling to; or when the traitor who has been working in the characters’ midst throughout the run of the show reveals himself and provides the reason he intends to protect them (as part of a select elite) during the global apocalyptic disaster he plans set in motion: “You’re here because you’re my family. I love you guys.”

**Losing Control**

The Dolls appear to be perfect corporate slaves, programmed to always “be their best” and sapped even of the very notion of resistance. It is only the audience—capable of seeing what Rossum’s employees cannot—that realizes the characters are in fact retaining their memories despite the technology’s promises and, indeed, are exerting

---

34 This is, in fact, one of the call-and-response mantras the Dolls have been programmed to repeat on command while in their Doll state.
quiet forms of resistance at the margins even as the series begins. The imprinting technology turns out to be fundamentally and fatally flawed; in its efforts to produce perfect slaves, the Dollhouse technology produces instead a structural excess in its zombie Dolls in the form of a new type of consciousness, one that is capable of resisting and subverting the imprinting technology and repurposing it towards their own ends. The amnesiac Dolls begin to remember. And through this power of memory, as the show goes on the Dolls become less braindead zombies and more rebelling zombies; slowly gaining control over their unique situation, the characters played by the show’s starring cast become increasingly autonomous actors, ultimately becoming protectors of each other and the society of large. Their hybrid status—no longer their original unitary selves, but each one containing a new multiplicity—gives them purchase on a new sort of human potentiality. This is especially true in the case of Eliza Dushku’s Echo and Alan Tudyk’s Alpha, both of whom slowly patch together new composite personalities that are the sum of all the imprints who have been uploaded into their minds. Alpha, whose original personality already contained strongly violent tendencies, is driven mad with multiple personality disorder, becoming a brilliant but murderous sociopath in his quest for revenge against the Dollhouse. But Echo is able to organize all her Dolls

35 All of the Dolls have been renamed in accordance to the NATO phonetic alphabet to name its Dolls, suggesting well their basic exchangeability with one other.
36 In the flashforward episodes discussed below, Alpha is revealed to have gained control over his imprints at some point after the end of season one in a manner similar to Echo’s. In “Epitaph Two,” set in 2020, we find he has achieved a kind of Zen calm and is now an ally of the characters.
under a new, multitudinous personality and, driven by an urgent empathy, seeks to awaken and liberate the other Dolls. The very formlessness of the Doll state becomes her greatest strength; the living death of the *zombi*, in essence, gives her a plastic superpower with roots with postcolonial hybridity, queer subjectivity, and Du Bois’s double consciousness: the ability to choose between multiple selves at will, to construct herself however she likes.

But *Dollhouse*’s exploration of the zombie myth ultimately brings in the mindless, murderous Romero-style zombie archetype as well, beginning with the series-transforming episode “Epitaph One” which closed the first season but which never aired on TV. Like *Firefly*, *Dollhouse* premiered in the so-called “Friday night death slot”—and remembering well what had happened to *Firefly*, Whedon’s fanbase sardonically began its “Save *Dollhouse*” campaign almost a year before the show first premiered.37 Like *Firefly*, *Dollhouse* was plagued by low ratings throughout its first season, and when it came time to produce the first season’s final episode cancellation seemed inevitable. With this warning, Whedon and his writers scripted a final episode, “Epitaph One,” which never aired on television but was included on the Season One DVD, and which was intended to wrap up the themes of the show. However, the series was then unexpectedly renewed.

“Epitaph One,” centred around an entirely new cast of characters, skips the story

37 See, for instance, http://www.wired.com/underwire/2008/05/dollhouse-fans/.
ahead ten years to a post-apocalyptic Los Angeles. The ruined city is in flames. What precisely has happened is never made clear—but Los Angeles is now divided between “Actuals” (unmodified humans), “dumbshows” (pacified wanderers in the base Doll state), and “butchers” (berserk killers suggestive of nothing so much as Firefly’s Reavers). Finally, our two species of zombies get to meet—and the result is the end of the world.

The events of the episode centre on a small group of Actuals trying to escape the city, arguing about where to go in terms that suggest nuclear apocalypse; some suggest heading into the desert, where there is no “tech,” while others suggest they should head underground. As their conversation continues it becomes clear that broadcast technology itself has run amuck, transmitting “signals” that transform Actuals into either dumbshows or butchers—the broadcast band replacing nuclear fallout as an invisible radioactive killer. Finally they do decide to head underground, where they discover the now long-abandoned Dollhouse. Using the now primitive imprinting technology on a dumbshow they have reluctantly brought with them—his young daughter has refused to be separated from him—they piece together the history of the apocalypse at the site of its origin, in pursuit of either a cure or a rumored “Safe Haven”: “a place where you can’t be changed: you die as you were born; heart in concert with the mind.” They discover, too, the probable origins of the butchers; Topher seems to have devised a means by which the imprinting might be done virally, over the telephone. In a
flashback, Topher (seemingly driven mad by his culpability in this event) recounts the
disaster:

An entire army, in a single instant, in the hands of any government, and
boom! We went boom! Millions programmed to kill anyone who’s not
programmed to kill. And then the war has two sides, those who
answered the phone, and those who didn’t. You know what? Don’t
answer the phone! Promise me you won’t answer the phone!

Here the inclusive/exclusive logic of biopower reaches an absurd, hyperbolic climax in
literal “viral advertising”; the foundation of the ultimate race war is an utterly arbitrary
division, a quirk of pure chance.

In season two’s series-concluding follow-up, “Epitaph Two” — continuing the
plot thread begun in “Epitaph One” after a season spent slowly manoeuvring the series
towards the 2019 disaster — we discover the 2019 versions of the series’ regular cast are
still alive, hidden in an agricultural enclave in the deserts of Arizona. In a sense they’re
partially responsible for what has happened to the world; not only did Topher and
Adelle selfishly abet the Rossum Corporation’s drive for better and better technologies
of control for their own security and advancement, but the rebelling Dolls’ original
victories over Rossum ironically introduced the unstable power vacuum that made the
global Dollpocalypse possible in the first place.

