ABSTRACT

HOPE, ROBYN. Bunker Discourse and Apocalyptic Fantasies. (Under the direction of Andrew Johnston)

This dissertation is an interrogation of the discursive formation I have termed "bunker discourse" and its constitutive role in apocalyptic and disaster preparation media. I expose the history of bunker discourse as well as its contemporary manifestations, while subjecting its narratives to crip, queer, feminist, and other cultural critiques. Bunker discourse is a fundamentally anti-relational understanding of threat and security, in which safe and unsafe entities must be separated from each other—physically, socially, and culturally. While the doomsday bunker is its unifying metaphor, this discourse extends far beyond the 'doomsday prepper' subculture and into popular media and design. Anti-relationality in the name of security has become the fundamental building block of our apocalyptic and post-apocalyptic fantasies, and its traces are found in everything from doomsday bunker designs to zombie films. This discursive formation constructs and enshrines an aggressive, patriarchal, white masculine identity; it further encourages antagonistic relationships with governments, the Other, and even with one's own body. Yet it is this very enshrinement that makes the apocalyptic fantasy appear not horrific but desirable, particularly to white American men who feel disenfranchised by modernity and inclusive politics. I demonstrate how this discourse emerged in the late 1960s through the collision of American cultural myths of masculinity and alienation in the wake of economic crisis, and how it appears in contemporary design trends and fiction. I conclude by introducing the outlines of a counter-narrative, which advocates for a more fluid, interconnected, and communally-minded approach to disaster and security.

Bunker Discourse and Apocalyptic Fantasies

by
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BIOGRAPHY

Robyn Hope is a Canadian critical media studies scholar with expertise in game studies and media history. Her research focuses on how digital games and other media, both historical and contemporary, shape discourse and the greater technocultural landscape. Her work incorporates intersectional criticism, drawing on feminist technoscience, queer theory, and crip theory. She has published in numerous edited volumes including *Feminism in Play* (2018) and *Real Life in Real Time: Live Streaming Culture* (2023), as well as contributing a video essay to Milena Droumeva's multimedia work, *Playthrough As Method* (2024). Her 2017 Master's thesis, *Play, performance, and participation: Boundary negotiation and Critical Role,* was one of the first scholarly works on actual play. She is also a strong supporter of research-creation projects, and has contributed artwork for the historical game *Nagasaki Kitty* (2022)

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TABLE OF CONTENTS

LIST OF FIGURES

INTRODUCTION

My interest in the apocalypse began with Peter Thiel. In 2016, an investigative reporter, Matt Nippert, discovered that the billionaire had purchased a 477-acre swath of New Zealand's South Island (O'Connell 2018). To ease the bureaucratic process of this purchase, Thiel had obtained New Zealand citizenship in 2011–despite having no immediate family in the country, and after spending only twelve days total on its soil. It was rumoured that Thiel wanted this land, halfway across the planet from his Silicon Valley home, for his doomsday bunker. This suspicion was partly confirmed when Thiel filed plans to begin construction on a "getaway lodge", and building plans leaked to the press.

Figure 1. Artist's rendering of Peter Thiel's proposed luxury bunker on the shores of Lake Wanaka. (Kengo Kuma & Associates, 2022)

While the purpose of this indulgence was only speculation, Thiel's "getaway lodge" does resemble a particularly luxurious doomsday bunker. The renderings depict two curved gashes in a New Zealand hillside, topped with artificial plant life. The design boasted living quarters for 24 people, a movie theatre, meditation pods, and a spa. It was an attempt to clothe the stomach-

churning excess of a billionaire estate in a bunker aesthetic, disguising its largesse with a mound of dirt. This camouflaging act did not fool local governments, who ordered the plans scrapped once it was determined that the estate would be an "eyesore", and that it would damage the protected lands Thiel had purchased.

I then learned that Thiel's plans were merely one example of a growing trend among billionaires. Reporter Evan Osnos interviewed a number of one-percenters about their own doomsday preparations. These wealthy interviewees—venture capitalists, investment bankers, and the founder of Reddit among them—spoke of the bunker boom as an open secret, and a popular topic of dinner conversation (Osnos 2017). Osnos even alleges the existence of private doomsday-themed Facebook groups with ultrarich memberships, where participants swap survival tips and anecdotes. Among the Silicon Valley elite, "New Zealand" had become a code word—a "wink wink, nudge nudge" that you were interested in prepping (Osnos 2017). New Zealand is attractive to wealthy preppers because it is a stable, English-speaking, predominantly white democracy, thousands of miles away from political tensions in Europe and the United States. That the end of the world has become a popular topic of conversation for the wealthy is remarkable, but even more remarkable are their prepping expenditures. These investments vary from laser eye surgery to the purchase of private, fortified islands (Osnos 2017).

This story fascinated me. Like many, I associated prepping with fringe conspiracy theories and apocalyptic cults. What did Peter Thiel and his ilk have in common with the bearded, backyard-bunker builders seen on National Geographic's Doomsday Preppers? What has convinced so many Silicon Valley billionaires that preparing for the end of the world is a solid investment?

I was asking myself these questions early in 2020, a heartbeat before the world's most recent brush with apocalypse in the form of the COVID-19 pandemic. Since then, the spectre of oncoming catastrophe has continued to looom large. At time of writing, the President of the United States has invited the world's richest man to disassemble many of the institutions that address disasters in the United States, including the Federal Emergency Management Agency (FEMA), the National Oceanic and Atmospheric Administration (NOAA), and the United States Agency for International Development (USAID). The very individuals who so often stoke fears of apocalyptic collapses in their rhetoric are dismantling the very infrastructure we have built to protect ourselves from disaster. Apocalyptic prophecy and apocalypse prevention do not dovetail as cleanly as one would expect, but the association between the rich and powerful and the apocalyptic imaginary has only become more relevant.

Whether it takes the form of nature-bound survivalism or Thiel's luxury bunker, prepping is not a purely practical activity (which is how it almost always sells itself—as 'common sense'). Rather, it is an indulgence in a very particular fantasy. When I read ethnographic accounts of preppers gearing up, running combat drills, and trading apocalyptic speculations, the practice reminded me of live-action roleplaying. Just like LARPers, preppers purchase costumes, build sets and props, and imagine their way into fantastical worlds. And just like LARPers, preppers construct imaginary narratives and cast themselves as the protagonists.

Of course, it would be premature to dismiss everything preppers do as indulgence in a fantasy. Not all disaster preparedness is impractical. If you live on a major fault line, keeping a month's stash of clean water and nonperishable food in your home is a reasonable precaution. Learning basic First Aid skills or CPR is eminently practical no matter where you live. There are some specialized prepper skills, like foraging or shelter-building, that are fun, useful, and may

lead to greater appreciation of your local biome. And, of course, larger conversations about disaster preparedness have rarely been more relevant in the United States.

However, the practicality of certain survivalist practices over others is not relevant to this dissertation. Instead, I argue here that apocalypse preppers distinguish themselves from the average practitioner of disaster preparation. This distinction is found in the way apocalypse preppers tailor their practices to adhere to a particular narrative of disaster and safety. It is a story that seems filled with internal contradiction unless it is examined *as* a story—as a place where decisions are not made to fulfill a practical need, but to satisfy the demands of a broader cultural narrative.

By necessity, this story carries certain implications and relies on certain assumptions. Namely, it establishes that the vast majority of humanity is doomed, and that the burden of recreating society will rest on the shoulders of a chosen few. Preppers elect themselves as members of this chosen few, often tailoring their picture of the post-apocalypse to best suit their skills and resources (Mitchell 2002). They will also argue that the only qualification for being saved is adequate preparation and resources. No religious practices are required; anyone can make themselves the hero of the post-apocalyptic narrative if they invest in the right skills and equipment.

Beneath the surface, however, this ‘anyone’ is still a qualified ‘anyone.’ In order to be properly prepared, the protagonist must achieve complete, self-sustaining independence from society and its networks. This requires a certain amount of starting income, access to resources and technology, able-bodiedness, and a willingness to engage in violence. While there are preppers of different races, classes, and genders, the bulk of media produced for preppers assumes a white heteromasculine subject position (Kelly 2020). Most bunker advertisements

target the patriarch of a nuclear family: ”protecting you and your children” is almost always touted as the foremost reason to invest in a bunker. Furthermore, despite presenting prepping as something “anyone can do,” preppers still describe themselves as members of an exclusive club or small minority. This paradox—that prepping is both accessible and exclusive—allows individuals with the required income and ability to initiate themselves into the select group of post-apocalyptic survivors.

Just as the protagonists of this narrative are subtly coded, so, too, are the antagonists. The bunker narrative is by its nature a narrative of segregation, pitting the chosen few against a mass of enemies at the gates. Prepper media is surprisingly consistent in the assumption that roving gangs of marauders will emerge regardless of the cause or conditions of the apocalypse. To the prepper, the greatest threat comes not from nuclear wars or zombie viruses, but from other survivors. Just as the protagonist in the post-apocalypse is subtly coded as a patriarch, these human adversaries are also subtly coded. In some cases they are referred to as merely “unprepared”, meaning those who become a threat specifically because of their lack of resources. This classist coding exists hand in hand with racialized language—usually terms that call to mind damaging stereotypes without speaking them aloud, such as “enemies of America” or even “refugees”. The cultural logic of the bunker, with its central purpose of keeping an encroaching threat from infiltrating a safe haven, assumes that inflicting violence on this Other is not only reasonable, but necessary.

I found many iterations of this narrative in survival guides and marketing material for prepper gear, but this story is bigger than the prepper subculture—how else would it have reached Silicon Valley? I subsequently noticed that the post-apocalyptic settings of popular fiction rest on the same narrative building blocks as prepper nonfiction: they imagine the

complete eradication of government and rule of law, and they centre on a small group of survivors entitled to use violence against a distinct Other. In the case of my own specialty—video games—the player often takes on the role of a singular survivor and enacts this violence themselves. In other words, whether the producers of a piece of apocalyptic media believe they are writing fiction or nonfiction, they imagine the end of the world in a similar way. Violence is a persistent theme in both prepper culture and post-apocalyptic fiction. The enduring popularity of the zombie apocalypse genre is a testament to the pervasiveness of these themes. Violence is not only an ethically permissible way of dealing with the zombie: it is the *only* way of dealing with a zombie. The zombie is an idealized less-than-human Other, a guilt-free target of violence for the post-apocalyptic survivalist. The prevalence of such synergies across fictional and 'non-fictional' apocalyptic media convinced me to undertake the primary goal of this dissertation: to expose the fundamental set of rules and assumptions that our contemporary visions of apocalyptic crisis share.

As my research progressed, I became increasingly critical of the underlying structure of the apocalyptic imaginary: I believe it is in dire need of scrutiny and criticism. It enshrines the white, neoliberal, middle-class nuclear family at the direct expense of all manner of others: people with disabilities who cannot survive without care; queer people who do not bend in service to the project of heterosexual reproduction; and the refugees, people of colour, and working-class urbanites who are often cast as the marauding antagonists. This structure encourages antisocial architecture, behaviours, and technologies. It assumes violence is the "default" means of human interaction, despite sociological evidence to the contrary. It is skeptical of democracy and dismissive of community. It is much more apathetic to disaster than

it appears; rather than taking steps to prevent disaster, it is an ideology that would rather let it run rampant. It prefers—even desires—to scrap the world and start again.

This is why I have dubbed this underlying set of assumptions *bunker discourse***.** Literally speaking, bunkers are common without being completely omnipresent in this discourse. Instead, I consider the bunker to be a unifying *metaphor,* the symbol around which the entire narrative turns. Even without a physical bunker, the prepper still divides themselves from the world, hoping that a disaster will wipe the slate clean and allow the select few to survive. In selecting this term, I am taking inspiration from Paul Edwards' 'closed world' discourse, which illustrates a metaphorical way of understanding the world that structured the Cold War. Following this example, I propose that bunker discourse is the key metaphor for understanding the future proposed by doomsday merchants, preppers, billionaires and fictional worlds alike. Thus, there are two major purposes for this dissertation. The first is to document the scope, preconditions and implications of this narrative. The second is to interrogate the way this narrative enshrines current hegemony, using the tools of crip, queer, feminist, and indigenous futurities.

Media Archaeology

The scholarly literature that provides the backbone for this dissertation comes in two parts. The first, media archaeology, is a methodological approach to gathering material; the second is a combination of critical cultural theories drawn from many sources–crip futurity, feminist technoscience, indigenous thought, and anti-colonial critique. These critical cultural texts provide a method of evaluating that material.

Foucault's initial sketches of media archaeology emerged from a skepticism towards the human tendency to artificially create unities (of genre, authorship, or oeuvre) in retrospect. One

way Foucault frames this is as a rejection of the idea of historical origins: he distrusts the practice of tracing every historical moment to some continuously deferred source in the distant past. Instead, Foucault's archaeologies concern themselves with the immediate conditions for the emergence of particular discourses – not completely doing away with the idea of historical cause and effect, but resisting the temptation to narrativize where it does not apply, and instead taking historical 'snapshots' of particular moments. While media archaeology has changed since Foucault, the forced disruption of our tendency to narrativize is still claimed by contemporary media archaeologists to be one of the major benefits of the method. Instead of seeking out narratives, media archaeology involves scrutinizing a broad contemporary archive for ruptures and consistencies in discourse. Kittler's archival study of the phonograph, for example, comprises everything from short fiction to Freudian psychotherapy texts. An archive of modern bunker discourse should be similarly comprehensive. My 'snapshot' incorporates media of the past fifty years[1]. Apocalypse prepper subculture has, like many subcultures, moved online. Alongside survivalist texts (largely books and newsletters) that predate the public use of the internet, hobbyists, survival gurus, businessmen and curious reporters have all produced websites, discussion threads, YouTube tutorials and interviews for the archivist to comb through.

However, this conventional understanding of the archive—'all that can be said' on the topic—may be inadequate when it comes to studying bunkers specifically, and media more generally. The focus on media and the conditions of their existence led media archaeologists to reach beyond the "seeable and the sayable" of discourse and into the materiality of media

[1] Some might expect bunker discourse to have emerged in the 1950s, during the first nuclear decade. As I will explain in Chapter 1, I believe that there is a significant difference in the discourse of the 1950s and the late 1960s and onward. The fifty-year span I am loosely pinning down as the heyday of bunker discourse is 1970 to the modern day.

artefacts. What the bunker expresses comes not just from what is said about it, but also from its material dimensions. As this dissertation will argue, there is significance in the bunker's position underground, in its replication of the suburban home, and in its reinforced doors. There is also significance in the way people are taught to or expected to interact with the bunker—to store valuables inside it, to inhabit it for an extended period of time, to leave it to confront assailants. The material, symbolic, and use- or practice-based elements of media are often deeply intertwined, and as a whole, they are referred to as cultural techniques (Siegert 2011). Cultural techniques do not simply represent culture and epistemic orders, but rather *produce* subjects and their epistemological conditions. Bunker discourse is quite an illuminating example of how this process of subject formation works: the world has not ended (at time of writing), and so the 'prepared man' is a subject position created entirely by the media he purchases, possesses, or interacts with. Most importantly, the prepared man possesses a secure space to which he and his family can retreat, and this space is typically a fortified version of the suburban home.

With the significance of this space in mind, this work follows several landmark media archaeologies on the topic of the private sphere. The spaces we inhabit are among those arrangements of media that create certain subject positions, and so expressions of identity often involve claiming, decorating, stocking, organizing, and managing space. Lynn Spigel's *Make Room for TV* is one such work, as it examines how domestic space transformed to accommodate a particular media technology, partly as a "catalyst for renewed domestic values" during a time of intensifying pressure to conform to heteronormative, nuclear family structures (Spigel 2, 1992). Bunker architects have a tendency to replicate the suburban middle-class home as closely as possible, meaning they may also be replicating many of the normative tendencies observed by Spigel. Another useful work comes from Paul Preciado, who discusses how *Playboy's*

construction of the "indoor man" carved out a masculine space in the domestic sphere. In fact, before the identity of the "indoor man" could exist at all, he needed a suitable habitat. *Playboy,* with its surprising focus on interior design and architecture, carved out a place in culture for this man through the invention of the bachelor pad, an architectural and mediated locale that fostered his identity. Similarly, the bunker recaptures domestic space for the resourceful, protective father figure. The bunker transforms the home into a fortification, which must be guarded and patrolled by a powerful patriarch to ensure the safety of the family. By designing itself purely around the address of violent threat, the bunker invites inhabitants who are equally defined by their role in "defending against" this threat by administering violence against the Other.

However, this invocation of violent catastrophe ensures that the bunker will not be a purely domestic space, but will instead be a space lanced through by public politics. Large-scale catastrophes, such as natural disasters, cause a collapse of the public and private spheres: disaster refugees become public charges, burnt or flooded private homes become examples of failed public infrastructure. James Rhodes argues that Hurricane Katrina forced the poor, black, hyper-ghettoized population of New Orleans out of their private neighbourhoods and into the public sphere, and thus "fears of black criminality" characterized the government response to Katrina (2010, 2056). Bunkers operate in a space of public and private collapse, even if their disasters are in the future tense. They are private installations designed to protect inhabitants from potential public threats —and, as with Katrina, these predictions often stoke fears of black and brown criminality. On its website, The VIVOS Global Shelter Network offers "Holy War" in the Middle East and "Immigration Invasion" at the US/Mexico border as potentially apocalyptic threats. Bunkers are private spaces as much as public, politically inflected statements about sovereignty and safety.

Given this context I also find Shannon Mattern's media archaeologies useful, as she has explored the materiality of both public and private media environments and how they intersect. Some examples include the "defensive" public spaces built with and around plexiglass (Mattern 2020) and "underground repositories" used to store media technologies and other information (Mattern 2018b). The latter is particularly interesting, as the bunker is not only a private space: it is also a storage technology. Theorists like Mattern, Zoe Sofia, and Craig Robertson have argued that containers, as invisible as they often are, are not neutral technologies (Mattern 2018b, Sofia 2000, Robertson 2023). Containers themselves often have meaning *beyond* the meaning of what they contain. Sofia critiques how artifacts of containment and supply are normally perceived as passive and feminine (2000); Robertson similarly demonstrates how piles of paper have been used to express authority through their height, rather than their contents (2023). Nicholas Taylor's work brings these two threads together, looking at gaming setups in domestic spaces and focusing on how cables, controllers, and consoles are displayed or stored, and identifying different storage methods as expressions of different masculinities and means of spatial ownership (Taylor 2024). With their built-in implication that all outside their walls will soon be destroyed, doomsday bunkers make statements about what is worth containing and thus preserving. To place something in a bunker is not only to deem it culturally sacred, but also to characterize it as a thing under threat. In other words, bunker discourse broadly claims that it is the middle-class white American family that is in danger, and that must be preserved.

In some sociological looks at survivalism, there is considerable concern directed towards discovering the "real" survivalists–the people at the core of the practice, and their truest motivations for their actions[2]. Mitchell argues that the survivalists he interviewed were very

[2] Academics of all stripes have been enchanted by the survivalist and prepper movements for decades. Alongside sociologists like Garrett and Mitchell, who express this interest through ethnographies from "outside", researchers

different from their media depictions (he calls this the "Huberty problem", after James Huberty, a survivalist who massacred 21 people and injured 19 more at a McDonald's in 1984; 2002). His first interviewee, a self-declared racist and white supremacist going by the name Nixon, was in Mitchell's eyes not really interested in white supremacy but rather in "storytelling" (Mitchell 2002, 20); Mitchell further cautions against the "ungrounded" depictions of survivalism in the media and advertising (Mitchell 2002, 16). These distinctions between "real" survivalists and their representations in the media, between their words and their "real" meanings, and between their "real" practices and the products that target them, are immaterial to the media archaeologist. Representations, products, speeches, shared practices and political narratives, and fiction are all equally real components of bunker discourse. The media archaeologist would not hear a survivalist's white supremacist conspiracies and try to determine their secret social function; rather, I take these mentions of white supremacy as they are, and I try to understand what might make white supremacy viable, even common, in discussions about the end of the world.

The significant political implications of bunker discourse make the deployment of my secondary methods invaluable. I plan to analyze and critique the assumptions of bunker discourse as they are expressed in apocalyptic cultural techniques via different critical concepts of futurity. My idea to interrogate futurity in this way began with Alison Kafer's *Feminist, Queer, Crip.* Kafer's book primarily uses the lens of crip theory to critique our ableist pictures of the future. However, in her introduction—even in the book's title—Kafer emphasizes that her method cannot be extracted from her background in queer and feminist theories. She advocates for both theoretical and political coalition-building across groups in a way that still maintains and

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often cross into prepper subcultures. Bruce D. Clayton, one of the "canonical" survivalists of the 1980s, has a doctorate in ecology. I suspect that delving deeply into subfields like politics and ecology—and confronting the astronomical problems facing us in those areas—would make the fantasy of survival despite it all even more compelling

acknowledges difference. Intersectional approaches are always valuable. What makes Kafer's work relevant here is its orientation toward the way imagined futures address these different groups. Minoritized populations are often "imagined out" of the future, but this erasure is accomplished in different ways for different people. As such, a thorough critique of imaginary futures requires a variety of approaches, relying on everything from feminist technoscience to queer negativity to crip futurity. Queer and crip critiques of futurity form an important through line in this dissertation, which is worth briefly elaborating on here.

At the outset, popular understandings of disability and queerness position them as ways of existing that are *against* the future. Because queerness is often by nature divorced from the possibility of heterosexual reproduction, it stands in symbolic opposition to it, marking an "end" to the future as symbolized by the child (Edelman 2004). Similarly, Kafer recounts how disabled bodies are often seen as problems to be solved by advances in medicine – that we will not be in "the future" until all disability is "cured". She also relates particular stories of disabled bodies – of young men who have been paralyzed by gunshot wounds in Chicago, to use her example – that are considered to have "no future". As they grew up in a dangerous neighbourhood, these bodies were treated as 'marked for death' even before their wounding. In essence, our bodies are expected to adhere to our ideas of "straight time" – they develop at a normative rate, and hit certain milestones (marriage, heterosexual reproduction) at predictable moments, and disabled and/or queer bodies disrupt this understanding of time as a straight and forward progression to the future (Kafer 2013).

In this context, technologies often act as means of enforcing the able-bodied and the heteronormative. Medical technologies in particular are often tasked with the burden of "curing" disability or of "straightening out" the queer. Technologies keep (straight) time – stopwatches,

calendars, atomic clocks. Alongside technologies which are explicitly designed to bring the body in line with normativity and/or normative time, there are technologies that reinforce normalization as a side effect of their use. Preciado points to the photograph as a key tool for the pathologization of gender: photographs were often taken of intersex bodies for the purpose of medical research (Preciado 2008). Similarly, the implementation of new technologies is often justified through reference to the disabled lives that might be improved by it. It is a terribly tempting axiom for every Silicon-Valley startup trying to convince itself that it is pursuing a fundamentally ethical project. This is just one of many manifestations of the idea that in order to get to the future, disability must be "solved", either cured by medicine or mitigated by their technologies. The self-driving car will be a gift to those with impaired mobility–so long as they can afford it, and regardless of the disabled bodies it may create elsewhere through high-speed collisions or the industrial-scale recycling of its toxic batteries. Bunkers are no different. Their structures often make implicit assumptions about the bodily ability of their inhabitants; their symbolic entanglement with the womb and the "rebirth" of society, as well as their tendency to mimic American suburbia, make them bastions of heterosexual normativity.

However, this is only part of what queer and crip theories of futurity offer us, as their theorists argue that technologies can be assistive and creative rather than limiting. Margrit Shildrick and Barbara Gibson, in two separate articles, articulate the disabled relationship with technology as one that can potentially redefine broader human experience. We tend to see the human subject as an independent actor, and thus we valorize activities and pursuits that make us more independent. This is the fundamental appeal of bunker discourse: preparing oneself for the apocalypse requires making oneself self-sufficient, able to survive completely independent of society's social and material infrastructures. However, as we will examine throughout this

dissertation, this appeal is also a mirage. Every human life is entangled in a web of interdependencies, and disability in particular makes our dependency on technology explicit. Shildrick, drawing on Deleuze and Guattari, sees the disabled body –and how it interacts with assistive technologies like animals, wheelchairs, and other bodies– as exemplary of an ethics of interdependence, through which we can come to valourize cooperation and care over "regaining" an independence we never truly possessed in the first place. Thus the most utopic future I found was one that imagines a tectonic shift in our ethical framework.

I contend that stories that imagine a specific future influence the technologies we devise to meet that future. In the imaginary apocalypses of bunker discourse, where one's value is determined by one's practical utility, the 'value' of people with disabilities is naturally called into question. Queerness meets the same fate: if the human race is in danger of extinction, heterosexual reproduction becomes part of that utility, and queerness becomes an inhibitor. However, the apocalypses we have come to know are not the only way to imagine the future–nor even the only way to imagine or understand catastrophe. Is it possible, then, to create a counter-narrative? This narrative would, following the example of Shildrick, Gibson, and Kafer, reposition cooperation as valuable, and reject the idea of measuring humanity for its utility. In the conclusion of this dissertation, I will explore some of these alternatives by drawing on the critical futurities of North American Indigenous groups. Indigenous North Americans have a much less speculative relationship with apocalyptic conditions, as the ravages of settler-colonialism are an indisputable part of Indigenous experience. Because of this history, Indigenous art and Indigenous speculative fiction approach catastrophe and survival not with a desire to validate the standing regime, but from a position of experience, understanding, and post-apocalyptic flourishing.

Bunker Discourse

As aforementioned, the structure of my media archaeological analysis is indebted to Paul Edwards' model of "closed world discourse". Edwards argues that the popular understanding of earth as a 'closed world'–a "limited system" that could be divided into claimable territories each "subjected to technological management"–motivated the conduct of the Cold War and the design of its computer technologies (1997, 7). The worlds of communism and capitalism could thus be 'contained'. Because the weapons of the Cold War were too destructive to deploy, simulations became the terrain on which the war was fought, and computer technology became crucial in assembling, calculating, and reasserting the power of both sides (particularly the power of the United States). Computer software and hardware were instrumental in everything from early-warning systems to the conduct of proxy wars; they were technologies developed to facilitate containment. Edwards' work is useful for this dissertation for a number of reasons. Firstly, it supports the assertion that discourses of futurity lead to the development of technologies designed to approach that future. American political and military authorities in the Cold War feared the future where the USSR launched nuclear warheads, and the technologies they built were meant to predict, track, and outgun this hypothetical arsenal. The arms and technology races of the Cold War are perfect examples of how imagined futures and actual technologies are inextricably intertwined. The primary cue I take from Edwards' work, however, is a methodological one. Edwards's work is centralized around a singular metaphor that represents an outlook on the world–or, more accurately, Edwards argues that this idea of the 'closed world' *produced,* quite literally, the cultural techniques and technologies of the Cold War. Edwards also looks for the 'closed world' metaphor primarily in military defense and technology programs, but also acknowledges its prevalence in pop culture and politics.

Similarly, the metaphor of the bunker unifies my media archeology of our post-apocalyptic disaster imaginary and disaster media. The bunker represents safety achieved through segregation. It also suggests, in the way that it replicates the structure of the suburban home, that the nuclear family is society's smallest individual building block, and that each nuclear family should be able to function independently of all others, as if each family is an indivisible atom in the complex molecule of culture. This understanding produces literal bunkers, but it also produces related technologies, popular media objects, and subjects of the apocalyptic imaginary. It is very possible to identify technologies that are not bunkers that still adhere to the cultural logic of the bunker. The pseudoscience of cryogenic freezing is, for example, bunker logic applied to the body. Cryogenic freezing aspires to isolate one's body from the ravages of time and exposure until it can be 'fixed'. DNA vaults serve a similar purpose by promising to preserve a biological imprint of the self–a type of survival assured through the existence of one's genetic descendants.

It is vitally important to understand the bunker discourse metaphor is inherently compromised, built on a ground of internal contradiction and fallacy. Its fundamental assumptions collapse under the barest scrutiny. As such, bunker discourse *requires* a significant refusal of other systems of knowledge. This refusal has two effects. On the one hand, it means that bunker discourse reproduces the same fallacies across much of its output in technology and culture. The same paradoxes that sit at the heart of a survivalist manual from 1979 are also found in post-apocalyptic digital games from 2015. Conversely, its flaws also mean that bunker discourse has a tendency to bump headfirst into its flaws and, in doing so, contradict itself. For example, survivalist Bruce Clayton noted how survivalist families often wanted to band together and form communities, but almost universally could not find other survivalists they trusted

(2002). They recognized that survival would be easier in a larger group, but as survivalism also preaches suspicion and hostility, they were incapable of building community. Internal contradictions like this will be common in the bunker media to come.

At the heart of bunker discourse is a refusal of relationality–a refusal to think of oneself as imbricated in complex, co-constitutive relations with other living and nonliving beings in the world. This refusal has been observed in contemporary culture more broadly, particularly in postcolonial nations, and a number of scholars have noticed how this refusal is both a defense mechanism against disaster, a refusal to engage with disaster, *and* a potential foundation for further violence. Refusal of relation to the Other is the foundation of what Mbembe calls the society of enmity–a society in which all relations with the Other are imagined as inevitably antagonistic (2019). Andrew Szasz argues that the 'green' products sold under neoliberal capitalism, such as air filters or organic food, prevent engagement with environmental issues on any level beyond that of the individual purchase, thus acting as replacements for collective political action (2007). Michael Barkun discusses the conflation of immigrants with disease and chemical weaponry in American national security policy and discourse; through these conflations with such "invisible dangers", it becomes unsafe to even be in proximity to the Other (2011). Sarah Sharma has observed this antirelational tendency in what she calls masculine fantasies of exit. Sharma argues that patriarchal privilege allows men to remove themselves from their imbrication with greater society–but only through reliance on the labour of women, people of colour, and underclass labour (2017). From these examples, we can see that the fears and desires stoked by propaganda, inequality, and colonial capital push the subject toward antirelationality. Through invocations of terrorism, environmental disaster, plague and war, these fears and desires are also deeply tied to our understanding of catastrophe. Bunker discourse

encompasses any space where this relationship between catastrophe and antirelationality becomes explicit. In other words, bunker discourse is *the address of catastrophe through antirelational imagination and practice.* Catastrophe, particularly apocalyptic-level catastrophes, are trotted out as justifications to engage in bunker discourse's thoroughly antirelational ideas and media products. Security, bunker discourse argues, is best achieved by cutting off one's poisonous, threatening relations–to the Other, to global capitalism, and to local community and environment–until one's family can sustain itself without any risk of interdependence.

The paradox of this position is, of course, that complete antirelationality is impossible. This is an untenable position from its outset. Even the most self-sufficient prepper is dependent on technology, the knowledge of others, and the land and property around him. Therefore, the antirelationality of bunker discourse is often in tension with the practical demands of survival. This often results in a type of post-apocalyptic fantasy where one can freely engage or disengage in relations as they desire, like options on a taskbar.

I arrived at this conclusion, with considerable help from my advisor, near the end of my writing process. For the vast majority of my research, I was instead focused on pursuing and documenting a number of patterns that I identified across post-apocalyptic media. Only at the end of this process did I realize that each of these patterns are symptoms of the refusal of relationality that lies at the heart of bunker discourse. I believe it will be helpful to catalogue these symptoms here, as they are more concrete examples of how antirelationality can manifest in disaster planning and apocalyptic media.

But first, what are these apocalyptic media? I cast a wide net in the course of my research in response to this question, incorporating information from a broad variety of apocalyptic sources. I referenced sociological studies of survivalists, preppers, and bunker-builders (Mitchell

2002, Garret 2020, Kelly 2020). I documented the websites of various bunker landlords, particularly the VIVOS Global Shelter Group, Oppidum, Atlas Survival Shelters, and Fortitude Ranch. Many of these websites come with floor plans of their bunkers, photography, and other self-made diagrams, which I included in my archive. I signed up for an email newsletter from The Skilled Survivalist, also known as "Just-in-Case Jack". I read magazines and online publications intended for preppers, and watched a number of prepper-influencer YouTube channels. Lastly, I played or replayed the three video games that exemplified the bunker narrative in my mind; *Far Cry: New Dawn*, *Horizon: Zero Dawn*, and *Fallout 4.* A considerable amount of this archival work is not present in this dissertation, but it was often valuable as supplementary evidence (and personal reassurance) that the claims in this work are sound.

It was from these examples that I synthesized this non-exhaustive list of symptoms of antirelationality:

- **Binary thinking.** Bunker discourse is characterized by black-and-white zero-sum thinking and often divides the world into oversimplified binaries. This is best demonstrated by the storage logic of the bunker itself. The bunker suggests an absolute division between what is safe and unsafe, and maintains this division with blast doors, air filters, surveillance equipment and patrolled perimeters. This stems from antirelationality in that only permits two kinds of relationships: friend or foe.
- **Self-Reliance.** Bunker discourse valourizes aggression, self-reliance, and the independent will. It understands these as moral traits, stating often and explicitly that a lack of preparedness is tantamount to an ethical shortcoming. This is the ultimate desire of antirelational practice: to achieve complete independence.

- **Reinforcement of structures of domination:** The overwhelming majority of apocalyptic media address a white, able-bodied, middle-class, cis-hetero-masculine subject. Casey Ryan Kelly argues that white masculinity may position itself as embattled, under attack by civil rights, queer visibility, and other projects of equity and social justice. Again, this is symptomatic–and perhaps cyclical causal–of a refusal of relationality. This misperception of the cultural power of white masculinity requires a refusal to sympathize with, or even *learn about*, other diverse groups.
- **Demonization of the Other.** As an extension of the previous point, bunker discourse is prone to villainizing and dehumanizing the Other. This process may involve coded language and racist dogwhistles or explicit white supremacist propaganda. On a more general level, bunker discourse also tends to promote the idea that humans are inherently violent and will revert to violence in apocalyptic situations.
- **Infrastructural illiteracy.** In general, bunker discourse requires a certain level of misunderstanding of social, political, economic, and physical infrastructure. This manifests in a number of ways, from conspiracy theories to mistrust of governments to oversimplifications of global economics. Infrastructural illiteracy is one of the necessary logical shortcomings on which the post-apocalyptic imaginary is built. Infrastructural illiteracy is an important concept to explain in depth, which will be accomplished in the section below.

In summary, bunker discourse pictures modern society as complex, sinister, oppositional and fragile. It desires a simpler society where one can pick and choose one's relations, and argues for this society's inevitability by imagining apocalyptic events that could bring it forth. This society would draw clear lines between protagonists and antagonists (and would dispense with all the

complexities of identity politics) in order to restore the value of the white male subject position. This attractive oversimplification of life, society, and morality may explain why many preppers do not dread the apocalypse, but rather seem delighted by the prospect (Mitchell 2002, Garrett 2020, Kelly 2020).

Infrastructural Illiteracy

While some of the concepts described above are straightforward, that of infrastructural illiteracy and its relationship to structural inequality requires some additional explanation. Infrastructures are difficult objects of study, notable for their layered, heterogeneous compositions. They are the grounds upon which other technologies operate—the material and social relationships that facilitate the transfer of goods, information, resources, etcetera. The technical elements of infrastructure are of great interest to media studies and anthropology, but their symbolic functions are equally significant. Importantly, Larkin argues against the popular wisdom that infrastructure is only visible when it breaks down—positing instead that the (in)visibility of infrastructure is one of its negotiated symbolic properties (2013). Whether an infrastructural project is noticed, trumpeted, obfuscated or neglected is often related to its symbolic weight. Infrastructures are often interrelated, nested within each other, or superimposed, such as how all digital infrastructures are by nature dependent on power generation and electrical infrastructures. Therefore, any discussion of a "specific" infrastructural assemblage requires an excision—prioritizing a certain arrangement of actors, gauging its level of "invisibility", and acknowledging that this arrangement is connected to other arrangements beyond the scope of the analysis. And beyond this, there are dozens of approaches to analyzing one arrangement.

In short, infrastructure is endlessly complex and easy to misinterpret; as a result, everyone in modernity struggles with a degree of what we might call *infrastructural illiteracy*. Infrastructural illiteracy refers to the inability to grasp the complexities of contemporary infrastructure, and this definition is intentionally broad. For instance, infrastructural illiteracy could be either innocent or intentional: no one person could understand every function of modern infrastructure, but someone might also intentionally oversimplify the workings of infrastructure to preserve a particular worldview, make a political argument, or advance an agenda. As an example, I discuss the influence of economic conspiracy on bunker discourse in the first chapter. These conspiracies require misunderstandings of specific elements of the American economy, such as mistaking the role of the Federal Reserve, but they also reflect a broader failure to understand the free-market economy *as an infrastructure*, in which the mechanisms of ownership, wealth, stock trading and regulatory slack all assist in directing capital toward the upper class. This failure of comprehension can be seen in the tendency of bunker discourse to embrace conspiracy theories that attribute the operation of economic infrastructure to a group of secretive, all-powerful individuals. These conspiracy theories reflect an inability to grasp the roles of non-human agents in facilitating the flow of power, and this is perhaps the signature fallacy of infrastructural illiteracy: the assumption that the impact of any system, economic or otherwise, must be the product of human intention, rather than the effects of non-human agents or arrangements.

Before this definition becomes too derisive, it is important to reiterate that we *all* have a certain degree of infrastructural illiteracy: the sheer complexity of modernity makes this inevitable. Alongside the acknowledgement that our infrastructures are so massive, global, complex, and interconnected that no one person could ever hope to grasp them all, our

subjugation to the operations of power and capital makes infrastructure uniquely alienating. It is difficult to contemplate something like the amount of data transferred through the internet in one day, or the amount of fiber-optic cable used to connect all the houses in North America, without feeling insignificant and vulnerable. Our greatest infrastructural achievements—the nexuses of power, water, population and goods that are our urban centres—are also symbols of loneliness and conformity. This is apparently even true in operations that attempt to subvert infrastructures of power: research has found that cybercrime, once characterized as an anarchic, anti-establishment practice, has begun to organize around illicit digital infrastructures that require tedious administration and maintenance. As a result, cybercrime can now produce the same feeling of alienation as corporate labour (Collier et al. 2021). At the same time, the extent of our interdependence can make these systems seem incredibly fragile. When a single cargo ship, the "Ever Given", was lodged sideways in the Suez Canal for less than a week, the cost to global markets was astronomical–somewhere between 6 billion and 10 billion USD (Russon 2021).

With the universality of infrastructural illiteracy in mind, the key insight offered here is found in how a person or group *responds* to transformations in infrastructure. In the case of a crisis–even a purely economic one, like the grounding of the Ever Given–it may be tempting to catastrophize. When our infrastructures reveal themselves to be simultaneously so massive and so vulnerable, it may feel perfectly logical to anticipate their collapse on an apocalyptic scale. In truth, such a collapse is both logistically unlikely and historically unprecedented (McAnany and Yoffee 2010). While this is not necessarily common knowledge, the fear of global infrastructural collapse can be dispelled with some historical research and pattern recognition. In brief, the complete societal implosion envisioned by bunker discourse is almost completely unprecedented; even significant disasters are more likely to result in social reorganization rather than collapse.

Historically, natural, economic, or climatological disasters more often led to reorganizations of power rather than the collapse of social order. “Human resilience,” note anthropologists Patricia McAnany and Norman Yoffee, “is the rule rather than the exception” (11, 2010). Conversely, bunker discourse *depends on* the willful, unquestioned acceptance of this particular type of infrastructural illiteracy. In order for the bunker discourse fantasy of complete societal collapse to seem feasible, the idea that all political and economic infrastructure could fail simultaneously must be accepted, regardless of plausibility.

Additionally, it is vital to underline the role of infrastructural illiteracy in the way that bunker discourse misunderstands structural inequality. As I will argue later, bunker discourse valourizes a strain of white masculinity that argues, contrary to all evidence, that white men have become a disadvantaged category as a result of the social progress of women and ethnic minorities. It is difficult to make this argument if one has even a passing familiarity with the ways that inequality can be literally built into infrastructure (Graham and Marvin 2001, Rodgers and O’Neill 2012). American highways–the most dangerous highways on the planet–often divide white suburbs from black neighbourhoods, and present significantly more danger to pedestrians than to those who can afford to travel by car (Graham and Marvin 2001, Kimble 2024). American political, judicial and economic infrastructures have created multiple systems that are instrumental in sustaining white supremacy–redlining, gerrymandering, and mass incarceration. Bunker discourse must broadly refuse to recognize the existence of this kind of systemic discrimination, as it would undercut the idea of white male victimhood. This is the primary way infrastructural illiteracy and systemic inequality are connected, but there are others. For instance, overestimation of the importance of human agency in an infrastructural system can also lead the infrastructurally illiterate to invent a system of human control where none exists–in other words,

infrastructural illiteracy breeds conspiracy, which often targets undesirable Others. For example, neoliberal capitalism, when left to operate unfettered, tends to exacerbate economic inequality. This explanation is too wishy-washy for some, and as a result, they may turn to conspiracy theories and allege that Jewish elites control the flow of capital. The infrastructural illiteracy of bunker discourse also extends to historical illiteracy, as it often misunderstands how historical patterns of discrimination remain relevant to our contemporary condition—for example, infrastructural illiteracy may manifest as denying the ongoing impact of slavery and institutionalized racism on American culture, economics, and social justice.