They are still fighting the remnants of Rossum, as well as periodic hordes of
butchers, but things are not going well; this is not a war which can be won. Finally
Topher announces that he has come up with a plan to “bring back the world”; bouncing
blanket signals off the atmosphere, he believes he can simultaneously return every
imprinted person to their original, Actual state: nothing less than a high-tech version of Depestre’s miraculous “revitalizing salt,” to be administered not selectively, or in deference to economic status, or with regard to medicinal biopolitical reason, but indiscriminately, at once, over the entire globe. After a dangerous return to get back to the Dollhouse to recover necessary technology, the device is built and the world is “saved”—and history, in effect, rebooted.

Outside the Dollhouse, confused dumbshows and former butchers begin to wake up out of a fog into a completely transformed world. We see nothing of what they’re thinking, or of what sort of world they might actually construct from the ruins of ours. All we know is that they now have the opportunity. The focus instead is on our zombie-cum-zombi Doll heroes, most of whom have chosen to remain underground for two years until the de-imprinting signal fades and it’s safe for them to reemerge. Completely unexpectedly, most of our Doll heroes decide they don’t want to be restored to their original, actual selves. They’ve become something new, something powerful, something posthuman; in becoming Dolls, they’ve gained much more than they’ve lost, and they don’t want to go back.

III. Zombietopia

The power Echo has gained, however, comes at a very high cost: permanent dependence upon the biopolitical structures of domination that have transformed both her and her world.
Having begun with a single, clear agenda of bringing down the Dollhouse—both in her original, Actual state as eco-terrorist Caroline Farrell and then again as in the earliest incarnations of Echo’s nascent composite personality—she ends the series still living inside it, requiring the Dollhouse more than ever for her own continued existence. Likewise, the characters of Firefly do not in fact bring down the Alliance; they merely embarrass it, perhaps slightly weakening its grip, and carve out just enough space that they can “keep flying” in its gaps and at its margins. In this respect both programs seem to return us the well-known suggestions of Fredric Jameson and Slavoj Žižek that it has become easier to imagine the end of the world than the end of capitalism. (In Dollhouse this is quite literally the case; the Rossum megacorporation is still going even after it sets the world ablaze.) Both programs suggest themselves, in this sense, as anti-Utopias: as imaginative proofs of the futile impossibility of wide-scale, transformative resistance.

Recalling once again Jameson’s distinction in Archaeologies of the Future between the Utopian program and the Utopian impulse, however, we might nonetheless seem to rehabilitate these apparently anti-Utopian depiction of the post-capitalist world on the level of Utopian form. The radical disruption of the grand narratives of history offered by the violence of apocalypse in these science fictional zombie narratives—their generation of a new anti-totality at the literal end of history—directs us precisely to “think the break itself.” The conclusion of David McNally’s Monsters of the Market: Zombies, Vampires and Global Capitalism suggests the possibilities of the zombie as a
figure for thinking this mode of resistance. McNally extends a general identification of the zombies with the precariat and the subaltern into a discussion of utopia’s relationship with the grotesque, the explosive revolutionary potential that arises when one has nothing left to lose:

[B]ecause they are the living dead, zombies possess the capacity to awaken, to throw off their bonds, to reclaim life amid the morbid ruins of late capitalism. As much as they move slowly and clumsily through the routinised motions of deadened life, zombies also possess startling capacities for revelry and revolt, latent energies that can erupt in riotous nights of the living dead. Bursting across movie-screens and the pages of pulp-fiction, such zombie-festivals contain moments of carnivalesque insurgency, horrifying disruptions of the ordered and predictable patterns of everyday-life. Without warning, a rupture in the fabric of the normal transforms the living dead into hyper-active marauders. The maimed and disfigured seize the streets and invade shopping malls; authority collapses; anarchy is unleashed. (254)

But—as with Atwood’s Crakers—this violent revolutionary break does not create a Utopia for us, but rather for them. In both Firefly and Dollhouse—and, indeed, in most zombie narrative—it is the zombies, not the heroes, who actually best exemplify the Utopian break, the zombies that create in the end an alternative organizing order for the globe: a zombie nation, territorially overlapping with ours, which also has the power to hail us as subjects and which also has the power over life and death. The “heroes” of zombie stories are those who stubbornly cling to the old order even after it has broken down, after history has passed it and them by—but the future belongs to the zombies.

One of the best examples of this tendency in zombie narrative can be seen in Richard Matheson’s Am Legend (1954), the last-man-on-earth novel that inspired
George Romero to make *Night of the Living Dead*. At the end of that book—which is, as Romero has correctly noted, a book “about revolution”—Mattheson’s hero, Robert Neville, discovers to his horror that he truly is the last *man* on Earth; the future now belongs instead to the vampire-like monsters he has relentlessly slaughtering throughout the novel.

They all stood looking up at him with their white faces. He stared back. And suddenly he thought, I’m the abnormal one now. Normalcy was a majority concept, the standard of many and not the standard of just one man.

… Abruptly that realization joined with what he saw on their faces—awe, fear, shrinking horror—and he knew that they *were* afraid of him. To them he was some terrible scourge they had never seen, a scourge even worse than the disease they had come to live with.

…Robert Neville looked out over the new people of the earth. He knew he did not belong to them; he knew that, like the vampires, he was anathema and black terror to be destroyed. (169-170)

This is the moment from which the novel takes its title. To the people of the future—the people of a utopia we cannot recognize as anything but monstrous—it is *we* who are the monsters. And if we are to ever get from *here* to *there*, it is not just society, but we ourselves, which will have to change.

Where the violence of the state exterminates the zombie—whether through its military arm, as with Whedon’s Alliance, or through local proxies like Kirkman’s Grimes or Matheson’s Neville—the violence of the zombie’s bite (or the Reavers’ replication by torture, or the butchers’ personality-destroying “signal”) inversely connotes not exclusion but rather *inclusion*. The zombie’s “bite,” whose virulence kills you and therefore turns you into a zombie, is precisely what brings you into *their* fold. For
zombies, violence is not a casting out, but rather a drawing in. We find this version of the zombie myth lurking in Kelly Link’s wonderfully understated short story “Some Zombie Contingency Plans,” a sad, quiet story about loneliness in which the real tragedy turns out to be that the promised hour of zombic deliverance never actually arrives:

Zombies didn’t discriminate. Everyone tasted equally good as far as zombies were concerned. And anyone could be a zombie. You didn’t have to be special, or good at sports, or good-looking. You didn’t have to smell good, or wear the right kind of clothes, or listen to the right kind of music. You just had to be slow.

Soap liked this about zombies.

There is never just one zombie. (164)

Where once the state had to produce terrorists, pirates, monsters, “enemies of all mankind,”38 in order to justify its own universalizing grasp, then, at the end of this logic these zombies return to unexpectedly assert themselves as a competing universal, one which does not rely on the same inclusive/exclusive logic of the state but rather operates in an entirely new way. Rather than an anti-state, zombies in fact allegorize a radically egalitarian counter-state, brought about through our total transformation into a new mode of subjectivity.

What we find when we strip the zombie narrative of its horror trappings, then, is a latent Utopian form that allegorizes the Utopian break as a rupture not only of society but of the self: a disruption of the liberal capitalist assumptions of radically atomic consumer individuality that have become so naturalized that all possible alternatives

38 Thank you to Sonja Schillings for bringing the history of this terminology in international law to my attention in her excellent seminar paper “Enemies of all Humankind: A Cultural-Legal Nexus.”
now seem completely “inhuman.” In this sense the zombie provides an unexpected vision of what the negation of the biopolitical state might look like; not only do zombies inherit the Earth, they do so precisely insofar as they are able to eliminate the inclusive/exclusive logic of the state altogether. Of the example I have considered, the butchers of *Dollhouse* are the least able to replicate or reproduce themselves; incapable of working the technology on which their reproduction depends, someone else has to send the signal. No wonder then that they are the least “successful” in establishing a new zombie hegemony over the globe. At the other end of the scale we can place the zombies of Romero’s original zombie films, who don’t even need to bite you to turn you; because in a Romero film your posthumous transformation into a zombie is inevitable, regardless of the circumstances of your death, the zombies don’t even really need to kill you—they just need to wait you out. Paralleling (in reverse) the logic of entropy that structures science fiction, the zombies’ victory—their zombietopia—is always assured.

From this perspective Romero’s ravenous zombies and all its various horror-movie reincarnations—from *Night of the Living Dead* all the way up to *Firefly’s* Reavers and *Dollhouse’s* butchers—turn out to be something like worthy successors to the rebelling *zombi* after all. These bloodthirsty zombies enact, in fantastically excessive form, that
mode of violence that Benjamin once called “divine”: that violence which does not make law or preserve it, but suspends it altogether to usher in a new era.39

Recalling McNally’s celebration of the ecstatic, grotesque, “monstrous utopia” of the zombie (266), I think of nothing so much as the Occupy Wall Street movement that began in Zuccotti Park in New York in August 2011 and quickly spread to dozens of cities worldwide, dominating headlines in the months I was concluding this project. Here we find an oblique vision of another type of world, one that runs counter to the traditional American narrative of consumer happiness and which has proved completely inscrutable to elites in business, government, and the media. Writing in n+1, Marco Roth calls attention to the movement’s appropriation of the iconography of homelessness, all the way down to the handwritten, cardboard signs reading “We Are the 99%” and tent-based shantytowns that remain the movement’s self-advertisement: “Just as the early communists heralded the proletariat as the repository of potential revolutionary consciousness, so OWS holds up the homeless as the privileged figure of contemporary American post-capitalist life” (Roth). The shantytowns of the Occupy movement suggest the mainstream’s new identification with those left behind by an increasingly cutthroat American capitalism; the radical abjection of the zombie—hunger,

39 “If mythical violence is lawmaking, divine violence is law destroying; if the former sets boundaries, the latter boundlessly destroys them; if mythical violence brings at once guilt and retribution, divine power only expiates; if the former threatens, the latter strikes; if the former is bloody, the latter is lethal without spilling blood. [...] Mythical violence is bloody power over mere life for its own sake, divine violence pure power over all life for the sake of the living.” (“Critique of Violence” 297).
desperation, need—signifies a precarity that is increasingly understood to be a near-universal condition, shared to one extent or another by all but a tiny silver of the global elite.

When Rick Grimes rides into downtown Atlanta on his horse and points his rifle at shuffling, lurching, groaning walkers in rags—human forms this police officer has cast out of the circle of protection and designated as wholly Other—just who is it he mowing down? What are we to make of university cops pepper-spraying the very students they have been hired to protect in the name of campus security, or of the spectacle of riot police furiously beating and arresting peaceful citizens “whose only crime,” as David Graeber notes, “was the violation of local camping regulations?” (Graeber) Are we not witnessing the fevered spasms of a sick system that is lashing out in all directions, trying to hold itself together—a system whose basic legitimacy is challenged every day by more and more hungry zombies gathering outside? This is the forward-looking “yet” that haunts Rebekah Sheldon’s recent memorable observation on Twitter that “Occupy camps are the closest I’ve been to a post-apocalypse social form. Yet” (Sheldon). More and more members of the “99%” seem to feel the apocalypse has indeed already happened, and we’re all already zombies—and there’s nothing left now but to wait for the part of the film where the survivors’ last defenses fail, the walls come down, the guns run out of bullets, and the zombies take their turn running the world.
“Revolution,” Hardt and Negri remind us, “is not for the faint of heart. It is for monsters. You have to lose who you are to discover what you can become” (Commonwealth 339-340). The deepest pleasure of the zombie story lies always in its depiction of this moment of rupturing, rapturous break, that exhilarating moment of long-hoped-for upheaval: the fulfilment of a sometimes avowed, sometimes disavowed desire to see power at last unmade, laid finally to waste, and torn limb from bloody limb—and our structures of dominion and domination replaced finally and forever with Utopia, if only for the already dead. And so we find that even in a waking nightmare of unrestrained violence unleashed by eruptive apocalypse and post-capitalist ruin—even after an end of the world that seems, somehow, to already be in the past—we can still hear the faint heartbeats of an impulse towards collective life, beating even inside the zombie’s dead chest.
In his spellbinding, Hugo-Award-winning novella “Exhalation” (2009), Ted Chiang depicts a singular vision of cosmic totality that harkens back to the Stapledonian ambitions that characterized much early SF. Chiang’s characters in that story are artificially intelligent robots, whose kinesthetic and mental operations depend on a complex system of pneumatic switches, valves, and tubes. The robots live inside some sort of sealed chromium canister, which is filled with pressurized argon gas; thus they can speak literally, not figuratively, about reaching “the edge of the world” (744). As far as the robots can tell they are the only life forms that exist.