Ultimately, even beyond the subject of bunker discourse, a certain degree of infrastructural illiteracy is *a necessary prerequisite* of any discursive system that refuses to acknowledge structural inequality. In fact, these two features of bunker discourse are so deeply intertwined that they are difficult to extricate. This will be demonstrated throughout the dissertation, as I often address infrastructural illiteracy and the refusal to acknowledge structural inequality simultaneously. There are a handful of exceptions—such as survivalist tendencies to exaggerate the vulnerability of the power grid, for example—where infrastructural illiteracy is discussed independently, as it is the broader umbrella of ignorance under which the denial of structural inequality shelters. However, in many other cases, the devaluation of identities other than that of the white, able-bodied cis man is built into the conversation about infrastructural illiteracy, and I will discuss both topics together.

Chapter Outline

Chapter 1 covers the historical conditions of emergence of bunker discourse. It begins by unsettling the common assumption that contemporary apocalyptic survivalism began in the

1950s, during the height of the Cold War. Efforts in the United States to popularize both public and private shelters in the 50s and 60s largely failed, and post-apocalyptic imaginaries at the time looked quite different. Survivalism and "prepping" as we recognize them were popularized in the United States in the late 1960s and 70s, while bespoke bunkers appear to be a fad of the past two decades. The first half of this chapter discusses how bunker discourse emerged in the late 60s and early 70s, and how this discourse represented a major shift from previous apocalyptic imaginaries such as those held by the Church of Latter-Day Saints. This section also makes some arguments for the uniquely American character of bunker discourse. The second half of this chapter proves the consistency of bunker discourse since the late 1960s, demonstrating the way certain catastrophes–like the Y2K bug and the terror attacks on September 11th, 2001–did not substantially transform bunker discourse, but rather integrated into it seamlessly. An important feature of a discourse is its ability to persist across dramatic historical shifts, and bunker discourse has done so; its key characteristics in 1975 are nearly identical to those in 2025.

Following the exploration of this historical context, Chapter 2 presents three 'case studies' of contemporary bunker discourse. These case studies are, in order, an investigation of the bunkers sold by the "doomsday merchants" described above; a close look at Silicon Valley apocalypticism via a book titled *The Sovereign Individual;* and a reading of a survival guide titled *Emergency: This Book Will Save Your Life* produced by a pickup artist. These case studies serve multiple purposes. Firstly, they argue that the profile of bunker discourse in media and design (architectural and otherwise) is growing, and this growth is dangerous for multiple reasons. Relatedly, each of these case studies also exposes how bunker discourse is entangled with a particular kind of ableist, white supremacist masculinity. This chapter also introduces the idea that safety is an affective state, meaning that our ideas of what constitutes safety can be

transformative. In bunker discourse, safety is largely constituted through separation, and this is one of its many detrimental features.

Chapter 3 discusses the manifestation of bunker discourse in post-apocalyptic narratives–specifically in video games. Among fictional media, video games are perhaps uniquely suited to the satisfaction of the desires created by bunker discourse, as mainstream digital games often valourize the independent will and the exertion of violence. This chapter focuses on four post-apocalyptic open world games: *Horizon Zero Dawn, Fallout 4,* and *Far Cry 5* and its sequel, *Far Cry: New Dawn.* This chapter exposes how bunker discourse structures these particular games, with particular attention to the dimension of space. Bunker discourse is in many ways a spatial logic, and digital games, with their simulations of 3-D space, are well suited to reproducing the spatial logic of bunker discourse. Video games and bunkers also share similar histories, with much of their design contingent on military technology that eventually passed into public or corporate hands. As such, their logics of space are also deeply influenced by militarism, and particularly by colonial understandings of space as claimable through violence.

Together, these three chapters do not simply demonstrate the pervasiveness of bunker discourse in contemporary culture; they argue for its negative impact on safety and disaster preparation specifically, and on culture more generally. Bunker discourse is not the only way to understand or address catastrophe. Thus this dissertation concludes by moving outside the historically situated, culturally specific, and critically deficient understanding of disaster in bunker discourse by exploring other apocalyptic imaginaries. In particular, the conclusion will investigate ideas proposed by indigenous futurity and apocalypticism. Indigenous scholars argue that American Indigenous people have already experienced an apocalyptic-level extermination of their population and culture. With apocalyptic experiences in their shared past, rather than

imagined as part of an indeterminate future, Indigenous artists and scholars have produced a contrasting vision of survival in the face of catastrophe, one that focuses on the sustainability of culture and community as well as our relationship with the more-than-human world.

CHAPTER 1: Historical Foundations of Bunker Discourse

Foucault warns against historical work that traces the origin of a particular subject, believing it can cause the researcher to burrow infinitely into the past. Looking for the origin of the bunker as an architectural form has indeed led other scholars in myriad directions: castle towns, Anasazi cliff dwellings, or the underground cities built by the Hittites (Garrett 2020). These parallels are also evoked in the bunker business: the shelter developer Oppidum takes its name from the Roman word for the fortified towns of the Celts. To get at the proper context of our modern bunker discourse, we need to look for more specific histories than the lineages of subterranean building. Media archaeology asks us to look at the social, cultural, and technical conditions that make certain understandings of the world possible.

Some of the concepts central to bunker discourse are quite old. In the English-speaking world, the narrative of a singular survivor 're-civilizing' a hostile wilderness arguably dates back to 1719's *Robinson Crusoe.* But bunker discourse as I describe it is a uniquely contemporary phenomenon, entangled with modernity, consumerism, and 20th-century politics of white masculinity. It is also an American phenomenon–not in the sense that it is isolated to the United States, but in the sense that it is a trend born of American culture and political events. American civil defense policies, millenarian Christianity and Mormonism, American relationships with space and resources, and American consumer culture all play a role in shaping bunker discourse. The aim of this chapter is to pick out the most important preconditions of bunker discourse–that is, those fundamental beliefs that remain unchallenged regardless of the specifics of any apocalyptic conversation–and show how these preconditions shaped our current understanding of catastrophe and how to handle it.

It is worth clarifying early on that bunker discourse is not expressed exclusively through the construction of private shelters. Rather, the bunker is simply the ideal representation of a broader set of ideas about disaster, storage, and purity. As the principles of this discourse begin to dictate our understandings of disaster and storage more broadly, the media logic of the bunker will appear in many places. Doomsday shelters are one expression of it, but equally important are nonfiction manuals that advise one to stock up on nonperishables and fictional media that fantasize about bunkering. Technologies that promise indefinite safety through isolation and purification are also often adopted into, and influenced by, bunker discourse. A retreater's cottage in the Cascades or a ready-to-eat meal may not look like doomsday bunkers, but they are part of bunker media logic.

This idea–that bunker media logic need not be executed in the form of a literal bunker–is also relevant to the history of bunker discourse. A historian might expect modern American bunker discourse to emerge alongside the fallout shelters of the 1950s and 1960s. The nuclear arms race was the first moment in modernity that we reckoned with an apocalypse triggered by man, instead of promised by God. It put apocalyptic thinking at the center of the cultural zeitgeist. Bunker-building became a matter of federal policy. And indeed, some relics of this era remain relevant to bunker discourse. The science of fallout protection was established in this era, and many modern bunker designs either replicate those of the 1960s or use Cold War-era military infrastructure, like abandoned missile silos, as literal foundations for bunker empires.

However, as several historians of bunkers and civil defense programs have documented, attempts to engage citizens in the construction of private shelters were, broadly speaking, a failure (Rose 2001; Lichtman 2006; Monteyne 2011). Private bunkers were unpopular, and the government-funded network of public shelters was, at its best, a half-complete project that

quickly lost its relevance. During some of the tensest years of the Cold War, the thriving subculture and consumer base of preppers did not coalesce. In the 21st century, this is no longer the case; prepping is more popular than ever. More importantly, the specific narrative of bunker discourse had yet to solidify. The protagonists, antagonists, and symbolism were not yet established. This means that in between the 1960s and now, *new* conditions must have arisen that made modern bunker discourse possible. These conditions, I argue, were established throughout the 1970s, and these conditions will be a major component of this chapter.

However, we will still begin with some history predating the 1970s. This is for two reasons. Firstly, some of the fundamentals of bunker discourse, as aforementioned, *do* predate the 1970s. Putting it another way, certain cultural beliefs, practices, and technologies before 1970 were necessary, but not sufficient, for the establishment of bunker discourse, and I will address them here. Secondly, it is important to look at previous waves of American apocalyptic sentiment–in this case, the nuclear fears of the Cold War and the Mormon apocalypticism of the mid-19th century–as points of contrast *against* bunker discourse. As I argue that the 1970s in America produced a unique discursive formation, it will be useful to show how other, previous imaginaries differ.

The second half of this chapter addresses two important events in our apocalyptic imaginary, both of which occurred near the turn of the millennium: the Y2K problem and the September 11th attacks. These events were significant additions to our apocalyptic fantasies, as they exposed new types of potentially world-ending threats in the forms of the collapse of electronic infrastructure and the terrorist attack. Despite their influence on the cultural imagination, neither of these events altered bunker discourse itself. This is an important characteristic of any discursive formation; after certain foundations are established, arguments

and shifts can still occur *within* that discourse without significantly changing its principles. The media and disaster technologies produced in the years surrounding Y2K and 9/11 mimic the survivalist texts and technologies of the 1970s to a staggering degree.

The Cold War

When I make the claim that bunker discourse was not established until the 1970s, I am actually making two intertwined but separate observations about the history of private shelters. The first is a literal observation shared by many historians of civil defense and fallout shelters: despite an extensive campaign of government support, private bunkers were uncommon in the 1950s and 1960s (Rose 2001; Lichtman 2006; Monteyne 2011). Nor did fallout shelters surge to popularity in the 1970s. At that time, the preferred solution for apocalyptic devastation was the "retreat"—this being the idea of retreating to a remote property to insulate oneself from social unrest[3]. However, the physical presence of conventional bunkers does not necessarily prove when bunker discourse begins. Rather, we are also looking for the confluence of *all* of the ideas that are fundamental to bunker discourse. Therefore, the second important observation imparted in this section is that the civil defense media of the 50s and 60s indicate that beliefs about disaster and disaster preparation were still very malleable. During the Cold War, conversations about civil defense were, as expected, heated and frequent. However, they varied greatly in their scope, position, purpose, and in the nature of their apocalyptic imaginary. The streamlined narrative of bunker discourse, in which white suburban families would rebuild America after its

[3] From now on, think of the bunker as a system of spatial logic. It is any fortified living/storage space in which the middle-class American guards his designs for society's rebirth. "Retreats", which are typically isolated cabins or cottages, still reflect this mindset. Retreats also carry an additional connotation of nostalgic pastoralism—that the world must return to its simplest, natural form before it can be reborn. Other "metaphorical" bunkers will be discussed in Chapters 2 and 3.

complete destruction, had yet to overwrite broader conversations about the Cold War home front. The foundation of bunker discourse remained shaky while society at large was unclear on what the bunker represented and what it was for. What follows here is an overview of some of these debates, as well as the material history of civil defense and how it impacts bunker designs today.

Broadly speaking, the responsibility of civil defense fell upon a government agency initially called the Federal Civil Defense Agency (FCDA). Its rather frantic implementation in 1950 led to many reorganizations—it was renamed twice and passed through three government branches before 1961. The FCDA's approach to civil defense was as muddled as its shifting identity would suggest. Civil defense historian David Monteyne points to their "confusing array of approaches", including a 250 million dollar budget proposal that was not backed by any research (2011, 13). The FCDA's initial goal was to implement a national shelter program, similar to those that would later be implemented in European countries: they would build enough publicly accessible fallout shelters to shield every American citizen from the bombs.

Unfortunately, this shelter program was unpopular with lawmakers: a solution that required collective living in publicly-funded shelters stank of communism (Monteyne 2011). The FCDA did not receive their 250 million—which would not have been enough to execute this plan regardless—and the agency remained underfunded throughout the 1950s. In the meantime, the FCDA drew up evacuation plans for urban centres. This was an unpopular move for suburban and rural Americans, who would be expected to feed and house the irradiated refugees. Alongside these failed evacuation plans, the FCDA also encouraged Americans to build private shelters—but with limited access to the results of atomic fallout research, limited funding, and their generally scattered sense of purpose, these were more messages from the FCDA that would be ignored. The FCDA—by then renamed to the Civil Defense Agency (CDA) —would

eventually receive its funding in the 1960s, after the acceleration of the Cold War. This was, again, put towards scattered purposes. Public shelters were partially assessed, partially funded, and partially stocked. The project was eventually defunded in the 1970s, and most public shelters fell into disrepair.

This period marks an American cultural departure from European countries with shelter programs. In Finland and Switzerland, public fallout shelters *were* sufficiently funded by national government programs. This divergence occurred for both practical and cultural reasons. A shelter for every citizen was a much more viable project in a place like Switzerland, which was physically smaller, adequately rich, less populous, and much less suspicious of "socialist" government programs.

Because the CDA could not fund all the required shelters on their own, they launched a media campaign to support the construction of private shelters. However, private shelter-building proved as unpopular with the general public as public shelters were in Washington. Instead of popularizing the construction of shelters, they succeeded mostly at making the shelters a topic of national debate. Popular magazines, including a famous 1961 issue of *Life*, issued shelter-building instructions and doomsday advice. The Department of Agriculture published designs for fallout-proof cowsheds (Rose 2001, 5). Meanwhile, artists and public intellectuals critiqued civil defense policies, private shelters included. Like satellites, submarines and nuclear weapons, fallout shelters were another technology on the Cold War game board. Some critics saw civil defense measures as incitement or provocation. Others feared that such measures bred complacency toward nuclear Armageddon. College students vandalized public shelter signs as a form of protest. In response to the posting of fallout shelter signs on their campus, 650 students and faculty at Columbia University—including a freshly-hired Susan Sontag—signed an open

letter that claimed public shelter programs "prepared our people for the acceptance of thermonuclear war as an instrument of national policy" (69). If the Cold War escalated, Columbia was doomed; New York City was in their view a "prime target for enemy missiles" (69). The shelters stocked by the CDA were not *blast* shelters: they were *fallout* shelters, meaning they offered no protection from the detonation. Bob Dylan addressed the issue in "Let Me Die in My Footsteps": "there's some people thinkin' that the end is close by / 'Stead of learnin' to live, they are learnin' to die."

This tumultuous response is important to the story of bunker discourse. The Cold War was a war of symbolism; alongside their proxy wars, participants fought for abstract victories in science, sports, and chess. In this context, the actual effectiveness of public shelter programs was not as important as their symbolic role, and the symbolic role of the bunker was up for debate. Were they necessary safety measures, or provocation? Did they breed proactive preparation for disaster, or complacency toward it? Were they havens of cultural continuity, as *Life* magazine depicted—or premature tombs, as Dylan described? Bunker discourse could not emerge while these questions were still being actively debated. In modern apocalyptic discourse, they are treated as settled. In order: bunkers are necessary, they represent proactive preparation, and they sustain life rather than ending it. Their significance in the narrative of bunker discourse is no longer disputed; they are as symbolically stable as the apple or the rose.

The vast and public nature of this debate also shines some light on why bunker discourse could not erupt in the 1950s and 60s: it is, perhaps surprisingly, a question of enjoyment.

Almost all ethnographers of doomsday preppers note that despite their dismal view of the future, they seem to genuinely *enjoy* prepping, stockpiling, and fortifying their homes (Mitchell 2001, Garrett 2020). This attitude makes much more sense when viewed through the lens of

bunker discourse; preppers enjoy such activities because they are imagining themselves as protagonists of a post-apocalyptic story. Preppers also enjoy developing expertise in particular areas of survivalism (food storage, first aid, marksmanship and gun repair), and they often take great pride in being part of a select group. They frequently refer to themselves as a small percentage: one representative website distinguishes between “the fragile masses” or “the resilient few” (“Revealing the Man Behind the Mission”, 2023). These “resilient few” have stepped into a narrative that paints them as competent experts belonging to an exclusive club. Being an expert in a narrow field is an enviable position—a position that, in the 1950s and 60s, a suburban layman could not occupy. In this era, preppers would not have been the experts in their field—that would be the nuclear scientists, or the generals, or even the FCDA. Nor would they have been part of an exclusive minority: worrying about the bomb was not a way to distinguish yourself from other Americans at the time. And most importantly, it is difficult, if not impossible, to enjoy a fantasy when it is the subject of constant, ongoing, and serious public debate. Prepping could only become a subcultural hobby once it moved off the front page and out of the national spotlight, where it could be enjoyed without too much disruption from governments, scientists, or moralizing philosophers who bothered to ask whether shooting a refugee of nuclear war might be wrong.

With all of that said, there were some important forces set in motion during the Cold War that would end up influencing how bunker discourse operates. The first relevant factor is a schism that still informs modern bunker discourse, and that is the divide between the predominantly white middle-class suburbs and multiracial urban centers. The suburbanization of the United States in the post-war era created that division in a broader sense, and once it was

established, it naturally had an impact on civil defense. This division was both racial and economic, and it largely persists today, in both reality and the apocalyptic imaginary.

The people living in these spaces were also imagined and treated differently by governments and researchers. Engineers created (and destroyed) test houses for the FCDA, but these models were almost exclusively "the type found in suburban developments or small-town America—urban apartment buildings were never tested" (Monteyne 2011, 27). From the whiteness of the mannequins used in the Yucca flats bomb tests to the white families populating instructional illustrations, Government and business materials produced in the name of civil defense were overwhelmingly concerned with documenting the survival of white nuclear families. When it came time for white preppers to situate themselves at the centre of the narrative, they would find the FCDA's imagined protagonists already looked like them.

Another relic of this time is a legal one. In the 1960s "in many localities, civil defense solutions were illegal" (Monteyne 2011, 151). Building codes imposed requirements for ventilation, access, illumination, etcetera, which the standard basement-bunker design typically violated. The Office of Civil Defense contracted with the American Institute of Architects to develop a set of bunker-specific guidelines that would waive these rules. These exceptions still exist; while aspiring bunker-builders will typically need permits to dig into their backyards, building design codes are not enforced on bunkers themselves.

While some artefacts of the 1960s did help preppers build an archive of legitimated knowledge, what they chose not to acknowledge proves equally interesting. In particular, bunker discourse must largely disregard the sociological research done on disaster response in this period. The story preppers tell–that upon the collapse of society we will all inevitably and violently turn on each other–was also a concern in the era of impending nuclear apocalypse.

However, studies at the time "debunk[ed] many myths of panic, selfishness, and criminal behaviour. Disaster victims interviewed told of an eerie calm, and the mutual aid of neighbours and strangers during the recovery period" (Monteyne 2011, 18). These findings have only been reinforced by similar studies since the 1950s. The overwhelming majority of the evidence indicates that in times of crisis, humans are far more inclined to help each other than profiteer from their suffering or ignore them.

The fact that bunker discourse depends on disregarding this sociological pattern of cooperation puts it at odds with the global history of disaster relief and humanitarianism, but it also distances it from previous apocalyptic practices. Religious apocalypticism predates the Cold War, even in a strictly American context, through various Christian millenarian movements and the beliefs of the Latter-Day Saints. In order to prove that bunker discourse marks a significant break from previous understandings of apocalypse, it is important to compare religious apocalypticism before 1970 with the secular apocalypticism of bunker discourse after the Cold War. As we will see, both apocalyptic imaginaries fulfill a similar social need, but a substantial difference in how these fantasies are executed may reveal the origin of the unique moral framework of bunker discourse.

The Church of Latter-Day Saints

Of the many different millenarian sects in American Christianity, the most relevant to this dissertation is the Church of the Latter-Day Saints. This is for several reasons, but begins with the fact that the apocalyptic practices of the Latter-Day Saints most resemble those of doomsday preppers, as storing a year's worth of emergency supplies is a standard demand of Mormon doctrine. Mormonism, like bunker discourse, is also strictly American in origin and orientation.

In order to understand the major moral difference between Mormon apocalypticism and bunker discourse, some historical context for Mormon apocalypticism is required. Historians of the Latter-Day Saints have argued that Mormon apocalypticism was, at least in part, a reaction against their complicated relationship with the American government. From their own perspective, the Latter-Day Saints were simultaneously devout American patriots and members of a persecuted group within the United States. The American government did tamper with the leadership structures of the Latter-Day Saints and sought to outlaw their beliefs on multiple occasions throughout the 19th and 20th centuries. Many apocalyptic prophecies in Mormon texts predict the fall of the government of the United States specifically, which "promised an end to their oppression" (Blythe 2020, 2). Imagining an apocalyptic comeuppance for the American government was thus a cathartic exercise. This exercise appeals not only because of the imagined destruction of one's enemies, but also because it imposes an indisputable moral element on the story. These prophecies promised that the Latter-Day Saints would be designated by God as morally superior to their oppressors, and that those oppressors would be punished and the believers rewarded with respite in a promised land. This narrative is both tidy and tempting. The good people and bad people are clearly designated, and each gets what they deserve.

The scale of the crises faced in the 20th century–nuclear war, global economic collapse, pandemics, and environmental degradation–made the idea of an entirely man-made apocalypse seem viable. When apocalypticism became (optionally) secular in this way, its cultural use as catharsis was secularized alongside it. Instead of apocalyptic rhetoric reflecting a particular relationship between a religious group and their oppressors, and guaranteeing their eventual righteous comeuppance, it became a reusable template that could direct anger against any number of superstructures. The survivors and tyrants in modern doomsday prophecies could be

anyone. Apocalyptic rhetoric was thus deployed to criticize the increasingly dense global power flows of the late 20th century, and to forcibly apply a simple moral dimension onto this complex web of interacting structures. Bunker discourse applies the logic of sinners and survivors to neoliberal capitalism and global politics, often through comprehensive oversimplification and misattribution of blame.

This political and moral element of apocalypse is more fundamental to its appeal than one might initially think. By the second half of the twentieth century, the Church of Latter-Day Saints "no longer perceived themselves as a political entity", and because of this stance, sermons and prophecies no longer offered the same relief for those who felt persecuted by the government (Blythe 225). Blythe notes that "the declining discussion of apocalyptic in church settings would drive many to the teachings of Mormon apocalypticists outside of the church hierarchy, and even outside the church itself" (226). It is important to reiterate that many Mormon apocalyptic prophecies predict the collapse of the *United States government specifically:* bringing the church away from politics also, by necessity, brought it further from apocalypse. The apocalyptic imaginary is about political and moral catharsis before almost anything else.

The shift to a secular apocalypse, then, presented a challenge to this moral dimension of apocalypticism. A religious apocalypse typically designates its sinners and survivors through group affiliation (you must be a Mormon) and moral regulation (you must try to be a good Mormon). In the absence of a persecuted group to belong to and a foundational moral text, there is only one characteristic that unites the protagonists of bunker discourse: namely, they are the people who have committed resources to preparing for the apocalypse. This imposes moral value onto prepping itself: the very act of preparing for the apocalypse becomes the reason you 'deserve' to survive it. As a necessary corollary, it means that those who do *not* prepare have

done something amoral and deserve no pity or reprieve. In terms of moral frameworks, this logic most resembles that of American individualism and capitalism. What makes a human worth 'saving' is their capacity for autonomous survival, the resources they have banked, and their willingness to hoard those resources at the expense of other people.

These differing imperatives create a marked difference between the texts of bunker discourse and Mormon texts. Consider this speech about Food Storage by Bishop Vaughn J. Featherstone:

> I should like to address a few remarks to those who ask, "Do I share with my neighbors who have not followed the counsel? And what about the nonmembers who do not have a year's supply? Do we have to share with them?" No, we don't *have* to share—we *get* to share! Let us not be concerned about silly thoughts of whether we would share or not. Of course we would share! What would Jesus do? I could not possibly eat food and see my neighbors starving. (1976)

In the entire body of secular prepper literature, this sentiment is nearly unheard of. As we will soon see, in bunker discourse, generosity is a weakness: it is often equated with putting one's family at risk. Regardless of the critical scrutiny that Mormonism may merit as both a religion and an organization, the Mormon apocalyptic imaginary retains a kernel of Christlike sentiment. The affiliation with Christian morality, however tenuous, makes Mormon apocalypticism behave differently from bunker discourse, which can only find value in people based on their physical effectiveness, or their ability to buy and hoard. And this discursive difference extends to practice. In the 21st century, the Church of the Latter-Day Saints is an active disaster relief organization, both via monetary donations and volunteer work[4]. During a disaster, the resources stockpiled by preppers and Mormons circulate differently. Mormons will dig into their stores to alleviate disasters that are almost certainly temporary, rather than apocalyptic, and to help people outside

[4] Much of this charity is directed toward the Global South, and is often for the purpose of religious conversion. This is another aspect of the church that merits scrutiny, but this topic is outside the bounds of this dissertation.

the church. Meanwhile, unaffiliated preppers are more likely to use crises as a time to gloat: during the COVID-19 pandemic, Bradley Garrett observed that "while most people went panic-shopping for toilet paper, preppers closed their blast doors and watched the chaos unfold from a safe distance with wry amusement" (2020).

In the introduction, I emphasized that there are ways to prepare for disaster that do not depend on bunker discourse, and the Mormon approach–stocking up, then giving generously to the afflicted–is one of them. Despite originating from apocalyptic beliefs, the Mormon rules of preparedness lack the valorization of the selfish human will, the aggressive stance toward any and all Others, and the idea that because complete collapse is inevitable smaller disasters are not worth addressing. The absence of these discursive principles permits the Latter-Day Saints to remain active in times of crisis, and the presence of them makes most doomsday preppers the opposite.

However, the relationship between bunker discourse and religious apocalypse is not one of complete mutual disinterest. Instead, bunker discourse began to exert pressure on religious apocalyptic rhetoric. Historian Robert Blythe notes that food storage was a significant and somewhat unprecedented presence in the speeches and teachings of Mormon authorities in the late 1970s. Prior to this speech, preparation instructions tended toward vague invocations of staple foods that hold nearly equal religious and nutritional significance–wheat, milk, honey and salt. According to Howard Ruff, a Mormon and financial advisor, based on figures released by the Church, "less than 6%" of his fellow Mormons were adequately prepared in the early 1970s (1974, vii). In his book *Famine and Survival,* Ruff aimed to correct assumptions that these foods provided an adequately balanced diet. It is in this book that we see the category-by-category, item-by-item breakdowns favoured by doomsday preppers. In Bishop Featherstone's speech,

quoted above, Featherstone gives quite granular instructions on how a Mormon family should begin their preparations, by buying grain, honey, and "a case of salt…In most areas, 24 one-pound packages will cost you less than $5" (1976). The symbolic foods are still mentioned, but they are described with much more precision–how much they should purchase, and even how much those purchases should cost. Once the media of bunker discourse began to circulate, Mormon bishops began to sound like doomsday preppers. Indeed, some of the Latter-Day Saints who left the church in pursuit of deeper apocalyptic catharsis would exemplify the tenets of bunker discourse as much as any secular survivalist[5].

It would not be accurate to say that Mormonism has changed completely due to bunker discourse, but it is also true that bunker discourse has exerted tremendous influence on Christian millenarianism in the United States. It is particularly appealing to televangelists. In the time of the Y2K panic, for example, many televangelists were taking advantage of the panic to make a profit. Jerry Falwell signed a marketing deal with SafeTrek emergency food; Pat Robertson created a survivalist website and funded a number of survivalist conferences (Schaefer 2004). Jim Bakker missed his chance to participate in the Y2K frenzy, as he was busy rebuilding his career after numerous tax and sexual assault scandals, but he would also start selling survivalist gear upon returning to preaching in the 2000s, and his words fit more with the paradigm of bunker discourse than Mormon disaster relief. Instead of preaching that sharing our stored resources is a privilege, Bakker sells his freeze-dried food on the prepper-esque sentiment of superiority: "Imagine — the world is dying and you're having a breakfast for kings" (McKinney 2017).

[5] Some memoirs of growing up in survivalist Mormon families reflect an experience tailored by bunker discourse, such as Joanna Brooks' The *Book of Mormon Girl* and Tara Westover's *Educated*.

Through the comparison above, we have started to paint a picture of the doomsday prepper. It is now time to meet him, and read some of his works.

Bunker Discourse in Writing

In 1979, Dr. Bruce D. Clayton published *Life After Doomsday: A Survivalist Guide to Nuclear War and Other Major Disasters.* This book is a comprehensive survival manual, and while its cost estimations are now somewhat outdated, it is still highly regarded among preppers. It is also meticulous with its citations. Some of the cited works are not intended for survivalist[6] use–Clayton cites cookbooks and military first aid manuals, for example–but many others are. In this dissertation, Clayton's book serves two purposes. Firstly, it is an exemplar of bunker discourse, with all of its nuances recorded in clear and precise detail. At the same time, *Life After Doomsday* is also an important piece of historical evidence, as its citations suggest a body of established literature on survivalism. By the publication of *Life After Doomsday* in 1979, there existed a body of survivalist work that fit within the bunker discourse paradigm. Indeed, by 1979, several men had made careers out of survivalist instruction and apocalyptic speculation, and Clayton references many of them. Notably, he claims Mel Tappan's 1977 *Survival Guns* as a major inspiration. Tappan was an icon of survivalism in the 1970s: he published and edited the *Personal Survivalist Letter* and was a frequent contributor to *Soldier of Fortune* magazine. The former allowed survivalists and firearms enthusiasts to cross-pollinate; the latter was perhaps the

[6] In the 1970s, the term "prepper" had not yet been coined, and the term "survivalist" (or "retreater") was preferred. I use the word "survivalist" for preppers practicing before the 2000s because that is what they called themselves. According to Mitchell in *Dancing at Armageddon,* the linguistic shift from "survivalist" to "prepper" may have occurred due to a rash of survivalist violence in the 90s: survivalists did not want their practice associated with John Huberty or Ruby Ridge. In our contemporary moment there is little practical difference between a prepper and a survivalist, and the words can be used somewhat interchangeably.

most successful survivalist-adjacent publication of the 1970s and 80s, reaching a circulation of 190,000 (Lamy 1992)[7].

Another figure Clayton cites is Howard Ruff, the Mormon author of *Famine and Survival* mentioned above. Richard G. Mitchell, in his 2002 ethnography of doomsday preppers, identifies Ruff by name: his books appear in the house of an interviewee. Ruff would later become a financial speculator of some notoriety, but in 1974 his passion was nutrition–specifically, cataloguing how families could manage proper, balanced diets in times of crisis. In the introduction of *Famine and Survival*, he acknowledges the influence of the Mormon church on his storage practices–but only after describing how another book, Robert Preston's *How to Prepare for the Coming Crash*, scared him into action.

Preston's *Coming Crash* was published in 1973, making it one of the first books describing a specific apocalyptic event that also fully exists within the bounds of bunker discourse. Preston's arguments are as typical for the genre as Clayton's: the end is coming and you cannot prevent it; helping others is a waste of time; preparing yourself is the best solution. However, Preston was not troubled by nuclear devastation. His main obsession was the crisis that finally set the foundation for bunker discourse. The first books to eagerly propose the collapse of civilization and to cast the reader as a post-apocalyptic protagonist were not books about the Rapture or nuclear war: they were about runaway inflation.

Preston's book is not an anomaly in this sense. Mel Tappan blames the precarious position of American society on "government economic interference" in an essay from 1981. In *Survival Guns,* Tappan claims he was inspired to write about his arsenal after reading Harry

[7] *Soldier of Fortune* is not strictly a survivalist magazine; rather, it reports on wars, terrorism, and firearms, and thus exists at the intersection of survivalism and right-wing militias. For more on the overlap between militias and survivalism, see Lamy (1992).

Browne's *How You Can Profit from the Coming Devaluation*, a strictly economic doomsday prophecy from 1970 (1979). John Pugsley's *The Alpha Strategy* was published in 1980 as well: it goes through many of the same motions as these other volumes, and is equally concerned with the issue of inflation. Even Clayton, despite his focus on nuclear war, agrees that inflation could trigger the endtimes. He also mentions that "if you were to make a list of the top ten leading survivalists, as many as seven would be former economists and investment counselors" (1980, 13). All of these books were written immediately before or during the inflation crisis of the 1970s. Preston, Ruff, and Browne all earned some notoriety for "predicting" the inflation crisis, though it was not quite as apocalyptic as they had foreseen.

From the outset, the inflation crisis providing the true catalyst for bunker discourse makes sense of some of the more perplexing obsessions of prepper culture. For example; why do preppers and doomsday merchants so often advocate for stashing gold? If they expect all social institutions to collapse, why do they expect gold to retain its exchange value when it has no functional worth? The obsession with gold is, in part, a holdover from when the movement's early writers behaved as financial 'experts' passing on investment advice. After all, Browne was not just concerned with survival, but with profit.

However, before we can fully explain why a financial crisis provided the grounds for bunker discourse when global nuclear war did not, we need to understand more about what bunker discourse looks like in media. In this context, *Life After Doomsday* serves as an example of bunker discourse realized and preserved. It centres the apocalyptic narrative around a singular protagonist; its arguments rely on misunderstandings of infrastructures and power; it encourages violence against the Other; and it reifies binary divisions old and new. Once we see how these

features operate in *Life After Doomsday,* we can return to the financial crisis and demonstrate why it proved such fertile grounds for the new apocalyptic imaginary.

Clayton's book is addressed to 'you'- a singular individual who is brave, disciplined, and resourceful enough to undergo proper preparations. Before he begins to instruct 'you' on how to survive, he justifies the need for 'you' in the first place. As he describes in his introduction, Clayton started writing *Life After Doomsday* because he was angry with disarmament activists. The activists Clayton encountered painted a picture of nuclear war as complete, unsurvivable devastation, in which no American would be safe. Clayton argues that the message *should have been* more optimistic on the question of individual survival[8]. Without the reassurance that nuclear war would leave at least *some* of the good guys left alive in its wake, the conversation of apocalypse was not worth having:

> I feel that the "survival" message is a much more useful approach to educating people about the dangers of nuclear war than the "disarm or die" approach because it is positive and hopeful…It is clear…that an audience will be much more receptive to a speaker who tells them that they are going to live than…[one] who insists that they are all going to die. (Clayton 1980, viii)

The disarmament activists would probably argue that it ultimately does not matter whether someone could survive a nuclear attack or not, as the goal of disarmament is to avoid a nuclear attack in the first place. Based on the content of the rest of the book, which is almost all post-nuclear-apocalypse survival instructions, Clayton does not disagree with these activists on the premise that a more positive message would hasten disarmament. His version of a "positive"

[8] Clayton does also argue that the disarmament activists are lying. He claims, for example, to know which areas of the United States would not be impacted by fallout based on wind patterns. Neither Clayton nor the activists are provably correct here: we simply cannot know exactly how much damage a nuclear war would do and how. As one example, the idea of nuclear winter–in which the smoke from nuclear detonations would obscure the sun and lower global temperatures–was not theorized until the mid-1980s, after the publication of *Life After Doomsday*. This book was also written prior to the Chernobyl disaster, which would change much of what we knew about the dispersal of radioactive material. Clayton's assertion that he knows better than the activists is groundless, and may only serve to justify his anger.

message takes nuclear war *as a given*, and thus he is more concerned with whether or not people are able to look forward to it.

If Clayton cannot have his "positive and hopeful" take on nuclear war, he is willing to hope for other disasters. Or, more specifically, the real statistical likelihood of certain disasters over others is irrelevant: what is relevant is which disaster suits the reader's ideal survival story. Elsewhere in the book, Clayton presents various decision charts on where the reader should move based on how different disasters will impact different regions. However, he frames these decisions as preparations for whichever apocalyptic disaster "you" consider your primary concern. Clayton's ideal apocalypse is a nuclear war, but if yours is an economic crisis, he is not necessarily interested in persuading you that nuclear war is more likely. Instead, he includes some alternative instructions specific to "your" imaginary apocalypse. Clayton wants to create a heroic tale of apocalyptic survival regardless of apocalyptic cause, and this suggests his priorities: the narrative is more important than the nukes.

Once the world has ended in whatever fashion, Clayton envisions his reader will become the leader of a small group of survivalists. He suggests organizing these survivors in a militaristic structure of specialized teams with the reader at the top. The 'protagonist' of Clayton's manual will assume command, organize his survivors into units, establish rules regarding who can leave the shelter and when, and set down a schedule for each day (1980, 126). Clayton even provides a draft schedule, which includes a "reveille" at 7 am, briefings, training sessions, emergency drills, and a night watch (126). This version of the post-apocalyptic story creates a protagonist who assumes command not through consensus but through force of personality and competence: "you must begin to organize your group members and direct them before they get their bearings…take charge, display the fact that you know what you are doing." (126). This is typical of bunker

discourse's "survival of the fittest" ethos; those who know the most about (this particular kind of) survival should be in charge. Bunker discourse fantasizes that, in the absence of other institutions, the post-apocalypse will be a meritocracy. Clayton takes this to its logical extreme, inviting the reader to assume command of their future society:

> When you attempt to contact the local government to offer your services, you may discover that, for all practical purposes, you are the local government. It could happen. As a large group of organized and well-trained survivalists in the midst of starving anarchy, you may be sucked into a power vacuum. (142)

By Clayton's description, 'your' transition to autocrat will happen naturally; the competent survivalist will be "sucked into" a position of power merely by being the most effective man around. Constructing the post-apocalyptic story this way does not make democracy unwelcome so much as irrelevant; if the survivors *did* vote for some kind of leader, everyone would obviously vote for 'you', as in this envisioned future, your competence is indisputably the most valuable asset. From here, the protagonist (who *is* the government in the post-apocalypse) will most likely rebuild society in the model suggested by the rest of Clayton's book: a highly regimented, task-oriented hierarchy.

Many survivalist texts pretend that this 'you' is universal–that anyone can be the protagonist of the end of the world, so long as they are resilient and prepared. However, with very little scrutiny, it becomes clear that the protagonist of the apocalyptic narrative must possess a particular identity. Doomsday prepper texts adhere uncritically to a white, cisheterosexual, able-bodied and male subject position (Preston 2010, Kelly 2020). The fact that alternative subject positions are almost entirely neglected in survivalism is not simply coincidence. Part of the cultural work that bunker discourse does is in restoring the value of the white male patriarch. In his work on doomsday preppers and white masculinity, Casey Ryan Kelly proposes that American doomsday culture provides a means to re-establish the sovereignty of the white male

subject by inventing a situation in which conventionally white masculine traits– "aggression, self-reliance, stoicism, competitiveness"–are not just laudable, but necessary for survival (2020, 30). Kelly sees this as a response to contemporary progress in various areas of social justice, which white men are only able to process as a "catastrophic" loss of power (3).

Perhaps ironically, restoring the position of white masculine dominance involves recasting white men as the victims of social progress. In general terms, this creates the claim that "feminism and multiculturalism [are responsible for] white men's dwindling social and economic principles" (Kelly 2020, 7). Conspiracies, including apocalyptic conspiracies, make this claim more literally, suggesting that these various minorities are puppeteering politics and culture for their own benefit[9]. The reason for this repositioning–for positioning white men as victims–is to give the white masculine subject a position of moral superiority. This is a prominent trend in post-apocalyptic dystopias, for instance: Higgins notes that dystopic science fiction often recasts white men as the victims of autocratic political systems (2016). Higgins argues that "to occupy the position of the victim is often to be absolved of guilt" and granted "righteous retributive agency" (2016, 53). The crafting of white masculine victimhood is also contemporaneous with the emergence of bunker discourse. Susan Jeffords argues that the failures of the Vietnam War caused a major cultural devaluation of the soldier–a key aspirational figure for American masculinity–and posits that a 'remasculinization' of culture took place in the Vietnam-focused media of the late 70s and early 80s, largely by redeeming this soldier figure

[9] In this case, the representative conspiracy theory is the white genocide or 'Great Replacement' theory, which coordinates anti-Semitism, white supremacy, heteronormativity and misogyny. This conspiracy imagines that Jewish 'elites' are influencing politicians to loosen immigration restrictions with the goal of eradicating whiteness. Non-white immigrants are the primary villains of this conspiracy, but it also implicates women (who are 'guilty' of either miscegenation or not having enough white children) and LGBTQ+ people and activists (as conspiracists believe that queer partnerships do not produce children or contribute to child-rearing). The 'threat' of white genocide is imagined to be apocalyptic; the first interviewee of Mitchell's *Dancing at Armageddon* uses it as his justification for prepping.