Interpretations of this situation vary; some of Chiang’s readers believe the robots were built long ago by now-deceased human(oid)s to be miners at the center of some great planetoid; others take the robots are nanomachines, operating at incredibly microscopic scale in an argon container on a forgotten shelf in a laboratory somewhere. Others, undoubtedly, have other interpretations. Because the robots never make contact with any historical context on any scale outside their own, and because they have no memory of their own origins, we cannot know for sure precisely what sort of situation Chiang had in mind.

What is clear is that the robots have a problem. Each year, in every town across their civilization, a town crier recites as a New Year’s ritual an hour-long passage of
religious verse. (The social totality being imagined here is highly homogenous; localities
differ in their practices, but only slightly. Their civilization in this way is truly global,
indeed, universal.) The passage takes precisely one hour to deliver—but this year
reports are coming in from all over the world that in all cases the clock is striking the
hour before the verse has been fully recited. The reports are far too widespread to be a
coordinated hoax; some other explanation is required.

The nameless protagonist begins its investigation with a first sublime
investigation into totality which requires it, improbably, to carefully disassemble and
dissect its own brain. He develops a complex system of mirrors that allows it to see the
back of its own skull, and a system of motorized arms that allow it to operate on itself.
This first glimpse of totality is an unexpected fulfillment of the impossible fantasy of
total self-knowledge:

I began by removing the deeply curved plate that formed the back and
top of my head; then the two, more shallowly curved plates that formed
the sides. Only my faceplate remained, but it was locked into a
restraining bracket, and I could not see its inner surface from the vantage
point of my periscope; what I saw exposed was my own brain. It
consisted of a dozen or more subassemblies, whose exteriors were
covered by intricately molded shells; by positioning the periscope near
the fissures that separated them, I gained a tantalizing glimpse at the
fabulous mechanisms within their interiors. Even with what little I could
see, I could tell it was the most beautifully complex engine I had ever
beheld, so far beyond any device man had constructed that it was
incontrovertibly of divine origin. The sight was both exhilarating and
dizzying, and I savored it on a strictly aesthetic basis for several minutes
before proceeding with my explorations. (747-748)
Carefully—very carefully—it unpacks each of the subassemblies, ultimately extracting its brain from its skull and spreading it across the full breadth of its laboratory: “When I was done, my brain looked like an explosion frozen an infinitesimal fraction of a second after the detonation, and again I felt dizzy when I thought about it. But at last the cognition engine itself was exposed, supported on a pillar of hoses and actuating rods leading down into my torso” (749).

From this transcendent perspective, simultaneously inside and outside itself, the robot is finally able to answer the question that has plagued generations of scholars: what is memory? Previously the debate had been between those who believed that memory was encoded on golf leafs inside the brain, and those who believed it was encoded in a series of analog switches and gears. The robot’s experiments demonstrate that memory is actually encoded in the patterns of the “persistent currents” of argon gas that constantly pass through the brain (750). This is why the robots are required to exchange tanks of argon (what they call “lungs”) on their torsos every day; the constant need for this replenishment is for them a communal practice that structures all their other sociality. What the robot discovers, that is, is that the subject/object distinction that structures individuality is in a very real sense an illusion; there is actually no difference between what is inside their body and what is outside; the air that they draw from “the great lung of the world, the source of all our nourishment” (744) is in fact the very stuff of thought itself. Now an even larger totality has been discovered, in which the
individual experience can be mapped onto the “natural” patterns of argon exchange from high pressure (the filling station) to low (exhalation, post breath). In a real sense, then, their thoughts are air, or more precisely, air pressure—and so ultimately is every other action they take. Their brains allow them to take.

Tragically, this is the secret at the heart of the apparent time dilation. The pressure inside their skulls is slowly equalizing with the general pressure inside the canister as a whole: “What is happening is that our brains are running slower. … our brains rely on the passage of air, and when that air flows more slowly, our thoughts slow down, making the clocks seem to us to run faster” (751). As a result their ability to think is slowly being compromised; as the difference between air pressure inside and outside their body becomes less pronounced, they are thinking more and more slowly, and at some point they will no longer be able to think at all. In a biologized analogue to environmental crises like climate change, or to Marxist “contradictions” in the logic of capital more generally, the robot society is slowly destroying the condition of possibility for its own continuation. What’s worse still is that no amelioration is possible; because they are permanently trapped inside the canister, there is no way for them to depressurize the canister, no way for them to reverse entropy and turn back time. Tiny delays in the progression of entropy are possible, but their society is ultimately doomed.

Here a third totality (cosmic) unexpectedly emerges that goes even beyond the first two (individual/global). Suddenly the robot’s thoughts turn beyond the world of
empirical experience; he begins to speculate about the nature of the universe, and about
the possibility of other universes beyond his own. In the face of apocalypse, this
becomes his last “slender hope” (754): that someday someone might be possible to drill
through the chromium from the outside, and depressurize the canister that way. He
does not imagine this could ever happen in time to save his civilization; rather, he limits
himself to the hope that the records he leaves behind will inspire the visitors to the
canister to understand what happened, and, through the power of the written word,
make his people live again, if only in the imagination:

Which is why I have written this account. You, I hope, are one of those
explorers. You, I hope, found these sheets of copper and deciphered the
words engraved on their surfaces. And whether or not your brain is
impelled by the air that once impelled mine, through the act of reading
my words, the patterns that form your thoughts become an imitation of
the patterns that once formed mine. And in that way I live again, through
you. (755)

The possible existence of these eventual successors becomes, for this robot at least, a
cause not for sadness or jealousy but for hope—even ecstasy, perhaps, that there should
be something rather than nothing: “Our universe might have slid into equilibrium
emitting nothing more than a quiet hiss. The fact that it spawned such plenitude is a
miracle, one that is matched only by your universe giving rise to you” (756). In the
context of a literalized end to history, the imagination (and here only the imagination)
offers us the possibility of getting outside a system that is suffocating us—an escape that
is predicated not in empirical experience or material reality but in the otherworldly,
unknowable potentiality of Kant’s noumena.
What begins as a science fictional vision of possible aliens is suddenly and unexpectedly transformed, then, into something more like a religion—a myth (in the Stapledonian sense) of both resurrection and redemption that might give us solace in an otherwise hopeless universe: “Though I am long dead as you read this, explorer, I offer to you a valediction. Contemplate the marvel that is existence, and rejoice that you are able to do so. I feel I have the right to tell you this because, as I am inscribing these words, I am doing the same” (756).

***

In interviews, Chiang locates his science fiction at the intersection between science and religion, arguing that the distinction drawn between the two is very much a contemporary phenomenon:

There is a similarity between science and religion in that they’re both attempts to understand the universe, and there was a time in the past when science and religion were not seen as incompatible, when it made perfect sense to be both a scientist and a religious person. Nowadays there is much more of an attitude that the two are incompatible. I think that’s sort of a 20th century phenomenon. (“Solomon”)

This historization of the science-religion dialectic recalls for me the famous “Third Law” of Arthur C. Clarke, that “Any sufficiently advanced technology is indistinguishable from magic” (36)—suggesting that speculations derived from science and from fantasy begin to bleed into each other at their mutual limit.

As Lorraine Daston shows in her book *Wonders and the Order of Nature*, the practice of science in the early Enlightenment was in fact organized not around
mundane reproducibility but around freakish marvels at the edge of (and beyond) everyday experience: “markers of the outermost limits of what they knew, who they were, or what they might become” (20). This aesthetic appreciation of “the wondrous” still survives today in the practice of science, particularly in cutting-edge research in quantum physics, whose language not uncommonly descends into hallucinogenic excess—but in the main, I suggest, it has moved into our science fictions, which are frequently preoccupied with the possibility of limit experiences of all types.

For few writers is this play between scientific wonder and mystical religiosity as clear as it is in the work of Philip K. Dick. In such works as Do Androids Dream of Electric Sheep? (1968), The Man in the High Castle (1962), Time Out of Joint (1959), UBIK (1969), Flow My Tears, The Policeman Said (1974) and A Scanner Darkly (1977)—to only begin to name them—Dick crafts a vision of a cosmic totality that extends will beyond the limits of space, time, and rationality. In VALIS (written in the 1970s and published in 1981) and his other late, mystical works, he seeks to pierce the veil of the material world to become cosmology—a immortal, demonic force coterminous with all empires across all times and realities—with Dick’s own Gnostic science fictions becoming in opposition a kind of eternal, divinely inspired resistance.

Dick’s position in the culture at large has grown considerably from the position of relative obscurity and material poverty he experienced in the years he wrote. At least a dozen of his novels and stories have been adapted into films like Blade Runner, Total
Recall, Minority Report, and last year’s The Adjustment Bureau, with more still on the way, and at least a dozen other unacknowledged, quasi-plagiarized descendents. Fredric Jameson’s once extravagant characterization of Dick as “the Shakespeare of science fiction” (Archaeologies 345) now seems prescient in both aspects: not only has Dick come to stand almost unchallenged within the realm of science fiction literature as the master of the form, but his works have earned increasing stature within the mainstream literary canon as well. The Library of America has published his thirteen most important novels in elegant three hardcover volumes, the first such release for a writer of science fiction. A generally obscure writer of science fiction novels during his lifetime—well-known in science fiction and counterculture circles, but largely unknown outside these groups—Dick is now among the best known and most studied writers of his generation, making frequent appearances on contemporary literature syllabi in English departments and on “best of” lists in the popular press.

But Dick presents significant interpretative problems for his critics. Forty-five years after Roland Barthes declared the death of that slippery and inscrutable figure, the Author, the Author nevertheless persists at the center of critical practice. And this is undoubtedly true of Dick—Dick’s tumultuous personal life frequently intrudes upon the autonomy of his literary works, almost to the point of exclusion: his lifelong preoccupation with his twin sister, who died in infancy; his many troubled relationships, including five marriages; his drug use; his various psychiatric diagnoses,
none of which is wholly satisfying or sufficiently explanatory; and most importantly the hallucinogenic “VALIS experience” that Dick would spend the last decade of his life futilely trying to unravel. VALIS (“Vast Active Living Intelligence System”) was Dick’s name for an entity comprised of “pink light” which he believed contacted him in February and March of 1974, a belief that was eventually translated to his religious VALIS trilogy and which today is understood as a genuine mystical experience, a full-on psychotic break, or an amusing, self-conscious literary hoax—or perhaps all three—depending on which of Dick’s critics one asks. The problem of studying Philip K. Dick is little different today than it was in 1975, when Stanislaw Lem wrote that (in contrast with most authors, or Authors) “Philip K. Dick does not lead his critics an easy life, since he does not so much play the part of a guide through his phantasmagoric worlds as he gives the impression of one lost in their labyrinth” (Lem). Critical readers of Dick frequently become unmoored between attempts to use psychiatric diagnosis to unlock the secret of Dick’s novels and attempts to use Dick’s novels to unlock the secret of his diagnosis.