(*Rambo* being the representative example). This observation is corroborated by James William Gibson, who takes note of the growth of other masculinity-affirming warrior-themed media in the same period, including the launch of military magazines like *Soldier of Fortune* and *American Survival Guide*, the dramatic growth in the sales of automatic firearms, and the invention and popularization of paintball. Even as it reaffirms the utility of violence and weapons of war, much of this 'remasculinizing' media also recasts veterans of Vietnam as the primary victims of the war rather than the perpetrators; instead, the culpable party is the American government[10]. Gibson also notes that the soldier figure in this era is "not so much military as paramilitary" (1994, 9). When divided from the power of the political entity that commands him, the soldier becomes an underdog–perhaps even a victim of the machinations of the larger powers at play–and yet, these impossible odds are always overcome through the deployment of militaristic masculine aggression. These media trends are also roughly contemporaneous with a trend of gendered self-help practices. In the mid 1970s, a trend in popular psychotherapy called for men to reconnect with their 'masculine essence'. This type of masculinity-oriented psychoanalysis, best represented by Robert Bly's 1990 bestseller *Iron John*[11], uses a grab bag of historical myths to argue that men have been deprived of their essential initiation rituals into the world of warrior masculinity by the various shackles of modernity–feminism, absent fathers, and alienated labour among them (Connell 1995, Lorentzen 2016). Like the 'remasculinizing' films discussed above, the argument of *Iron John* is that the violent essence of masculinity has been

[10] Despite rejecting the authority of government, survivalists and their ilk do express admiration for some, but not all, military technologies. This contradiction is in part possible because it adopts this constructed division between soldiers and governments.

[11] It is also well-represented by Jordan Peterson's *12 Rules for Life:* Peterson's work is more or less recycling of Bly's, decontextualized mythology and all.

wounded by an overly feminized society, and reconnecting with the inner warrior is thus a restorative act.

Bunker discourse first consolidated, then, as the broader media environment was rescuing an embattled white masculinity through the figure of a lone warrior facing overwhelming odds. These media argue that the white masculine subject position, exemplified by the figure of the lone warrior, is both effective and necessary, while placing this subject position subordinate to an overwhelming opposing force. The nature of the opposing force varied, but it could, and often did, stand in for the various Others that troubled the white masculine claim to superiority. Bunker discourse facilitates the fulfilment of this fantasy by providing a specific narrative scheme in which the white masculine warrior is an ideal protagonist, and various Others can be installed as antagonists on a literal world-ending scale.

We can look again to *Life after Doomsday* to see how bunker discourse constructs the identity of its supposed readers. While the white male subject position of Clayton's apocalyptic hero is never stated outright, this is only because it is taken as a given throughout the text. Clayton imagines a middle-class, heterosexual, Christian American reader–an identity in which whiteness is also inscribed–and makes no effort to address other subject positions. The examples of this failure of imagination are subtle but constant. To Clayton, the "usefulness" of a certain medical volume, *Where There is No Doctor*, is undercut by the author's "concentration on tropical diseases and impoverished people," as if his readers could not be located in the tropics or impoverished (2018, 100). Clayton's maps exclusively depict the mainland United States; Hawaii and Alaska only appear in passing comments and appendices. The sex of Clayton's protagonist is also evident throughout. In the section on first aid and other medical treatments, there are passing mentions of pregnancy, but they are described with emphasis on the moment of

delivery and the care of infants–never as if the reader of the book could themselves become pregnant. There are no instructions on contraception, for example, nor are there lists of which foods pregnant people should avoid in the section on food storage. There is one passing mention that the prepper should stock up on sanitary napkins, but no estimate of quantity. Clayton quips that the person who forgets to buy sanitary napkins "may well be sent back out to get them", a rhetorical wink implying that those who use menstrual products are expected to be adjacent to, not directly conducting, the prepping process (132). The influence of American conservative Christianity is present as well. Clayton is adamant on dividing washrooms and sleeping areas by gender. He claims that the survivalist will need a Bible, as "your group will feel an overwhelming need for the "proper" services if you have a death, or later on, a wedding" (139).

The whiteness of Clayton's apocalyptic protagonist can also be inferred from the way Clayton imagines racial Others. He is often casually dismissive or condescending on the basis of race and nationality. When describing the likelihood of a contemporary Black Death epidemic, he describes Madagascar–which saw five deaths to plague in 1976–as a "primitive tropical republic" where "[the] grasp of sanitation is almost nonexistent" (Clayton 1980, 4). He then claims that death by plague in the 1970s is "more disturbing" when it happens to someone living in Colorado or New Mexico (4). As aforementioned, Clayton cares little for the motivations behind Civil Rights protests; instead, he seems to think "riots" are an inevitable feature of urban life. There are also sections of the book where Clayton imagines survivalists facing violent opposition after an apocalypse. As is often the case with survivalists who are not promoting specific conspiracies, Clayton envisions a violent, nonspecific mass that is inflected with racialized language. He hypothesizes that "an illegal alien with a flea bite" might cause an apocalyptic epidemic in Los Angeles (4), or that the possibility of "Pancho Villa-style banditos

laying siege" to survivalist compounds "certainly cannot be ignored" (54). He also uses words that are racially coded without being explicit– suggesting that "a desperate mob or gang" might "attack to obtain women", for instance (117).

It is also worth emphasizing that Clayton's unthinking white gaze is as subtle as racialized language gets in bunker discourse. Apocalyptic preparation movements overlap significantly with white supremacist movements and racist conspiracy theories, and this has been true since the 1970s. In 1978, neo-Nazi William Luther Pierce published the white supremacist dystopia-fantasy *The Turner Diaries*, which has since become a fundamental text in extremist white nationalist circles (Berger 2016)[12]. In *The Turner Diaries*, the government of the United States is controlled by Jewish elites, black Americans and other minorities have been deputized to carry out violent raids on the (non-race-traitorous) whites, and all privately owned firearms have been confiscated. The book places its white male heroes in a position that is both subjugated and, to the white racist, morally defensible. It depicts black Americans as cannibals and defines women's liberation as mass psychosis. The main character of the novel, Earl Turner, is a member of a white nationalist terrorist cell called "The Organization". Turner and the Organization participate in several escalating terror attacks, which eventually break out into a national nuclear race war. The book is implied to be a recovered historical document: it is annotated throughout by an editor speaking decades in the future, who instructs the reader on how Earl's actions led to the construction of an all-white utopia.

[12] Aside from its role as propaganda and recruitment tool for extremist groups, *The Turner Diaries* has directly or indirectly inspired a number of white supremacist murders, most notably the Oklahoma City bombing perpetrated by Timothy McVeigh in 1995. Some historians have also argued that the makeshift gallows set up outside the Capitol insurrection in January of 2021 were an unmistakable evocation of one of the book's signature scenes, dubbed "the day of the rope", in which the groups reviled by the author–Jewish people, people of colour, and white women–are hanged en masse (Hoffman & Ware).

The Turner Diaries is also part of the bunker discourse media sphere: it crafts a narrative of complete societal destruction and rebirth; it focuses its perspective through the eyes of one protagonist with outsized significance (Earl's suicidal mission to fly a nuclear weapon into the Pentagon ends the book, and also turns the tide of the war in favour of The Organization); it displays a juvenile and conspiratorial understanding of structural problems like governments and gun control; it designates all racial Others as enemies; and it reports technical and material details with fetishistic precision. "Turner walks readers through his cell's preparations, step by step, and often in very specific detail, from how to store and conceal weapons caches to secure communications to the construction of bombs." (Berger 2016, 27).

It might seem upon first glance that Clayton's subtle disdain for "illegal aliens" would not merit the same scrutiny as an explicit white supremacist doomsday fantasy, but the comparison between these two media objects exposes a significant problem: there is nothing in bunker discourse that would discourage or disparage extremist white supremacy, and plenty that permits or even encourages it. In *Life After Doomsday,* Clayton personally thanks Kurt Saxon in his acknowledgements and later recommends his magazine, *The Survivor.* Kurt Saxon was an on-and-off member of various white supremacist organizations, including the American Nazi Party, throughout the 1960s and 1970s, before leaving to concentrate on his survivalist publications (King 1983), and the American Nazi Party famously used (and still uses) *The Turner Diaries* as a recruitment tool. Clayton's only acknowledgement of his work's connections to white supremacy are that some survivalists are "concerned with racial tensions" (1980, xii). The issue is not just that Clayton knows and cites at least one white supremacist; it is that Clayton's work can coexist with Saxon's without troubling any of its fundamental goals. The shared project of returning agency to the hands of a white masculine subject always takes

priority, and both treat the Other as antagonistic, if not monstrous, in order to do so. The difference between Clayton's racism and Saxon's or Pierce's is only a difference of degree.

While the gendered and racial coding of the post-apocalyptic fantasy might be subtle at some times and overt at others, the creation of masculine victimhood is always obvious. Racist conspiracies and Vietnam War revisionism are justifications for why white men can consider themselves victims of the contemporary moment; post-apocalyptic fantasies are a shortcut into a reality where white masculine victimhood is uncomplicated and indisputable. The most obvious version of the fantasy is that the survivalist can expect to have their bunker assaulted by a 'gang' or 'mob' of some kind. It is worth noting that this is *always* the position imagined by survivalists: they are always established in their territory, and interlopers always bring violence *to* them. Clayton emphasizes, in italics, that his chapter on self-defense is "*about defending a refuge*" (1980, 111). When you are in the position of protecting your own property, "you are morally justified in resisting to the utmost" (111). The repeated emphasis that the reader is 'defending' or 'resisting' puts them in the position of victim, rather than assailant. From this position of victimhood, it seems that retaliatory violence of any scale is justifiable, or perhaps even the morally superior course of action. Clayton goes so far as to reassure the reader, "you are not 'shooting to kill.' You are shooting to live. Although all firearms have the ability to take a person's life, only a few have been designed to *save lives*" (112). The pleasure of the post-apocalypse is not just in the fantasy of asserting one's willpower and dominance through violence, but also in the pleasure of achieving moral superiority in doing so. The masculine symbol of the firearm has had its logical relationship to death inverted so it can symbolize moral excellence–saving lives, rather than taking them.

Infrastructural Illiteracy and the tools to build it

With *Life After Doomsday* up for consideration, we can now fully explore a concept key to bunker discourse, which I have so far been referring to as 'infrastructural illiteracy'. This is a shorthand for an interconnected group of illiteracies, misconceptions, and willful ignorances that are necessary in order for bunker discourse to maintain its facade of rationality. In brief, these include feelings of powerlessness and antipathy before the complex global systems of modernity; the tendency to oversimplify infrastructural problems, particularly by transforming them into binary moral conflicts between good and evil; attributing the impacts of complex systems to an individual or group; understanding infrastructures and technologies themselves as neutral, and thereby refusing to acknowledge the existence of structural inequalities; and liberal use of mathematical, historical, or other adjacent fallacies that would make their conclusions possible.

It may already be obvious how some of these illiteracies are interconnected. For example, believing that all technology is neutral renders one unable to perceive how inequality can be built into technology–and if the technology itself is neutral, surely any harm done by it must be the fault of a malicious human actor. The infrastructures in question here are complex, often supra-national systems with material, technological, and human components. For example, bunker discourse almost always misunderstands economic infrastructure. It relies on faulty understandings of currency, banks, resources and markets, and typically argues that governments (or the 'elites' puppeteering them) can manipulate economies directly. As it must by necessity reject complex, abstract social and political systems, bunker discourse is already inhospitable ground for criticism of established hegemonies. Concepts such as patriarchy, white supremacy, ableism and heteronormativity would be swiftly discarded as nonsense in this discourse if they were ever acknowledged at all.

The most vivid infrastructural misunderstandings in bunker discourse come from how it frames the interactions between infrastructure and disasters. The core fallacy of bunker discourse is that certain catastrophes could lead to a complete and total collapse of civilization–i.e., a complete elimination of social, economic, and political infrastructures in at least the United States, if not the world. On the one hand, this is an exaggeration in terms of scale. Most of the catastrophes humanity has faced in the past, no matter how devastating, were somewhat regionalized–including natural disasters, nuclear meltdowns, chemical spills, or terror attacks. When disasters do present a global threat, as in the cases of climate change or the COVID-19 pandemic, they need time to spread from region to region, and upon their spread, they impact different regions differently. Disasters also typically present an opportunity for governments to *assert* their power, rather than crumbling under the strain, as they are expected to marshal their resources to solve the problem[13]. Generally speaking, when we calculate the risk of certain events occurring, we can only extrapolate conclusions based on previous similar events. Predicting the apocalypse is therefore severely complicated by the fact that the world has never ended before[14].

However, the main issue with this misunderstanding is not that a world-scouring event is completely impossible, but rather that it leads bunker discourse to frame other "smaller" catastrophes as nothing more than an unavoidable series of warning signs. It encourages a near-complete dismissal of contemporary problems in anticipation of "the big one". As one example, bunker discourse often and repeatedly cites historical examples of unrest as proof that

[13] They may also make use of their power to diminish the importance or impact of the disaster–such as how the USSR obfuscated many of the details of the Chernobyl meltdown.

[14] There may be an important exception to this: some scholars argue that the genocide of indigenous tribes is tantamount to an apocalyptic catastrophe. Since bunker discourse originates from the dominant culture of white Americans, I will address the perspective of indigenous apocalypse-scholars in the conclusion.

civilization could collapse at any given moment. Clayton references "[riots] occurring in recent years in various cities and college campuses around the country… usually…associated with racial troubles or draft protest," but mentions no specific events by name (1980, 11). He then includes a series of headlines that seem as if they could refer to Vietnam draft protests or Civil Rights protests in the 1960s, only to reveal that they date from the 1860s, and that they are referencing similar actions during the American Civil War. Clayton's point is that "disorganized mob violence…seems to lurk just beneath the surface in many of our cities" (11). He suggests that there may eventually be a riot destructive enough to require a retreat to the bunker. With around forty years of hindsight, we can see that protests for racial justice would indeed recur–the Rodney King riots in 1992 and the Black Lives Matter protests in 2020, for example–but none of them ever reached the civilization-toppling fervor that Clayton was waiting for. As predicted above, those riots also did not threaten the integrity of the government; rather, the police and the military used those occasions to impose state power upon citizens through arrests and extrajudicial executions. Furthermore, because Clayton only documents civil unrest as a possible catalyst for the apocalypse, he is not interested in exploring *why* these demonstrations happen and if, perhaps, addressing systemic issues would make large-scale protests less necessary. He is as uninterested in addressing racial injustice as he is in disarmament; the related conflicts are only relevant to him as justifications for the bunker fantasy.

Other illiteracies support this overall project of misunderstanding catastrophe in a way that benefits the prepper. One tactic that occurs repeatedly in doomsday prepper literature is the misuse of risk estimation. The idea is to take the percentage chance of a particular disaster in the upcoming year and treat it as a simple compounding probability. Here is an example from Clayton's *Life After Doomsday,* in which Clayton estimates the chance of nuclear war in the next

year to be 2%, and then uses that figure to calculate the likelihood of nuclear war in the next 75 years:

TABLE 1
Probability of Consecutive Years of Peace

YEARS	PROBABILITY IN PERCENT
1	98
5	90
10	81
25	60
50	36
75	22

Figure 2. Table of calculations of the 'Probability of Consecutive Years of Peace' from Life After Doomsday. (Clayton 1980, 15)

This approach to risk calculation relies on some illustrative fallacies. The first is that any estimation of risk, as aforementioned, must be based on the frequency of prior events. There has never been a nuclear war (at time of writing), which means there is no precedent on which to base this data (Nelson 2022). Clayton's source for the 2% likelihood of nuclear war is "an estimate by a knowledgeable man," meaning we have no idea what data this knowledgeable man used or how he derived his final percentage (1980, 14). It is also implausible (to put it mildly) that this chance of peace will compound unchangingly for the next 75 years. And we know this is true, because even if the knowledgeable man's estimate was accurate in 1980, the USSR would collapse and the Cold War would end within twelve years, which would surely shift the probability of nuclear doomsday. The prediction of risk is a complicated, involved, and extremely fallible process, and is particularly ill-suited for a long-term prediction of how the world will end. This estimation requires statistical illiteracy, but also infrastructural illiteracy; it requires that we take a teleological approach to all the systems involved in apocalyptic

imaginaries. We must read our social and material infrastructures as self-determining and inevitably progressing in a single direction.

This type of estimation is reflective of infrastructural illiteracy, but it also facilitates it. One of the most insidious parts of infrastructural illiteracy is how it fabricates the inevitability of catastrophe, and in this project, statistical deception is an invaluable tool. Reducing nuclear war to a percentage chance–moreover, a type of percentage chance that is *specifically designed to make an event appear inevitable*–provides the perfect excuse for one to throw up one's hands and refuse to acknowledge any systemic complexity that may provide space for an alternative outcome. It also obfuscates the opportunities an individual or collective might have for averting the event. If you are convinced that nuclear war is a statistical certainty, what use is a public disarmament movement? This fabrication is necessary to support the political detachment inherent to bunker discourse. Agreeing to disengage completely from a social system is much easier, and much more appealing, if you believe the system is doomed. This is also another reason for the bunker discourse moniker: the bunker is designed not only to separate you from nuclear fallout or roving gangs, but also to detach you from the infrastructures of society–voting, taxes, capitalism, the news media, and so on.

But why is detaching oneself from society in this way so appealing? As mentioned above, modernity relies on massive, complex networks composed of heterogeneous actors. The desire for apocalypse addresses one of the main anxieties of modernity, which is the feeling that the operations of these systems are beyond one's control. An inflation crisis providing the foundation for bunker discourse is thus very appropriate: a misbehaving economy is an ontological nightmare. No one person, organization, or government has control over the economy. It does not exist anywhere in particular, yet it impacts every citizen on a significant

material level. It *also* reacts to public sentiment, which is abstract and intangible. The reality that two major world powers are on the brink of nuclear war–as was the case when Clayton was writing his book–is equally disempowering. Many apocalyptic fantasies involve the comprehensive eradication of modernity, which would (in theory) place much more agency in the hands of the individual. This is fairly evident in Clayton's book, as it is dominated by instructions for survival projects and, above all else, shopping lists. One of the illusions neoliberal capitalism imposes on us is that we can effectively assert our agency through purchases, so the first step to recapturing one's agency is to buy it from somewhere (Szasz 2007). In the Foreword to Mel Tappan's *Tappan on Survival,* published just after Tappan's death in 1981, fellow survivalist and science-fiction author Jerry Pournelle reminisces on how Tappan changed his life. His reason: "I can reach out and put my hand on a dozen objects I wouldn't have if Mel hadn't written his books" (Tappan 1981, v)

To review: bunker discourse must misrepresent disaster in order to convincingly argue that apocalypse is inevitable. To craft this inevitability, it dispenses with the complexities of relevant issues–such as global economics or nuclear politics–and treats related events as indicators of an unchangeable pattern. The oversimplification of infrastructures and their issues is not just useful for creating apocalyptic scenarios; it also helps navigate and characterize modernity while we are still trapped in it. This is partly why the apocalyptic imaginary often overlaps so neatly with conspiracy theories: both are ways of addressing (or rather, of avoiding) the complexity of modernity. Conspiracies strip down complicated systems in order to satisfy "the desire for understanding, accuracy, and subjective certainty" (Douglas et al, 2017 538). They ascribe human intentions to systems, like national economies, that operate beyond the influence of an individual. The apocalyptic fantasy simplifies systems in the same way, with the

additional promise that these systems are fated to collapse. Apocalyptic fantasies and conspiratorial narratives can coordinate to introduce an element of karmic justice to their narratives, in that the actions of those mysterious figures perpetuating the conspiracy are often assumed to be self-destructive: the conspiracy is responsible for the current state of the world, but its actions are so unethical and misguided that they will lead, ironically, to societal collapse. Conspiracies designate the behind-the-scenes operators as evil and the layman as good; apocalypses provide a way for the evildoers to get their comeuppance.

Financial conspiracy in bunker discourse

Here we must address the specific conspiracy that informed the earliest years of bunker discourse. According to this theory, the villain responsible for the economic downturn in the 1970s is the Federal Reserve. Preston's *How to Prepare for the Coming Crash* begins with a regurgitation of the Federal Reserve conspiracy, and survivalists across the 1970s will parrot his description. This conspiracy combines questionable economic theory with the common contention that a shadowy council of "elites" are controlling the global economy from behind the scenes.

The flawed economic framework for this conspiracy comes from Milton Friedman's theory of inflation as a one-to-one reflection of how much money is in circulation. Most mainstream economic theory considers this a drastic oversimplification of the actual mechanics of inflation, and more recent empirical studies have revealed some of Friedman's arguments to be based on faulty evidence, and therefore misleading if not untrue (Golumbia 2016). From this faulty beginning, conspiracy theorists in the 1960s and 70s streamlined this understanding further. In the mind of men like Robert L. Preston, the Federal Reserve either printed money in

an intentional but misguided attempt to sustain its own power, *or* to purposely devalue the U.S. dollar as an act of international sabotage. This half of the conspiracy–that the money supply is controlled by a sinister group of malicious actors–actually predates Friedman's theory of inflation, and evolves almost purely from anti-Semitic misinformation. Eustace Mullins, an outspoken anti-Semite and Holocaust denier, claimed as early as 1952 that the Federal Reserve was run by a cabal of 'Jewish elites'. Preston simply includes the Rothschild family in his history of money and leaves the connection implied. Preston is one of the bridges between the Federal Reserve conspiracy and bunker discourse; his book is part conspiracy, part preparation instructions. For those who preach survivalism, the conspiracy provides an argument that the world is ending imminently. Both Mel Tappan and Bruce Clayton parrot Preston's faulty understanding of inflation and how it could potentially topple society, even as Clayton admits that economics is outside his area of expertise.

As an additional example of the bunker-discourse practice of oversimplifying infrastructure, the survivalist-economists of the 1970s were very concerned by the fact that the United States fully divested its currency from the gold standard in 1971. Preston claims in his book that gold and silver are "real" money because of their inherent value, and paper currency is merely a "receipt" (1972, 17). This is also an inaccurate oversimplification. In modern markets, gold and silver are considered commodities, and thus they are still subject to fluctuations in value. In the very specific type of global collapse envisioned by preppers, however, there will be no commodity markets–only exchanges between individual survivalists, who will somehow have to decide how to value their stashes of silver coins. This particular imaginary economy demonstrates that it is not just complexity that frustrates adherents of bunker discourse, but abstraction. The value of fiat money (paper currency) is typically explained to the layman as

"backed by the people's trust in the government that issued it". Most survivalists have *no* trust in the government, which extends to a suspicion of fiat money, but Preston's insistence on gold as the only "real" money also betrays the bunker discourse fixation on materiality. Bunker discourse valorizes autonomy and independence, which are enacted almost exclusively through material or embodied means–owning a retreat, stocking up on food and supplies, and performing violence against the Other. The idea of a currency backed by something as immaterial as trust is consequently seen as disempowering: you cannot count, store, lift or weigh *trust* in the way you can with gold. And if you are a libertarian survivalist, clearly your *mistrust* of the government has not impacted its currency at all. This renders bunker discourse insensitive to (and suspicious of) any infrastructures that operate intangibly in some way–and here we could include a variety of examples from fiat currency to patriarchy, or any other system that exerts power through both material and immaterial means.

This example illustrates exactly how bunker discourse streamlines complex issues into simple parables. The greedy men behind the curtain at the Federal Reserve have moved away from "real" money on purpose, and are deceiving us by pretending that fiat currency has value. This immoral behaviour, in truly poetic fashion, will lead directly to their downfall: Preston and his fellow doomsayers predicted that the Federal Reserve's money-printing would devalue the US dollar to the point where the American economy and government would collapse. This is a common pattern. Many other apocalyptic catalysts that can be assigned a human cause are also assigned a moral dimension[15]. In the case of nuclear war, the crisis at hand comes pre-simplified by the anti-communist rhetoric of the Cold War. The villains were the Soviets, and mutually

[15] If a potentially apocalyptic crisis is neither religious nor obviously manmade, conspiracy theorists may contort reality even further to impose moral dimensions upon it. Consider, for example, the popular and groundless theory that the COVID-19 pandemic was a bioweapon that breached containment.

assured destruction would be their comeuppance. In the case of protests for racial justice, the label of immorality is assigned to the protestors, who are recharacterized as rioters–a transformation only possible because the adherents to bunker discourse have wished structural injustices out of existence.

An apocalypse for any occasion: Y2K and 9/11

As described above, proving that bunker discourse qualifies *as* a discourse requires that it remain consistent even in the face of other social, political, and cultural changes. Significant events in the past forty years, which have in many ways altered our perceptions of disaster, do not alter the tenets of bunker discourse. Instead, they are often employed to reinforce them. The five decades since the formation of bunker discourse are interspersed with crises large and small. Two catastrophes at the midpoint of this fifty-year span present important contrasting examples of how bunker discourse remained consistent. The Y2K bug was a catastrophe that was widely predicted but never materialized; the September 11th terror attacks were a shock to the general public, and responses to it were retroactive, rather than pre-emptive.

Y2K is something of a unique event in the history of apocalyptic catastrophe. It is arguably the only man-made apocalypse that was provably, permanently averted. Most other man-made apocalypses lack a hard deadline: as long as the technology for manufacturing nuclear missiles still exists, for example, the possibility of nuclear war can never be fully discounted. Meanwhile, religious apocalypses–including everything from early Mormon apocalyptic predictions to the misappropriation of the Mayan calendar in 2012–frequently predict specific dates for the end of the world, only to see them pass by, leaving the world un-Raptured. But the Y2K bug was a man-made problem, and its failure to end the world was reflected in man made

technology everywhere, from functioning bank statements to safely landed airplanes. It was essentially a mediated apocalypse, in which all the fears of destruction centred on how humans stored information and communicated it to each other.

In brief, the Y2K bug was not a singular computer bug, but rather a series of design decisions made in previous decades that could potentially cause failures in any computer system that relied on a specific date (Gibbs 2019). In the early years of computer programming, storage space was limited and expensive. To save space, most programs that required a date would represent the year in two digits, meaning '1999' would be recorded as '99'. Once the calendar turned over to 2000, computers would begin to record the year as '00'; apocalyptic theories suggested this would cause catastrophic mathematical errors in the software that controlled everything from banking to national defense. This theory was not completely unfounded, as software engineers and other computer experts did recognize the potential for the Y2K bug to disrupt computerized systems in the 1990s. Once the issue was reported to the public, however, it was quickly exaggerated, oversimplified, and widely misunderstood. One concern expressed by computer programmers was that embedded systems–computers installed in larger mechanical systems such as airplanes–could not be changed retroactively. This quickly mutated into the signature image of Y2K chaos: the prediction that planes would fall out of the sky at midnight on New Year's Eve. Inevitably, the doomsday merchants of the day predicted that Y2K would cause the collapse of society. Evangelicals even began to tie the Y2K panic to religious prophecies (Schaefer 2004). The vast majority of predictions, religious or otherwise, did not come to pass.

In retrospect, the Y2K panic was generally characterized as much ado about nothing, but this, too, is an oversimplification. Some predictions were groundless from the outset; computerized systems on airplanes do not need to record what year it is to keep the plane in the

air. Some Y2K bugs did occur, and caused small to moderate disruptions in many different sectors. Contemporary articles catalogued errors in weather centres, social service databases, and point of sale machines. Commentators largely believe that the worst of the crisis was averted by the thousands of programmers who did the tedious manual labour of scraping millions of lines of code for errors (Beckett 2000, Gibbs 2004, Allen 2019). Planes were never going to fall out of the sky, but the transition to the new millennium could have been much, much rockier. Lessons were also learned in terms of digital preparedness in times of crisis. Many systems also lacked backups or redundancies, which were implemented as a part of the Y2K project. Y2K bugs certainly could have been a problem, but the problem was overblown, and successful prevention of the problem felt underwhelming.

For the purposes of this dissertation, fears of a Y2K doomsday produced a small boom of interest in survivalism and bunker-building. Entrepreneurs sold shelters, magazines, guns and MREs; televangelists prophesied that Judgment Day would arrive through the predicted Y2K collapse, and many began to partner with survivalist companies (Schaefer 2004). Just as they had in the 1970s, survival guides proliferated. Survivalist books climbed the *New York Times* best-seller list, complemented by a new media incarnation in the survivalist website. Among the hundreds of Y2K advice books, offerings such as Michael S. Hyatt's *The Y2K Personal Survival Guide: Everything you need to know to get from this side of the crisis to the other* are as representative of bunker discourse as Clayton's *Life After Doomsday*. Hyatt's book includes very similar checklists of rations, tools, and medical supplies. It opens with comprehensive doomsday prophecies (expanding beyond Y2K), and suggests moving away from dangerous urban centers. Hyatt's book takes an innovative stance on violence by suggesting alternatives to firearms, such as purchasing a taser, self-defence classes, or a guard dog: "if you want a dog for protection

beginning in January 2000, it is obviously too late to get a puppy" (1999, 258). Ultimately, though, violence is still a necessity, as Hyatt claims that "self-defence philosophy" is something that must be meditated on before the new millennium (258). Hyatt is also an evangelical Christian, which puts him in an interesting position regarding violence and community. Evangelicals must somehow square the Christian ethic of neighbourly generosity with bunker discourse's obsession with resilience and its general antipathy toward the Other. To do this, Hyatt draws a hard line between people who are safe (neighbours, fellow Christians) and people, usually envisioned as a mass, who are dangerous ("thugs", "criminals", or "a mob", (125)). Hyatt also sees the Y2K apocalypse as an opportunity for conversion. He quotes a pastor, Bill Mendel, who "hopes that his community food reserves draw in the meek of his community, so that he can spread the Gospel to them" (311). "The meek" are certainly a different mass from "the mob"; they are by definition non-threatening. In some places, the Christian prerogative of generosity *becomes* the power fantasy; Hyatt considers preparation for Y2K his personal calling (124). The apocalypse will bring not only judgment, but also the satisfaction of knowing that God chose *you* to lead people to sanctuary. And, of course, Hyatt indulges in more classic survivalist fantasies: the chapter on self-defense is bracketed by a short fictional narrative about a man named Stephen chasing robbers off his property with nothing but the click-clack of his shotgun. As we now know, a religious reckoning at the turn of the millennium would not come to pass, and any who followed Hyatt's advice would find themselves disappointed (hopefully not with their new dogs). A *Forbes* article quotes a survivalist who emerged from his bunker in the middle of January: "In a way, I was kind of looking forward to it…I really felt that I could meet the challenge" (Allen 2019). This rather gives the game away in terms of the appeal of the apocalypse: it is an opportunity to test one's autonomy.

However, some texts that describe preparing for Y2K sit outside the bounds of bunker discourse, and these make for an interesting comparison to those that do. Of note here is software engineer Ed Yourdon's book *Time Bomb 2000,* co-written with his daughter Jennifer. While this book does make predictions that largely never came to pass, it is far more conscious of infrastructure and how it operates. For example, Yourdon & Yourdon include testimonials from experts beside themselves that actually challenge their conclusions. One comes from a consultant in the electrical industry, who explains why our electrical grids were not likely to fail on a national level on New Year's Eve, 2000[16]. Rather than designating the countryside as safe and the city as dangerous, these authors are more even-handed about the infrastructural differences in rural and urban life. They speculate that city- and suburb-dwellers will likely get electrical power back before rural areas, which would be considered lower priority (1998, 81), but that rural areas may allow for better access to fresh food and more space to store it (185). In their section on banking and investments, they compare the worst-case Y2K scenarios to the Great Depression, or Russia after the collapse of the USSR, in that there would be severe disruptions for many, but not changes that would obliterate the entire financial system overnight. As Yourdon & Yourdon put it, "We certainly don't foresee any possibility of a Year-2000 crisis taking us back to the days when we relied upon gold coins, bushels of wheat, or other forms of barter" (163). They identify specific points of failure, rather than predicting complete collapse; they worry, for example, that food distribution in certain American cities would suffer specifically because the system is reliant on truckers, many of whom are contracted independently. Yourdon & Yourdon reason that independent contractors might be more reluctant to deliver food if payment systems *and* gas stations were compromised, particularly if the crisis made these truckers worried for

[16] In short, it is because the power grid is built with enough redundancies that date-related bugs in some systems would not impact power generation at a national level.

their safety (176). Yourdon & Yourdon also have a very different attitude toward violence. They do warn about urban riots–though only in the case of very severe disruptions, such as a month-long collapse of the social security system–but do not mention firearms or home defense at all.

While the concerns in *Time Bomb 2000* are overblown, the book is not apocalyptic, and it is not interested in catering to the heroic power fantasy of bunker discourse. The authors understand that survival during a disaster is not exclusively a matter of how prepared *you,* the reader, are. Rather, it depends largely on the resilience or failure of different infrastructures, the most fragile links in their extensive chains, and how swiftly different institutions could fix them. While the authors express limited faith in governments, it does assume that they will largely remain in place, and that survival in the year 2000 will be a matter of navigating their systems in a state of emergency. In their section on electricity, Yourdon & Yourdon even suggest building a relationship with an official at the nearest utility company and maybe sending them a birthday card (1998, 78).

Once the Y2K bug failed to impress, Ed Yourdon did something that was also unprecedented in apocalyptic media: he looked back on this work and admitted that he was wrong. Yourdon was a fairly influential software engineer in the 80s and 90s, and leading up to the year 2000, he maintained a personal website and occasionally released essays about his concerns regarding the Y2K problem. In the new millennium, he returned and conducted post-mortems on four of these essays. These reflections are not technical, but philosophical: Yourdon asks himself whether it was morally correct or politically effective to write his predictions. This is interesting for two reasons. Firstly, doomsday merchants rarely admit to being wrong. Most of those whose Y2K predictions were foiled either disappeared from the conversation (like Michael S. Hyatt, who retreated into a management position in the publishing industry for ten years

before re-styling himself as a self-help guru) or claimed victory, as the problem had been resolved (Beckett 2000). What is most striking, though, is that Yourdon regrets his work on promoting awareness of the Y2K bug:

> I can't help looking back on all that hard work that I did and asking myself: *why did I bother?*...many [friends and colleagues] have said to me, "Your work *did* matter. It *did* raise awareness. It *did* lead some companies to take Y2K remediation more seriously. It *did* make some families and individuals aware of just how vulnerable they were to *any* disruptions, whether it was in the form of Y2K or a hurricane." It's very gratifying to hear such reassurances, but I think that there were similar warnings and predictions coming from other people that my absence wouldn't have mattered. (Yourdon 2000)

Despite the fact that Yourdon's background in software engineering lent him credibility with authorities, and despite the generally accepted conclusion that considerable work *was* necessary to mitigate the potential damage of Y2K, Yourdon was unable to see this work as worthwhile simply because other people also wrote similar books. Ed Yourdon's work on Y2K was far from unimpeachable, and yet its failure to be unique is not something for which it can be criticized. Yourdon's Y2K work is not emblematic of bunker discourse, but it *does* show just how strongly contemporary American culture equates heroism with unique, independent action. Y2K was proof that some disasters can only be averted if a large number of people coordinate to make a small contribution, and this contribution might involve work that is not heroic at all, but tedious and irritating. Programmer Emma Byrne, who worked on Y2K projects in the United Kingdom, compared it to joining a monastic order and said, "no one gets to be a star about this" (Gibbs 2019). Bug-hunting in the leadup to Y2K was a thankless task, and as a result of excessive scaremongering, the consultancies and programmers involved were mostly seen as grifters in its wake. With its mundane solution and its unremarkable denouement, Y2K posed no threat to the apocalyptic imaginary of bunker discourse. It may have cast a temporary shadow over the credibility of doomsday prophecies, but this would not last. Triumph over a singular disaster,

whether the threat was overblown or not, does not threaten bunker discourse, but every new disaster reinforces it. More catastrophe awaited in the 21st century, and when it arrived, the temptations of bunker discourse would resurge with it–as would some of its original architects.

Twenty-two years after *Life After Doomsday,* Bruce Clayton published a follow-up volume, *Life After Terrorism,* in response to the September 11th attacks. While the instigating catastrophe was different, the content of his work had not changed much in the interim; in fact, it was Clayton's very experience with survivalism in the 1970s that convinced him he was qualified to write a sequel. The formula of *Life After Terrorism* is very similar to that of *Life After Doomsday:* Clayton begins both books with a comprehensive introduction to the apocalyptic danger at hand, and then provides shopping lists and recommendations for further reading. The timeframe for survival and retreat in these books has changed somewhat: *Doomsday* imagines irreversible disasters that would leave one burdened with the rebuilding of society, while *Terrorism* addresses temporary, localized crises, like natural disasters or terror attacks, and survival tactics over a period of weeks, rather than decades. At one point, it seems that perhaps Clayton has come face to face with one of the falsehoods holding bunker discourse together. After a decade of experience as an emergency response planner in California, he admits that in the face of a disaster more people are likely to help than turn to violence:

> It is the universal experience of emergency managers that victims of a disaster pull together, treat each other like family, and risk their lives for total strangers…In disasters, people forget about their differences and show irrational love and cooperation for one another. (Clayton 2002, 115-116)

The human capacity for compassion upsets a basic rule of bunker discourse, which posits that we are all one catastrophe away from turning on each other. But this revelation is not enough to free Clayton from his discourse. He does not reach the end of this section before suggesting that "you should have a shotgun with a handful of shells" in any emergency (117). He makes a revealing

statement about this a few pages later: “In a disaster you probably won’t need [a] pistol, but it makes you feel better about being on foot in neighbourhoods you wouldn’t normally visit” (131). This phrasing is a dogwhistle: due to the historical policies of redlining, white flight to the suburbs, and the conflation of race with criminality with urban spaces, the “neighbourhoods” the reader “wouldn’t visit” are almost certainly minority neighbourhoods. This paradox–that Clayton can extol the generous virtues of humanity on one page and then claim one should have a gun in “certain neighbourhoods” on the obverse– presents no challenge to bunker discourse at all. It merely exposes that within bunker discourse, the designation of humanity is only extended to certain people. This is borne out in the first half of the book, in which a strict definition of “us” (the heroes) and “them” (the terrorists) is drawn along racial lines: “we can’t predict *their* actions by thinking like *us*. We have to think like them instead” (98). This is particularly evident in who is granted clemency from the “terrorist” label: Timothy McVeigh and Ted Kaczynski, both white men, are “lunatics, not terrorists” (18). David Koresh is granted a similar reprieve, with an interesting reason: “In my opinion, people who build their own prison compounds and move into them have done society a service. The appropriate response should be to put up “quarantine” signs around the neighborhood…if they want to withdraw from the world, let them” (21). Meanwhile, Clayton implies that it is a security risk to employ “Arab noncitizens” at airports (130).

And beyond that, *Life After Terrorism* is more of the same. Clayton makes sure to flatter the protagonist for their autonomy: “People who are willing to confront the challenge of survival…are independent thinkers, solitary eagles” (Clayton 2002, 139). He also advises the reader to purchase a retreat in the countryside and escape there during dangerous times. This creates a fascinating contradiction: Clayton expects others to be generous during a crisis, but

assumes his survivalist reader has no interest in practicing this generosity. In fact, by his own model, he encourages behaviour similar to David Koresh–if you want to withdraw from the world, do so (21). Perhaps it is no surprise, then, that Clayton observes: "I once interviewed 150 survival families…They all wanted to join a group but couldn't find anyone they agreed with or trusted" (140).

Both of these events provide evidence of just how resilient bunker discourse is. If a disaster is mitigated by cooperative work, it does not register as a disaster; if it is explosive, devastating, lethal and immediate, the cooperative work done in its shadow is lauded one minute and discarded the next. Any disastrous event can act as "proof" that "something far worse" is possible. Disasters provide the impetus for prepping and bunkering, which are ultimately selfish ways of disengaging oneself from contemporary problems. Real disasters are complex, and addressing them may require that we trust the actions of a largely faceless network of human, mechanical, digital, and abstract actors. Instead, practitioners of bunker discourse prefer to address problems that are solvable by an individual: finding food, water, and shelter. Unlike the vast majority of work done under the disempowering conditions of modernity, in a survival situation, the reasons for your actions and the impact of those actions are very clear. Additionally, as Clayton's text unwittingly reveals, this fantasy requires an intentional and imperfect self-quarantine, the kind of isolation that will be both perpetually threatened by imaginary enemies and undermined by the very infrastructures that make our survival possible. Yourdon's regrets over his career and the disappointed survivalist emerging from his bunker in January of 2000 expose why these imaginaries are so compelling when we confront catastrophe: bunker discourse does not satisfy the need to prepare for disaster, but rather the desire to feel in control.

The promise of this satisfaction in the face of disempowering disasters has produced more ‘doom booms’ of record across the first quarter of the 21st century. The growing catastrophic impacts of climate change, the COVID-19 pandemic, and the Russian invasion of Ukraine all bolstered the bunker-building economy, as did the election of President Obama. In the next chapter, we will look at bunker discourse in its contemporary form. In the current moment, who are the people perpetuating this discourse, and what exactly are they trying to sell us?

CHAPTER 2: Contemporary Case Studies in Bunker Discourse

The purpose of this chapter is to conduct an in-depth investigation into contemporary bunker media, including bunker designs, survivalist non-fiction, online prepper forums, and billionaire pet projects. Whereas the previous chapter presented the historical conditions of emergence of bunker discourse, this second chapter is organized around a series of case studies in how bunker discourse manifests in different media. Woven throughout these case studies is the theme of infrastructural illiteracy, and, more importantly, how infrastructural illiteracy is key to the enshrinement of white American hypermasculinity. The greater purpose of this chapter, then, is to prove that infrastructural illiteracy and white supremacist patriarchy are so fundamentally intertwined with contemporary survivalism and the post-apocalyptic imaginary–with bunker discourse–that a massive discursive shift is both warranted and necessary.