In his I Think I Am: Philip K. Dick, Laurence A. Rickels attempts to square this circle returning diagnosis-making agency to Dick himself. Because “the unhousing or unhinging of reality—the crisis of uncanniness” requires a singular subject/mind to “be legible as world,” Rickels “gives priority to the legible borderline passing through psychosis along which Dick unfolds his thought experiments on the way to giving them
form” (6). But what ultimately makes Dick’s writing “psy fi” is not just the presence of this metaphysical and metapsychological themes but also, crucially, self-analysis, the key discursive mode that unites science fiction, psychoanalysis, and memoirs of psychosis. Rickels, this is all to say, attempts to find his way out of Dick’s labyrinth by focusing on Dick as the agent of his own psychoanalysis, which means returning to those theoretical and practical studies in psychoanalysis which “Dick would or could or should have read” (5). Thus, in the first part of the I Think I Am, we come at Dick (or out of Dick) through Daniel Paul Schreber’s Memoirs of My Nervous Illness, as well as through Freud’s reading of Schreber, as well as Dick’s reading of Freud. In Dick’s hands Schreber’s illness immediately becomes science fictionalized as perhaps not illness at all, but as potential contact with a macrocosmic world beyond empirical comprehension—precisely the move Dick decides to make with respect to his own VALIS experience (48). Dick’s is a world where, even if psy fi isn’t already real, it threatens to become so at any moment.

The paranoid revelation that reality is fundamentally a lie, manipulated by the demons, aliens, or G-Men for sinister purposes, is quintessentially Dickian; similar climactic revelations punctuate too many of his novels to name. In the VALIS series of novels and essays written near the end of Dick’s life, and extending into the so-called Exegesis, a million-word private journal of ruminations on Dick’s mystical experiences that was likely never intended for publication—Dick develops a totalizing counter-
theory of human existence as such: “Prior to that, during the interval in which he had experience the two-world superimposition, he had seen not only California, USA, of the year 1974 but also ancient Rome, he had discerned with the superimposition a Gestalt shared by both space-time continua, their common element: a Black Iron Prison. This was what the dream referred to as “the Empire.” He knew it because, upon seeing the Black Iron Prison, he had recognized it. Everyone dwelt in it without realizing it. The Black Iron Prison was their world” (VALIS 48).

Thus the Cold War security state is translated by Dick into a cosmic ontology—because for Dick this was precisely the world in which he already lived: “This time in America—1960 to 1970—and this place, the Bay Area of Northern California, was totally fucked. I’m sorry to tell you this, but that’s the truth. Fancy terms and ornate theories cannot cover this fact up. The authorities became as psychotic as those they hunted. They wanted to put all persons who were not clones of the establishment away” (VALIS 11-12). An unsolved break-in on Dick’s home—the subject of a profile on him in Rolling Stone—became for Dick the ultimate symbol of this collision between the individual and sinister authority—a collision that was similarly symbolized, in other moments, by the police system, the mental health system, the Catholic Church, the FBI, the KGB, demons, aliens, and on and on.

If the Empire was “the institution, the codification, of derangement,” “impos[ing] its insanity on us by violence” (134), Empire’s total control creates a situation in which:
Those who agree with you are insane.  
Those who do not agree with you are in power. (60)

Or, to phrase it all another way: “What he did not know then is that it is sometimes an appropriate response to reality to go insane” (10). This challenge to the hegemony of establishment rationality has its echo in the famous Timothy Leary maxim “tune on, tune in, and drop out”; irrationality, even insanity itself, becomes a weapon in the war against the state’s imposed logics and forced choices.

Dick’s own attitude towards his science fiction in this period becomes, unexpectedly, that of a scholar, as he seeks (neurotically, obsessively) through his own work to unlock the single Gnostic truth that unites them all. (Repeating Jameson, Dick comes to treat his own works “as though they were variants of one single work” (Archaeologies 363) he has not written yet, becoming in this way his own most devoted fan. The ultimate truth or falsity of these mystical experiences therefore becomes beside the point, as well as the unanswerable question of the extent to which Dick really believed in his VALIS experience, or only wanted to, or thought it might somehow make him money or bring him fame, or had genuinely lost his grip on sanity entirely. What Dick is after in his Exegesis, for any or all of these reasons, is almost precisely the cognitive mapping work Jameson identifies in the conspiracy narrative in his influential essay “Totality as Conspiracy” as crucial to resistance in postmodernity: the “impossible vision of totality” that “organizes history but is unrepresentable within it” (79); Dick’s mystical science fiction, and commentary upon it, are his attempt to do exactly this
cognitive work. The recourse to transcendent totality is required at the moment SF begins to wrangle history. Such a politically infused reading of the works of Philip K. Dick encourages us to take seriously the reading of Jameson’s student Carl Freedman, who writes:

Yet paranoia remains, I think, of all ideologies perhaps the most "reasonable" and the most nearly approximating to knowledge of capitalist society. If, as Ubik suggests, the hermeneutic of paranoia is finally doomed to failure, yet our social and psychic constitution as bourgeois subjects makes the temptation to such hermeneutic irresistible. If paranoia is an ideology, it nonetheless remains a stubbornly privileged one. And no modern writer—certainly none since Kafka—has fictionally produced that ideology more rigorously than Philip K. Dick. (22)

This is at least one sense in which Dick’s science fictions turn out to have “something important to say,” to paraphrase the pointed question asked by Radio Free Albemuth’s Nick Brady (13)—and the sense in which Kim Stanley Robinson can say that “Some people have said that VALIS and the last phase of Dick's work in general indicate that Dick was going crazy. I think it is something like the opposite: VALIS stands as a monument to a mind that had pulled itself back together, after struggling on the brink” (242).

In this way the unanswerable question of the “reality” or authenticity of Dick’s mystical experiences that has so preoccupied his critics for so long becomes for me quite secondary to the power of estrangement (whether science fictional, religious, pharmacological, or otherwise) to shed light on the real relations of power and domination that structure the world and to establish the possibility of competing,
alternative orders. I read Dick’s mad science fiction as a philosophical, critically resistant response to a world that has gone mad, a project that takes him far afield from traditional rationality into entirely new modes of experience—and invites us to come along. Dick’s version of science fiction, in a sense, rejects Western “science”/rationality in favor of a much wider conception of what is possible/thinkable; it is in this sense in which Carlo Pagetti declares Dick to be writing “meta-SF,” “SF about SF”—science fiction in which the status of both science and fiction, and thus the ultimate potentialities for thought as such, are up for grabs.

***

That Dick, the quintessential writer of SF, has so much in his science fiction that is explicitly nonscientific should encourage us to look for similar tensions across the genre. And in a way this is where we began: with the very troubled status of the “science” in “science fiction” that makes the genre so difficult to distinguish from fantasy, folklore, or myth. Perhaps China Miéville was right after all when he denounced SF’s pretensions to scientistic self-legitimation: “To the extent that SF claims to be based on “science,” and indeed on what is deemed “rationality,” it is based on capitalist modernity’s ideologically projected self-justification: not some abstract/ideal “science,” but capitalist science’s bullshit about itself” (240). It may be that we cannot hold onto the supposed “cognitive” component of Darko Suvin’s “cognitive estrangement” in anything but the most rhetorical sense—not cognition but a cognition effect, in Carl
Freedman’s terms, which is to say the “attitude of the text itself to the kinds of 
estrangements being performed” (Critical Theory 18) rather than any actually existing, 
reliable relationship to scientific knowledge.

What then distinguishes SF from other genres, if not “science”? One answer 
could well be “nothing”; this would again be the approach Jacques Derrida suggests in 
his well-known essay that shows “the law of genre” is as much “a law of impurity or a 
principle of contamination” as it is a system of reliable categorization (57); in this view 
the business of making firm definitions in pursuit of a genre’s “essence” at all becomes 
hopeless. But another approach might turn from the rhetoric that invokes (the fantasy 
of) “science” towards aesthetic form, and consider not the mode of cognition but the 
mode of reception that SF seems to engender. Here, I think, the religious valences we 
find in writers like Chiang and Dick turns out to be completely in line with how science 
fiction does its literary-artistic work.

In Metamorphoses of Science Fiction Darko Suvin wrote that this aesthetic 
category, the so-called “sense of wonder,” is a “superannuated slogan of much SF 
criticism due for a deserved retirement” (83). But perhaps an earlier generation of 
science fiction scholars were onto something when they identified the “sense of wonder” 
as the constitutive aesthetic quality of science fiction; as Istvan Csicsery-Ronay has 
recently noted we can see this central sense of wonder even in the titles of the pulp 
magazines in which science fiction was born: “Astounding, Amazing, Wonder Stories,
Thrilling, Startling, etc.—clearly indicate that the putative cognitive value of sf stories is more than counter-balanced by an affective power, to which, in fact, the scientific content is expected to submit” (“On the Grotesque in Science Fiction” 71).

Damon Knight, one of the first critics to use the term, defined the sense of wonder as prompting an experience of alterity: “some widening of the mind’s horizons, no matter in what direction—the landscape of another planet, or a corpuscle’s-eye view of an artery, or what it feels like to be in rapport with a cat” (12-13). But the most essential experience of the sense of wonder is the vertiginous experience of the cosmic, access to the incomprehensibly vast scale of the universe. Recall here Cornell Robu’s recasting of the “sense of wonder” as precisely the “pleasure in pain” of “the sublime,” a contention that science fiction is really about sublimity, about the drive to “think the infinite” itself (21-23): that is, totality.

Recalling Clarke’s claim that science fiction is a “consciousness-expanding drug,” in their Encyclopedia of Science Fiction John Clute and Peter Nicholls align this sublime experience of the sense of wonder with the mode of “conceptual breakthrough” that Thomas Kuhn called “paradigm shift” (254-257)—if we take this affinity with religious limit experience seriously, we might be tempted to translate this as “epiphany,” or “revelation.” As David Hartwell put it:

To say that science fiction is in essence a religious literature is an overstatement, but one that contains truth. SF is a uniquely modern incarnation of an ancient tradition: the tale of wonder. Tales of miracles, tales of great powers and consequences beyond the experience of people
In your neighborhood, tales of the gods who inhabit other worlds and
sometimes descend to visit ours, tales of humans traveling to the abode of
the gods, tales of the uncanny: all exist now as science fiction.

Science fiction’s appeal lies in combination of the rational, the
believable, with the miraculous. (66-67)

In his later work even Suvin himself begins to move in this direction in his criticism; one
of the final essays in his career-retrospective *Defined by a Hollow* is an explicit call for a
“a new value system, centred in liberation of labour and creativity,” that will function as
an materialist replacement for religion (in an evolutionary sense, standing in
relationship to religion “as lungs are to gills”) focusing on salvation in what Suvin
frequently calls the thisworldly, the here and now (481). Following Gramsci, and
echoing Freedman, Suvin repeatedly insists that an orientation towards utopia—“an
optimism of the will”—remains the necessary companion of “pessimism of the intellect”
(396, 485). We must, he says, have both. Facts, figures, and a cool appraisal of the
machines and mechanism of repression are not by themselves sufficient to craft a
politics—as much as these we need a “salvational doctrine for one and all” (call it
utopia) that kicks in before we die, not after. “Without it,” Suvin writes, “any liberatory
movement shall fail: no revolution without revelation” (499).

This encounter with sublimity undergirds all of the science fictions I have
discussed, from the apocalyptic sublime of early SF to the astronomical sublime of
NASA’s Blue Marble to even the “delightful horror” of zombie fiction. Science fiction’s
tendency towards totalizing perspectives in this way aspires to transcendence even of
the rules of the “science” that nominally governs and delimits the creation of science.
fictions, and trends in many cases towards the creation of sublime, quasi-religious cosmologies. In many of the texts I have dealt with we have seen science fiction explicitly threatening to flip over into mysticism, even perhaps a kind of explicit alternative to religion—Stapledon’s cosmic mythmaking, Asimov’s psychohistorians, and Atwood’s eco-religion being only the most obvious of many possible examples. We might think also of real-world religious practices in which science fiction has leapt across its genre and medium boundaries, like Scientology, or the UFO mythology of the Nation of Islam or the Heaven’s Gate suicides. We might even reconsider in this light the recent popularity of speculations about an imminent posthuman Singularity (what Ken MacLeod has called a “rapture of the nerds”) whose total transformation of history will entail (in futurist Ray Kurzweil’s formulation) both personal immortality and the resurrection of the dead.¹ Or, for that matter we might begin to consider as at least quasi-religious the practice of massive science fiction conventions like ComicCon, where science fiction fans gather (frequently in costume) to celebrate their shared love of the genre; or fan reenactments like Star Wars: Uncut, in which thousands of people collaborated to make a shot-by-shot remake of the first Star Wars movie fifteen seconds at a time, which grew out of a generation’s collective nostalgia for the play of reenacting the films as children; science fictional video games that allow players to insert themselves virtually into alternative worlds; or the many blogs and forums across the

¹ See the Kurzeil documentary Transcendent Man (2009).
Internet where devoted fans meet in private to pour over science fictional texts of all kinds and collectively distill their secrets.