Importantly, this second chapter rests on an artificial distinction between "fictional" and "non-fictional" doomsday media, as described in the introduction. There are many reasons why this distinction is illusory: arguably, all prepper media are at least partly speculative and therefore somewhat fictional; fictional apocalypses are constantly invoked in prepper literature and used as practical tutors; apocalyptic conspiracies arguably owe more to narrative tropes than reputable evidence; and so on. Each media object examined here is at least *addressed to* the "real" potential of an apocalyptic future, and thus is intended to be used as a guide or resource. The sincerity of this address and the actual likelihood of the apocalypse in question are not significant determinants in any of these case studies.

The specific examples discussed here are the bunker designs sold by four companies; the doomsday projects of Silicon Valley billionaires and the book that inspired them; and the survival manual of an ex-pickup artist. Each of these case studies includes a number of

supplementary documents and media objects to help embed them in the broader conversation of bunker discourse. Therefore, the first section examines both the bunker designs themselves and the marketing materials of the companies in question. It should also be noted that the designation of "contemporary" media is quite loose. For example, one significant book in this chapter, *The Sovereign Individual*, was published in 1997; however, its impact on Silicon Valley culture in the 2020s is still indisputable, considering its 2020 reissue with an introduction by Peter Thiel. The media archaeological method instructs us not to be too precious about exact dates. If an older text is republished and obsessed over, it is relevant; more importantly, it may still be part of the same discursive formation. Our approach to archives should be flexible, thereby preserving the heterogeneity of everyday experience–and experience that regularly sees the resurgence of older texts (Parikka 2012).

Lastly, it is important to define the kind of masculinity enshrined by these various case studies. The masculinity of bunker discourse is a specific type of white, able-bodied, middle-class hypermasculinity in which one's masculinity is contingent on the possession of those other identities: in other words, the masculinity of bunker discourse is contingent on the subject's whiteness, able-bodiedness, and success under neoliberal capitalism. As an example, the role of the patriarch in bunker discourse is often imagined as one who "protects and provides for his family". The assumption of this role therefore requires a certain amount of able-bodiedness and economic security, as the patriarch is able to both labour under contemporary capitalism and protect his family through the deployment of violence. With this in mind, the discussions of masculinity in this chapter are intertwined with questions about ableism, race, and capital.

This claim situates this work among other studies of contemporary white masculinity. I have already mentioned Casey Ryan Kelly's idea of white masculine victimhood as useful for

understanding prepper masculinity. The practice of producing white masculine victimhood situates the white male in an (unsubstantiated) position of subjugation in order to redeem his social role and justify his exercise of retributive violence. Importantly, Kelly and others analyzing this kind of white hypermasculinity are not restricting their analysis to survivalism, but rather to white masculinity more broadly, in its multiple coexisting manifestations (Preston 2010, Kimmell 2013). Similarly, other masculinities besides those performed by preppers are relevant to this chapter, with white geek masculinity playing a notable role in the second section of this chapter.

Woven throughout these case studies and discussions of masculinity is the theme of infrastructural illiteracy. It is in the process of reasserting white masculine victimhood that one of the key roles of infrastructural illiteracy in bunker discourse is made clear. Only through determined ignorance of structural injustices can white masculinity see itself as aggrieved, and only through ignorance of global interdependence can it make itself heroic. It is quite telling that the habitat most conducive to the flourishing of violent white masculinity is one essentially without infrastructure.

And, of course, as it is a foundational component of bunker discourse, I will continue to investigate its claim that safety is best constructed through isolation. This chapter is particularly important in demonstrating how this logic of isolation ties into both infrastructural illiteracy and the enshrinement of white masculine struggle. Men—survivalist men, who patrol their well-prepared properties and assert their physical strength—are responsible for constructing and maintaining the barrier between the dangerous outside and the safe havens indoors.

The first section of this chapter investigates companies that sell bunkers to doomsday preppers—dubbed “doomsday merchants” by Bradley Garrett. Of particular concern here is how

the designs reflect this idea of safety through segregation, and how this idea is already flawed at the architectural level. Furthermore, I argue that the designs of these bunkers reflect broader patterns of white flight in suburbia, and thus a desire to separate the white family unit from a criminalized Other.

The second section of this chapter addresses the question that opened this dissertation. Why does the destruction of modern society appeal to the men who have arguably profited more from late-stage capitalism than any other—that is, Silicon Valley billionaires? The archival material of this section includes *The Sovereign Individual,* an economic-apocalyptic prophecy touted by Peter Thiel, as well as the private bunkers and island retreats of various billionaires. This section addresses how bunker discourse ties together neoliberal capitalist ethics and masculinity, as well as gesturing towards the dangers of the proliferation of bunker discourse into other realms of design.

The final section of this chapter focuses on the body of the prepper as an expression of masculinity, paying special attention to the role of able-bodiedness in bunker discourse. In particular, I argue that able-bodiedness is both celebrated and taken for granted among preppers, to the extent that the material dependencies of the body are imagined out of the apocalyptic future. The archival objects in this section of the dissertation are a survivalist manual written by an ex-pickup artist, posts from r/prepper (the survivalist subreddit), and—for reasons that shall, appropriately, become clear later—photos of doomsday merchants in eyeglasses.

Bunkers: Doomsday merchants and architectural design

At time of writing, the doomsday business is booming (Marx 2024). The COVID-19 pandemic spurred an increased interest in preparing for the apocalypse, and the invasion of Ukraine and conflict in Palestine triggered their own spikes in demand. This is reflected in the

recent success of what Bradley Garret calls “doomsday merchants”–businessmen who make their living selling, building, designing and installing bunkers and related survival gear. The “doomsday merchants” term is perceptive; in order to sell doomsday bunkers, these entrepreneurs must first sell their customers on doomsday.

Due to this prerogative, doomsday merchants are some of the most fervent proliferators of bunker discourse. Their marketing materials make pointed arguments about how we should understand disaster and apocalypse. More importantly, their products are bunker discourse made manifest: the designs and affordances of their doomsday bunkers set their principles of disaster down in steel and concrete. While the architectural styles of these bunkers are quite varied, there are notable consistencies across the board, including the use of underground space, the prevalence of gun safes, and the general adherence to the design of the suburban home. Examining these consistencies will expose the flaws inherent in the principle that safety is best achieved through division between safe and unsafe, as all of these tendencies in bunker design can create just as many hazards as they claim to mitigate. Throughout this section, I will also identify the ways that structural and infrastructural misunderstandings help preserve the ideology of safety through division, as well as how these elements of bunker discourse reify the identity of the white male patriarch by constructing a masculine sanctuary within the traditionally feminine domestic space.

This section examines four bunker construction companies: VIVOS, Fortitude Ranch, Atlas Shelters, and Oppidum. These companies are notable not only for the appeal of their products, but also for their media presence. Netflix documentaries, New Yorker interviews, company websites–all of these groups have actively sold doomsday. The way that the company founders or spokesmen express their convictions about the end of the world are also examples of

bunker discourse in its contemporary state. These companies are central enough to this chapter that an introduction to all four players is merited.

VIVOS is arguably the most visible company in the doomsday shelter market. VIVOS's shelters are part of three different complexes built from repurposed military facilities—one each in North Dakota, Indiana, and Germany. VIVOS also offers pre-built shelters dubbed VIVOS Trine. VIVOS is notable because its CEO, Robert Vicino, goes out of his way for media exposure. Interviews with Vicino appear in the introduction of Bradley Garrett's Bunker: Building for the End Times, and dozens of periodical publications. VIVOS's xPoint bunkers featured on an episode of Netflix's Amazing Interiors. In public appearances, Vicino often frames his business as a higher calling, and he acknowledges the symbolic weight of apocalyptic narrative. The VIVOS group also maintains a fascinating website, which is a mixture of product pitches and apocalyptic prophecies.

Fortitude Ranch builds doomsday bunkers in the form of small, isolated communities. Observationally, this has been one of the more successful shelter businesses of the past five years. In the time I spent researching this dissertation (2021-2025), Fortitude Ranch expanded from one location to five, with eight in total planned, and its website underwent a major redesign. Fortitude Ranch's founder is an ex-military officer with a PhD in international relations. What makes Fortitude Ranch unique is its "retreater" vibe: each location features a dozen rustic cabins sitting atop underground bunkers, tucked away behind fortified walls in the depths of the wilderness. Another savvy business decision may have contributed to the Ranches' success: they operate as vacation destinations in the pre-apocalyptic meantime, offering regular classes in marksmanship, first aid, and other survival skills.

Atlas Shelters are the people's bunkers, provided those people are moderately well-funded American suburbanites. This company designs different underground and basement shelters, usually appended onto suburban homes. Their shelters are often marketed as disaster-specific (for e.g., tornado shelters) and their website is very specific about dimensions and requirements in each case. The brand's aesthetic leans closer to industrial efficiency than VIVOS's nuclear doomsday look or Fortitude's apocalyptic summer camp; large warning signs, black and yellow stripes, and lists of affordances of each bunker are the main features of their promotional material. Founder Ron Hubbard's media presence is less grandiose than that of VIVOS's Robert Vicino, but he gives frequent interviews.

All of the companies above are based in the United States, and founded and operated in the United States. As a point of contrast, Oppidum was based in Switzerland before its closure at the end of 2024[17]. Its ultra-wealthy clientele came from places around the world, including the United States, Europe, and the Middle East. Oppidum's promotional material characterized it as a "bespoke luxury bunker company". Whereas the previous three companies are selling to what remains of the American upper-middle class, Oppidum targeted the global one percent. Their bunkers are custom-built, but the templates on their website carried million-dollar estimates (in USD). Oppidum was unique in that it did not appeal directly to aesthetics of disaster and survival, but rather those of high-class architectural design. Their website featured promotional videos of bespectacled architects sketching bunkers by hand.

Placed alongside each other, these four survival shelter companies might seem to cover a reasonable breadth of tastes and lifestyles. Atlas's functional, industrial aesthetic does not have

[17] It is impossible to know at this juncture why Oppidum closed its doors. If we can take founder Jakub Zamrazil at his word, it is not due to a lack of demand, as Oppidum was receiving inquiries into the spring of 2024 (Desmarais 2024).

much in common, on the surface, with Fortitude Ranch's frontier cabins or Oppidum's ultra-luxe underground manors. Yet these bunkers do share a key motivation in their design: they are meant to guarantee safety. In some ways, safety is actively quantifiable; basic principles of engineering, physics, and chemistry dictate our infrastructure, and straying too far from those standards does produce a larger chance of injury, death, or structural failure. However, safety is also an affective state: we can feel safe or unsafe, and producing a feeling of safety does not necessarily have anything to do with engineering. Scholars doing cultural work on risk and emergency have pointed out that this affective dimension has a significant impact on our responses to crises, as well as the way we prepare for or avert them. Michael Barkun notes that civilians–those with no expert information on the likelihoods of certain disasters–tend to assemble "'risk stories', narratives with villains, intention, dramatizations, and morals that create a compelling tale" (Barkun 2011, 29). Because 'risk stories' are more beholden to their own internal, symbolic logic than to reality, "the landscape of fear is consequently constructed both from the products of reasoned analysis and from the exercise of imagination" (Barkun 2011, 69) Barkun also acknowledges that these stories are influenced by external cultural and political context. Elizabeth Ellcessor, in her book on emergency media, refers to these stories as infrastructures of feeling– these are assemblages of "cultural and material messaging" that establish a feeling of safety, whether or not these feelings have a basis in practice (2022, 17). We can take these theories together and apply them to doomsday shelters. Each bunker design serves as a new 'node' in these infrastructures of feeling, as these designs introduce and emphasize certain threats and means of safety while obfuscating others. These threats may be chosen for logical reasons, but they are also usually part of a 'risk story'–a symbolic, moral narrative with designated heroes and villains.

Consider this sales pitch from VIVOS:

> We have all heard the prophecies of the 'End Times'. The Bible warns of it. Nostradamus foresaw it. Edgar Cayce predicted it. The Hopi Indians, the Third Secret of Fatima, Saint Malachy and prophets throughout the ages all warn of the same epic global catastrophes that will befall upon the Earth. We have been warned of Armageddon, Nibiru/Planet X, a sudden pole shift, future plagues, an EMP blast, a solar kill shot, a super volcanic eruption, major earth changes, killer asteroids and comets, a mega tsunami, an economic meltdown and even the anarchy that will certainly follow any one of these events. ("Survive the Prophecies with Vivos Deep Underground Shelters")

This paragraph is a grab bag of religion, science, history, and fantasy. As a pitch it is trying to solicit everyone from religious believers (via Armageddon, the Bible) to conspiracy theorists (via Nostradamus, pole shifting) to scientifically-minded skeptics (via solar flares, plagues). It seems bizarre that these arguments are allowed to co-exist on one page. In my own estimation, a 'solar kill shot' is scientifically possible (though not probable) and could even be significantly disruptive[18], and it stands here next to Nibiru, a planet-collision cataclysm prophesied by a person who claimed to be in psychic contact with aliens via brain implant. The examples provided here are also geographically nonspecific (which volcanoes would erupt? Which economies would collapse?) and culturally diverse.

This paragraph is a representative example of bunker marketing, as doomsday merchants either claim to protect the purchaser from an extensive list of different threats or leave the threats unnamed, allowing the client's imagination to fill in the blanks. These marketing materials do not make an argument for the likelihood of any particular cataclysm, but rather stir up

[18] The Carrington Event, in 1859, was a solar flare that caused a mass disruption to the few electric systems in operation at the time; namely, the fledgling global telegraph network suffered outages across Europe and North America. Considering our current reliance on electricity, a mass blackout from a strong solar flare might produce some confusion and upheaval, and perhaps even casualties, depending on which areas lose power when and for how long. However, we would likely have a few days of warning thanks to sun-monitoring satellites, and the last major solar storm on record (in 1989) collapsed the energy grid in Quebec for a grand total of nine hours, which was not enough time for the provincial government to fall to anarchy. When I say I believe a solar storm could be "significantly disruptive", I mean this is the kind of emergency for which it is advisable to have a month of non-perishable food and clean water on hand (Lloyd's 2013)

apprehension that any and all of them could be possible. This approach is favourable, because it caters to feelings of safety and danger, and helps customers build their own risk stories.

Apocalyptic fantasies among preppers are both formulaic and broad. As ethnographers have observed, individual preppers often tailor their fantasies to their specific skills, desires, or political beliefs–a means of making oneself the hero of the risk narrative. Thus bunkers must advertise protection from a broad swath of threats in order to assuage this diverse customer base. At the same time, the impacts of these threats always fit within certain parameters. Notice that all of these vastly different catastrophes are unified at the end by "economic meltdown" and certain "anarchy". All of the apocalyptic events described above allow for small handfuls of survivors while triggering the collapse of larger social orders. The "anarchy that will certainly follow" describes a non-negligible population of aggressive, ungoverned human adversaries—a problem to which the bunker is envisioned as the best solution. Thus the designs of these bunkers, and the means by which they are sold, legitimate a particular logic of disaster and safety. As suggested above, this logic is one of segregation: the bunker is designed to separate threat from safety. The disasters rage outside, but the family remains safe within. Thus, bunker designs focus heavily on ports of entry and exit. Blast doors are common, and often given pride of place in documentaries or advertisements. Atlas Shelters are built around a 90-degree turn at the entryway, which is a simple but effective way to disperse fallout ("Shelter Features"). This 90-degree turn is a major selling point on their website. Oppidum's "Model L'Heritage" emphasizes a reinforced entryway with built-in chemical showers, adjacent to a security room ("The Ultimate Bespoke Sanctuary: Model L'Heritage"). Both of these companies also describe their bunkers as airtight, and both employ filtration systems. Even particulate matter can be dangerous if it comes from outside the bunker.

Perhaps the greatest example of how this philosophy of safety through segregation prevails over practicality is the fact that bunkers are almost always underground. The trend of moving shelters underground is partially a legacy of World War-era bunkers, which were partially buried to protect from aerial bombardment. However, when the Civil Defense programs of the 1950s and 60s realized that defense from a nuclear blast was all but impossible and switched instead to a focus on fallout protection, the majority of designers remained attracted to the underground. As Monteyne says:

> Architecture for civil defense assumed many of the aesthetic and ethical characteristics of bunkers, for both practical and symbolic reasons…the appearance of a bunker symbolically satisfied a perceived need among the public and professionals for more robust protection than civil defense officials seemed to be offering. (158)

The lack of 'robust protection' refers to the fact that civil defense authorities proposed many ways to design above-ground shelters, or reinforce above-ground buildings that already existed. While these designs might have been technically effective against fallout, they did not feel effective, and so were often neglected by government promotional material and the civil defense program at large. In comparison to these perceived inadequacies, the subterranean bunker did seem more "robust." Here, again, the feeling of safety prevails over practicality.

In the early 1960s, a number of engineers and architects within the OCD pushed the importance of above-ground shelter design and advocacy, as it was "believed to be more acceptable for a host of social, psychological, and environmental reasons" (Monteyne 158). This belief did persist for some time–Bruce Clayton's 1979 book suggests a number of designs for above-ground emergency shelters, for example–but it has proven less impactful in the tradition of shelter design. Despite architectural and social realities, the buried bunker retains its symbolic power. Barely twenty years after the OCD's design debates, T.K. Jones, Reagan's deputy

secretary of defense for Strategic and Theater Nuclear Forces, infamously suggested that the American population could survive a nuclear war "if there [were] enough shovels to go around" (Scheer 18). The OCD had already proved that the dirt on top of your shelter was moot; Jones insisted "It's the dirt that does it"[19]. Most of the VIVOS and Fortitude Ranch locations are spacious properties in the wilderness; all are either fully or partially underground.

And yet the historical game of telephone has continued; the bunkers of the 21st century are now expected to protect us from multiple disasters, not just fallout or blast waves, and yet they largely remain subterranean. The designs of Peter Thiel's New Zealand retreat evoke the bunker specifically because they are embedded into a hillside; the shelters of every company mentioned in this chapter are either fully or partly underground. Even Fortitude Ranch, with its frontiersman aesthetic, constructs its above-ground cabins on top of underground bunkers. The Fortitude Ranch website reassures us that "just a few feet of earth provides plenty of protection against blast and nuclear radiation"–a historical misrepresentation straight from the mouth of T.K. Jones ("Shelter Designs for Survival Preparedness"). The perception of the underground as "safe" persists, when in reality, an underground shelter creates as many problems as it solves. Building into the earth is costly, logistically complex, and loud. If you believe the prepper premise that your unprepared neighbours will become your enemies after society collapses, a backyard bunker is a rather obvious target.

[19] Incidentally, radioactive fallout tends to be very problematic once it settles in the dirt. The increased levels of radioactive isotopes in populations across Europe after the Chernobyl disaster were largely the result of consuming crops grown in contaminated soil or drinking milk from animals fed on irradiated grazing lands (Beresford et al., 2016). It would be inaccurate to suggest that underground shelters carry a higher risk of exposure to radioactive particles—however, it does demonstrate a misunderstanding to suggest that being underground offers *greater* protection than being in an above-ground building made of concrete. The fact that foraged foods and game present the greatest radiation risk is often conspicuously absent from bunker-builder websites—particularly in places like Fortitude Ranch, which proudly advertise their chickens as a renewable food source while providing them no fallout protection.

Modern bunkers are also intended to protect the inhabitants from disasters beyond nuclear fallout. This makes the decision to bury our bunkers even more questionable. The underground may be the ideal defensive structure against aerial bombardment and tornadoes, but it is not necessarily so against earthquakes, flooding, or human assailants. Additionally, unique problems arise from building underground. Structural failures, flooding, fires, and collapse are more dangerous and much more difficult to repair. Incidentally, recall that shelters are also not beholden to building codes. Due to regulations on ventilation, lighting, and means of egress, "in many localities, civil defense solutions were illegal." (Monteyne 150) Building codes were renegotiated by the AIA and OCD into shelter-friendly guidelines; they produced a publication called "Suggested Building Code Provisions for Fallout Shelters", which the OCD then began to promote to the different code authorities" (ibid.). Thus the regulations were already slack by the time shelters moved from a public concern to a private hobby, and this particular historical path has left bunkers legally unsupervised. While a prepper might need a permit to build a shelter in their backyard, the design is fully in their hands. In standard, above-ground architecture, regulations on lighting and ventilation exist to stop mundane dangers like tripping and falling, fire hazards, or carbon monoxide buildup. Despite the extensive "safety features" extolled on bunker websites, I could not find any layouts or pictures that explicitly included sprinklers or fire extinguishers. In fact, many bunkers-for-rent come unfurnished, placing the responsibility of installing safety features on the client. Entryways and exits present other potential safety issues. Exit designs vary from bunker to bunker, but bunkers with stairs or ladders as the only means of egress are not uncommon. This makes entering or exiting bunkers far more dangerous, if not impossible, for anyone with limited mobility. This includes not only those who use mobility aids before the apocalypse, but also anyone injured in its course. Building codes that address these

issues are meant to keep us safe, but in a very tedious and mundane way, and so many bunker designs neglect them entirely.

Of all the potential risks that exist within the supposedly "safe" haven of the doomsday bunker, the most notable is the overwhelming prevalence of gun rooms and firing ranges in different bunker designs. When stored on private property, guns create more danger than they prevent. At time of writing, there are around 500 accidental deaths in the United States each year from handling firearms ("Domestic Violence & Firearms"). There are approximately 76,000 hospitalizations from gun injuries every year in the United States, with the largest percentage of those injuries being inflicted unintentionally or accidentally (Schnippel et al. 2021)[20]. The assumption that guns will be in the hands of safe inhabitants and used only against unsafe outsiders is patently flawed. Most mass shooters target family members or intimate partners ("Domestic Violence & Firearms"). Suicide attempts by firearm (surely an increased concern after the collapse of civilization) have a far greater chance of being successful than any other method of suicide, with a death rate of up to 90% (Johns Hopkins Center for Gun Violence Solutions). These statistics on death and injury are more striking when we consider that gun ownership is not evenly distributed throughout the American population, but rather concentrated in certain hands. Only a quarter to a third of American adults own a firearm, and roughly half of the guns sold in the United States belong to three percent of the population. Regardless of intention, regardless of whether the violence is directed at oneself or at others or at no one at all, keeping guns in a doomsday bunker makes it less safe for its inhabitants, not more. And yet guns are not just seen as tools to preserve safety, but also as technologies worth preserving. In the same way sanctifying the suburban home in the bunker makes the nuclear family sacred, singling

[20] Because this statistic draws from hospital data, it does not include firearm injuries that may have been treated at urgent care clinics or at home.

out guns as something to be stored grants them a privileged position among other technologies. Guns are imagined as things that keep one safe, but also as things to be kept safe–from children who might misuse them, or from outsiders, who might turn them to nefarious ends, but also from the ravages of time and apocalypse. For all the alterations made to bunker designs, a space for gun storage is one of their most consistent features[21]. Bunkers with modular designs, like VIVOS xPoint, often suggest including a gun room; some Atlas shelters are used for gun storage and nothing else.

The prevalence of the gun vault offers another hint as to the character of the crises that bunker discourse legitimates. Due to the widespread access to firearms in the United States, gun violence is considered by many experts to be a public health crisis, as it poses an immediate, significant threat to the health of a large population. However, the epidemic of mass shootings is not typically a crisis addressed or even alluded to on the websites of bunker companies. Instead, these companies see gun ownership as a standard characteristic of their protagonists. Elizabeth Ellcessor, via Jennifer Rubenstein, offers an interesting perspective on how we think about gun violence:

> Many forms of ongoing misfortune or oppression–such as gun violence, climate change, and disability–do not serve as the basis for emergency claims, as they are understood to be part of a normal state of affairs. (Ellcessor 2022, 6)

This point gives us an inkling of the kind of crises that bunker discourse is not prepared to address. Gun violence is dispersed, sporadic, and endemic, but it is also considered by many Americans to be 'a normal state of affairs'. It does not meet the qualifications of a *crisis,* which is usually understood as a drastic *shift* in the normal state of affairs. This could even be argued as

[21] The only bunker company I investigated that does not advertise or emphasize firearm storage is Oppidum. At the risk of being trite, presumably, someone who can afford a nine million dollar bunker can also afford to pay security staff.

another case of willful infrastructural illiteracy. From overly permissive regulations, to the ready accessibility of guns via shows or sporting stores, to the political championing of guns as symbolic of American freedom, the proliferation of gun violence in the United States is arguably an *infrastructural* problem. Gun violence is a problem of broadly distributed access to a dangerous technology, and solving the problem would require a response on an infrastructural level, tackling not only the legality of firearms but also the systems of distribution that would suffer economically as a result of such restrictions. Instead of approaching this as a problem of infrastructure, the responses to gun violence often focus on singular events such as individual school shootings. The "good guy with a gun" solution, which suggests that teachers should be armed or schools patrolled by armed guards, is an infrastructurally illiterate one; it focuses not on the proliferation of guns as a problem, but on who is armed and who is not in a particular situation. It evaluates the most eye-catching moment, the outbreak of violence, independently; it neglects the larger context.

Like the example of school shootings, the imagined apocalypses in prepper discourse are also always imagined as immediate, drastic societal shifts–like major natural disasters or economic crashes–and, again, it is only the fear of *those* crises that the bunker is equipped to legitimate. In fact, imagining these crises is one way bunker discourse legitimates ubiquity of guns in bunker designs: the insistence on "anarchy that will surely follow" global catastrophe posits guns as tools of safety, so long as they are in the hands of post-apocalyptic protagonists. This is quite reminiscent of Bruce Clayton's bizarre aphorism from the previous chapter–that some guns are "designed to save lives". Guns are understood as a tool for preserving safety, and so they are given a space in the bunker's infrastructure of feeling.

Figure 3. Photographic example of a bunker ‘gun room’ as designed by Atlas shelters. (“Shelter Features”)

Some design features are explicitly intended to address safety, such as blast doors. Others have an overlooked relationship to safety, such as gun safes or sprinklers. But there are also some elements of design that contribute to the bunker’s infrastructure of feeling that do not have an explicit or causal relationship to safety. Rather, they are meant to evoke the feeling of safety through cultural and historical association.

Like IKEA showrooms, the Oppidum bunkers look like rooms that no one has ever lived in. Everything is orderly, untouched, and depersonalized. If humans are present—see the bartender in the Futurist model?—they rarely engage with the space in depth. They seem to be pieces of furniture themselves, designed to compliment and complete the space. The VIVOS

xPoint bunkers are even more of an illusion, as families are expected to furnish their bunkers themselves. Upon renting their space at xPoint, preppers are granted access to an empty concrete hallway with a blast door. They must supply everything from wooden framing to furniture to electrical generators.

Juhani Pallasmaa has mourned this aesthetic transition in modern architecture; buildings are no longer designed as spaces to inhabit, but spaces to be photographed (Pallasmaa 2005). They are places to be pictured–fantasized about–rather than lived in. This is particularly true of survival shelters, which exist exclusively to facilitate fantasy, and are rarely lived in at all. If there is one design principle uniting bunkers across the spectrum, it is of course the prioritization of safety—but this is an aesthetic sense of safety rather than a practical implementation of it.

For instance, there is a striking prevalence of white in the Oppidum designs. This unnatural colour is far removed from anything resembling traditional post-apocalyptic survivalism. Instead, the colour calls to mind surgical levels of sterility, Apple computers, the hull of the Starship Enterprise. We associate white with safety and purity—hospital ships must be painted white in wartime, and the white flag represents the end of conflict—and increasingly, due to the design prerogatives of Apple, we also associate white with sophisticated technology. This feeling of safety emerges from the idea that white is an ‘untainted’ colour, unmarked by dirt or blood. The white flag is visible on the battlefield because it differs from the brown and red and grey of on-the-ground conflict. The association between the colour white and advanced technology plays into Oppidum’s favour as well–it advertises itself as “cutting-edge” in the discipline of safety technologies. Of all the bunker designs, the Oppidum bunkers are the most separated from the realities of disaster. There is no place for dirt, blood, contaminated water or human casualties in an Oppidum bunker-fantasy. This is truly meant to be an impervious

capsule, indistinguishable from modern richesse, which can be opened once the unrest outside has died down. It is a pocket utopia inside a dystopic world.

For a point of comparison, consider the photos included in The 50$ and Up Underground House Book. This 1978 volume is written by Mike Oehler, who has built a number of underground houses and considers himself an expert on DIY architecture. The grainy black-and-white photographs in this book, showing the underground houses Oehler has inhabited for years, depict a very different kind of survival—cluttered, crooked, handmade and thoroughly lived-in. While Fortitude Ranch's cabins are not quite so organic, they are also designed to capture that aesthetic. Here we find an entirely different set of aesthetic principles: exposed wood and stone, slanted interior ceilings, and old-fashioned furniture like the cast-iron stove. This type of design brings the inhabitant up close to the survivalist aspects of the dystopic fantasy. In a Fortitude Ranch cabin, one could easily imagine oneself as a pioneer in the old American west. This design, too, creates a particular type of affective safety. In this case it is the safety of nostalgia–a yearning for a nonspecific time in the past 'when life was simpler'[22]. With its distrust of global infrastructures and increasingly outspoken minorities, this symbolic retreat to the past speaks to a desire to keep the advancements of modernity out[23].

While these aesthetics are different, both bunker companies are attempting to construct a similar feeling: that one is far away from danger. The marriage of isolation and comfort—whether comfort is achieved through luxury or nostalgia— means that the suburb is the mode of organization to which bunker designs are most indebted. Depending on available space, most

[22] While "nostalgia for a simpler time" is a broadly deployed conservative political tactic, the image of the frontier as the ideal 'simpler time' for America is a construct of the Reagan presidency, and is invoked frequently in his cowboy-themed rhetoric and advertisements (Smith 2021).
[23] This aesthetic can be skin-deep: Oehler suggests coating all the wood in an underground house in a layer of polyethylene.

bunker designs seek to replicate the structure of suburban homes as closely as they can. Atlas Shelters makes this project clear on their website:

> Making a shelter feel like you're in the county jail takes away the normality you would need to survive long-term underground in a survival shelter. The shelters we produce today feels (sic) more like a home than a bomb shelter, with luxurious interiors that have walk-in showers, master bedrooms, full kitchens, and living rooms. ("ATLAS SAFE CELLARS™")

Similarly, the shelters at VIVOS xPoint are typically made up to look like suburban homes. When a customer rents a shelter from VIVOS, they are purchasing the right to an empty concrete cylinder with a blast door. Furnishing–everything from electricity to interior rooms–is the responsibility of the client. However, VIVOS has built out one of its bunkers for demonstration and marketing purposes–and this demonstration bunker also looks very much like a suburban home (aside from the sinister ceiling).

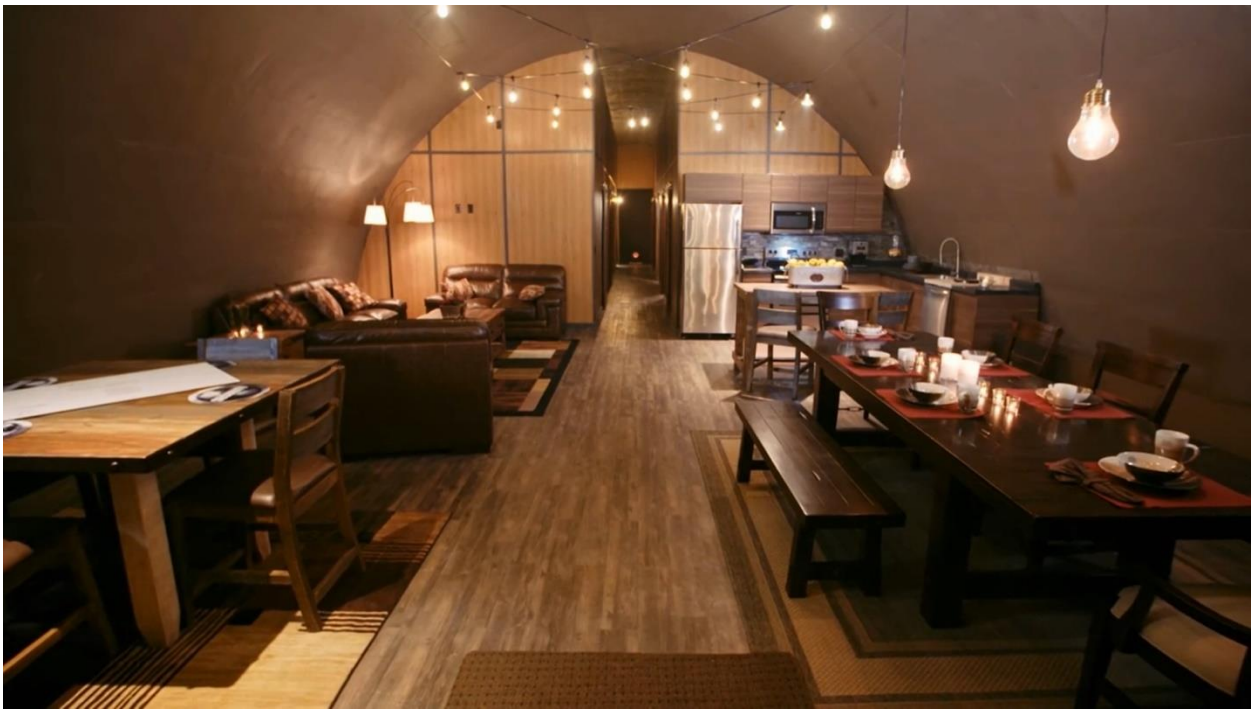

Figure 4. A furnished bunker showroom at VIVOS xPoint in South Dakota. ("VIVOS xPoint")

Additionally, both Fortitude Ranch and VIVOS xPoint are organized into doomsday suburbs. Each family owns (or rents) a single bunker, which are divided from each other. VIVOS xPoint, features 575 individual bomb shelters on an otherwise depopulated plain.

Figure 5. The exterior of VIVOS xPoint. ("VIVOS xPoint")

Why is the suburb such an appealing template for the survival community? We might also ask, following our previous theme, what affect of *safety* does the iconography of the suburban home produce that makes it worth replication in the bunker? Certainly, as the Atlas website proposes, the suburban home promises the comfort of the familiar–at least to those who already live in similar circumstances. However, the podlike divisions of VIVOS and Fortitude Ranch may also present practical safety challenges. For example, in a hypothetical nuclear winter scenario, one family might have to move from their bunker to another to request medical attention, an exchange of resources, or even social company. In this situation, the lack of sheltered walkways or tunnels, the windowless buildings, the blast doors, and the predisposition of survivalists toward gun stashes make crossing from one bunker to another a terribly risky venture. A more communal living plan might be successful, but it also contradicts the prime

directive of bunker discourse, which is to place paramount importance on security through isolation. There are communal spaces–shopping malls, perhaps, or open-plan offices[24]–that might offer the comfort of familiarity without the danger of such strict divisions between properties. There must be something more than familiarity at work in this particular design choice.

On the one hand, I interpret the gesture of moving the suburban home into the bunker as a remasculinization of domestic space. This remasculinization of a space that has been traditionally feminized is an ongoing cultural project, manifest in previous examples. Paul Preciado argues that *Playboy* magazine's construction (literally and rhetorically) of the bachelor pad was one such expression; more recently, Nicholas Taylor sees the same pattern emerging in private gaming setups and "man-caves", as the 'man-cave' is essentially a specialized basement bunker that prioritizes the entertainment and socialization of masculinity (2024). Bunker discourse conducts its remasculinization of space by transforming the priorities of the home space away from traditionally feminine practices–nurturing, cooking, care work, family communication, etcetera–and toward security. There are many types of security, but this is its most masculine expression: security derived from an owned property with a perimeter rightfully defended by firearm. It is the logical extension of castle doctrine, in which the home is defined primarily by the inhabitants' right to use violence against interlopers. This is why so little about the home's interior has to change when it is transported to the bunker: the boundaries–the walls, blast doors, and particle filters between you and the treacherous outdoors–and whatever threatens to cross them are all that matters.

[24] Or, for some tried and true examples, the contemporary public bunkers mandated by the Swiss and Finnish governments; the planned public shelters of the Office of Civil Defense in the 1950s and 60s; or even the stations of the London Underground during the Blitz. There is arguably even *more* precedence for community bunkers than there is for private ones.

With that said, another reason suburbia is so compatible with bunker discourse is that it is already a product of philosophies in which segregation is equal to safety. The original draw of the suburb, as conceived in the mid-19th century, was the distance it promised from urban dirt, disease, waste and crime (Davison 2013). Notably, these negative characteristics were attributed to the density of urban population; "density not only promoted physical disease, but moral contagion" (833). Historian Graeme Davison notes that early suburbs also created "a protective cordon" between the middle class and the working class, upon whose labour the middle-class lifestyle depended (835). And it is no accident that these boundaries were also drawn along racial lines. The urban poor were also often racial minorities, and the trifecta of disease, crime, and racial diversity as representative characteristics of urban population has continued into the modern day. (Recall, for instance, Bruce Clayton's hypothetical "illegal alien with a flea bite" spawning a plague in Los Angeles). In contemporary bunker discourse, we can see these associations on VIVOS's website via their designation of "high-crime anarchy zones", which are essentially just the major cities of the mainland United States:

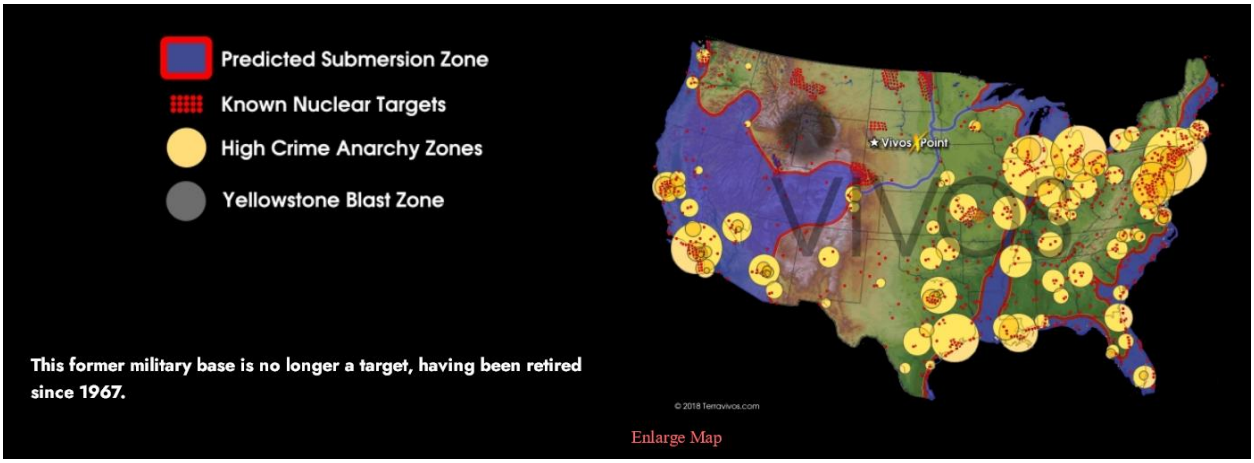

Figure 6. A map of 'apocalyptic threats' in the United States, produced by VIVOS. ("VIVOS xPoint")

Thus, alongside its policing of other threats, the "security" of the suburban home is also contingent on the belief that people can also be divided into safe and unsafe. City people and

racial Others are dangerous for their associations with crime, disease, and poverty; fellow white suburbanites are nonthreatening. The bunker is simply an extreme variation on this principle. All strangers outside the bunker are dangerous, and the people inside are always understood as family, and thus allies. However, in contemporary suburbia, the white suburban home does not necessarily provide safety for everyone, and the same would be true of the bunker as well. It is not a safe place if the parents of the home are abusive, or if the children are queer and the parents homophobic, or if the inhabitants are overly suspicious of racial minorities walking through their neighbourhoods.

Additionally, in terms of safety, suburbia itself is largely an affective structure. In the modern United States, the pattern of retreat–whether to bunkers or suburbia–has little relationship to the actual frequency of crime in the area (Low 2003). Fear of crime escalated sharply in the early 1970s and has remained steady since, despite a constant decrease in crime rates over the same span of time. New inhabitants of gated communities–which also experienced a boom in the 1970s–often cite crime as a reason for moving despite the fact that gates, like those 'few feet of dirt' on top of a fallout shelter, are much more of an infrastructure of feeling than actual protective architecture[25]. The spread of urban crime and unrest–particularly through riots–are often cited on bunker websites as reasons to invest in a shelter: VIVOS uses the Rodney King riots as an example of what post-apocalyptic "High-Crime Anarchy" might look like ("How to Survive Widespread Anarchy").

[25] Drawing from Setha Low's *Behind the Gates*, research suggests that the relationship between gated communities and crime is complex. Not all gated communities experienced reduced patterns of crime before and after installing security. Some did experience less crime, but this would trigger a spike in crime in nearby neighbourhoods, leading to a costly "arms race" of gating. If gating negatively impacts employment, it can even lead to an increase in crime rates.

Interestingly, perhaps because it is an affective practice rather than a logical one, research on gated communities also suggests that suburban withdrawal due to the fear of crime creates a self-reinforcing cycle:

> ...taking precautions against crime may actually increase rather than reduce a person's fear of crime: those precautions lead to greater social isolation, which in turn produces greater perceived vulnerability and more fear–which residents deal with by taking even greater precautions. (Low 2003, 121)

Of course, this cycle has a relationship with race as well. White flight is also a process of cyclical isolation, in which a fear of integration with visible minorities causes white, middle-class families to move out of neighbourhoods when racial diversity in the area begins to increase. In the 1950s, a boom in the post-War economy and housing market drove white families into the expanding suburbs, while black families were kept from suburbia via discriminatory policies. Suburban infrastructure was indisputably designed to insulate white families from interaction with urban people of colour, as suburbanization was part of the larger cultural push to create the idea of the "traditional" nuclear family. The desire to institutionalize capitalism, racism, and misogyny helped the movement gain steam (Nelson 1997). A middle-class family that could afford to move into white suburbia was expected to operate somewhat self-sufficiently. Unlike during wartime, women could afford to leave the workforce, and contemporary media attached moral significance to the role of housewife. Black Americans were excluded from this picture, both via their relative class and their increased likelihood to have non-traditional family structures. In this way, racism and misogyny both motivated and characterized the move to suburbia. The replication of this home in bunker-building is not a neutral choice, but rather a reiteration of the principle that the white nuclear family is America's fundamental building block—the particle into which the post-apocalyptic society would "atomize".

These self-reinforcing patterns suggest something quite revealing about bunker discourse–as does the fact that both bunker discourse and American gated communities emerged in the same decade alongside a spike in the fear of crime. Gated communities are essentially suburbs with additional infrastructure to reinforce the principle of safety through segregation. Perhaps suburbs were failing to live up to their promise of impermeability. The exposure of the Love Canal poisoning in 1977 suggested that the suburbs were not safe from environmental toxins; nor are suburbs entirely impervious to minorities, as racial integration has slowly yet persistently increased in recent decades. Yet the actual frequency or intensity of environmental catastrophe, racial integration, and crime are only incidentally related to the perpetual cycles of white flight and increased bunkering down. Instead, the retreat to the bunker is an inevitable escalation of the self-reinforcing cycle of suburban paranoia[26].

As a result, half of our doomsday shelter merchants make a point of placing their buildings far away from urban centres. VIVOS and Fortitude Ranch both build on isolated, rural properties or abandoned military bases. As with the construction of the bunker itself, this desire for isolation creates its own safety concerns. For example, if you wish to make use of your VIVOS xPoint bunker in a cataclysm, you will need to fly into Rapid City, South Dakota and make the two hour drive to VIVOS xPoint. This choice of location assumes the kind of apocalypse that leaves you with functioning airports, largely unblemished roads, at least two working vehicles, and enough fuel and time to get to your bunker. Robert Vicino, the CEO of VIVOS, has apparently committed to this commute himself–when not on location, he lives in "sunny Southern California" (Morris 2018). This isolation presents all the practical difficulties you would expect. In a short Netflix documentary about VIVOS xPoint, the head carpenter is left

[26] Incidentally, one of the video games we will examine in the next chapter, *Fallout 4*, depicts the end of the world through the violent collapse of suburbia–as do many, many other apocalyptic fictional properties.

waiting for thirty minutes or more as Vicino makes the drive into a nearby town for some tools, which the pair had apparently forgotten on the drive in.

Beyond the comedy created when preppers are unprepared, this scene also drives home the ineffectiveness of the safety-through-segregation ideology. If you are planning, like the VIVOS crew, to replicate a modern suburban home with functional electronic furnishings, a television, a fridge, a generator, and industrial-chic decor, you will not find those things in the wilds of South Dakota. Furthermore, if those electronics break during the apocalypse, they may not only threaten your survival by disrupting your food, water, and power systems, but may become hazardous themselves.

This may sound like I am simply pointing out the logistical errors of prepping for entertainment value, but that is not my (only) motive. I am spending time on these illogical moments because they are a useful tool for exposing how the priorities of bunker discourse dominate logic. Each logical fallacy or logistical failure in doomsday preparations reveals something held as so valuable within this discourse that it must be honoured *despite* practical considerations. Here, the externalizing of all threat, the impulse to retreat, and the pervasiveness of racial paranoia have created a situation where "preparing for the end" involves furnishing a poorly-ventilated hallway with a set of technological appliances that are, *even before* the apocalypse, miles away from the expertise and tools needed to maintain them. The idea of an isolated luxury bunker betrays a lack of appreciation for the complexity of modern life, particularly the complexity of modern technological conveniences. Our relatively comfortable standard of living rests on an inconceivably massive foundation of different infrastructures, from international trade agreements, to two centuries of electrical engineering knowledge, to global shipping lanes, to the accessibility of the nearest IKEA. Attempting to replicate the luxury of the

Global North outside that network often leads to a swift and inevitable recanting: one must tap back into it in order to reap its benefits, and Vicino must make his thirty minute drive to town to pick up a power drill.

So far, I have discussed the friction between independence and convenience in a very literal and obvious case of 'bunker' discourse. However, I argue that bunker discourse extends beyond the design of literal bunkers, and that it has rather become a philosophy of safety and catastrophe in a much broader context. Most notably, apocalypse preparedness is disturbingly popular among the elite in Silicon Valley. While many billionaires are in fact building ultra-luxe bunkers of their own, this cultural shift seems bizarre. What use would the minds behind our most cutting-edge technologies have for the apocalyptic imaginary? For the men who have arguably benefited more from the current social and economic order than anyone else, what makes the end of that order so appealing?

Billionaires: capitalism, Cybertrucks, and *The Sovereign Individual*

In the fall of 2023, Tesla began delivering the first of its long-delayed Cybertrucks to customers. The Cybertruck is meant to be the electric equivalent of sturdy off-road trucks like the Ford F-150, made for hauling heavy loads across rugged terrain. Tesla's promotional materials emphasize the vehicle's toughness and durability. The windows of the Cybertruck are (allegedly) shatterproof. The stainless steel paneling is (nearly) bulletproof[27]. The Cybertruck website also touts the car's "hospital-grade HEPA filter". Although HEPA filters are a fairly standard feature in cars built within the last five years, the Cybertruck may be unique in

[27] While the panels will not be penetrated by a standard 9mm pistol shot, strict definitions of bulletproof require that the material be resistant to repeated shots, which is a standard the Cybertruck cannot reliably meet.

advertising its filter as a "Bioweapon Defense Mode." The Cybertruck was designed to keep its driver safe from all manner of external threats.

Whether or not the Cybertruck was designed *well* is a separate question. The development and launch of the Cybertruck have been fraught with mishaps, the majority of which are the result of questionable engineering decisions. The Cybertruck's allegedly shatterproof windows shattered twice at a demonstration in 2019. After launch, the trucks were recalled eight times, for everything from sticky accelerator pedals to faulty warning lights to failure of the rearview cameras–which are vital, because it is impossible to see through the back of the Cybertruck through its rearview mirror (Hindy 2025). Alongside official recalls, Cybertruck drivers have also documented a number of potential safety problems with their vehicles. Owners have lacerated themselves on the boxy side panels, with at least one earning a hospital visit (Altchek 2024). There are also significant concerns as to whether the panel material might present a danger during accidents (Sriram and Jin 2023). Modern cars typically incorporate crumple zones in their design in order to disperse the shock of impact, and the Cybertruck's stainless steel components may not be conducive to shock dispersal in the same way[28]. These stiff panels also present a great danger to whatever the Cybertruck happens to collide with—pedestrians, cyclists, or other cars. Musk has framed the stainless steel paneling as a security measure—or rather, as a competitive advantage in automobile death matches: "if you have an argument with another car, you'll win" (Sriram and Jin 2023).

In summary, Tesla's Cybertruck is a mobile bunker, designed to indulge the fantasies of bunker discourse. Its approach to safety is identical to that of the bunker; it revolves around

[28] The American auto industry places the burden of safety testing on auto manufacturing companies (Sriram and Jin 2023). This means that experts are unable to confirm exactly how the vehicle will behave in a crash, as Tesla has not granted access to their test data.

protecting a sacred interior from a threatening exterior. The actual question of automobile safety is complex, and it depends on factors both inside and outside the car. The behaviour of the driver, for instance, plays a role in increasing or decreasing risk for all parties—whether they are distracted or intoxicated, whether they are speeding, whether they are wearing a seatbelt, etcetera. In the design of the Cybertruck, the question of safety has shifted to the bunker paradigm of segregation: the inside is safe, the outside is unsafe, and an impenetrable barrier should be erected between the two. Bulletproof paneling has taken priority over crumple zones. The exterior is so unfriendly that it occasionally lacerates would-be passengers. The imagined threats to the Cybertruck are not just drunk driving or icy roads; they are also bullets, hammers, and bio-weapons.

According to Musk, the design ethos of the Cybertruck came from a question asked by his son—"why doesn't the future look like the future?" (Landy 2023). In attempting to design a car that looked "futuristic", Musk modeled the Cybertruck after the post-apocalyptic setting of *Blade Runner,* among other inspirations. In the process of answering this question, the designer must draw on a particular cultural referent for "the future" and live up to that imaginary. When Musk was asked to *envision* the future, he imagined a truck best suited for violent dystopia—and a fully fantastical dystopia at that, given how readily the Cybertruck's design disposed of accepted principles of automobile safety. The physics and automobile-centred infrastructures of this world come second to the violence of his chosen imaginary.

The example of the Cybertruck illustrates why the cultural impact of bunker discourse should be of significant concern beyond prepper subculture. Firstly, this discourse has a tendency to overwrite more nuanced understandings of safety. Bunkers are less safe as homes because of their neglect of basic interior safety features like ventilation and fire prevention; Cybertrucks are

less safe as cars because they isolate the driver in an impenetrable capsule, rather than understanding automobile safety as a network of interactions between drivers, cars, pedestrians, and the laws of physics. At the same time, the growing popularity of apocalyptic fantasy among the billionaire class is worrisome because billionaires have the resources to fund whatever products they desire. In the case of the Cybertruck, a billionaire's fantasy was given priority over established safety conventions, and our roads are more dangerous for it. As billionaires fund bunkerish designs in other disciplines, such risks proliferate and multiply. Peter Thiel has already poured millions of dollars into seasteading, which involves the construction of floating autonomous colonies in the ocean. Seasteading relies on a misunderstanding of the law of the sea that suggests it would be possible to create floating colonies that are not beholden to any government regulation or taxes. The legal and logistical illegitimacy of seasteading exposes another problem; much of bunker discourse relies on misunderstandings of infrastructure, and if these misunderstandings are not addressed pre-launch, it can result in billions of wasted dollars in dead-end investments or helpless legal battles (DeNuccio 2015). Similarly, the billionaire "space race" between Elon Musk and Jeff Bezos has the odour of the bunker about it. It involves investment in a technology that would separate the ultra-wealthy from the earth itself, at the expense of those who have to live with the carbon emissions from rocket fuel—and those whose farms have been struck by rocket detritus (Lawler 2024). The negative externalities of a space program are unimportant; the priority is the escape capsule for the ultra-wealthy.

In this section, I plan to address the question that motivated this dissertation in the first place. Why exactly has bunker discourse found purchase in Silicon Valley, of all places? What appeal does the bunker hold for billionaires? The short answer is that, despite their differing aesthetics, bunker discourse and Silicon Valley are more culturally compatible than it would

initially appear. Billionaires merit this unique case study because they hold outsized power of production, and their fascination with apocalyptic fantasy thus impacts culture differently from the fascinations of everyday middle-class preppers.

The most significant commonality between bunker discourse and tech culture is their shared preoccupation with masculinity. So far, this dissertation has mostly grappled with masculinity as envisioned by bunker discourse, and argued that this masculinity is characterized by traditional hypermasculine traits and a conflation with whiteness, able-bodiedness, and middle class status. Following the work of Raewyn Connell, it is now generally accepted that there are multiple forms of masculinity, and that these masculinities are organized hierarchically, with the most culturally acceptable and laudable ways of 'being a man' at the top, typically referred to as 'hegemonic masculinity' (Connell 1995, Connell & Messerschmidt 2005). Rather than strict roles, it is more accurate to envision masculinities as "configurations of practice", which are often re-configured, and flexibly adopted and disavowed by individual men, over time (Connell & Messerschmidt 2005).

Geek masculinity, which was once derided as a 'lesser' form of masculinity, has become perhaps the defining form of hegemonic masculinity in the 21st century. Many sociocultural changes in the past few decades made this shift possible, including the mainstreaming of geek culture via the popularity of geek media franchises; the growing ubiquity of the computer in everyday life (which allowed geeks to hold economic power along with social power); and the rise of the celebrity tech baron (Salter and Blodgett 2017). Geek masculinity became a carefully managed identity category, organized around media consumption, tech knowledge, and a self-deprecating picture of one's lack of social savoir faire. Despite their mainstreaming, geeks still

consider themselves members of a disadvantaged social category, defining themselves as outcasts who are prone to being bullied.

It is, in part, this very self-deprecation that makes bunker discourse and geek masculinity not-so-strange bedfellows. Geek masculinity provides a direct route to the victimhood that bunker discourse seeks to cultivate. Despite being arguably the most powerful subculture in the world, white male geekdom still clings to its identity as a socially stigmatized group (Salter and Blodgett 2017). Geeks often self-identify as victims of bullying, usually as a result of their failure to live up to other images of masculinity. The white male nerd can picture himself as a member of an aggrieved class even when he is one of the richest people in the world, and all the other richest people in the world look and act just like him.

Another feature of bunker discourse that makes it appealing to Silicon Valley billionaires is that, despite its vague desire for "simpler times", it is not strictly anti-technology. In fact, bunker discourse is quite happy integrating certain complex technologies into its apocalyptic fantasies–like air purification systems, or automatic firearms–as long as they facilitate (or at least fail to disrupt) its picture of independent masculinity. This is because, as a component of its infrastructural illiteracy, bunker discourse does not permit a very sophisticated understanding of technology. It imagines most technologies as neutral; instead, it is the person or organization controlling the technologies that determines their moral weight. Therefore, it is not at all incongruous for preppers to stock up on antibiotics but dismiss vaccines as a government plot to implant citizens with mind-control chips. Antibiotics can be bought and stored in a bunker, but vaccines are to some extent supported and administered by the government, and therefore suspect[29]. Consider *Life after Doomsday* and Clayton's description of "guns that save lives."

[29] The list of *which* technologies are controlled by sinister government agencies varies from prepper to prepper.

This descriptor is the result of placing morality in the user instead of the technology: the supposed moral superiority of the survivalist takes precedence over a technology designed exclusively to kill. As long as geeky tech like the computer can be sold to men as an empowering technology, that tech—or money made *from* that tech—can be welcomed into bunker discourse. And this is precisely how tech companies have framed computers for decades: as empowering gateways to the digital *frontier*.

Bunker discourse also benefits from its grip on its biggest champion in Silicon Valley: Peter Thiel. Thiel is one of the billionaire founders of PayPal, a staunch conservative libertarian, a frequent angel investor in tech startups, and Silicon Valley's premier doomsday prophet. In their book about the public images of Silicon Valley's celebrity billionaires, Little and Winch highlight Thiel's role as a key player in the Silicon Valley social network. Despite his politics conflicting with the (allegedly) more liberal tech barons like Zuckerberg, Thiel's seniority, networking ability, and carefully constructed reputation as a fringe intellectual help guarantee his seat at the table. He has been described elsewhere as a "self-styled philosopher king" (Little and Winch 2021). Near the top of the reading list of this philosopher-king is a book from 1997 called *The Sovereign Individual*, which is an apocalyptic prophecy that describes how the computer will cause nation-states to crumble into a neoliberal capitalist utopia. Thiel recommends this book often, and even wrote the introduction for the book's re-release in 2020. Like the early survivalist texts of the 1970s, the catastrophe imagined in *The Sovereign Individual* is primarily framed in economic terms, and the benefit to individuals comes largely in increased autonomy and monetary profit. It removes the pretense of man returning to the wilderness to test his resourcefulness; instead, it is about achieving the kind of power that comes from wealth in a capitalist society. In an amusing and revealing section of his survival guide, author Neil Strauss

attends a conference set up by the Sovereign Society—a non-profit outgrowth of *The Sovereign Individual,* which is advertised in the back of the book—expecting to learn some survival tips. He is quite baffled to find that the lectures at the conference are not about skinning goats or building fires, but rather about establishing offshore tax havens. Beyond its importance to Thiel, *The Sovereign Individual* reveals exactly how billionaire life and apocalyptic fantasy overlap.

The main thrust of *The Sovereign Individual* is the prediction that the information age will permit the arrival of the eponymous "sovereign individual"—a kind of Randian superhuman with absolute dominion over his chosen enterprise. The consequence of the rise of this sovereign individual is a financial and political apocalypse, in which the primary casualties will be governments and social institutions. According to this prophecy, the placelessness of digital technology will increase global mobility, as digital businesses can be run 'from anywhere'. As the sovereign individuals move to avoid taxation, welfare states across the globe will collapse. The authors, Davidson and Rees-Mogg, hypothesize:

> When most wealth can be earned anywhere, and even spent anywhere, governments that attempt to charge too much as the price of domicile will merely drive away their best customers. If our reasoning is correct, and we believe it is, the nation-state as we know it will not endure in anything like its present form. (1997)

Without the funds from taxation, governments will be unable to operate, and they will slowly collapse and fragment into corporate-run city-states with indistinct borders and overlapping jurisdictions. In the minds of the authors, this transformation will ensure a more equitable society. They predict that digital technology will close the income inequality gap, and that economic exchange will become agnostic to identity politics:

> Genius will be unleashed, freed from both the oppression of government and the drags of racial and ethnic prejudice…It will not matter what most of the people on earth might think of your race, your looks, your age, your sexual proclivities, or the way you wear your hair. In the cybereconomy, they will never see you. The

> ugly, the fat, the old, the disabled will vie with the young and beautiful on equal terms in utterly color-blind anonymity on the new frontiers of cyberspace. (Davidson and Rees-Mogg 1997)

The predictions in The Sovereign Individual did not come true. Income inequality was not reversed by digital technology; in the United States, the wealth gap has been increasing steadily since 2007 (Kolar 2023, Sherman et al. 2024). No government was destroyed by digital technology, as most institutions simply learned to use it. Democracies rolled their welfare programs out through government-operated websites, and totalitarian governments learned to censor internet searches. Identity-based discrimination persists, and digital technology only offered it new outlets for expression. We have created new injustices in many digital spheres, found in everything from AIs trained to discriminate on the basis of race to cyberstalking and online harassment. This is to say nothing of the fact that while digital technology has helped coordinate some positive social actions, it has also been used to organize and galvanize global hate movements (Wong 2018).

The failure of this prophecy should not be surprising. Given the statement quoted above, it is clear that The Sovereign Individual is missing quite a lot of information on the nature of systemic inequality. The idea of ‘color-blindness’ as a political position has been thoroughly critiqued, as it more often serves as an excuse to overlook systemic discrimination and the lived experiences of people of colour (Alexander 2010, Bonilla-Silva 2006). It’s also worth noting the hollowness of the claim that “the disabled” will vie for riches on equal footing when the qualifier for wealth is “one who is truly able”. It is impossible to believe a capitalist meritocracy is just without also subscribing to ableism; the two ideas are so inherently intertwined that The Sovereign Individual’s attempt to pretend otherwise becomes internally contradictory. This is quite obviously a statement in favour of equality made by someone who is approaching the

question from a purely capitalistic point of view. Not only is a 'purer' capitalism imagined as more equitable, but the actual benefits granted to "the ugly, the fat, the old, the disabled" are nothing more than the right to profit from an online business. No considerations are made for health, culture, safety, citizenship, mobility, pain, love, or any of the other daily experiences of human life—but this is consistent with the beliefs of authors who describe the government as a business and citizens as customers.

The faulty predictions in The Sovereign Individual are the result of many misconceptions, but in particular, they rest on a very common misconception about technology: technological advancements, no matter how revolutionary, rarely redistribute social power on their own. This is partly the result of understanding technology as neutral, because it then becomes impossible to imagine how discriminatory practices could be built into technologies. The same burden of great social change was placed on the telegraph in the 19th century—a century which would itself end in a period of extreme economic inequality matched only by our own—as the telegraph became a tool of exploitation for massive colonial empires (Carey and Quirk, 1989). Instead, those who already have power and capital tend to have greater access to new technologies, and thus, the ability to put these new technologies to work. Cryptocurrencies are another modern example: anyone can get rich from Bitcoin mining–provided they started to mine crypto eight years ago, and already possessed the startup capital for computers that can handle mining's astronomical power, processing, and cooling demands.

In other words, Davidson and Rees-Mogg are conducting their analysis under the familiar shadow of infrastructural illiteracy, and the related failure to understand discrimination as a structural problem. The pair claim that if the sovereign individual doesn't like his tax bracket, he can simply move to a different country. They do not seem to understand that moving is

expensive and logistically complicated. It is not a solution for those already left behind by income inequality; it is only relevant to those who have the capital required for plane tickets and document processing. Starting a digital business also carries infrastructural demands. Not only would the entrepreneur need to pay for the computers, but also advertising, security, internet access, and electrical power. Nor are the digital businesses envisioned by The Sovereign Individual all that sovereign, at least in terms of their infrastructure. We have seen the rise of independent YouTube channels or Etsy stores, but those must obey the rules of their larger online hubs. The gig economy—sporadic, inconsistent work as facilitated by apps like Uber—is equally dependent on a handful of digital infrastructures that have universally functioned as a step backward for labour rights. The truly titanic global online businesses, like Amazon, depend on equally titanic server farms, which require space and electricity to run.

However, even if it is wrong in the same way that bunker discourse often is—via misunderstandings resulting from infrastructural illiteracy—there is more to the relationship between The Sovereign Individual and bunker discourse than that. If the book did predict something correctly, it was the increased power and flexibility of the point-one percent. And that is who this book is truly for: the obscenely wealthy, and those who dream of wealth. The Sovereign Individual writes the wealthy entrepreneur into the role of the apocalyptic protagonist, and uses his wealth to grant him his coveted autonomy. The book also imagines enemies for the sovereign individual, from government workers looking to maintain their power, to ambiguously identified "criminals" and "parasites" who will no longer be kept in check by the government, to "Neo-Luddites" who fear technological progress. All of these people will come to challenge the sovereign individual with violence:

> Their nostalgia for compulsion will probably turn violent. Encounters with these new "Luddites" will make the transition to radical new forms of social

> organization at least a measure of bad news for everyone…*You must understand and prepare for such unpleasantness* (Davidson and Rees-Mogg, 1997)

Like all works of bunker discourse, this book frames opposition as inevitable–which also rather invalidates any gestures it makes toward social equality. The term "cognitive elite" is used interchangeably with that of "sovereign individual", which reveals the true nature of this fantasy. The cognitive elite cannot be elite without an underclass over which to express their superiority. In this case, these elite are even given permission to use violence by this carefully worded paragraph. And as with bunker discourse, this violence is not framed as violence—it's preparation.

It is not hard to determine that this framework of thought would appeal to people who have already made billions off digital technology, and these same people have been taking the 'lessons' in this book to heart. The sovereign individuals of the information age are the scant handful of people who have sold or consolidated their platforms into sources of unfathomable wealth—like the book's biggest champion, Peter Thiel. For this handful, many of the predictions of this book actually hold true. The rules of civic participation are simply different for billionaires. Tax havens and corporate loopholes ensure that escaping taxation is easy, while digital technology allows billionaires to dictate their global oligarchies from anywhere, even if the infrastructures of these oligarchies are not so mobile. Peter Thiel was able to become a citizen of New Zealand despite only visiting the country for a handful of weeks by promising to invest in its economy (Roy and Jong 2017). However, to truly suit the desires of the sovereign individual, these loopholes are not yet wide enough, and many billionaires are actively attempting to drag themselves closer to Davidson and Rees-Mogg's Randian utopia. In 2013, tech entrepreneur and venture capitalist Balaji Srinivasan began to argue for Silicon Valley's

"ultimate exit"—an escape from the shadow of government regulation, a sovereign utopia for tech barons (Giridharadas 2013).

This billionaire utopia is what Sarah Sharma has fittingly termed a "fantasy of exit", in that it permits the subject to imagine escape from their current social and economic conditions–even when those conditions are the tech billionaire lifestyle. This was also the purpose of seasteading, and is certainly one of the appeals of Elon Musk's imaginary yet well-funded Mars colony. The overarching irony of the exit fantasy is that only those who are least disadvantaged by our socioeconomic conditions can afford to indulge in them. An escapist fantasy often requires capital and mobility–access to a vacation home, a private bunker, or a private island. But there are yet more restrictions: Sarah Sharma primarily critiques the exit as a patriarchal fantasy, one contingent on the social liberties and mobilities afforded to men. Women are "subject…to forms of biopolitical management that do not allow for exit" (Sharma 2017).

Sharma's framework is primarily a feminist one, but she does hint that the possibility of exit, however temporary or fantastical, is built upon many intersecting privileges. Exit may also be difficult to imagine if your body is seen as foreign or threatening when it appears in someone else's exit fantasy, the way black and brown bodies are often perceived in suburbia. Or perhaps exit is physically impossible because your population is disproportionately incarcerated. Exit is also a complicated fantasy for disabled bodies for a thousand reasons–limited mobility, dependence on assistive devices, dependence on medication, and dependence on aides or close family could all make exit more taxing, more expensive, or more dangerous. The fantasy of exit is an important narrative for queer subjects, but it is one that seeks to maintain social relationships. A queer exit—shedding the name and bodily features that cause dysphoria, or the family that rejects one's identity—is not a fantasy of detachment, but rather a fantasy of

reintegration. It involves moving from a body/community that makes one feel excluded into another community that is accepting. Thinking about why exit is not just infeasible for minoritized groups, but also unappealing to those groups, exposes that leaving behind social connection and interdependence is only a pleasurable fantasy to those who are ignorant of that interdependence in the first place. In other words, exit fantasies are an expression of unchallenged privilege.

How exit fantasies interact with cultural politics should resonate with the observations in previous sections of this chapter. Post-apocalyptic fantasies are a variation on the exit fantasy, and they are thus stratified by race, class, gender, and other markers of difference. Detachment from society is the distinguishing feature of the hegemonic exit fantasy, which gives it its uniquely antisocial character. As a subset of the exit fantasy, the post-apocalyptic fantasy creates that detachment by destroying the social order altogether. This antisociality makes exit fantasies actively counterproductive when it comes to creating public good. As Sarah Sharma notes, exit fantasies also provide detachment from social and collective responsibility; they occur "at the expense of cultivating and sustaining conditions of collective autonomy" (Sharma 2017). Nullifying the efforts of collective autonomy is the goal of Srinivasan's proposed Silicon Valley exit, which exists to get companies away from regulation. Corporate regulations largely exist to protect the public by requiring companies to limit pollution or toxic byproducts, or hire staff equitably, or test their products before selling them, or pay taxes to contribute to public services. An "exit" from such regulation is nothing more or less than an exit from social responsibility.

Andrew Szasz makes a similar point in his book Shopping our Way to Safety, but through the lens of environmental consciousness. The main thrust of the book is that personal purchases have a tendency to replace collective action when it comes to combating pollution and

other environmental dangers. Instead of a community protesting the construction of a chemical plant upriver, each family can protect itself by purchasing HEPA filters. The focus is on keeping one's body separate from the toxins, rather than ensuring the toxins are never produced– reminiscent of how Bruce Clayton's focus was not on preventing nuclear war, but shielding himself from its fallout. Szasz also makes the useful point that this magic trick is contingent on the power of consumerism. As we have seen, bunker discourse often convinces its adherents that buying something is equivalent to taking action. Fittingly, one can buy their way into exit fantasies that centre around escaping or surviving crises. Not averting them, but, as Neil Strauss puts it, becoming the one that gets away (2009, 8). This is also obvious in The Sovereign Individual; purchasing power is what grants one freedom and sovereignty.

The various conditions described here consolidate to this: 'sovereign individuals' desire the right to separate themselves from all social and environmental responsibility, and they believe their wealth is adequate justification for this right. Because the 'sovereign individual' is defined by his self-made fortune and autonomy, this principle reflects the role that capitalism plays in the apocalyptic fantasies of bunker discourse. And, because we are bound to our histories, this 'sovereign individual' has an overwhelming chance of being a straight, white, abled, cis male American. Fisher's aphorism (adapted from both Frederic Jameson and Slavoj Zizek) that it is easier to imagine the end of the world than the end of capitalism holds true here: even people who imagine the end of the world in a professional capacity tend to imagine a class-driven post-apocalypse. We have already seen evidence of this from the authors of survivalist texts in the 1970s, in titles like How to Prepare for the Coming Crash. The end of the world as we know it is imagined as a way to become wealthy through the persistence of ownership after economic collapse. The Sovereign Individual is a continuation of this tradition, as it envisions a

cadre of people who will make their fortune in a time of impending crisis. Davidson and Rees-Mogg are not shy about painting violence and anarchy into their prophecies of governmental collapse, and they are as shameless as Preston and Browne about describing chaos as an investment opportunity.

We can see how these intersections of class privilege and social privilege are made manifest in bunkers designed for billionaires[30]. I have alluded to the idea that bunkers are meant to preserve objects and concepts of cultural importance after the end, and it is overwhelmingly consistent that one of these concepts is wealth, and with it, a wealth-based hierarchy. Hoarded wealth is a feature of many economic systems, not just capitalism—but the apocalyptic imaginary is specifically a capitalist one because of its attitude towards agency and profit. Bunker discourse relies on the logic of idealized, meritocratic American capitalism.

For an example of how the importance of wealth as a concept can be stored in a concrete way, we have the Oppidum "gallery". Oppidum bunkers, which are custom and modular, offer the option of including an "impregnable" gallery designed to store "art, wine, and other collections" ("Wealth Protection"). Here is how the website describes these features:

> You've worked hard over many years, taken risks, seized opportunities, made your vision a reality. Your reward is the means to acquire and curate all the beautiful, rare and precious objects you desire…[the gallery] keeps your art, wine, and other collections completely safe, in perfect condition and close to hand

[30] Detailed bunker designs for the richest people in the world–like Thiel's cancelled bunker in New Zealand, or Zuckerberg's Hawaiian complex, tend not to be publicly available (Scrimgeour 2023). Oppidum, whose bunkers begin at two million dollars USD, offers a glimpse at what these designs might include.

Figure 7. A model gallery for storing artwork, as featured in some Oppidum luxury bunkers. ("Model L'Heritage")

The client's collections are described here as the direct result of a singular individual's hard work ("you've worked hard" and thus "your reward" is art and wine). These cultural objects are not valued for their inherent characteristics, but as symbols of success–a 'reward' for behaving in a way that is laudable in the eyes of meritocratic capitalism. This is why the wine is stored and never drunk; its significance is not in how the wine tastes, but the wealth expressed by owning it. It is intriguing that this gallery–temperature controlled and ultra-secure–presents an opportunity to preserve artifacts of high culture through serious catastrophe. However, the description on the website does not sell its gallery by appealing to the historical and cultural significance of art, or even by describing its sentimental value. Instead, the value in this art is found in its value as an

emblem of success, as a personal reward for ‘hard work’. This suggests that the primary purpose behind these collections is to validate the collector’s status as a wealthy individual, regardless of how the economy fares–or whether it continues to exist.

Another representative feature of these bunkers are the “staff rooms”, which are intended to house cleaning and service staff. In an Oppidum bunker, the perpetually undervalued domestic work of cooking, cleaning, laundry, and childcare can be done by servants. These servants are subject to the traditional spatial discriminations of live-in staff–the ‘staff rooms’ keep domestic labourers separate from the property owners. Oppidum also offers to do the labour of mechanical upkeep; they promise ongoing bunker maintenance and technological updates. This concrete recognition of stratified labour in Oppidum’s bunkers exposes another of the critical ironies of the apocalyptic fantasies of the ultrawealthy. Namely, while the ultrawealthy may wish to escape modern society, their fantasies must still be built on the labour of others. The middle-class prepper finds satisfaction in self-sufficiency; while this self-sufficiency is not always credible or realistic, the illusion of autonomous survival–of productive, self-sustaining work–is central to the appeal of prepping. The ultrawealthy do not fantasize about a future where their labour can feel less alienating, but a future where they can continue to outsource labour to an underclass. The question of what the wealthy will do after the collapse of the world seems to be answered by the symbol of the gallery: they will continue to be wealthy. This fantasy of exit-with-labour has a corollary in the billionaire’s private island, most of which are not private at all, but rather managed by a significant number of domestic workers (Jones 2016). During their escapes to luxury bunkers or private islands, the masters of the house maintain the inequality created and enforced by capitalism and other sociocultural differences by relying on serving staff. And the billionaires know this: despite his career-long investment in seasteading and other exit

technologies, Peter Thiel notes in his book Zero to One that "there is no secession from society" – but he says this purely in the context of labour management, noting that the role of a CEO is to "bring out the best work from everybody at his company" (2014, 141).

If billionaires are arguing for an escape from society that preserves symbols of wealth, patterns of class stratification, and a domestic labour force, it is justifiable to ask exactly what they are escaping from. Srinivasan's speech suggests billionaires want to escape from any responsibility they could have to contribute to the public good. The persistent interest in tax havens in The Sovereign Individual suggests that taxes are also worth escaping. Furthermore, despite their sophisticated styling, these bunkers are still doomsday bunkers. Oppidum's designs come complete with decontamination showers, blast doors, air filtration systems, and diesel generators. They are meant to protect one from natural and man-made disasters alike. Billionaires also bear an outsized responsibility for the only truly apocalyptic problem we face in our lifetime–climate change (Barros & Wilk 2023). This suggests that billionaires want absolution not only from potential responsibility, but also from accountability for past actions. Those who have interviewed billionaire preppers report that above the fear of climate change or nuclear war, what billionaires fear most is violent retribution for what their pursuit of wealth has done to the planet and to society. In anonymous interviews, billionaires confess to fearing the desperate masses described in all the survivalist texts, but they also wonder how to incentivize and tame their own security staff (Osnos 2017). Rather than understanding this collective anger as something founded in the persistence of injustice, inequality, and environmental threat, billionaires shirk the idea of accountability altogether. In their own work, they say as much:

> Like [tech] founders, scapegoats are extreme and contradictory figures. On the one hand, a scapegoat is necessarily weak; he is powerless to stop his own victimization. On the other hand, as the one who can defuse conflict by taking the blame, he is the most powerful member of the community…Perhaps every

> modern king is just a scapegoat who has managed to delay his own execution. (Thiel 2014, 135)

It is clear from this description that Peter Thiel considers himself and his cohort to be victims, unjustly blamed for social discord and unrest. But billionaires are not typical victims–they are symbolically significant, even *necessary*, as martyrs that absorb blame and defuse crises for the well-being of the rest of society. Thus, the reign of a 'modern king' is dependent on 'delaying execution'. Elsewhere in *Zero to One,* Peter Thiel names the most important role of a billionaire CEO: "the creation of new value", or the invention of new products to sell (2014, 140). In Thiel's imagination, the tech baron does not bear any social, economic, or environmental responsibility; rather, this responsibility is wrongly forced upon them, and surviving their misplaced blame, while continuing to contribute to the catastrophe of unhindered capitalist production, is their true role. And to be able to do this role effectively for as long as possible, they should be free of taxation, regulation, and violent reprisal. In these fantasies, the role of the bunker is to give the sovereign individual both somewhere to hide from what he has done, and a place he can keep doing it.

This is why the bunker appeals to billionaires; it is the ultimate form of exit that modern luxury architecture strives for, because it is both isolated and inscrutable. Other luxury properties share the desire to be distant from the rabble. From private islands to penthouses to superyachts, the amount of money at your disposal is directly proportional to the distance you can maintain from "everybody else". Even projects that are not strictly doomsday bunkers are attempts to stretch that distance as far as possible. The private island, the floating city, and the mars colony exist to bring one outside the political reach of governments and the physical reach of the masses. Indian Creek village in Miami is a man-made island that houses 84 ultrawealthy landowners including Jeff Bezos. It has established a government separate from the city of

Miami and an independent police force of 15 officers. These police officers spend most of their time patrolling in boats to keep anyone who is not a resident of the island away. Just as valuable as physical distance is the ability to remain invisible and anonymous; in the Information Age, a sign of wealth is the ability to limit the spread of one's private information. As a result, the actual designs, operations, and affordances of billionaire retreats are almost always "shrouded in secrecy". The NDAs relating to Zuckerberg's Koolau ranch are so thorough that different construction teams working on the property are not allowed to discuss their work with each other (Scrimgeour 2023). The technology that enabled the sovereign individual also threatens him; those who built our media spheres of comprehensive surveillance must now shop their way into digital invisibility along with physical remoteness.

However, these spaces are never as empty as billionaires envision. It bears repeating that these retreats are built on land stolen from Hawaiians or Māori, and that those groups still live on their respective islands. Building on this land also often requires the labour of the land's inhabitants. Moreover, those spaces often have their own established infrastructures, and the attempt to divide one's bunker from those infrastructures often comes at a great cost to others living nearby. Larry Ellison owns 98% of the property on the Hawaiian island of Lana'i, and his plan to create a separate electrical grid for his buildings will cause electricity prices to skyrocket for the other residents—above their already exorbitant monthly average of $250 USD (Dobbyn 2022). Starting in 2018, the billionaire-funded California Forever group began enacting plans to build a private city in Solano County. When farm owners in the area refused to sell their land, California Forever dragged them to court (Wong 2024). These land grabs reveal one of the structuring ironies of bunker discourse, and particularly of *The Sovereign Individual*. The book suggests an unbound existence for the sovereign individual, one that is repeatedly and literally

described as godly. The sovereign individual's existence is not spatially bound: he can shift freely between continents and countries in search of the cheapest infrastructure. Nor is he bound by his identity, which has been rendered irrelevant in the digital post-human age. With such freedom, the sovereign individual can choose to neglect or discard any relation he chooses. However, this freedom is *entirely* contingent on relations and interdependence that the sovereign individual exploits in order to achieve this freedom. He needs land—private, isolated, fertile, temperate land, tended by indigenous people or rural families. He needs the labour of the underclasses to prop up his security and well-being. He even needs the compliance of governments and judiciary systems for his questionable citizenship and land claims. He needs the starting capital to make his billions through exploiting the labour of others. The sovereignty of the sovereign individual has less to do with complete independence and more to do with the unidirectionality of his relations; his perceived independence comes from his lack of reciprocation in every relationship in which he is entangled.

Bodies: Ableism after the end

Any given formulation of masculinity, hegemonic or otherwise, is constructed with help from role models that exemplify its characteristics. These role models may be characters in media, or historical figures, or contemporaries–although, because masculine practices and media are constantly shifting and reinforcing each other, 'role models' may have their biographies streamlined or altered to suit the relevant idealized picture of manhood. The largely apocryphal picture of Elon Musk as an inventor was crafted to fit Musk into the shape of tech-visionary-masculinity–the brilliant playboy billionaire image as codified in media, Little and Winch argue, by Marvel's film depictions of Iron Man/Tony Stark (2021). Musk now stands as the model of

that archetype[31]. While this model is increasingly borrowing language and practice from prepper masculinity, it is not the only formulation of masculinity to which bunker discourse caters. The previous chapter described the embattled American guerilla-soldier as an important 'role model' for masculinity under bunker discourse. As evidenced by the ongoing incorporation of both masculine identities, bunker discourse can accommodate different masculinities within certain boundaries. The shared primary demand of the masculinities under bunker discourse is that men must exhibit independence, resourcefulness, and an ability to 'provide for their family'. Thus, the most important template for masculinity in bunker discourse can be found in the American frontiersman–the colonial settlers of the 18th and 19th century who tamed the lawless West, transformed the plains into homesteads. This image of the frontiersman, despite his significance across American history, is also plagued by historical inaccuracy and romanticization. He is less important as a historical entity than as a cultural myth.

Although they are both approaches to understanding historical content, there are some significant theoretical distinctions between a cultural myth and a discursive formation like bunker discourse. Discursive formations delimit the outer bounds of our understanding, meaning they control the essential definitions of the conversation. Debates and disagreements happen *within* the boundaries of discourses, and overturning a discourse is the result of a significant upheaval of our understanding (a "discursive shift"). Meanwhile, cultural groups tend to be quite aware of cultural myths, which often stand in conscious opposition to other ideologies or cultures. The frontier myth is a bundle of imagery and ideology that Americans throughout history have actively reshaped to suit the era; the most relevant related discourse would be the

[31] Little & Winch's book was written before Musk's disastrous purchase of Twitter and his open affiliation with the current administration. Anecdotally, this has not so much discredited Musk as a figure exemplifying some type of hegemonic masculinity–rather, it has driven a wedge between those who revile Musk and those who still idolize him, while laying bare the more destructive aspects of hegemonic geek masculinity.

discourse of nationalism, and the unquestioned assumption that one's identity is shaped by one's nationality. I am taking this definition of cultural myths from Richard Slotkin, a historian notable for his extensive examination of the frontier myth and its many manifestations throughout American history. The frontier myth has had considerable influence over how bunker discourse, as a primarily American phenomenon, has been shaped–more specifically, the versions of the frontier myth that were propagated from the 1950s through to today.