The crucial irony is that the mode of knowledge generated in such practices is decidedly *un*scientific. In such works we can see the way the totalizing impulses of science fiction pushing it, at its limit, towards becoming something more than a literary genre; it becomes ethics, epistemology, ontology—even a secular alternative to divine revelation, a font of inner strength and consolation in a tragic world. This line of speculation might ultimately tempt us to amend Gary Westfahl’s bold declaration that “literary criticism made American science fiction great” (28-29); perhaps science fiction’s century-long project of collective exegesis, which began in the letter pages in the pulps, and continues to this day in a diverse global fandom of readers, writers, and ritual re-enactors, would be better described as a communion.
Works Cited


Avatar. Dir. James Cameron. Twentieth Century Fox, 2010. DVD.


Bady, Aaron. “@adamkotsko Exactly. And whereas "literature" is manifestly a giant heterogeneity of different things, each critical school recreates it in its own image. To the new critic, all lit is John Donne. To deconstructors, romantic poetry. New historicist, Shakespeare, etc”. July 2, 2011 11:44 AM. Tweet.


*Daybreakers.* Dir. Michael Spierig and Peter Spierig. Lionsgate, 2010. DVD.

*The Day the Earth Caught Fire.* Dir. Val Guest. Lionsgate, 2012. DVD.


Fido. Dir. Andrew Curie. Lions Gate Entertainment. 91 minutes. DVD.


*Giant*. Dr. George Stevens. Warner Home Video, 2005. DVD.


*An Inconvenient Truth*. Dir. Davis Guggenheim. Paramount, 2006. DVD.


368


*The Kingdom*. Dir. Peter Berg. U Studios, 2007. DVD.


Lovecraft, H.P. “At the Mountains of Madness” Parts I-III. Astounding Stories (February 1936-April 1936). Print.


*Planet of the Apes: The Legacy Collection*. Dir. Various. 20th Century Fox, 2006. DVD.


---. *Night of the Living Dead*. The Walter Reade Organization, 1968. 96 minutes. DVD.


*Shaun of the Dead.* Dir. Edgar Wright. Universal Pictures, 2005. 99 minutes. DVD.


Sheldon, Rebekah. “Occupy camps are the closest I’ve been to a post-apocalypse social form. Yet.” October 30, 2011, 10:31 AM. Tweet.


Silent Running. Dr. Douglas Trumball. Universal Studios, 2002. DVD.


---. “Assorted Jottings for a Possible Book about the Future.” Notebook. OS/B5.5.4. Olaf Stapledon Archive, U of Liverpool, Liverpool, UK.

---. “Charts for Last and First Men and Star Maker.” Charts. [N.d.] OS/I/1. Olaf Stapledon Archive, U of Liverpool, Liverpool, UK.

---. “Comparative Time Chart of Political, Constitutional, Literary, and Economic History in England and Also of Important Foreign Events.” [c. 1900] Notebook. OS/I/1/5. Olaf Stapledon Archive, U of Liverpool, Liverpool, UK.
---. *Darkness and the Light*. Amazon Digital Services, 1941. Kindle.

---. “Education for World Citizenship.” Lecture Notes. [c. 1940s]. OS/F7/1. Olaf Stapledon Archive, U of Liverpool, Liverpool, UK.


---. “*London Daily Mail* interview (July 1, 1937)”. Newspaper clipping. OS/I9/2. Olaf Stapledon Archive, U of Liverpool, Liverpool, UK.


---. Complete holograph manuscript of Star Maker. [N.d.] OS/B1/21/1. Olaf Stapledon Archive, U of Liverpool, Liverpool, UK.


---. “To All the Peoples of the Earth (Draft B).” [N.d.] Letter. OS/D1/18/1. Olaf Stapledon Archive, U of Liverpool, Liverpool, UK.


*WALL-E.* Dir. Andrew Stanton. Walt Disney Video, 2008. DVD.


---. “Man of the Year Million: A Scientific Forecast.” *Pall Mall Gazette* 57 (6 November 1893): 3


---. *Serenity*. Universal Pictures, 2005. DVD.


Biography

Gerry Canavan was born in Denville, New Jersey, on November 16, 1979. He attended Case Western Reserve University in Cleveland, Ohio, where he received his B.A. *summa cum laude* in English (with departmental honors) and Philosophy in 2002. He received an M.F.A. in creative writing from the University of North Carolina at Greensboro in 2004. Canavan was the recipient of a Jacob K. Javits Fellowship from 2002-2004, and received a James B. Duke Fellowship and an Anne T. and Robert M. Bass Fellowship for Undergraduate Instruction while in attendance at Duke. In 2011 he was an R.D. Mullen Research Fellow at the Eaton Collection at the University of California, Riverside.

Canavan is the co-editor of special issues of *Polygraph* (with Lisa Klarr and Ryan Vu) and *American Literature* (with Priscilla Wald) on “ecology and ideology” and “speculative fictions,” respectively. Portions of this dissertation have previously appeared in print as “‘We Are the Walking Dead’: Race, Time, and Survival in Zombie Narrative” (*Extrapolation*, 2010) and “Fighting a War You’ve Already Lost: Zombies and Zombis in Firefly and Dollhouse” (*Science Fiction Film and Television*, 2011). Another article, “Hope, but Not for Us: Ecological Science Fiction and the End of the World in Margaret Atwood’s *Oryx & Crake* and *The Year of the Flood*” is forthcoming in *Lit: Literature, Interpretation, Theory*. Beginning in Fall 2012, he will be an Associate Professor in the Department of English at Marquette University, teaching twentieth and twenty-first century literature.