The frontier myth is a cultural narrative that was initially proposed in a speech by Frederick Jackson Turner in 1893, in which he argued that America as a nation was uniquely defined by its pursuit and conquering of the Western frontier. The implications and iterations of this myth over two and a half centuries of American history have been thoroughly and meticulously dissected by historian Richard Slotkin. In summary, American identity is defined by the conquest of wilderness and subjugation of its Indigenous people, and this conquesting spirit is credited with the achievement of modern American cultural, political, and economic dominance. Thus the American identity typically exists in a liminal space between civilization and wilderness. Americans must separate themselves from the metropolis to achieve the goal of spreading its principles (technological sophistication, democracy, economic advancement, etcetera), and this places the American identity in a cycle of perpetual dissatisfaction with its position. The wilderness is unsatisfactory because it is uncivilized; civilization is unsatisfactory due to corruption, laziness, and misadventure, which drives the frontiersman back into the wilderness. Feeding this cycle requires finding more and more space to conquer. After solidifying its mainland borders, Americans spent decades seeking out new frontiers to colonize–outer space, the deep ocean, or the digital world. In fact, many of the ways we speak about the

digital in English–calling it cyber*space* or the digital *frontier*–are influenced by this need to dream up new, unconquered territory.

Slotkin also makes the observation that violence is "central to both the historical development of the frontier and its mythical representation" (1992, 11). This exploration and conquering of territory is accomplished by inflicting violence against its indigenous inhabitants. The frontiersman is waging a war of extermination, what Slotkin calls a "savage" war. The goal of such a war, made necessary by the frontier myth, is the complete eradication of the "savage" within the wilderness so space can be made for civilization. In the initial manifestation of this myth, this "savage opposition" is represented by caricatured Native Americans; in future reimaginings and reapplications, this "savage" could be anyone from a different racial Other to Soviet Communists. Because of this relationship between violence, territorial expansion, and the development of civilization, Slotkin has summarized the American struggle for identity as one of *regeneration through violence*.

This myth translates very cleanly into the post-apocalyptic imaginary, and other theorists have already argued that post-apocalyptic fiction is a way of indulging the frontier myth (Kyyrö and Panttila 2015). The apocalypse, as imagined in bunker discourse, often razes American civilization to the ground, thus creating a new frontier ripe for reconquering. One of the most recognizable post-apocalyptic settings–the zombie apocalypse–is also one that provides a guilt-free "savage opposition" for protagonists to exterminate. However, bunker discourse does not need to limit itself to fiction to indulge the demands of the frontier myth. Those companies and content creators who appeal to the survivalist tendencies of preppers are typically invoking these symbols and stories, and offering a way to relive that essentially American experience of conquering a frontier.

Slotkin and other historians have pointed out the ways this myth is detrimental. Not only is it an inaccurate telling of America's early history, it is a narrativization ripe for social critique from a number of angles. The myth's project of white supremacy, for example, is obvious: the white colonizer is given the responsibility of eradicating the "savage" indigenous people to introduce their "more civilized" way of life. It is also a strongly gendered fantasy; some historians point to the tendency to associate women with nature, turning the female body into a metaphorical land for conquering (Belmonte-Ávila 2023). Conversely, the American on the frontier is almost always envisioned and described as a male figure; this places the agencies of civilization, as well as the necessity of violence, with men and masculinity. I wish to add another vector to these criticisms by illuminating how ableism functions in the frontier myth, and particularly how the assumption of an able body is necessary to prop up the frontier myth's façade of aggressive, violent masculinity. Ableism and masculinity intersect in bunker discourse in the same way, and it is through these shared themes that I plan to connect bunker discourse and the frontier myth. Instead of focusing on a specific bunker-building company, I have chosen to do so through a more modern apocalyptic instruction manual. I must here introduce a person I did not expect to find in my archive: Neil Strauss.

Neil Strauss is first and foremost a journalist and non-fiction writer. His most well-known works are a duology of autobiographies, written almost a decade apart, titled *The Game* and *The Truth.* In 2005, Strauss initiated himself via paid course into the pickup artist community. Pickup artists are a group of men obsessed with the sexual conquest of women, who have gained notoriety in the digital age as a part of the "manosphere", a semi-united front of misogynistic subcultures that also includes incels (Kennedy-Kollar 2024). Strauss's first book, *The Game,* was a recounting of his friendship with other pickup artists and a catalogue of their techniques for

seducing women. *The Game* popularized much of the lingo still used by pickup artists, such as "negging" (offering a woman a backhanded compliment to crush her self-esteem). In 2015, Strauss released *The Truth,* a book about his stay in sex addiction rehab and his difficulty maintaining a serious long-term relationship. *The Game* is a very confused book, narrating the formation and eventual breakdown of Strauss's male friendships with pickup artists but seemingly oblivious to the rampant misogyny and frustrated masculinity informing these conflicts. In *The Game,* Strauss seems aware of his own unhappiness and low self-confidence, but he constantly redirects the narration toward his success as a pickup artist. In *The Truth,* Strauss is much more honest about his insecurities and his compulsive cheating. He compares himself unfavourably to every man he meets. He records uncomfortable conversations and unflattering internal monologues. It is a self-aware and particularly agonizing autopsy of the trauma caused by modern heterosexual masculinity.

In between these two books, Strauss wrote *Emergency: This Book Will Save Your Life,* a book about survivalism. This makes it a fascinating discursive artefact for this dissertation: it is a semi-autobiographical, semi-instructional volume written by a man who would, five years later, publicly dissect his own crisis of masculinity. Neil Strauss's own oeuvre means that reading behind the lines is not required: we know from Strauss's own work that he suffered immensely—and inflicted no small amount of suffering on others—from the incoherent pressures of modern American masculinity.

Take this segment from the introduction of *Emergency:*

> Unlike me, Mad Dog was a real man. He could chop wood, make fire, forge weapons, kill his own food, and defend himself with his bare hands. In other words he could survive on his own—without Con Edison, without AT&T, without Exxon, without McDonald's…without two and a half centuries of American civilization and industry. (Strauss 2009, 4)

This is a more efficient summary of survivalist masculinity, and how it is indebted to the frontier myth, than I could ever hope to write. Being a "real man" is associated with practical, traditionally masculine skills of survival and violence. It is also placed in opposition to the constructs and conveniences of modernity (AT&T and McDonalds). Consistent with Slotkin's observations of the frontier myth across the centuries, this type of masculinity demands a distrust of the city and its web of dependencies. There is even an implication that achieving "real" masculinity is contingent on a rejection of modern America. This type of masculinity is also specifically defined by what it lacks, or what it is not. It is not feminine, because that is how traditional masculinity always defines itself, but it is also divided from any dependency on infrastructures of care or convenience. No electrical power, no fast food, no internet. Similar to how the government was feminized to try and redeem the masculinity of the Vietnam War—the government became a fussy mother, overbearing and overprotective—the conveniences of modernity are depicted as coddling. Defining masculinity as opposite femininity and dependence also places it at the intersection of ableism and misogyny. This is a definition built on disparaging both those who help and those who may need help[32].

Strauss's understanding of the world in Emergency is framed by this understanding of masculinity and self-reliance, in that he is dismissive and blasé about experiences outside his own. For example, presents a historical theory that Americans grew complacent about survival in the 1980s and 1990s because they were not faced with a crisis approaching the scale of the World Wars or the Vietnam War. In particular, he blusters past the AIDS pandemic: "from 1980 to the close of the century–nothing. Or at least no war, no national catastrophe, no defining event powerful enough to pull us outside of our self-centered, solipsistic world" (Strauss 2009, 8). We

[32] Or rather, who is stereotypically lumped into those groups. It should go without saying that people without disabilities also need care and that men can do care work.

know Strauss has heard of AIDS; in the very next paragraph he mentions that a cure for AIDS was, at the time, one of the few steps left before society could be considered perfect–like a cherry on top.

In terms of illustratively inaccurate histories, this sits alongside Clayton's recounting of a non-disruptive Industrial Revolution in terms of sheer gall. Leaving aside other near-catastrophes, like Reagan's attempts to reignite the Cold War, this is a painfully ignorant picture of the HIV/AIDS pandemic. At time of writing, over forty million people have died of AIDS-related complications–more than the entire population of Canada or California in 2024. Estimates of casualties in the Vietnam War are difficult, but even at the highest end, they reach about a tenth of that total—but only if one includes Americans, allied forces, Vietnamese soldiers, and civilians on both sides. When Strauss was writing this book, there were still over a million deaths a year from AIDS. Moreover, unlike the Vietnam War or World War II, the AIDS crisis is an ongoing one; those estimated total casualties will only climb.

At the same time, this is a revealing mistake to make. In the same way we can misunderstand the strength of certain threats and the necessity of certain kinds of safety, the way a crisis is perceived is often very different from its actual impact (Barkun 2011). Neil Strauss would likely not imagine himself as a person at risk of contracting HIV. Of course, straight white men like Strauss are not immune to HIV, but HIV and AIDS have historically been stigmatized as conditions that only impact gay men and other select populations (Rogers 2022). Strauss's framing suggests that the HIV/AIDS pandemic is outside the boundaries of what he would consider a "national catastrophe". It may belong to the same category as the gun violence epidemic mentioned above; after its initial wave of broader political relevance in the 1980s and 90s, the HIV and AIDS pandemic was simply considered to be part of the ongoing state of

affairs. Consider also that HIV is a slow-moving virus that might rest dormant for years before impacting the person who has acquired it. Fictional apocalyptic plagues—zombie viruses, for instance—are always depicted as highly infectious diseases that inflict rapid, transformative symptoms. HIV/AIDS is simply not explosive enough in its execution to constitute a shift in "normal" societal function[33]. Essentially, Strauss's understanding of "crisis" requires that the crisis is loud, destructive, immediate, and that it impacts people who look and behave like him—in other words, it is both a crisis that is relevant to him and one that masculine violence, self-reliance, and resourcefulness are (allegedly) best equipped to solve.

An autopsy of an ex-pickup artist's survival manual would not be complete without some glimpse of how he views women and their role in his survival practice. While he introduces himself as a survivalist via a list of action verbs, here is how Strauss speaks about his partner at the time:

> Unlike me, Katie had been popular in high school and, consequently, learning to be self-sufficient had never crossed her mind. If she was too scared to do something, there were always guys around who would gladly do it for her (2009, 191)

This is a fairly typical attitude toward women in the manosphere. Women are evaluated by their physical attractiveness; this is their main asset and primary area of competence. Their relationship to the world is completely contingent on, and defined by, their romantic relationships with men. Unlike the "unprepared" man, whose independence is hampered by his reliance on McDonald's and AT&T, Katie's independence is hampered by her adherence to her gender role. Dependence and femininity go hand in hand. Earlier in the book, Strauss speaks about a female colleague, Bianca, who in his estimation "had to sacrifice some of the softness

[33] Neil Strauss's book was written in 2009, long before the COVID-19 pandemic, but it is worth noting that even *that* pandemic was not considered catastrophic to "count" for most preppers. According to their biographers, like Bradley Garrett, preppers mostly considered COVID a prelude to "the big one".

and submission that serve as honey to men on a date but weakness in an office" (Strauss 2009, 33). She did this to "succeed in a man's world" (ibid). Strauss quite bluntly equates femininity with submission to men; independence or assertiveness are tantamount to a conscious de-gendering, to making oneself *less* of a woman in order to stand on somewhat equal footing with men. These gender politics make merely being a woman into an unwinnable situation. A woman who is desirable is by nature incompetent; a competent woman is no longer desirable. No matter what subject position a woman inhabits, a man has every reason to condescend to her. While this position is primarily misogynistic, I would also like to underline that it is contingent on a cisgendered, heterosexual understanding of the world as well; women have inherent characteristics ('softness and submissiveness') that define their gender, and these characteristics only matter in the context of their heterosexual relationships with men. This places women in a dependent role in the frontier myth as well as in survivalist practice. As a small coda to this section, Strauss also neglects to learn traditionally feminine labours that may be important for survival. For example, learning to make, mend, alter, or patch clothing would be important in a situation where you could not buy more, but Strauss never so much as learns to sew on a button.

Lest we neglect the role of colonial domination in this portrait, Strauss's book concludes with his central apocalyptic strategy: he obtains citizenship for St. Christopher and Nevis, informally known as St. Kitts. This is a small island in the Caribbean with a population of about 40,000, the majority of whom are descended from African slaves who worked on the island's sugar plantations in the 18th and 19th centuries. This is Strauss's version of the popular prepper strategy of fleeing to New Zealand. (Strauss did aim for New Zealand first, but found that the country had changed its residency requirements). Lest there be any doubt about what kind of

myth he is indulging, Neil Strauss calls St. Kitts "the Wild West with an ocean view" (2009, 405).

From these examples, we can see that being a "real man" means inhabiting the position of the protagonist of the frontier myth—and because Strauss sees women as primarily dependent, it seems that *only* a man could inhabit this position. This position requires a rejection of civilization's comforts, as well as the capacity to execute a series of actions ("kill his own food") that would allow a man to survive in the wilderness. Incapacity or injury are not the result of coincidences, accidents, or unforeseeable circumstances. Instead, Strauss uses illness as metonymy for being unprepared, saying that in a crisis, he doesn't want to be, among other things, "dying of cholera in [a] refugee camp" (Strauss 2009, 8). He wants "to be the one who gets away" (ibid.). Strauss calls himself a "lone wolf" (ibid., 240) and emphasizes that he wants complete excision from all societal dependencies:

> All my life, I had thought that freedom was something that, as Americans, we were privileged to have, thanks to the Constitution and the Bill of Rights. But those documents didn't create freedom. They created a system. And systems create dependencies. Real freedom, I realized, meant knowing…how to take care of myself if the system ever broke down. (190)

Strauss sees his freedom, then, as contingent on his personal knowledge and abilities. He should be able to 'take care' of himself, as should every 'real man'. Freedom both means and requires complete masculine independence. This ability to 'take care' of oneself is also contingent on a certain level of health and able-bodiedness that Strauss assumes he possesses now and always will, as he breezes past serious afflictions like HIV/AIDS and cholera as things that happen to other people. Moreover, he implies through his example of cholera that illness is a result of being unprepared–and that 'taking care' of himself in a masculine fashion should therefore exempt him from the risk of disease or other bodily hindrance.

This understanding of freedom and masculinity, as well as health and utility, relies on a series of dangerous assumptions that disability theory is primed to interrogate. The prepper fantasy requires a sufficiently strong, mobile, and knowledgeable protagonist, which narrows the identity of our potential hero down further–he is now, most likely, a white, straight, able-bodied man from America. But his entire character arc of achieving complete independence rests upon a tenuous foundation, which is the idea of the human as an autonomous, independent unit. This valorization of autonomy has been called into question by a number of scholars—feminists, post-structuralists, and so on—but disability theorists have a unique insight on how our ideas of autonomy are specifically entangled with our bodily capacity. Our bodies can be perfect conduits for understanding our interconnectedness.

Barbara Gibson explains that any theoretical perspective that engages with the body "requires a re-imagining of the contained and sovereign subject of Western discourse as fluid and becoming" (Gibson 2006, 188), signifying "a theoretical move from dependence to connectivity" (emphasis mine) (Gibson 2006, 187). This is a move inspired by Deleuze and Guattari, as Gibson borrows their understanding of the self as "distributive, both confined to individual bodies and simultaneously connected, overlapping with other bodies, nature, and machine" (2006, 189). Gibson contributes by bringing disability into the discussion; in her view, the distributed self troubles the separation of dependence and independence, along with the separation of bodies into abled and disabled. Instead of the dependent/independent binary, Gibson suggests we "reconceptualize dependency as connectivity, an active potential for connecting across multiple dimensions" (2006, 188). Her essay uses three examples of connectivity that we would normally conceive of as dependencies, all based on her own experiences—a blind man and his seeing-eye dog, a man and his ventilator, and a physically disabled couple and their attendant who helps

manage their sexual relationship. Gibson recounts that these people have developed nuanced understandings of their relationships with each other, animals, and technology. The man on the ventilator sees it as an 'extension' of his body, for example, rather than a vulnerability or shortcoming.

We are all dependent on/connected to 'other bodies, nature, and machines', and this has been true for a very long time—but this truth tends to conflict with the idealized picture of frontier myth-masculinity. The prepper holds a mythologized picture of the lone cowboy or the resourceful homesteader in their mind, and aspires to achieve that level of independence. Neil Strauss draws this connection explicitly, claiming that "at one point in history, almost everyone was a survivalist. They knew how to…keep themselves and their families alive" (2009, 191). It is not clear exactly what time period Strauss is referencing, but a dash of general historical knowledge is all it takes to identify this assumption as fallacious. Humans have been organizing themselves into interdependent societies for thousands of years, for at least as long as we have had written records of civilization, and many of these records also suggest specialized professions that would create interdependencies. If the community has records of a doctor, it can be assumed that others in that community rely on that doctor to handle injury and illness.

If I were to guess what time period Strauss is envisioning in this quote, I would place my bets on the American frontier of the 19th century, if only because the subtext of the frontier myth pervades the rest of the book. This is the imaginary frontier settled by a thousand autonomous families, each captained by a Little House on the Prairie-esque Pa who could build a log cabin with his own hands. This telling of the story obfuscates the systemic nature of American colonization, which was both a bureaucratic process of purchasing, lending, and treaty making (and breaking), as well as a systemic deployment of military violence and invasion. And in all

cases, infrastructural development played a vital role in sustaining these systems. Pre-existing social and economic conditions often determined who was able to set up homesteads in the 13 colonies or, later, in the American West. Land and labour often had to be purchased; thus, pre-existing wealth, alongside the economic infrastructures of indentured servitude and slavery, allowed subsistence farms to swiftly evolve into commercial enterprises. Economic gain also motivated much of the push Westward, such as the gold rushes in California and the Black Hills: in those cases, the inspiration behind moving west was not to recapture the masculine spirit by removing oneself from the economic system, but rather to gain the resources required to rise to the highest classes of that system. Westward expansion did not develop randomly, but along infrastructural umbilical cords—first, along roads and rivers protected by military outposts, and later along railroad and telegraph lines. There were also strong infrastructures of information on the American continent. Literacy was quite high in the colonies, and books and pamphlets were changing hands as early as the 17th century; additionally, it was indigenous knowledge and trade with indigenous groups that guaranteed survival for everyone from the starving Mayflower pilgrims to the coureurs des bois in what would later become Quebec. On the note of survivalists who lived "without" communication and information infrastructure, it is ironic that Strauss should specifically mention AT&T. AT&T is an abbreviation derived from the company's original name, which was The American Telephone and Telegraph Company. This company, in turn, was the result of the consolidation of about 20 regional telephone services. The oldest of these companies was founded in 1878, making it older than the statehood of twelve American states. One subsidiary, called Pioneer Telephone & Telegraph, provided services in "Indian Territory". So, at least in some stages of their conquest, the pioneers did have AT&T. Even in

the sparsely settled (by white colonizers) and unfamiliar American frontier, a system of connections and interdependencies that made colonization possible.

The way we tell survival stories matters: it is very easy to present American settler-colonialism as a narrative celebration of autonomy by focusing on individuals or singular families. Conversely, narratives of medicalized disability tend to make the connections between people, nature, and things more explicit. I say "medicalized" because our definitions of disability and impairment are often dependent on arbitrary distinctions, which deteriorate upon closer scrutiny. There is an example that both illustrates Gibson's point about dependencies and underlines the dependencies/connections that preppers are unable to eliminate. Survivalists imagine themselves as the autonomous protagonist of the frontier myth, and not as owners of disabled, interconnected bodies. However, if dependence on a specialized medical aid is our only qualification for disability, then at least half the preppers I have talked about are disabled, and all in the same way: they wear glasses.

Whether or not they wear glasses is not the kind of detail preppers tend to include in books or product pitches, so I have started a small collection of photos from press interviews and Facebook pages. Among the glasses-wearers are Bruce Clayton, the author of Life After Doomsday; Kurt Saxon, the father of far-right 1970s survivalism; Ron Hubbard, the CEO of Atlas Shelters; and Neil Strauss. I also have photos of different location managers of Fortitude Ranch in glasses. To my chagrin I could not find any photos of Robert Vicino in glasses, but he is a rather devout sporter of shades.

Figure 8. Photograph of Steve Rene and Eric Parker, executives at Fortitude Ranch in Wisconsin, wearing eyeglasses (Ewen 2022)

So, why glasses? Obviously, it is impossible to determine the strength of their prescriptions, or whether any of these glasses are for near- or farsightedness, but such details are somewhat insignificant. What these glasses *do* signify is that a significant number of preppers depend on a sophisticated piece of medical technology whether they like it or not, and this dependence is so ingrained in their daily lives they have stopped noticing it.

Glasses are easily the most socially integrated medical prosthesis. Glasses-wearers do not typically consider themselves disabled unless they are also legally blind, and some people with unimpaired vision will wear glasses as a fashion statement. Wearing glasses in public does not mark one as disabled, while other prostheses, like hearing aids or prosthetic limbs, typically do. Despite their tendency to "fade" into the background of a person's other features, glasses are also a sophisticated medical technology. Glass-making techniques are over four thousand years old, but they were not refined enough to make corrective lenses until the 14th century—and once the technology did exist, it remained a discipline for specialized scientists (Rasmussen 2008).

Making durable glass involves mixing specific chemical compounds at extraordinarily high temperatures, grinding the lenses, ensuring the right level of magnification, and fitting the lenses into frames without shattering them. This skill is not like slaughtering a goat or building a fire; it could not be picked up 'after the end' without very specific instructions and supplies.

This means that glasses present a problem for prepper independence. They are a medical tool that augments a bodily shortcoming, and they are too sophisticated to replicate. It is also reasonably dangerous to not have glasses if you need them, particularly for the sorts of things preppers expect to do—like navigating in the wilderness, or cleaning a gun, for example. Preppers largely handle this problem by ignoring it. Most websites or prepper manuals don't mention glasses. Those that do offer one of two perfunctory solutions: buy an extra pair, or get LASIK surgery. This dependence is addressed in the same way as most prepper problems; either it must be permanently "fixed", or one can stock up on resources that will "fix" it for you.

Of course, this exposes the greater irony that preppers rely on specialized technologies all the time. From automatic rifles, to spill-proof furniture, to Oehler's polyethylene coatings, to electrical fixtures, to those pesky forgettable power drills, preppers build their bunkers on complex technologies, which are themselves reliant on infrastructures of knowledge and economic exchange. This may seem like a strange objection in hindsight; of course preppers can buy tools and buildings from elsewhere in order to survive. Survival must come at any cost!

Perhaps—but this reliance on established infrastructure is not just a problem of logic. It is also a problem of narrative incongruity. Preppers seek to benefit from the infrastructure of modern society while openly claiming to disavow it to achieve autonomy. In prepper fantasies, international chains of production almost never survive the apocalypse, but their spoils always do. Wealthy preppers stash guns, refrigerators, computers, cars, and works of art in their bunkers

because they want to possess those things in the future—but their fantasy means nobody else will be able to make those things for decades, if not centuries, after the end. So do preppers want access to modern technology, medicine, and refrigeration or not? What they seem to want is for these luxuries to spontaneously incarnate, as autonomous as their users, without relying on the labours, resources, or knowledge of any other human beings. In other words, they want their 'stuff' to be as autonomous as their bodies. Books, YouTube channels, and retreats that skew harder toward nature-bound survivalism—Fortitude Ranch, etcetera—might try to avoid more complex comforts like televisions when they can, but even in the strictest cases, I find that two technologies almost always remain, and those are guns and glasses.

The example of eyeglasses also exposes the black-and-white thinking preppers inflict on bodies and their relationship with technology—the exact binary categorizations Gibson urges us to discard. In prepper estimations you are either healthy or sick, in the same way you are either prepared or unprepared. Perhaps your prescription, like mine, is always getting worse–and yet the idea that bodies can change over time and must be managed in the long term seems to put a strain on the capacities of bunker discourse. Consider: Neil Strauss mentions, in his introduction, that he has learned how to deliver a baby. This puts the emphasis on pregnancy's "crisis point", as if pregnancy is a singular state of emergency, something that happens right when the baby arrives. Strauss does not offer instruction on prenatal nutrition, or how to take care of a baby if the mother does not survive delivery[34]. Bruce Clayton is a little more prescient than this—in the sense that he recommends "stocking up on baby formula" and avoiding obstetrics (Strauss 1979, 103). In Strauss's case, a long and complex biological process, which significantly changes the

[34] Note the overlap of instrumentalizing misogyny with ableism here. Cis women are not considered in these conversations in any humanizing way, neither as partners nor as patients. Instead, they are excised from the discussion as if they are inert baby-producing machines. Chapter 3 explores the de-feminization and mechanization of reproduction further.

body of the parent and often demands specialized care and nutrition, is reduced to its most dramatic moment; in Clayton's, there is a bit more awareness that pregnancy and child-rearing are processes, but mastering these processes is once again a simple question of stocking up on the right stuff. This is an extreme version of what Gibson calls "the mentality of the cure"—the idea of treating medical conditions as singular problems that can (and should) be permanently "fixed" with the right application of technology and resources (Gibson 2006). Thus, prepper manuals focus on first aid for extreme injuries. More complicated ailments are "fixed" by referencing instructional manuals and having the right medications on hand. Bruce Clayton's chapter on medicine in Life After Doomsday, like much of the rest of the book, is part bibliography, part shopping list. This way of approaching healthcare—essentially as a curative checklist—presents problems for handling all kinds of conditions.

For example, consider mental health and mental illness, where conditions tend to be ongoing, complicated to manage, and difficult to diagnose. Bruce Clayton offers a single illuminating suggestion: "The [United States Army Field Manual] discusses how to recognize a psychological casualty, how to give first aid, and how to control your own attitude toward a person who is helpless but apparently uninjured" (Clayton 98-99). Like Strauss's understanding of pregnancy, this suggestion depicts mental health struggles at a singular, immediate point of crisis, as a "casualty" of a particular event who must be given emergency care—mental health as something that can be "fixed" in the moment. The last comment is particularly illuminating for its disdain. In a subculture as obsessed with physical effectiveness as survivalism, there is nothing more disgraceful than being 'helpless but uninjured'. In bunker discourse, like in Strauss's claim that crisis preparations will protect him from cholera, there is a conflation of illness with a lack of preparation and thus a lack of effectiveness. This is the only paragraph in

Clayton's chapter on medicine that references mental health[35]. Elsewhere in the book, Clayton is also somewhat scornful toward people who are overweight or arthritic, worrying primarily that the survivalist (who is assumed to be not overweight and not arthritic) must find something for them to do. They are allowed to have some physical shortcomings, so long as they can still be effective. When it comes to managing mental illness, there is very often an ongoing social aspect to treatment; for example, avoiding triggers for sufferers of PTSD is often a collaborative effort between partners, family, and housemates. This may impact the effectiveness or utility of others, who need to spend at least some of their time and energy accommodating for the other survivor. Because bunker discourse sees illness as a failure of autonomy, it makes it difficult for adherents not only to acknowledge their own interdependencies, but also to accommodate the idea that someone who needs ongoing help still deserves to survive.

This is but a single example of how unfriendly prepper culture is toward disabled bodies, particularly those with ongoing conditions that require management. When people with disabilities become involved in prepper culture, they often struggle with this problem openly. Diabetic survivalists have come to Reddit seeking a way to manage their condition, and strategies follow that familiar formula: fix it or buy it. Type-2 diabetics are told to "fix it", or rather, to "get rid of the diabetes":

> OP:How would a diabetic survive in the event of an apocalypse?
> If diabetes from lifestyle (obese, sedentary, high carb diet) your first prep should be to change that and get rid of the diabetes and off any dependence of diabetic drugs for your survival. Consult your physician on lifestyle changes to do this under their guidance (but generally diet and exercise) (SWT_Bobcat)

[35] In a later chapter, Clayton gives some instructions on how to manage other survivors that do brush up against the idea of mental well-being; however, his instructions there are equally terse and absolute. Effective shelter management comes down to running the community like a military base, ensuring that each hour of the day is scheduled and each shelter inhabitant has tasks to complete. The logic of "fixing" persists here—the stress of post-apocalyptic survival is assumed to be "fixed" by establishing this militaristic schedule.

If nothing else, it is considerate to remind type-2 diabetics to talk to their doctor, but the "get rid of the diabetes" phrasing makes it seem as if this process will be curative, so that the diabetic will eventually eliminate their dependence on doctors and insulin. Conversely, type-1 diabetics are told to stock up on at least one year of insulin. A non-negligible number of responses acknowledge that this is a limited and ultimately ineffective solution:

> OP: How would a diabetic survive in the event of an apocalypse?
> they die (hoardingraccoon)

Another creative suggestion for diabetic preppers is to buy a pig and learn to extract insulin from its pancreas (McClatchey 2017).

First of all, we should note the dismissive ableism in the "diet and exercise" statement directed at type-2 diabetics. While a managed diet and regular exercise do help manage type-2 diabetes, patients still need to monitor their blood sugar and take insulin depending on the state of their condition. Type-2 diabetes can go into remission, but it cannot be cured (one does not simply "get rid of the diabetes"). The attitude toward type-2 diabetics reflects the prepper conflation of illness with incompetence. Preppers, like most other modern health media, understand type-2 diabetes as something you 'get yourself into' through laziness and poor nutrition—through relying, as it were, on McDonald's and AT&T. There is very little consideration for other factors that contribute to the onset of type-2 diabetes, such as medical comorbidities or food deserts (Johnson 2023). Health is just as 'autonomous' as everything else in bunker discourse—something that an individual can and should control, and their failures to control it are often understood as the primary cause of illness. Some redditors suggest that type-2 diabetics would actually benefit from the apocalypse, as it would force them into stricter diets and more frequent exercise. Note that the poster above calls diet and exercise "your first prep", as if practicing a healthier lifestyle and preparing for the apocalypse are essentially the same

process. Preppers assume that if the disease can be managed by the work of one's own body, that is the way it should be managed, as the type-2 diabetic is not advised to purchase extra insulin but rather to 'get off diabetic drugs'.

The pig insulin idea is also worth discussing. Interestingly, it is possible to extract insulin from the organs of a pig—this was how medical insulin was produced for decades—but it requires precision, and the potential of an allergic reaction to imperfectly purified insulin is high[36]. What I find so fascinating and exposing about the pig suggestion is that, however fantastical it is, it puts pigs in a role reminiscent of that of the seeing-eye dog in Gibson's paper—an animal that you must care for because of how it will care for you. Diabetes is a tough nut for preppers to crack, and one of the only possible solutions is to form an ongoing interdependent connection with a pig—or, rather, a family of pigs, as you would likely have to kill the pig, butcher it, and identify the pancreas correctly in order to extract the insulin. Diabetes simply cannot be managed without synthetic or animal insulin; before the development of those processes, it was a death sentence. Survival for the diabetic requires either modern medical treatment or, however unlikely the post-apocalyptic pig farm is, an interdependence with another being.

We are approaching some key contradictions in prepper ideas about the body. In summary, preppers valorize independence and autonomy as expressions of masculinity. These values come, at least in part, from a misunderstanding of American history that takes the myth of the independent, self-sufficient settler at face value. Because autonomy is considered a moral strength, dependence is considered a moral failing. Preppers thus conflate illness with incompetence. Their 'plans' to handle illness are limited by their black-and-white perception of

[36] The first recipient of synthesized insulin, Leonard Thompson, had an allergic reaction to the canine insulin prepared for him by doctors Banting and Best. He received a refined version twelve days later.

health and their dismissive attitude toward illnesses that are entangled with misconceptions of agency—like mental illnesses, or conditions that appear to arise from individual lifestyles.

If we simply reconfigure our perspective—removing the binaries of healthy/unhealthy, and seeking out connection over independence—it becomes clear that preppers are fantasizing about an environment that would be actively hostile to their own bodies. Preppers are unable to conceive of themselves as disabled, dependent, or connected because they conflate all three characteristics and disparage them equally, especially as they correlate these characteristics with femininity. Despite this, many preppers are already connected to/dependent on technologies—some that are, quite literally, right in front of their eyes. Certain technological dependencies, like refrigerators, may primarily serve our comfort or efficiency, but in the cases where bodily health is implicated, choosing to disregard our interconnectedness is tantamount to disregarding our safety. Disabled activists point out that 'disability is a club anyone can join', either through unexpected traumatic injuries or simple aging. And it is a club that many preppers are in already, but that they refuse to acknowledge, as they see it as a weak point.

So far, we can conclude that preppers are envisioning a world that would not welcome them should they lose their able-bodied status, or should their dependencies be exposed. But this entire pattern of thought becomes grimmer still when we remember exactly how preppers tell us to handle people who are not prepared:

> The biggest burdens in a crisis are those who were so concerned about the welfare of everyone else that they never provided for themselves…Yes, there will be many, many people who'll be hurt—but that isn't your fault. And if you save yourself it won't be at their expense. (Preston 1972, 121)

> There is a pervasive humanitarian attitude that it is "noble" to sacrifice yourself and loved ones for a stranger. I do not agree with this point of view. I feel that I have a moral obligation to warn people of the troubled times ahead and show them how to prepare themselves, but once they have been warned, I feel no further obligation to them. (Clayton 1980, 111)

> 95%+ people not well prepared, will come to steal/kill for food, water, gas, ammo - small survivor groups their most likely targets (Survive a Collapse)
>
> If [your] supplies are your only hope of survival, anyone who attempts to steal or sabotage those supplies is attempting to murder you and your family. The principle of self-defense clearly applies. If someone is trying to kill you, you are morally justified in resisting to the utmost. (Clayton 1980. 111)

In summary: we have no moral obligation to help those who did not prepare. Providing for others is a moral failing, as it turns one into a "burden". People who are, *for any reason,* in desperate need of survival supplies are "attempting to murder you," and it is assumed that most of the population will approach the problem of survival violently anyway ("95%+ of the population"). Bunker discourse presents "survival of the fittest" as an ethical imperative, removing any burden of care or compassion we might have toward those who did not, or could not, prepare for survival. Note how these texts conflate unpreparedness and violence: the unprepared will not trade, beg, or bargain, but they will "come to steal/kill". The unprepared are assumed to inhabit a position of inferior moral worth, and their original sin was not believing people like Clayton; "once they have been warned", their rights to life and health can be safely removed from the equation. Because they have already failed in this first moral duty (preparation) they will doubtlessly turn to immoral means for survival (killing or stealing) and so killing *them* is "morally justified".

Recall that illness is equated with a lack of preparation; it is something survivors should be able to prevent with adequate supplies and the right textbooks, something Neil Strauss thinks he can avoid. Illness is assumed to be the result of a lack of preparation, and a lack of preparation is a moral failing deserving of anything from fatal neglect to execution. Bunker discourse thus creates a moral imperative for its adherents to administer and celebrate the death of the disabled.

This is not as unprecedented as it might sound; Alison Kafer points out that many imaginary futures assume the gradual elimination of disabled bodies through medical technology (Kafer 2013). In Kafer's examples, the future is a utopian one, placed at the climax of the curative timeline: imagine a perfect world where all illnesses and disabilities have been "solved" by medical technology. This vision, which inspires a whole host of medical inventions and procedures, subtly places disabled existence as less valuable than able-bodied existence. It suggests that a disabled life is less worth living, and so the goal of medicine should be to "cure" or eliminate disability via, for instance, prenatal genetic tests and selective abortions. Some applications of these procedures might be reasonable, such as the prevention of unsurvivable birth defects, but the broader aim—to eliminate all bodies that deviate too far from an arbitrary norm—is a eugenicist project.

The utopian story of curative time is easier to swallow, but the dystopic imaginary of bunker discourse, similarly, has no place for the disabled body[37]. Its reasoning is more crude but equally cruel: disabled bodies do not meet an arbitrary standard of autonomy, and so they are presumed dead in advance, before the bunker doors open again. Via the conflations of illness, dependence, unpreparedness, and moral failing, this state of affairs is not painted as morally objectionable—rather, it is logically inevitable.

Perhaps the most insidious thing preppers do is to depict this future as "your choice." It is your choice to prepare or not prepare. Of course, we do not typically choose our impairments,

[37] It is worth reiterating here that what preppers imagine as "the disabled body" is plagued by ableist stereotypes as well. A media-savvy reader might point out the number of dystopic fictions that depict disabled characters, with the most impactful in recent years being *A Quiet Place.* In brief, depictions of disability in dystopia tend to rely on negative stereotypes and curative logics. If the disabled character's narrative relationship with their disability revolves around their utility–whether their disability makes them more "helpful" in survival situations or more of a risk—that character is being judged by the same criteria that led bunker discourse to its disturbing conclusions in the first place. Remember that the most common disabling injury in post-apocalyptic fantasy is still the zombie bite, and becoming a zombie is always depicted as so dehumanizing ("don't let me turn into one of those things!") that many characters opt to die via heroic sacrifice or merciful execution rather than succumb to its effects.

nor do we choose when we get sick, injured, or traumatized, and we may not even be able to choose the method or quality of our care. Nothing wrenches the illusion of bodily autonomy away faster than a medical crisis. But preppers imagine the world works this way nonetheless; they imagine that preparing for something will grant you some measure of invulnerability to it. They imagine preparing as a significant expression of autonomy. The irony here is that much of this autonomy comes through another illusory exercise of choice: that of selecting purchases. The way to prepare is to stock up on materials, meaning the greatest expression of independence we have before the end of the world is through buying more products under capitalism.

Conclusion

What I have shown in this chapter is not only how this narrative manifests in the actual design of bunkers, but also how this narrative relies on internal contradictions, dangerous thought patterns, and insidious assumptions. The bunker constructs hard divisions between two binary categories. Safe/unsafe, inside/outside, healthy/unhealthy, dependent/independent, us/them, self/other. In order to determine which parts of the world must be purged and which must be preserved, hard lines must be drawn. We must secure that which is safe and familiar, tended to by people who work hard and succeed on their own merits. We must rid the earth of toxins and pollutants, threats and enemies, and the havoc wreaked on the planet by government, economics, and society.

None of these binaries can sustain themselves under scrutiny, and the bunker discourse adherents violate them liberally at every turn. The interior is not as safe as it appears, nor is the exterior quite so threatening. The body of the prepper is not autonomous; it interfaces with the world, a body flexible and extended, dependent and connected. By misunderstanding where the

threat lies and how autonomous the body is, preppers place themselves in situations of greater concern and risk. It is very telling that the Fortitude Ranch cabins are only vacation destinations, that Oppidum suggests its clients conduct business in their bunkers, and that most VIVOS xPoint renters import refrigerators and televisions; for most of us, living in a bunker is *not* more secure, safe, or comfortable while capitalist modernity persists unimpeached.

Perhaps the greatest condemnation of this narrative is that, with its dedication to an antirelational position, it is difficult to paint a positive picture, or even a *coherent* picture, of what the post-apocalyptic world would look like: the very idea of an "antirelational society" is paradoxical from its name on down. In some ways, what glimpses we do gleam of the world after the end bear disturbing resemblance to a fascist utopia—no racialized Others or disabled bodies, only American citizens operating at peak performance with uninhibited access to guns. In other imaginaries, which cannot quite escape relationality and therefore strive to oversimplify it, post-apocalyptic society is a hallucinatory pastiche of contradictory social structures—a world in which there is no law, no government, no system of maintaining infrastructure, but there *is* a thriving economy, a class system, and modern technologies of comfort and convenience. The sovereign individual, for instance, can supposedly accrue and hoard obscene amounts of wealth despite living in a world with no system to maintain currency.

But bunker discourse, like fascism and the frontier myth before it, does not rely on a coherent plan of the future. It believes it does, with its measurements of particulate matter purity and one-year non-perishable food supply—but ultimately this discourse is one of pathos over logos. Robert Vicino has fallen head over heels for this discourse and is a master at delivering it. He has referred to his business as a "calling", and claimed he doesn't *want* to build survival shelters—he *needs* to (Morris 2018). For him, building bunkers is tantamount to a religious

mission. Vicino gets the last word in this miniature documentary, and he delivers the quote above. It is always about "the next generation."

To paraphrase Lee Edelman—fuck the next generation. This rhetorical figure of the innocent child has been used to implement all manner of disastrous ideologies and laws, and it is no different here. Preppers would have the modern world razed at the expense of its most vulnerable to build the next generation's playground, and they cannot even present an adequate picture of what would be different—except that there would be more violence, limits to our already limited social tolerance, a handful of ultrawealthy "chosen ones", and a promise of death for sufferers of chronic illness. Critics of Edelman's *No Future,* like Jose Munoz, have pointed out that this rhetorical child has a specific set of features—white and able-bodied—and that real children in visible and invisible minorities are often among those sacrificed for this idealized future. This still holds true for bunker discourse. The next generation are not the beneficiaries of this imaginary so much as they are its excuse. The real beneficiaries are equally obvious: the preppers themselves, who have now purchased the means to play out heroic fantasies of autonomy, violence, and symbolic significance in their own backyard.

While this chapter has argued that only the ultrawealthy could possibly benefit from bunker discourse, that does not mean only the ultrawealthy are impacted by it. We must (at time of writing[38]) share the road with the Cybertruck. But more importantly, while the architectural trappings of the apocalyptic exit fantasy are not available to all, the fantasy itself is broadly appealing and broadly available, even to those outside survivalist subcultures or the tech oligarchy. The next chapter will address how the apocalyptic fantasy exists for the non-prepper everyman by looking at post-apocalyptic fictional media–more specifically, post-apocalyptic

[38] I remain optimistic.

video games. Previous chapters, by focusing on the broadly non-fictional media made by preppers for preppers, may have created the mistaken impression that only those who practice prepping are regularly engaged with apocalyptic discourse. However, the division between prepper and non-prepper, and the distinction between fictional and non-fictional media, are artifices created for the sake of organization. An argument could be made that all apocalyptic media are fictional, since all are addressed to a future imaginary; conversely, even entirely fictional apocalypses are products of bunker discourse, and they still inform our literacies and understandings of disaster. The following chapter will prove that bunker discourse goes far beyond its pet subculture, as it impacts the perception and understanding of the everyday media consumer.

CHAPTER 3: Bunker Discourse in Digital Games

In a discourse that is so clearly oriented toward the future, it could be said that every text that is relevant to bunker discourse is a fictional text in some way. Most prepper manuals blend instruction with fantasy at some point; the buildings and gear survivalists buy might never be used outside their imaginations. This relationship to invention makes the role of speculative fiction particularly notable in bunker discourse. Stories about what the future will look like–exactly how violent, bleak, threatening or antisocial it might be–are necessary to justify every purchase and practice that emerges from it. And these stories need not be the stories members of the prepper subculture tell each other; it is not unheard of for professional survivalists to recommend movies or video games as resources for learning survival skills (Estela 2022, McCarthy 2019) . Moreover, post-apocalyptic fiction is hardly niche. It holds massive popular appeal, even to non-preppers, as evidenced by the continuing success of post-apocalyptic fiction in novels, comics, movies and video games. This suggests that the beliefs and assumptions of bunker discourse are still credible, or at least intriguing, to the broader masses. This chapter will address how these beliefs and assumptions appear in fiction–in particular, in video games.

While the post-apocalyptic genre exists in multiple media, I have chosen to focus on four open-world video games: *Fallout 4, Horizon Zero Dawn, Far Cry 5* and *Far Cry: New Dawn*. This choice of medium was made for a number of reasons. That said, video games also differ greatly by genre, control scheme, platform, and dozens of other parameters. Among post-apocalyptic games, one can find first-person shooters, management simulators, role-playing games, survival games, point-and-click puzzle games, and so on. For this case study, I have chosen to focus on the open-world roleplaying game, for reasons that will become apparent as I explore these games in more detail. One straightforward reason worth mentioning here is that

these games are among the most popular and successful incarnations of the post-apocalyptic genre. More importantly, the open world roleplaying game relies on specific affordances that cohere well with the priorities of bunker discourse.

Note that *Far Cry 5* and *Far Cry: New Dawn* (hereafter referred to as *Far Cry 5/ND* to represent the duology) form two halves of an interconnected analysis: *Far Cry 5* is set in a fictional county in contemporary Montana, where an apocalyptic religious cult, The Project at Eden's Gate, is forcibly converting and drugging the citizens. It is not a post-apocalyptic game, but rather an immediately pre-apocalyptic one: the end of *Far Cry 5* is also the start of a global nuclear war. *Far Cry: New Dawn* takes place seventeen years after that nuclear war in the same county. It continues the storylines of central characters, and introduces a new threat in the form of a group of bandits known as the Highwaymen. This makes it an interesting case of a story that bookends the apocalypse, rather than simply taking place after one. Note that *Far Cry 5* is not a sequel to *Far Cry 4;* the entries in the *Far Cry* series are unrelated stories connected by gameplay principles and a general story structure.

The same holds true of the Fallout franchise: *Fallout 4* shares its setting, iconography, and some of its gameplay mechanics with the previous Fallout games, but its narrative is independent of previous games. After a brief prologue set in a pre-war suburb, the game takes place two centuries after a global nuclear war. Previous *Fallout* games explore how civilization has persisted in the wake of this war by focusing on different American cities, such as Washington D.C. or Las Vegas. *Fallout 4* moves the series to Boston. At the outset of the game, the player's custom-built character seeks shelter from nuclear war in a nearby underground complex, where they are cryogenically frozen for nearly two hundred years. They are defrosted

after an unspecified period of time, only to find their newborn child has been kidnapped. The player is then released into the post-apocalyptic world with the goal of rescuing their child.

Unlike the other three games, in which the apocalypse is a detail of the setting rather than a significant plot point, *Horizon Zero Dawn* largely involves unraveling the apocalyptic event that shaped the main character's world, which is a version of our earth in the 31st century. In this case, a weapons manufacturer develops an army of automated war machines dubbed 'Chariots', which feed on biomass in order to sustain themselves. A bug in their code causes these machines to run rampant, meaning they will strip the earth of its living matter. Dr. Elisabet Sobeck, a prominent scientist and engineer, realizes that no one will be able to stop the drones from consuming all life on earth. With the backing of the American government, Dr. Sobeck gathers a council of scientists who begin an ambitious and extensive project to rebuild the world using various AI programs and secret production facilities. These AIs serve multiple purposes: over the next few centuries, they decode and deactivate the automated drones, rebuild biospheres by reintroducing plants and animals, and preserve human embryos for reintroduction. Among their creations are the game's signature "robot dinosaurs", which are produced to monitor the planet's rebuilt biospheres. The main character, Aloy, unearths this history over the course of the story. In her own time, the Chariots have been reawakened, and her eventual goal is to stop them before they consume all life on the planet once more.

These four games share a number of significant narrative and mechanical features. All three games are set in the United States: *Fallout 4* in Boston, *Horizon Zero Dawn* in Colorado and Wyoming, and *Far Cry 5/ND* in a fictionalized part of Montana. The specific locales of each game will be significant going forward. *Horizon Zero Dawn* and *Far Cry 5/ND* take place in

states traditionally associated with the Western frontier and American natural splendour; Boston is a major historical touchstone for early colonial America.

The games also offer similar gameplay experiences. In each game, the player controls a single character over the course of the story. This character interacts with the world primarily through combat, but also through exploration, conversation, and occasional puzzle-solving. The gameplay takes place on one large open-world map, which the player can explore at their own pace after a short tutorial in an isolated location. In theory, the player can go anywhere on the map at any time, although certain locations might be inaccessible at certain points. Alongside their main quest, the player can undertake a number of sidequests, including clearing out enemy camps or collecting resources for non-player characters. Each game includes a "fast travel" system, which allows the player to teleport to any location they have already visited.

Combat takes centre stage in gameplay. In the case of *Fallout 4* and *Far Cry 5/ND,* the player typically uses traditional firearms, although melee weapons and more fantastical weapons (like *Fallout 4's* laser and plasma pistols or *Far Cry: New Dawn's* buzzsaw launcher) can also be found. Combat in *Horizon Zero Dawn* is built around Aloy's bow and arrows. The arrows are science-fiction gadgets that perform different elemental attacks—fiery explosions, electrical explosions, etcetera. Aloy also has access to a number of other tools, such as bombs and tripwires. Combat against the robot dinosaurs requires strategic disassembly— the player may weaken the machines by rupturing their fuel tanks, tripping them with explosive wires, or blowing off horns or limbs to make the machines vulnerable to damage. The focus on combat ties into the level-up system of all four games, as the main characters earn some manner of skill points that will grant access to new abilities in combat. Some skills also increase the character's resource-gathering abilities, or open new options in their interactions with non-player characters.

Lastly, *Fallout 4* and *Far Cry: ND* also have a small base-building element, in which the player-characters collect resources in order to upgrade a home base of some kind. This typically creates a gameplay loop in which the player's home base then produces more resources for players to use when they venture back into the open world.

To analyze these games, I played each game from beginning to end once over the course of my dissertation. I would occasionally return to certain sections of these games if they piqued my interest. In addition to taking notes on traditional narrative elements–dialogue, storyline, imagery, symbolism, etcetera–I applied some established methods for the qualitative study of video games. Consalvo and Dutton's qualitative toolkit suggests analyzing a game's interactive elements by examining the objects the player can interact with, the information imparted by the game's interfaces, the interactions player characters can have with other characters, and the emergent elements of gameplay encountered in practice. This guides the researcher to focus on the game's affordances and priorities–what the player is allowed to do, and what the player is *encouraged* to do. As we will see in this chapter, what a player can or cannot do in a particular game world often carries some significant implications. Through its inclusion of interface study, this method also ensures that researchers do not miss information in menus and GUIs that is typically absorbed without pause by the player. Again, as we will see in a later discussion of game maps, if a game's interfaces consider something significant enough to track, it is likely that this information also signifies the game's priorities and some of its politics.

It is also important to underline the observation of 'emergent elements' of gameplay. Much can be learned about a game in the course of its playing, and any close reading without at least some reflection on gameplay is incomplete. Emergent elements of gameplay refer to decisions that players make organically in the course of play, which may or may not be intended

by designers, and these emergent elements can become as significant to a game's identity. As an example, *Fallout 4* is rather notorious for its glitches; it is both fairly straightforward and common for players to use these glitches to their advantage, either by clipping through walls to create useful shortcuts or by duplicating valuable items. In this particular dissertation, a handful of play behaviours–such as players intentionally jumping off tall mountains, or attempting to clear levels stealthily instead of through open assault–provide some additional insight into the implications of its design. I usually observed these play behaviours in my own play sessions first, and then sought out video playthroughs to see if my habits were somewhat normative[39].

In the hopes of getting at least a glimpse into the general attitudes toward these games, I also conducted some research into their reception. This primarily involved reading text reviews and watching video reviews, looking into the games' most popular mods, and conducting some general historical research on social media. While no critical work in game studies can hope to account for all possible perspectives, trends in player reactions can highlight points of contention that may be particularly illuminating when discussing a larger discourse. In some cases, design decisions in these games press up against the boundaries of what is considered acceptable in apocalyptic narratives. While the choice to have a female protagonist in *Horizon Zero Dawn* was not controversial at base, a flood of misogynistic consternation has still followed Aloy through both of her games. While this is unfortunately a common event–various gaming subcultures have a deeply entrenched problem with misogyny–it is interesting specifically in the context of the post-apocalyptic narrative. The lukewarm critical response to *Far Cry 5* is equally

[39] Empirical research on player behaviour in open-world games does line up with the observations in this chapter, but these studies are few in number (Hughes 2023). These studies do suggest that players often make impulsive decisions in open-world games, which means that documenting one's emergent behaviour is a useful bit of self-reflection for this particular genre. A number of my decisions were also informed by familiarity with open-world games; a player who has never encountered one before would likely play differently.

interesting, as a common complaint is that the game fails to stake a strong political position. We will return to both of these complaints later in the chapter.

The structure of this chapter mimics the structure of gameplay in these open-world titles. We start with an introduction to our protagonist, and their agency as embodied in the player character. Following this, we move into the open world, and discuss exactly how this open world is to be explored and navigated. The next section deals with the game's locations in more detail, honing in on how each game makes use of the doomsday bunker as a feature of the landscape. Then comes an examination of the enemies a player might encounter in the game. Lastly comes the conclusion of each game's narrative, complete with a discussion of a key theme that is typically addressed in the climax–that of rebirth and regeneration in the post-apocalypse. As the chapter progresses, I will also gesture to how each of these features results from a particular demand or affordance of bunker discourse.

Avatars and agency

When the game begins, the player must be given a means to interact with the game world. Whether this is a cursor or a character, the player takes control of some type of tool through which they can change the game state. In the case of the games studied here, the player is attached to a human protagonist.

As attaching a player to a controllable character is likely the most common way to grant access to the game world, early game theorists chose to approach the affiliation between the player and their avatar through psychological ideas of identification similar to those used in film theory. Counter arguments to this perspective soon emerged, as many began to argue for the affiliation as more instrumental than psychological (Newman 2002, Klevjer 2011, Giddings & Kennedy 2008). These approaches saw the avatar as a prosthetic tool through which the player

influences and experiences the game world, or as a vehicle the player 'drives' through interactable spaces. Sometimes this affiliation was prioritized over identification to such an extent that the semiotic level of the game was even dismissed as superfluous (Aarseth 2004). Both of these approaches turned out to be oversimplifications, as later research would reveal that our affiliations with video games are instead quite complex and constantly shifting. We can be absorbed in a game's narrative, its mechanics, combinations of the two, or even in the social experience of playing the game with a friend or other spectator. Not only do these affiliations change from game to game, but they shift repeatedly *within* single play sessions of the same game (Giddings & Kennedy 2008, Taylor et al.. 2015) and may even pause or break engagement in the game entirely (Newman 2009). These attachments are sometimes cognitive, sometimes emotional, and sometimes purely sensory: many games hold our attention simply because they engage our bodies, and they "feel good"—smooth, rhythmic, responsive or stimulating—to play (Behrenshausen 2007).

Regardless of how it is achieved, strong engagement with the game is quite desirable in game design. Therefore, a player's avatar will ideally facilitate this engagement. They might be a defined character with a complex backstory, or they might be a customizable character that allows the player to imagine themselves into the fictional world: both of these are ways of stimulating narrative engagement. Conversely, things like gameplay challenges, responsive controls, realistic character animations, and interesting ways of interacting with space and objects contribute to mechanical and sensory engagement. What this means for this dissertation is that when we analyze the avatars of these games, both character-based narrative and gameplay function are of interest—in fact, the two are often deeply interrelated in a way that makes distinction between them mostly semantic.

A pause here for an important linguistic caveat: de Wildt et al. have recently argued that the word "avatar" itself should be re-contextualized through its history (2020). The term was lifted from Hinduism by a number of game developers in the 80s. These developers had a well-documented fascination with Eastern religions, a result of their outgrowth from 1960s counter-cultural movements. In the context of Hinduism, the word "avatar" initially referred to one of a deity's many possible incarnations in our world. The shift from Hinduism to Western-led digital game design filtered this original meaning through a Christian story structure; the avatar became a singular emissary and thus a Christlike figure, instead of one iteration of a many-faced divinity. In the view of de Wildt et al, this term is not only a fairly apt description of the experience of immersing oneself in fantastical digital worlds, but also a conscious attempt to "re-mystify" a culture that had become cynical. The Avatar of *Ultima IV* is the exemplar of this phenomenon; they are transported to the fantasy world of Britannia, and by committing to uphold nine virtues through their gameplay, the Avatar becomes the founder and leader of Britannia's new religion.

These romanticized ideas—that the avatar is an untroubled incarnation of the player's influence in a way that resembles a divine will—may not be perfectly accurate, but they are still influential in popular discussion and game development. Designers and critics alike often put considerable value on player agency as expressed through the avatar, as this is seen as one of the ideal routes to deeper player engagement[40]. The player should have the power to make significant decisions and take significant actions that impact the digital world. The attachment to the word "avatar" suggests that the player's will can even border on godlike. Importantly, this is

[40] Earlier on in game studies and development, when narrative and game mechanics were presumed to be opposites, this would lead to claims about the importance of player choice in statements like "restricting a player's freedom of action is likely to make for a less satisfying game" (Costikyan 2000). While the diametric opposition between gameplay and narrative is no longer taken as true, the emphasis on "freedom of action" is still important to note, as it is seen as valuable in popular gaming discourse to this day.

often an obfuscation of the actual experience of gameplay. The player's agency is frequently limited by things like cutscenes, loading screens, or even glitches and hardware issues (Newman 2002, Schmalzer 2020). The myth of the avatar as a flawless prosthetic attachment to the player's will persists despite these realities, which is a testament to the strength of that myth.

This concept of the avatar is also quite apropos for our discussions of bunker discourse, as bunker discourse, too, takes its belief in autonomous willpower too far. Thus there is already a compatibility between what bunker discourse instructs us to desire and what video games claim to provide. In all four games discussed here, the player controls a singular human character, and their actions are the primary driver of each game's narrative. The main character's arrival (or 'incarnation') in their respective worlds—when *Fallout 4's* Lone Survivor steps out of their vault and into the wasteland, or when the Deputy arrives in *Far Cry 5's* Hope County—is the instigating event of each game's narrative. The protagonist is typically marked as different from NPCs through some visual or narrative convenience. The Lone Survivor was alive before the bombs fell, and thus their Christlike cryogenic freezing and resurrection in a vault marks their origin as significantly different from every other character in the game. If the player characters appear on screen—as they do in *Fallout 4* and *Horizon Zero Dawn*—they are visually distinct from non-player characters, and not just because the game is played through their point of view. The Lone Survivor of *Fallout 4* starts the game wearing a vault jumpsuit, an iconic blue and yellow outfit worn by vault-dwellers across the series. Aloy's signature feature is her red hair, which is long, braided, beaded, and painstakingly animated. It is significantly more unique and complex than any other character's hair. Considering Aloy's parentage is integral to the story, her unique hair also carries some narrative significance.

Their identity established, the avatar ventures into the story and begins to perform their role. This role, influenced as it is by the frontier myth, is somewhere between cowboy and messiah. The avatar is a cosmically significant agent who employs righteous violence to purge the world of savagery. This cosmic significance extends to temporal and spatial structure. In the open-world game, narrative pace and chronology bend around the player's actions; each significant location in the game is a static set piece until the player disturbs it. Treasures remain buried, challenges remain incomplete. Before the player arrives at an enemy outpost and instigates a fight, non-player enemies patrol in endless circles. A handful of narrative moments will be sparked by other agents in the game—once the player achieves a certain amount of progress in *Far Cry 5*, for example, they will be abducted by one of the trifecta of supporting villains. However, once these attempts are thwarted, the narrative impetus returns to the hands of the player, and the player is welcome to waste as much time as they like. Observations that the final boss will happily sit back in their castle while the player completes irrelevant sidequests is, by now, an old gaming joke.

Behind the veil of narrative justification, plot events *actually* trigger in response to the player achieving a specific milestone in the game. In *Fallout 4*, the Brotherhood of Steel blimp becomes available to the player after they complete the quest "Reunions". No matter how long it takes them to get to that mission and complete it, the Brotherhood of Steel blimp will always be waiting just beyond the last loading screen. A dash of familiarity with the game's progression is all it takes to unmask the illusion of opposing agencies.

This puts almost all the narrative impetus in the hands of the player. They complete whichever tasks appeal to them at any pace they desire. Despite the supposedly contiguous nature of the open world, this tends to fragment the experience of these worlds into a series of

interchangeable challenges. Even individual obstacles are optional. If a particular challenge loses its appeal—too difficult, too tedious—the player is usually free to abandon it.

This is an appropriate formula for a fantasy built around autonomy and effectiveness. Traditional ideas of narrative opposition (man vs nature, man vs man, etcetera) are rendered modular. The open world also permits a departure from something that usually claims most of a prepper's attention: survival. More specifically, the task of meeting mundane bodily needs, which occupies so much of bunker design and survivalist practice, is absent from these post-apocalypses. Our protagonists do not have bodily drives like hunger or thirst[41]. This absence is particularly remarkable given the existence (and popularity) of survival simulation games.

To elaborate: there are many games in which the player's gameplay loop involves searching for food, building shelter, and even more subtle aspects of survival like maintaining temperature or storing food so it will not spoil. Some of these games are set in post-apocalyptic spaces (*Project Zomboid),* some are not (*The Forest),* and others are ambiguous or flexible (*The Long Dark, Rimworld)*. What interests me here is that basic survival mechanics—despite their popularity elsewhere—are neither *mandatory* nor *ubiquitous* in post-apocalyptic gameplay settings. This absence of a hunger mechanic is striking in all of our examples, but particularly in *Fallout 4.* This game features simple radiation mechanics in which the player may be exposed to radiation which reduces their maximum health. Managing one's radiation levels is often as simple as consuming medications that mitigate or remove radiation from the avatar's body. This is relevant because the player can grow a handful of vegetables in their settlements in *Fallout 4,* but all vegetables grown in this way will be slightly irradiated. The same is true of any prepackaged food the player might find that predates the nuclear war; eating it will heal the

[41] There is an optional "survival mode" that adds these limitations to *Fallout 4.* In theory, the other games discussed here could also be modded to include survival modes, but at time of writing, no such mods are available.

player for a small amount, but also increase their radiation count. This disincentivizes the player from engaging with the limited food-related mechanics that *do* exist. In *Horizon Zero Dawn* and *Far Cry 5/ND*, the player is encouraged to hunt wild animals, but the meat scavenged is typically traded for weapons, upgrades, or other gameplay advancements.

The player does not need to worry about maintaining a human body within the game; instead, their play-body recalls the divinity of the avatar. The avatar does not need maintenance the way a mortal body would. In order to permit the extent of the fantasy here—endless exploration, expansion, and violence—the body must be somewhat superhuman. And again it is not the existence of the superhuman player character in general that creates an interesting contrast here, it is the continued co-existence of this superhuman protagonist *with* survival mechanics in other games. This suggests to me that the pleasure of surviving by one's own labour might not be the only thing inspiring indulgence in the post-apocalyptic fantasy. Rather, a liberated will unconstrained by the demands of the human body can also create this appeal[42]. Other survival games actually accentuate the fragility of the body, implementing features like permadeath or singular save files, typically said to add to the "realism" of the game. We have already separated the pleasures of survivalism from bunker discourse in previous chapters, as there are certain post-apocalyptic plans (like the luxury bunkers of Oppidum) that do not emphasize survival skills at all.

Also note that the protagonist's avatar-body is otherwise untroubled by human limitations. These bodies can operate just as efficiently while injured. They never tire. Their reflexes match those of the player—and their strength bends to what the game demands rather

[42] A great deal of survival games also facilitate the pleasure of progress—one's system for maintaining basic survival becomes more efficient as time goes on; in this case transcending the demands of the body through efficiency is the gameplay process that eventually brings satisfaction, as opposed to the body in the open world which is already transcended.

than any realistic size of backpacks or pockets. Like most game characters, they can heal quickly and be infinitely resurrected. With fast travel systems, they can teleport from place to place. The player of the post-apocalyptic fantasy inhabits an avatar body unbounded by the demands and limitations of the human body. It is also quite rare to have the player's control of these bodies compromised. Removing control of the avatar from the human player is a technique that has been used before, usually for emotional effect. In the cult horror game *Haunting Ground*, the main character, Fiona, will run around uncontrollably if she becomes too afraid. In both the *Red Dead Redemption* and *Grand Theft Auto* series, drinking heavily will cause the screen to blur and the controls to become wobbly. *Far Cry 5*'s storyline includes an ideal opportunity for this kind of mechanical playfulness in its "conditioning" sequences, in which the avatar is hypnotized into killing soldiers at the sound of a particular song. However, in these sequences, the player still controls where to move and when to shoot.

It is for all these reasons—their imperviousness, their role as narrative catalyst, and their divine agency—that I will continue to refer to the player-character in these games as the "avatar." While the term "avatar" deserves to be interrogated and recontextualized, I want the reader to remain aware of how these games rely on normalizing the avatar as an untroubled tool of the player's overpowering will.

The open world

The next dimension of interest begins when the player takes control of their avatar. The game provides its tutorials, laying down its basic expectations for how the player should learn to behave (Giddings & Kennedy 2008). After all parties meet and learn the basics of negotiating with each other, the player is released from the tutorial area. They are given a body of

considerable capacity and few demands, and allowed to travel in any direction. Where does this protagonist go?

These games offer the player a large, mostly contiguous natural environment to explore, with some isolated areas that typically serve as unique challenges (ruined buildings, factories, and, of course, bunkers). After learning how to play in a smaller tutorial area, the player can move through this contiguous environment without restrictions. Some obstacles, like enemy camps, mountains, walls, or bodies of water, may streamline the player's movement somewhat, but the overall illusion is that of the "open world" that gives the genre its name. A considerable amount of effort goes into making these open worlds visually extraordinary places to explore. *Far Cry 5/ND* and *Horizon Zero Dawn* both seek to replicate particularly majestic swaths of American wilderness, being set in a fictional county in Montana and areas of Colorado and Wyoming, respectively. The wilds are postcard-worthy—steep mountain crags, towering pines, rivers, and so on. Even *Fallout 4*, with its nuclear wasteland aesthetics, includes some striking natural features, such as the barren craters in the Glowing Sea.

The question of space is as central to the study of video games as are questions of player control or character identification. Games are a spatial medium, and the way a player moves through and controls that space is not naturally preconstituted, but rather a conscious selection of affordances that reflects power relationships both within the gamespace and in the culture outside of it. The choice to make these worlds visually interesting and thoroughly interactable is not a neutral one. Soraya Murray, drawing upon previous research into landscapes, makes this point across her recent work. Like the landscape, she argues, the open-world game is "at least second-order representational formulations" (Murray 2018, 191). It is not a duplication of the space, but rather a mediated *way of seeing* the space, guided by the affordances of digital media

and broader cultural and political contexts. In the case of the open-world game, these vivid landscapes perform several functions when it comes to orienting our sight *and* structuring our priorities as players.

For example, these games strive for a very particular kind of verisimilitude. That is, they attempt to create a visual and auditory simulation of the biomes of Colorado and Montana that, to the average player, evoke our mental images of Colorado and Montana. The visual, auditory, and kinetic details of these worlds often earn significant attention–so, water reflects light, the player leaves footprints in simulated snow, and grizzly bears make grizzly bear noises. I say a *particular* kind of verisimilitude because, as Murray notes by drawing on the work of Matthew Payne, video game realism is always a qualified realism. Games select which details must be "realistic" and which must be overlooked in order to create a certain play experience. The grizzly bears, black bears, and cougars in *Far Cry 5/ND* will always attack the player on sight. While all of these animals have attacked and killed humans in the non-digital world, this behaviour is much, *much* rarer than *Far Cry 5/ND* suggests[43]. If an unlucky victim survives a grizzly bear attack, the injuries tend to be life-changing; meanwhile, our avatar will bounce back from a bear encounter with a short breather and a first aid kit. *Horizon Zero Dawn* was praised for the realism of its snow deformation, but the fact that Aloy's accuracy and energy never suffer during exposure to extreme cold is rarely lamented as unrealistic.

Importantly, we must ask not only what spaces these games represent, but also how these choices of representation are teaching us to see and think about space. Why choose such dramatic natural landscapes, and why focus on replicating visual splendor instead of accurate animal behaviour? The splendor in itself contains an answer, as these dramatic natural

[43] We already know that bunker discourse imagines humans to be much more hostile to each other than they actually are, so perhaps it is no surprise this mischaracterization extends to other sentient life.

landscapes invoke our cultural ideal of the Romantic sublime. The sublime is the aesthetic experience of an encounter with nature at its most overwhelming, encapsulating the pleasure and terror of witnessing something grander than ourselves, immeasurable and indomitable. This aesthetic principle is conventionally associated with European Romantic poetry and philosophy, as writers attempted to capture their emotions when witnessing oceans, glaciers, mountains, and other spectacular natural monuments. The encounter with nature was understood as an encounter with the sheer scope of divine creation—and yet even in the 19th century, Kant was already marveling at the human capacity to achieve mastery over this divinity through perception, at our "taming of the terror" (Apel 2015, 17). Like any other perspective on landscapes, the idea of sublime nature transforms across different cultural contexts. As William Cronon writes, when the idea of the sublime eventually flourished in the United States, the sublime and the American frontier myth collided to characterize American wilderness as a culturally sacred space, one in which the American man could separate himself from civilization to access the indomitable pioneering spirit of his ancestors. Cronon's work is concerned with the wilderness preserves formed in America in the first half of the 20th century, which were imbued with a kind of sacredness that would have them serve as sanctuaries for the individualist masculine spirit. In digital open-world games, we find a simulation of this sanctuary. While the landscapes are suitably epic, they exist specifically to be explored, overcome, and claimed by the individual player. Todd Howard, the lead director of many open-world games including *Fallout 4,* gained some infamy for emphasizing just how climbable the mountains are in another of his games, *Skyrim*—which eventually mutated into the memetic phrase "You see that mountain? You can climb it." Despite being an anachronism, this phrase rather neatly encapsulates the open-world design mindset. The purpose of including a mountain in an open-world game is not just to make

an encounter with sublime imagery possible, but specifically to give the player the opportunity to overcome natural obstacles—to tame the terror, to climb any mountain you can see.

The four games discussed in this chapter are rife with sublime imagery, which is particularly visible in their launch trailers. Here, the natural sublime is entwined with a kind of technical or digital sublime. We not only feel wonder when gazing at these landscapes, but also a related awe that digital technology can capture both the detail and scope of the natural world with such precision. Lighting engines, particle effect simulators, and so forth, are often sold alongside the environments themselves as assets of a particular game or franchise. There are layers, then, to how digital games allow mankind's will to dominate the natural world. The eye is also a tool of domination, in how it categorizes, focuses, identifies, and measures (Pallaasma 2005, Murray 2018). With human vision, mathematics, and physics, it seems that we are beginning to understand the dynamics of snow and the colour of light so thoroughly that we can re-model and re-present nature with computers. With every new lighting engine, developers claim to be able to create games nearly as vivid and detailed as reality.

Figure 9. A sublime mountainous landscape from the Horizon Zero Dawn launch trailer, featuring the protagonist, Aloy, climbing a snowy mountain (2017).

In these landscapes, the player might find collapsed buildings, roads, monuments, and other indicators of ruined cities of the past. Unlike its peers, *Fallout 4* trades more in the splendor of these apocalyptic ruins than natural landmarks. Indeed, *Fallout 4's* replication of Boston is precise enough that one historical games theorist, Emma Fraser, was able to navigate *Fallout 4* using her own embodied knowledge of Boston—knowledge which she first gained by playing *The Last of Us*, another apocalyptic game set partly in Boston, and then travelling *to* Boston to follow the paths explored in *The Last of Us* (2017). The game makes a point of preserving some significant Boston landmarks. Fenway Park still stands in *Fallout 4;* the stadium walls now shelter a post-apocalyptic shantytown named Diamond City. Players who are at all familiar with Boston will thus encounter a ruined reflection of a real place. Although the ruins of *Horizon Zero Dawn* are somewhat less recognizable, there are a handful of buildings in the Colorado area that appear as ruins in the game. The sequel, *Horizon: Forbidden West*, includes

more ruined buildings that currently exist in California, Nevada, and other western states. *Far Cry: New Dawn* is in an interesting position, as the ruins in that game do not use a real city as a referent, but rather the buildings of *Far Cry 5*. Buildings and infrastructure that the player would have explored in the previous game may appear as ruins—as sunken houses, collapsed bridges, and cracked roads.

Figure 10. Still image from a video comparison of architecture in Far Cry 5 and Far Cry: New Dawn (2019)

The image of the ruined city possesses its own kind of cultural and symbolic power. Here I followed the same route as Emma Fraser, who looks at post-apocalyptic ruins in video games, and referenced work on urban explorers, contemporary ruins, and ruin photography—in particular, Dora Apel's book *Beautiful, Terrible Ruins,* which examines the cultural significance of photos of Detroit. Apel argues for Detroit as a "central node" in our network of contemporary/21st-century ruin imagery. Images of contemporary ruin, she argues, are not only meant to capture our anxieties over the inevitable decay of neoliberal capitalism—the boom towns that crumble in the face of dying demand, offshore manufacturing, and retaliation against labour action—but also to offer a means of overcoming this anxiety.

> As fears of decline grow, the threshold for compensatory aesthetic pleasure also grows higher, requiring more expressions of ruin and disaster to be mentally mastered in order to achieve a sense of safety. (2015, 10)

The mediated exercise of mastery over contemporary ruin, as practiced when viewing a photograph of an abandoned mall or an urban exploration video, becomes a proactive, partly-embodied kind of mastery in the post-apocalyptic digital world. *Horizon Zero Dawn* has complex climbing mechanics and offers prizes for climbing to specific natural or ruined vantage points. *Far Cry: New Dawn* provides a number of different vehicles for the player's use, including four-wheelers, cars, boats, jetskis, planes, helicopters, and a wingsuit. The player might stumble across an optional challenge to beat a race course in the time allotted using one of these vehicles.

Mastering these challenges is still "one step removed" from actual danger, as all satisfying contemplation of sublime risk must be (Apel 2015). This is why the avatar will not get frostbite climbing the frozen towers in *Horizon Zero Dawn*—in fact, a celebratory fatal leap off the tallest point in the game world is a time-honoured tradition of open-world play[44]. The player can experience the exhilaration of the rocky textures clarifying as the ground rushes up to meet them (and the comedy of their avatar's ragdoll physics) without any actual risk to their wellbeing. This takes us back to the idea of qualified verisimilitude: photorealistic imagery "provide[s] a formal fidelity, while often eliding larger and much more problematic realities…that tend to be far less cinematic" (Murray 2018, 179). The games in question here elide the more unpleasant and threatening qualities of both wilderness survival (cold, rot, animal carcasses) *and* human decay (no chance of picking up tetanus from all the rusty metal towers

[44] To prove this is not simply an idiosyncratic habit of mine, there are a number of YouTube compilations of players leaping off the highest points in different open world games. A YouTube search for "Jumping from the Highest Point in Video Games" will provide dozens of entries, many with millions of views.

Aloy climbs). Creating this sense of mastery over ruin for the player depends on eliminating many of the ruin's actual dangers, and transforming survival into an aesthetically sanitized experience. Additionally, both of these challenges involve building a cognitive map of the area until it can be navigated efficiently. The climbing challenges are puzzle-like, and require spotting the right platform or rope to reach the top; unless your reflexes are particularly caffeinated, the vehicle challenges might involve memorizing the driving route until each turn and dive can be performed in rhythm, and with confidence. In these cases, the ruin is not only mastered through a physical triumph, but also through obtaining detailed knowledge of its contours.

This quest for mastery leads us to a final vital feature of these gameworlds; most of them are much smaller than they appear. Both *Fallout 4* and *Horizon Zero Dawn* have significantly reduced the real-world distances between landmarks; like most other open worlds in digital games, all of the spaces discussed here are, based on player estimations, less than ten kilometers squared. Aarseth argues that, in multiplayer online games, these constraints are a result of developers wisely placing realism second to enjoyment and social interaction (Aarseth 2008). By compacting space in this way, as well as through fast-travel systems, the game functions like a theme park in that it "offers the players near-instant access to the attractions" – the "attractions" in this case being those individual challenges in climbing, racing, or combat (Aarseth 2008, 118). Open worlds are typically overstuffed with activities, such that there is very little space that exists simply to be traveled through–instead, travel distances are significantly collapsed, and even the moment-to-moment gaps can be filled by collectibles or enemies. Thus the sensation of mastery is constantly available, even in small doses. Importantly, Aarseth notes that maps of this size are somewhat unrealistic, particularly those that shift through multiple biomes in a small space. However, Aarseth's essay on this topic is analyzing Azeroth, the setting of *World of*

Warcraft, which he claims earns some grace for its unrealistic environments through its cartoonish art style. For games like *Horizon Zero Dawn* to retain their power of triumph over terror, their environments must still strive for *some* verisimilitude; this is partly why their biomes tend to be somewhat more consistent. More importantly, the spaces in these games must look realistically massive. This is perhaps another reason why climbing to the peaks of the open world is such a popular pastime. Once on top, the player can look down, marvel at how far they've come, and test how far they can fall. The avatar can conquer in fifteen minutes a mountain that would, in the real world, demand a whole day, but the distance from the peak to the ground still induces vertigo. Thus both the illusion of vastness *and* the actual smallness of the world are both key to facilitating feelings of mastery.

At this point, it is important to address an idiosyncrasy in the object of study. This dissertation is concerned with *bunker* discourse. It does not seem terribly 'bunkerish' to be exploring the wilds of Montana or throwing oneself off mountaintops. This is, in fact, another reason why it is important to address post-apocalyptic open world games. There are bunkers flecked throughout their landscapes, and we will return to these later, but these bunkers serve as individual monuments or challenges rather than complete game settings. Games set entirely inside of bunkers tend to fall into different gameplay categories. They are popular in horror and action horror, as in *Amnesia: The Bunker* (2023) and *Metro: 2077* (2010). As a gameplay space, the bunker itself is represented as claustrophobic; its layout can be cramped and confusing, with its insides rotting, rusting, ill-maintained and dark—all aesthetically incompatible with both the gorgeous open worlds of the *Horizon* series.

In truth, this idiosyncrasy exposes a point I have been alluding to throughout the dissertation; bunkers inhabit a temporal role that is both *permanent and temporary.* The bunker

must last through whatever horrors and scourges the end times may bring, but the discourse always assumes the bunker will be exited. *Fallout 4*, *Far Cry 5* and *Far Cry: New Dawn* grant the player access to their open worlds with a symbolically significant departure from a bunker. When the player exits their dark, enclosed prologue, they are briefly blinded by the sunlight of the post-apocalyptic world before their eyes adjust, bringing the spectacular landscape into sharp relief. Bunker discourse requires leaving the bunker; the fantasy demands the purging of undesirable life on the outside *just so* the protagonist/player can leave to reclaim it and re-civilize it. The pleasure of autonomous survival, reclaiming, and regeneration would be lost if the protagonist/player were confined.

For an artifact illustrating this dynamic, we can look at the maps of open-world games. Maps are conventionally understood as objective records of space—that they come *after* the territory they represent. In fact "there is no space independent of cultural technologies of ruling spaces" (Siegert 2011, 15). Maps produce a subject, and situate that subject in a nexus of spatial and temporal constructs. In the midst of these orientations, maps also create contexts for action—indicators of how the subject should interact with that space (Drucker 2014, Ellcessor 2022). An open world game map is especially clear in how it constructs a particular subject position; its symbols and territories indicate what the player is going to play *with,* and how they are going to interact with those spaces.

The maps of these games, for instance, grant the player spatial and temporal domination over the map via a series of landmarks. Once the player has discovered a landmark—a building, a resource node, a climbing or racing challenge—they can typically travel there at any time, from any distance, by opening the map and selecting the landmark. This will teleport the avatar to a

set point nearby without cutting into their resources[45]. The landmark/fast travel system creates a subject who claims dominance over significant locations *at first sight*—as if the knowledge imparted by the eye is enough to fold the area into the player's territory, and thereby designate the space around it benign enough that travelling through it is no longer an adventure worth playing. This system also tends to streamline—and somewhat devalue—the "open-ness" of the open world. Once claimed by the player, the land is no longer a contiguous space so much as a series of nodes connected by paths that are, once first established, rarely explored a second time. These open spaces are occasionally designed to hold collectible resources to make them 'worth' walking through—but only in certain games (*Horizon Zero Dawn* features many wild collectible resources, and *Far Cry 5* has almost none). In fact, the sprawling spaces of open world games are not seen as valuable in themselves; players prefer smaller maps with more interactable material over larger, emptier maps (Hughes 2023). The open world is only interesting as long as the avatar can interact with it–more specifically, extract value from it–somehow.

[45] *Horizon Zero Dawn* does feature a mechanic that requires the player to spend resources ("fast travel packs") to fast travel, but it is possible to overcome this mechanic fairly early on by acquiring a "golden fast travel pack" that can be used an infinite number of times.

Figure 11. In-game map as seen in Far Cry 5 (2018)

Marking locations on the open-world map as significant also itemizes the kinds of behaviours the player is expected to exhibit. Open-world maps identify certain places as valuable, dangerous, or useful—the player is thus encouraged to interact with particular spaces as if they are inherently hostile, and others as if they are friendly. The Copperhead Rail Yard is both dangerous and significant. The player knows from the symbols (the black and white Eden's Gate flag) and the way the objective is worded that the cult of Eden's Gate is occupying the railway, and that they should "liberate" it from these enemies. The player can also expect a reward for doing this—they will unlock a new type of truck to drive. Other locations encourage the player to look for resources and valuables. The diamonds on the map above indicate prepper stashes, which typically contain raw materials, weaponry, and skill magazines that improve the player's abilities. These examples are quite standard across the genre; if an area is marked as significant on the player's map, it will either contain some kind of useful resource, be patrolled by enemies, or both. It is worth emphasizing that the presence of enemies is enough to justify a

visit by the protagonist—enemies themselves might be carrying resources (bullets, currency, healing items), and eliminating them is often important for making progress.

As a tool for constructing subjectivity and legitimating knowledge, then, the game's world map exists to both motivate and justify the player's actions, and to characterize those actions as an achievement of mastery through knowledge. What climbable ruins and landmark hunting achieve on a small scale, the world map achieves on a broader one; by the time the game is well-explored, the player will have 'tamed the terror' of the ruins and wilderness before them. They will have dredged up its valuable resources and purged it of occupying adversaries. This cultural logic—that a place falls under your control once you have cleared it, explored it, and noted it down on your map—is undoubtedly colonial in nature, and it also plays into the narrative fantasy at the centre of bunker discourse. One would assume that someone seeking to "rebuild society" after the bombs fall would have a vivid picture of the kind of world they imagine building. Instead, the process of "rebuilding civilization" is a relapse into classic colonial action—removing whatever unsavoury groups are currently "occupying" the land and, in the case of Fallout 4 and Far Cry: New Dawn, even building ramshackle farms and residences to establish post-apocalyptic colonies. This model also requires a colonial understanding of land itself. Land, like knowledge, is treated as a resource–something to be measured, owned, traded, and valued based on what other resources can be extracted from it (Liboiron 2023)[46]. This is not an opportunity to build civilization back better than before; it is an opportunity to execute the dynamics of colonialism on digital territory.

[46] It is worth noting that bunker discourse more broadly also understands land through a colonial lens. Retreats, bunkers, and other gated or bounded properties are valuable in the apocalyptic imaginary. Ownership of land is equated with security, because that land is where one's resources are stored. One's ownership of these spaces is imagined to extend uncontested into the post-apocalypse. Like capitalism, colonial land relations are another structure that bunker discourse thoughtlessly replicates.

The Other and how to hunt them

As the protagonist explores their world, they will encounter opposition. Enemies abound in considerable variety. *Fallout 4* keeps to the series tradition of populating its world with giant mutated vermin (roaches, crabs, and scorpions); *Far Cry 5* and *New Dawn* features various fauna common to Montana, such as black bears, moose, and cougars; *Horizon Zero Dawn's* world is marked by its unique animal-machines. These are complex, glossy robots built to resemble all kinds of animals—deer, horses, crocodiles, birds of prey, and dinosaurs.

Yet the most common enemies in all four games are other human beings. Sometimes these humans are associated with a specific faction, as in the members of the Eden's Gate cult in *Far Cry 5*, or the Brotherhood of Steel in *Fallout 4.* At others, they are labeled with generic terms like "bandit" (*HZD)* or "raider" (*F4)*. While none of these games technically feature zombies, the radiation-addled feral ghouls in *Fallout 4* essentially play that role—a humanoid figure absent of agency and reduced to pure violent threat.

"Labeled" is a word I am using literally. When the player encounters enemies in the open world, they are identified on the screen. Some games track enemy position with icons on a map or compass; others display an enemy health bar. Red is ubiquitous—all four of these games, and many others besides, use red icons to signify hostile enemies. While hostile enemies will almost always attack on sight, these indicators will often appear before your avatar engages with them in any way. The game is always certain, and never incorrect, about the designation of friend or foe.

Like the sublime visuals of the post-apocalyptic world, these design elements train the player into a particular way of seeing. From this perspective, distinguishing friend from foe is the first and only priority when interacting with other beings in the game world. This red labeling is a convention of the genre, constantly reinforcing this distinction as immediate, binary, and

infallible. The focus on the absolute identification of friend and foe echoes the militaristic logic of targeting software. Packer and Reeves argue that our militaries have placed this burden of identification on machines out of the anthropophobic belief that humans can fail to make this distinction while 'objective' machines make it infallibly (2013). The games we are discussing here also take the superiority of the machine as a given. Not only is the game always right about who is an enemy and who is not, it is imperative that the player trust this information instinctively in order to react to the game's challenges. Blundering into the signline of an enemy triggers them to open fire almost immediately. Conversely, all of these games encourage the player to conduct assaults on bandits camp or faction strongholds stealthily. *FC5/ND* even give the player extra rewards for remaining undetected. To do this, the player *must* rely on the game's friend and foe distinctions, as they must kill their enemies before they interact with them in any other way.

This relationship between military logic and game design logic is not at all unprecedented; much of our digital game technology, including basics like internet connectivity and 3-D modeling, derive from military technologies (Crogan 2011). The perspectives and judgments of military design have carried over into digital games as a result. A study on the spectatorship of the Multiplayer Online Battle Arena (MOBA) game *Dota 2* revealed that audience members used their controllable camera much like a drone, employing it to identify threats and gather combat data from a detached, aerial perspective (Elam & Taylor 2020). They also observed that experienced spectators–those who had played the game before–would use their knowledge to make camera movements pre-emptively, creating a cyborg apparatus that could "out-drone the drone" by drawing on human expertise (2020, 510). This can also happen in single-player games like the post-apocalyptic games discussed here. When I play *Far Cry 5* or

Fallout 4, I occasionally try to 'snipe' enemies from so far away that the game has not yet registered their presence–to shoot them before their enemy designation even appears. In making these decisions I trust my own familiarity with the genre; I can easily identify a hostile non-player character by their movement, their position, perhaps their outfit–and I can out-drone the drone by eliminating them ahead of the game's process of identification.

These games also double down on the utility of mediated, militaristic vision. In *Horizon Zero Dawn,* Aloy relies on her "Focus", a wearable computer and projector that not only targets enemies, but also reveals their elemental weaknesses to the player. The Focus can track foes in the way a skilled traditional hunter might, identifying footprints, broken branches, and spilled blood[47]. *Far Cry 5/ND* mediates vision through a pair of binoculars. These are particularly interesting because, unlike Aloy's Focus, which has tracking abilities that are enabled by imaginary, futuristic technology, there is no implication that these binoculars do anything more than amplify the protagonist's sight. However, looking at an enemy for long enough through these binoculars will park them with a red arrow. The *Far Cry 5/ND* avatar's eyes possess the same infallibility as the computer, suggesting perhaps that this kind of instant, "on sight" identification is preferable, and something we should aspire to. In *Fallout 4*, the avatar is equipped with a "Pip-Boy", a wrist-mounted computer which is implied to be the source of the onscreen information seen by the player. Incidentally, the Pip-Boy also gives the player access to the overworld map, combining friend/foe identification with bird's-eye knowledge of the territory. It is worth noting that aerial photography and mapping have also been heavily

[47] In addition to the features described here, the Focus also becomes one of the tools that distinguishes avatar Aloy from the other inhabitants of her world. Only a handful of other characters in the narrative have access to a Focus, which is considered lost technology.

influenced by military technology; it is a perspective on space that emphasizes territorial gains and losses, and is often sought out in order to gain information on the enemy (Crandall 1999).

The design principles and technical instruments of tracking vision synthesize quite cleanly with bunker discourse—in particular, with its black-and-white understandings of safety and danger and its tendency to scapegoat and villainize the Other. Consider, for example, how *Fallout 4* describes its raiders:

> Loosely organized, with a power hierarchy based on pure ruthlessness, they will attack anyone at any time…for any reason. (*Fallout 4* loading screen)

These raiders are explicitly—and purposefully—positioned on the boundaries of human rationality. They are only 'loosely' organized; like many popular misunderstandings of wolf packs or lion prides, their hierarchy is "based on pure ruthlessness"; and they will attack indiscriminately, "for any reason", which may as well say "for no reason at all." It is first worth noting the ableism informing this description, which can be demonstrated with a quick comparison to the other common enemy of post-apocalyptic fiction: the zombie. Despite the fact that it was once human, killing a zombie is always justified because it is incapable of reason, and that incapability manifests as constant, destructive violence[48]. While they are not zombies, "bandits" or "raiders" are equally limited in their reasoning and thus portrayed as equally incapable of anything other than violence. This is the same logic that informs the overwhelming bias against disabled individuals, particularly black disabled individuals, in American policing. A combination of blackness and non-normative or "irrational" behaviour, even if temporary and

[48] A useful addendum here is that some scholars also argue that the zombie reflects white fear of non-white immigrant populations, and zombie behaviour emerges from the jointly ableist/racist mindset that sees non-white immigrants as a mass, a swarm, or an infection (Barkun 2011). Equally notable is the fact that, across franchises, new "takes" on zombies always retain two traits: aggression and infectiousness. The fungal Clickers of *The Last of Us* still spread their condition through bites; the bites of feral ghouls in *Fallout 4* deal radiation damage. This makes zombies an ideal threat for the apocalyptic fantasy. It is always morally "okay" to murder a zombie, because the protagonist is directly faced with the threat of *becoming* the very abject/disabled/racialized creature in front of them.

functionally harmless—a seizure, for example—can be enough to motivate extrajudicial murder by police officers (Thompson 2021). The imagined correlation between irrationality and crime has stuffed our games to bursting with irrational enemies who will “attack anyone at any time”.

As an extension of this logic, the terms used to refer to these enemies carry with them our racialized ideas of criminality. In the United States, the association between non-white skin and criminality, savagery, or violence is a very old construction of white supremacy, used to justify everything from colonizing indigenous land to slavery, but this association experienced a resurgence and transformation in the 1980s that makes it particularly relevant here. In this period, the war on drugs was used as an excuse to incarcerate black men at unprecedented rates. Since this move, racism and white supremacy were theoretically restrained by law and damned in culture, but, in practice, were enshrined and enforced by the justice system (Alexander 2010). Thus, while it was condemnable to explicitly suggest that criminality was a trait inherent to blackness, this relationship was instead implied through connotation and imagery (and then retroactively justified by the very same statistics that resulted from this extension of racist policing). As the association between crime and race was subtly reconstructed, the language of crime became subtly racialized. A seemingly unrelated word that can be used to evoke racial resentment is often called a dog whistle, which is a terribly useful rhetorical tool for spreading racist politics.

Racist dog whistles typically come in two varieties: either they are intentionally constructed to reach other fringe racists, or they are unconsciously repeated in a way that spreads negative associations (Saul 2024). The use of words like “bandits”, “raiders” or “highwaymen” to describe video game enemies falls into this second category, which Jennifer M. Saul dubs “covert effect” dog whistles. In her book on dog whistles and coded racist language, Saul cites

research that suggests words with racialized connotations are incredibly effective at stirring up racial resentment–far more impactful than language that explicitly mentions race (2024). Tellingly, one of Saul's key examples in her book is a George H. W. Bush campaign ad that featured the face of William Horton[49], a black man who committed violent crimes while on furlough from a murder conviction. In this example, it is specifically the association between blackness and criminality that is being exploited to stir up racial resentment. Words like "bandit" make criminality the character's central characteristic; the game emphasizes that these people have done something wrong, which makes them a greater risk and potentially justifies retribution. Other works in bunker discourse use similar dog whistles to describe the kinds of people who are likely to attack in the post-apocalypse.

Importantly, the Willie Horton example emphasizes that these associations can be stirred up by images as well as words. This is important because most of the enemies in Horizon, Fallout, and Far Cry are racially heterogeneous. However, this design is not a departure from racialized language, but rather an additional obfuscation of it[50]. It adds a level of deniability to say that anyone can be a 'bandit', and then to demonstrate this within a fictional text: but the fact remains that defining a group specifically by the crimes they commit is a tried and true tactic of dehumanization. Bandits are given costumes that imply savagery and deemphasize humanity. Their clothes are dirty and mismatched, often with helmets, hoods or goggles that obfuscate their faces. The highwaymen of Far Cry: ND–who are, incidentally, led by a pair of black women–are covered in tattoos that resemble graffiti. Yet these costumes are usually consistent across the

[49] The ad refers to him as "Willie" Horton, a name he never used. Horton himself believed the name change was done to play on negative stereotypes of black men.

[50] It should also be noted that this heterogeneity is new to the *Far Cry* series in particular. The vast majority of the enemies in both of its predecessors, *Far Cry 3* and *4*, were Pacific Islanders or from Central Asia (in a fictional analogue for modern-day Tibet) respectively. In *Far Cry 3,* the avatar is a white holidaymaker who kills countless Pacific Islanders in the course of the game. *Far Cry 3* was released in 2012; we are only a little over a decade removed from broad acceptance of its narrative logics.

open world, giving the impression that these bandits are insignificant members of a much larger group. Bandits are never found alone; regardless of the game, they almost always attack players in groups of three or more. The idea of these bandits being part of a "swarm" or "flood" is another visual dog whistle, this one commonly deployed against non-white immigrants. It is also the same language used by bunker-builders when imagining post-apocalyptic threats. They almost always imagine being attacked by a group, because groups are easier to dehumanize than individuals.

What we have here is an assemblage of imagery and associations put in place to justify the ruthless application of violence against the Other. Enemies in these open world games are subtly racially coded and unsubtly dehumanized–two forces that work in tandem–to make violence against them as exhilarating and guilt-free as possible. At the same time, the game militarizes the player's vision and trains them to react quickly, thoughtlessly, and without remorse. Even if the player is caught off-guard by some humanizing detail and takes a moment to mourn their enemy, that enemy is never alone–threats are always encroaching. The game trains the player away from moral reflection and toward the automation of violence against the other (Elam 2018).

What about the bunkers?

While bunkers do not play the role we might expect them to play in post-apocalyptic games, their presence is still significant enough to merit discussion. Roughly speaking, there are two types of bunkers in these digital open-world games. The first are bunkers that present minor, optional challenges to the player; the second are unique bunker locations that play some significant role in the plot.

We should first take stock of the minor vaults and what they hold. In *Far Cry 5 / ND*, there are "prepper stashes"—secured may contain new vehicles, weapons, money or ethanol (the currency used in the apocalypse), and crafting materials for makeshift explosives or healing items. There are five vaults in *Fallout 4*, which tend to be more extensive. Vault 85, for example, is home to a sidequest, a recruitable companion, a non-player vendor who sells rare resources, and two unique rifles. There are also dozens upon dozens of smaller "vaults" throughout the open world—hidden safes, secret rooms, and underground stashes. In *Horizon Zero Dawn*, the most significant vaults are the cauldrons, where Aloy can overcome climbing and combat challenges to earn the ability to control different kinds of robot animals.

Like the real-world bunkers of chapter 2, these bunkers are quite aesthetically varied. *H:ZD's* are futuristic, lit in eerie blues, carpeted with exposed cables, and themed around uncomfortable triangular shapes. *FC5/ND's* are rustic, makeshift, some being little more than empty caves with hidden access points. *F4's* are extensive underground complexes with classic hazard signs and blast doors, capitalizing on the Fallout series' signature retrofuturist aesthetic. Despite their differences in design, these bunkers perform similar functions across games—they are used to store a supply of whatever that particular game considers valuable. Typically, these are resources that expand gameplay options, either directly or indirectly. Of these materials, currency, crafting materials, and skill points are the most common.

This scheme reflects the relationship between knowledge and resources established by bunker discourse in prepper manuals and real-world bunker design. Knowledge is broken down into units, something that can be purchased, discovered, gathered and stored. in discrete blocks. The purchase of a tool or an instruction manual is equivalent to acquiring practical knowledge. If you don't know how to light a fire, you can purchase a book of matches or a pamphlet on fire-

starting; this often "counts" as learning how to manage fire, even if you have never actually started (or managed) a fire yourself. This is an epistemology inflected by capitalism, in which obtaining a product containing knowledge is tantamount to possessing this knowledge yourself.

This dynamic maps well onto how knowledge works in game environments. The avatar's abilities are sectioned into discrete units, and one can 'purchase' these abilities with an equivalent 'unit' of knowledge resources, typically referred to as skill points. In these games, bunkers contain a higher-than-average quantity of knowledge 'units'. *Fallout* 4 vaults often contain magazines or bobbleheads, which translate into skill boosts; *Horizon Zero Dawn's* cauldrons allow Aloy to control different types of machines; and *Far Cry 5/ND's* prepper stashes all contain three skill magazines, which translate directly into skill points. *Far Cry 5/ND's* skill trees are a particularly egregious conflation of purchasable resources with knowledge, as its "perks" include both skills like running quietly or rigging vehicles to explode *and* purely material upgrades, like a grappling hook and parachute, which come pre-packaged with the avatar-body's ability to use them.

Figure 12. The "perks" UI from Far Cry 5 (2018)

Once the prepper stashes of *Far Cry 5/ND* or the cauldrons of *Horizon Zero Dawn* are raided for their resources, they serve no further gameplay purpose. They become another modular challenge to mark off on the map. The vaults of *Fallout 4* might have a slightly longer gameplay shelf life—one might return to Vault 85 to purchase rare fiber-optic scrap, for example—but it is still *resources* that would cause the player to return. It is particularly interesting that the vaults in *Fallout 4,* unlike other surface locations, cannot be developed into settlements (unless the player is willing to pay extra for DLC). There is no reason to upgrade a vault or continue to protect it after raiding it. Despite being the seeds of a new world, bunkers cannot grow.

This hearkens back to an irony I illustrated previously—that while they are symbolic of post-apocalyptic fantasy, bunkers themselves only exist to be exited. But once they are exited, bunkers lose almost all of their unique utility. In all of the post-apocalyptic fictional worlds examined here, above-ground settlements are livelier than bunkers. They serve as hubs for

narrative progress, trade, and host more varied characters and quests. These settlements are more integrated with the open world and less isolated.

In the post-apocalyptic video game, bunkers are understood the same way colonialism understands the natural world or foreign settlements: as hubs to be plundered for resources. Once their resources are expended, post-apocalyptic bunkers have no purpose. They represent an unsustainable, bygone way of living—isolating oneself until one's resources are depleted. Bunkers become the ruins of the post-apocalyptic future.

This fate is representative of the fate of the "open world" at large. The player's only relationship to the game is that of a conqueror, and their success is measured through territory claimed and resources pillaged. Games often meticulously track how many challenges the player has conquered, how many places they have ransacked, and how many unique weapons and items they have gathered. In Far Cry 5, the game even displays a percentage that represents how much of the world map the player has explored. However, increasing this percentage in any open-world game is an act of consumption, not construction, and reaching 100% completion is a melancholic achievement. When a map reaches 100% completion, there are no challenges or resources left. 100% completion means that the player has emptied the world of its value.

One would think, at this point, that the player would be satisfied by their world, which has been made "safe"--but consider Dora Apel's observations about the increasing stakes of ruin-gazing, and Slotkin about the myth of the frontier. Both suggest that this position of the explorer-colonizer can never reach a peaceful stasis. If one's safety, or security in one's identity, can only be guaranteed through repeated displays of mastery over territory and resources, then stasis is tantamount to failure. In bunker discourse's wildest fantasies, the only way to be truly secure is to continue to take.

Rebuilding and Reproduction

Of all the paradoxical, untenable positions that bunker discourse finds itself trapped in, its position on women is perhaps the most troublesome for its purposes. In a narrative of apocalyptic rebirth —particularly one that adheres so strictly to hegemonic constructs of gender—one might expect women to play a crucial role. The conventionally 'feminine' disciplines of birthing and raising children, as well as other domestic care work, would be fundamental in rebuilding society after the end. Many apocalyptic narratives enter shaky territory here, because much of bunker discourse exists to create a world where problems are best solved (and society is best promoted) through aggressive, masculine-coded behaviours. To make this argument, feminine-coded behaviours–and women alongside them–are often disparaged, disguised, or rendered irrelevant. This puts bunker discourse in an awkward position, as the rebirth of society is a project that, both symbolically and literally, veers too close to the feminine. Ideally, bunker discourse would find some way to apply its argumentative logic to this situation as well, and find a way for masculine aggression to be an ideal manner of reproduction and child-rearing.

The paramilitary warrior created in the wake of the Vietnam War, as discussed in Chapter 1, had similar anxieties about women and their control over reproduction, and he, too, was granted a means of interference in this sphere. In his world, male roles were socially determined–warrior, adventurer, politician–and female roles were defined by their biology. A conceptual shift, however, could bring the reproductive role back under his dominion:

> If, as…Vietnam representation wants to claim, reproduction is a social and not only a biological activity, then it is possible for the masculine to appropriate this role to itself, to encompass the feminine position of reproduction within its own sphere of control. On the other hand…women are limited in their roles by their biologically ascribed status, [and] they will be unable to do the same, that is incorporate a masculine role. (Jeffords 1989, 91)

In the media depicting the Vietnam War, men often achieve roles of social reproduction through symbolic interventions in motherhood: Jeffords describes a scene of a soldier cutting open the stomach of a dead pregnant woman to save an unborn infant. Symbolic birth, parenthood, and child-rearing, particularly when intertwined with ritualistic violence, are similarly employed in post-apocalyptic narratives to place control back in the hands of the patriarch.

Of the games discussed in this chapter, Far Cry 5's narrative enacts the masculinization of childbirth and parenting in this same symbolic manner. The leaders of Far Cry 5's cult are a group of siblings, led by siblings John, Jacob, Joseph and Faith Seed. Joseph, the leader of the cult, is typically referred to as the "Father". In this narrative, the ability to act as the "Father" of the apocalyptic world is not just divorced from matrilineal care, but contingent on a conscious, violent refusal of the feminine and its means of reproduction. Joseph chooses instead to build his family through masculine trials of strength and aggression. Through his brothers, Joseph exposes the avatar to violent trials including kidnapping and torture; it is revealed that before the game, Joseph killed his infant daughter after the death of his wife, seeing the loss of his family as part of his religious callying. It is his manner of fatherhood that dominates the narrative. At the end of the game, the player-character is forced into the nearest bunker alongside Joseph Seed as nuclear war descends on Montana. In the same shelter in which they started the game, the player can only watch as Joseph informs them of their fate:

> I prepared my family for this moment, and you took them from me…But you're all I have left now. You're my family…I am your Father and you are my child.

In this game, families are not built through love, nor through traditional means of reproduction: they are intertwined through violence. Joseph's previous family taught the player-character how to be violent, and the player-character responded by killing them all: then, the eruption of violence on the continent at large forces the player-character into a relationship of Father and

child with the very man they had been violently resisting. In the sequel, *Far Cry: New Dawn,* we see what person this kind of patriarchal tradition creates. The player-character returns in this game as a non-player ally nicknamed the Judge. The Judge is masked, mute, and completely loyal to Joseph.

This creation of a patriarchal lineage of violence takes the place of biological reproduction, the presence of women, and feminine-coded childcare work in post-apocalyptic stories. Outside of *Far Cry 5,* this tendency appears when female characters, particularly young girls, are invited to be the main characters of the apocalyptic narrative. This is an important tendency to address at this moment, as one of the games selected for this chapter–*Horizon Zero Dawn*–has a female protagonist. So how, exactly, does a game with a female protagonist establish this idea of masculine aggression as a sustaining, life-giving, or reproductive practice?

A clue rests in the surprising prevalence of young women as major characters in post-apocalyptic video games. Aloy of *Horizon Zero Dawn,* Ellie of *The Last of Us,* and Clementine in *The Walking Dead* all inhabit the protagonist's aggressive masculine role, but they can only play this role after a key narrative initiation. Male leads—such as the male protagonists partnered with Ellie and Clementine, Joel and Lee—come to the story already comfortable with violence, as if it is in their nature. By contrast, their female companions or equivalents are forced into violence through a ritualistic initiation. This genre often exhibits a morbid fascination with the girl's 'first kill', which is usually treated as a major turning point in the story, and is usually committed to protect a male character. Both Ellie and Clementine commit their first murders to rescue their male guardians from a human assailant. Aloy has, by contrast, an extended initiation into the violence that codifies her world through her mentor and father figure, Rost. This initiation serves as the player's extended tutorial. Aloy also kills her first human in self-defense

in a scene where Rost is also killed. These scenes signify a "passing of the torch" from the masculine guardian to the feminine charge[51]. These moments in which the girl "toughens up" guarantees that she can match masculine expectations of post-apocalyptic violent agency. In sequels or subsequent chapters, we can see how these young women have "grown up", which typically means that they are ready to kill at a moment's notice. In these cases, the introduction of a female character has done nothing to overturn the genre's broader expectations, nor challenge its specific gender politics. Unlike the hero, the female lead must undergo the transformational trauma of committing violence in a life-or-death situation before she can be "reborn" into the role of heroine–but once she is inducted into the world of violence, she can continue to practice it as expected of the post-apocalyptic protagonist. After this ritual she can, and usually does, continue along the same messianic-cowboy path as her male counterpart.

Living in the post-apocalyptic (or immediately pre-apocalyptic) world typically exposes a protagonist to enough violence that the continuation of this patriarchal lineage is ensured through action alone. The children, male or female, must be taught to navigate the world through aggression, and this lesson is far more central to the story than any expression of care or natural reproduction. However, because post-apocalyptic fiction is fiction, it has other educational tools at its disposal. There is more than one way to cut women and femininity out of the line of cultural succession, and this can be done much more thoroughly. Even in the aforementioned cases of symbolic patriarchal succession, in which violence begets new generations, cis women are still present—on the fringes or by implication—as the biological source of new life. However, another tool at the disposal of the apocalyptic narrative is technology–more

[51] Both Ellie and Clementine have killed zombies in their respective worlds before these scenes. The scenes described here are the first times they kill another non-infected human. The lack of narrative significance in killing a zombie, as opposed to significance in killing a non-infected attacker, is evidence of the further objectification and abject-ification of the zombie-other. Killing the disabled/racialized Other in these games simply matters less.

specifically, the capacities of imaginary reproductive technology, or other imagined technologies that could be turned toward that end. These technologies mean the biological source of life might also be made irrelevant. Perhaps one day, science fiction speculates, cloning or cryonics will enable a total cultural hysterectomy.

The deployment of technology toward this end is not an uncomplicated endeavour. As Preciado notes, gender and sex are themselves constructs of technology, and examining this relationship too closely might unsettle some binaries that bunker discourse would rather leave undisturbed. Technologies produce gender and sex, but only "in an unstable way", and so more technologies are developed with the Sisyphean goal of shoring up these invented binaries (Preciado 2019, 103). The anxieties produced by technologies of sex, gender and reproduction are enough to spawn their own apocalyptic subgenre. *Children of Men, Y: The Last Man,* and *Lisa: The Painful* are all dystopic fictions born from the fear that 'natural' human reproduction will, through an anomaly of biology or technology, become impossible. However, whether reproductive technologies are put toward the disruption or the reinstatement of hegemonic control is often determined by who has access to such technologies. Should these technologies only be put toward the reinforcement of the white cis-male subject position, then bunker discourse can make use of them.

In the games discussed in this chapter, the primary technology in question is cloning, which allows for the production of a new generation without the presence of the cis-female body. While cloning will be the focus for the next section, it is also important to underline that other technologies in these worlds serve the complementary purpose of removing feminized labour, feminine qualities, and care work. Sarah Sharma observes this tendency to repackage care work as technological work in real-world gig economy apps:

> The dependence on Mommy's care is hard to shake. And if Mommy cannot or will not provide that care anymore, perhaps a new machine can…Thus the post-Mommy economy of Silicon Valley dispenses Mommy without dispensing *of* Mommy, while more deeply entrenching neoliberalism's exploitative relationships. (2018)

In our world, these technologies are typically obfuscations of the precarious work undertaken by marginalized groups, "repackaged and sold…as an enterprising and innovative system of assembling and modulating work"–but it is that very lie that makes these apps so tempting (Sharma 2018). The idea that care could be entirely supplanted by a machine deals two useful blows in one for bunker discourse. On the one hand, if care work is so simple that it can be done by a machine, it is perfectly valid to dismiss it as work that is unimportant to "the story"–in the same way the human occupation of *calculator* was rendered obsolete by the machine of the same name, and often neglected in histories of computation technologies[52]. On the other hand, the automation of care work removes the need for women and their conventional labours in the post-apocalyptic imaginary. Sharma frames this dynamic–distancing oneself from the care labour required for one's survival–as retreating to Mommy's basement. In terms of the labours it obfuscates, the bunker is just a reinforced basement, and many of its technologies are cousins of Sharma's Mommy-apps. What need is there for home-cooked meals if you're eating pre-packaged MREs? The devaluation of care work through technological obfuscation means that as we go forward, we should be able to find that obfuscation in post-apocalyptic fiction alongside the technologies that make biological reproduction irrelevant. We have already described how game avatars typically do not suffer from most of the afflictions–like hunger, or permanent injury–that would make care work relevant, but in these games the discarding of care work happens on a grander level, in even bigger bunkers.

[52] Incidentally, this was also a job typically done by women, as well as members of other marginalized groups who could legally be paid less (Thompson 2019).

Consider the case of Fallout 4. At the outset of this game, the player's avatar is cryogenically frozen alongside their spouse and infant son Shaun. At some point before unfreezing, the child is kidnapped, and retrieving Shaun becomes the player's primary mission. However, at some time after this kidnapping, the avatar is re-frozen, unbeknownst to them. This means that once the player encounters Shaun again, sixty years have passed. Shaun is now the elderly director of The Institute, where he is referred to as "Father". This title derives from the fact that he is the creator of the synths, who are essentially clones[53]. The player has the option of taking over the Institute, as Shaun is slowly dying of cancer and intends to pass the directorship to his remaining parent. Alternatively, the player can side with a different faction and destroy the Institute by overloading their reactor. Either way, it is revealed that Shaun has created a synth clone of himself who is permanently trapped in childhood, at about the age of twelve; he entrusts this 'prototype' to the player character, who can either send synth-Shaun to live at a settlement or leave him behind when the Institute is destroyed.

Until Shaun's nature is revealed, the motivation to rescue a child from the savage lands of the post-apocalypse suits the cowboy-messiah role of the avatar, in that it involves treating the child as a token of civilization that the player must restore to their control. However, the care work required to actually raise a child has no place in this particular fantasy: the game mechanics of Fallout 4 emphatically do not allow for any kind of gameplay that resembles it. As mentioned above, there are no survival mechanics—the avatar's clone-son is as impervious to hunger, exhaustion, temperature, or radiation as the avatar themselves. While settlements do need to meet a certain threshold of particular resources, the player typically builds these resources and leaves

[53] The synths have some biomechanical elements to them, which may or may not prevent them from aging or sleeping. These capacities are somewhat inconsistent across different synths, but as they are always 'copied' from the DNA of living humans, clones are their closest analogue. There are also first- and second-generation synths, who are fully mechanical.

them to manage themselves. Crops require as much care as children in Fallout 4: both can be left unattended while the player adventures.

Both clone-Shaun and elder-Shaun facilitate the pleasure of creating a patriarchal lineage that requires no care work and no women. The younger Shaun, who is liberated from his creator into your care, is an affirmation of the player-character's parenting: the child has been successfully protected. However, as Shaun will never age past twelve, he will be perpetually old enough to feed himself but never old enough to assume complete independence, ensuring his power will never usurp that of the player-character's, nor will he ever become a person the player-character does not approve of. The player-character is granted the power and symbolic significance of parenthood, but burdened with none of its responsibility. This calls to mind Edelman's rhetorical future-child, a hypothetical being who has very little to do with real, living children: Shaun is valued for his symbolic weight, not treated as a human in his own right. He, like Princess Peach before him, is essentially a trophy. Meanwhile, the elder Shaun is far beyond the need for care–the player need not even step in to perform palliative care for his fatal illness–but as he is the player-character's biological son, he still offers himself up to their judgment. The player can approve of Shaun's actions or disparage them, both through dialogue options and by eventually turning on or taking over for Shaun. The presumed authority over another human being seems to be the only feature of parenthood Fallout 4 cares to explore.

Importantly, regardless of the role of science in their creation, it is still violence that binds these fathers and sons together. Synths are seen as an existential threat to post-apocalyptic civilization, and are often attacked and executed upon their identities being discovered. Siding with or against elder-Shaun is also an inevitable call to violence, as it will involve slaughtering every member of at least one other faction. It is implied that the player-character's decisions

regarding the synths will be their primary legacy, which means that this legacy is also an inevitably violent one[54].

At this point, when we have the legacy-building practices of masculinity and technology in hand, Horizon Zero Dawn provides an interesting counterpoint. The story of Horizon makes an attempt to challenge patriarchal lines of succession with a matrilineal genealogy, and to paint a more complex picture of the dangers and benefits of technology, but it is limited by its adherence to the typical design of the open-world game. Its mechanics still reproduce tropes of agency, heroism, and spatial navigation, which all hamper its ability to tell a different story. Creating a female protagonist does not disrupt those tropes all on its own. Furthermore, the story's attempt to weave together motherhood, technology, and nature falls back into other troublesome stereotypes, serving mostly to expose our anxiety over what happens when any of these three domains meet.

Prior to the beginning of Horizon Zero Dawn, the entire planet has been rebuilt under the guidance of a dozen interlinked programs operated by a single AI. GAIA, the coordinating AI, appears in the game as a female hologram with a woman's voice. The name 'GAIA' evokes the symbolic intertwining of women and nature, and the idea of Earth itself as the mother for all life. At the same time as being feminine and associated with nature, GAIA is also a purely technological construct. GAIA might, in one interpretation, represent the sort of utopic natural/technical harmony that guides the aesthetic direction of Horizon Zero Dawn–the same aesthetic that places robot-dinosaurs in splendid wilderness.

However, GAIA's project management is not an unqualified success, and in fact it is GAIA's various shortcomings that shape the conflict of Horizon. GAIA's subroutines are

[54] It is—*very* technically—possible to beat Fallout 4 without killing an enemy, but it requires using a number of glitches and relies on a weapon that incites the enemies to kill each other (ymfah 2019)

transformed into nine independent AIs by a mysterious signal[55], and she loses the ability to command them directly. One of these AIs, HADES, has the directive to "reset" GAIA's work if she should fail, stripping the biosphere to start from nothing again. Once liberated, HADES reactivates the Chariots, and Aloy's purpose–and by extension, the player's–is to defeat them and eventually deactivate HADES.

The failure to discipline HADES is not GAIA's only failure: centuries before HADES goes rogue, another subroutine's mission goes awry. This is ELEUTHIA, the subroutine dedicated to re-establishing the human species. ELEUTHIA is able to create new human children and care for them as infants. However, due to the deletion of another subroutine (APOLLO, an archive of the world's history, knowledge and culture) these children are unable to learn anything beyond a 'kindergarten level', and find themselves dissatisfied with ELEUTHIA's care as they grow up. As adults, they leave ELEUTHIA's cradles–which are, as with all the other AI facilities, bunkers–to re-establish the human population on the surface world.

In both of these examples, technology proves an unfit mother. GAIA is unable to control her violent subroutine-son HADES; ELEUTHIA's automated child-rearing functions leave her children unhappy. The children must, like all bunker-discourse protagonists before them, go out and claim territory in the surface world in order to be properly fulfilled. GAIA is forced to self-destruct to subdue HADES temporarily. Her solution to HADES' eventual return is to clone the project's founding scientist (in some sense, her own mother) Elisabeth Sobeck. This clone–Aloy, the player character–has Sobeck's DNA, meaning she can unlock the Project Zero Dawn facilities and eventually help rebuild GAIA.

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[55] This signal does not figure into the plot of *Horizon Zero Dawn,* but is rather central in its sequel, *Horizon: Forbidden West.*

This story repeatedly and somewhat cyclically entangles nature, motherhood, and technology, but when it comes to saving the world, this assemblage is insufficient without human will, which is depicted as separate from all three. GAIA has the ability to reconstruct the environment, but her own function is limited to this rebirth function. An independent human agent–the Sobeck clone Aloy–must reclaim control of the project from violent threats. This agent needs to be aggressive and battle-hardened in order to face HADES and the reanimated Chariots. In HZD, the work of rebirth is all done in the background by a feminine computer: GAIA is the ultimate Mommy app. The AI can even produce children, but only those children who have been exposed to the outside world and properly trained and mentored can "protect" this rebuilt world. The role of women and care work can happen in the background, automatically–but without masculine agency, it is insufficient. It is also worth pointing out that within the story-world, Aloy is raised by a male figure but widely scorned by her tribe for lacking a mother. Aloy is, however, the most effective and agential character in the story by a significant margin. If anything, her existence proves precisely how obsolete motherhood can become under apocalyptic circumstances.

Horizon Zero Dawn aspires to offer a nuanced perspective on technology, environmentalism, and motherhood, but its efforts are seriously undercut by the player's means of navigating and conquering this world. Regardless of her gender, Aloy still fulfills the role of cowboy-messiah–a single, unitary will that scours the globe for resources and kills en masse. The story still gives the player their opportunities for willful expression entirely through activities that are traditionally violent and masculine. Nowhere can the player actually involve themselves in GAIA's rebuilding and rebirthing project. It happens passively, in the background.

Because of this tension, Horizon Zero Dawn does not present an alternative to bunker discourse. Instead, it is, firstly, a way for women to induct themselves into the protagonist role of the discourse, and secondly, a showcase of how the expectations of bunker discourse limit our imaginations in terms of futurity, safety, and disaster. Regardless of the imagination poured into Horizon Zero Dawn's world, it has still constructed one in which singular, autonomous wills are the most effective difference-makers, and are, in fact, required for rebirth. Of all these games, Horizon Zero Dawn is the one that ties rebirth to violence the most directly, because this is exactly what GAIA cloned Aloy for–her ability to recapture old Zero Dawn bunkers through her genetic heritage, and her willingness to kill anyone who gets in her way.

There is one other way that gaming technologies can facilitate a mediated techno-parenthood in the player, and that is through the mechanic of avatar creation[56]. This brings us full circle in a way, back to our point of entry into this chapter. Avatar customizability is available in both Fallout 4 and Far Cry 5/ND. Gender, races, faces and hairstyles can all be shifted about with sliders and palettes. Players may spend a significant amount of time in character customization, even in games like Far Cry 5/ND where their avatar's face is rarely seen in gameplay.

Given everything I have posited in this chapter so far, this is a fitting endpoint. Firstly, we should remember that these games have a particular idea of what childhood and child-rearing entail. The attachment to the child is more symbolic than emotional: the child symbolizes a (white, straight) future, per Lee Edelman, and in bunker discourse specifically, the child also signifies a personal legacy of victory over the apocalypse. Furthermore, the only other aspect of parenthood that was reflected in Fallout 4's story was the allure of exerting authority over

[56] I am grateful to Lauren Cruikshank for suggesting this idea to me during the 2024 Canadian Game Studies Conference.

another being. There is no other being over which the player has more authority than their own avatar.

Other studies into our relationships with our avatars have suggested they may be objects of queer desire for the player. Gerald Voorhees argued this after noticing that some games incentivize certain player actions by placing the avatar's good looks on the line–such as in Fable 3, which adds scars to the avatar after the player loses a duel (2014). However, Witkowski observed that male players in a competitive video game space occasionally chose female avatars not because they were attractive, but because their animations displayed more finesse, which they believed reflected their own finesse as players (2012). This recontextualizes Voorhees' reading of the Fable 3 avatar somewhat, as the handsomeness of the avatar is also a direct result of the player's finesse, tying skilled gameplay to pleasing visuals. While there are certainly situations where someone might choose an avatar out of pure erotic desire, the case can also be made that avatars are a means of sculpting an attractive legacy to leave within the game. Once the game is complete, you will leave behind only the gameplay statistics, which will reflect your aptitude, and the face and body of your custom avatar.

To push this idea further, consider this composite image created by the developers of Baldur's Gate 3, another game with customizable avatars, during their early access phase[57].

[57] "Early access" refers to games that are released in a partially finished state for a discounted price. This model is popular, as the players both act as unpaid bug testers and provide some funding for game development to continue. In the case of *Baldur's Gate III,* the finished game comprises three "acts", and the early access version released only Act I.

Figure 13. The "average protagonist" of Baldur's Gate 3, generated from early access data by Larian Studios. (Parrish 2020)

As it is based on *Dungeons and Dragons, Baldur's Gate 3* offers extensive fantastical options for character creation. The player can make a green-skinned alien, a dragon-headed humanoid, a half-demonic tiefling with horns, or a three-foot gnome with blue skin and white hair. Yet when the developers combined the most popular choices in character creation into one avatar, it produced a startlingly average portrait of a white male human hero. Without a full study of the game's demographics, it is impossible to say for sure exactly how this character emerged, but I suspect that white male players undergoing techno-mitosis is the most likely scenario[58]. I would argue that this result speaks less to queer desire than a desire to leave your likeness in the code. Like Edelman's rhetorical future-child, this data-child is not a real child, but a signifier of *your* achievement. Alongside this image, your completed save file represents proof of victory through

[58] The early access period may have been dominated by white male players building avatars in their own image, or it may have been a diverse players of other genders and races. If the early access group *was* broadly diverse, then we are left with the idea that, regardless of who we are, a white man still pops into our heads when we envision a fantasy hero.

the avatar's level, equipment, and resources. This excessively beautiful data-child carries all their trophies with them, and is left behind to signify your conquest of their digital world. And just as reaching 100% completion signifies the emptiness of the map, this data-child reaching its peak potential means you will likely never engage with it again, as it has no worlds left to conquer.

Why video games?

To conclude this chapter, I will return to what might seem like an incidental story. I mentioned in passing that the critical reception of Far Cry 5 was somewhat lukewarm. Fallout 4 is a beloved triple-A blockbuster and Horizon is a critical darling. Why is it the middling example of the genre that ties everything together?

The answer to this requires some context regarding the larger Far Cry series. Prior to its fifth instalment, Far Cry games were set in real or fictional nations in the Global South. These nations were always in violent political turmoil of some kind. The protagonist was usually a named white male hero, and the enemies were whatever indigenous groups inhabited those regions. The series was, at this point, rightfully critiqued for its indulgence of colonial fantasies and its white saviour complex. When the fifth instalment of Far Cry moved to a predominantly white American state, game reviewers were hoping for a drastic shift in the series' politics. The very act of setting a Far Cry game in the United States seemed to tee up some clever anti-colonial critique–or at least a statement that Americans are not so much more "civilized" than the places their heroes have been deployed to fix. Critics anticipated all kinds of incisive political critique that would take aim at cults, American gun culture, misguided sects of Christianity, and Trump-era politics (Pessgrove 2018). Sadly, this deconstruction was not to be. After the game launched, reviewers noted bitterly that, from their perspective, the game did not commit to any

political position. Over and over again, the critics claimed that the game fell flat because it had nothing to say.

It may be true that the game did not offer a critique of colonialism or gun culture, but that is not because the developers refused to engage with those things. It is because their product–the open-world game, with all its affordances–made it impossible to critique them. Far Cry 5 has plenty to say, but because it is merely a reiteration of a discourse we have already accepted, it is harder for the critic to hear. The game is not apolitical; rather, it takes the dominant perspective, which is often characterized as apolitical merely because it is dominant. As an open-world game, Far Cry 5 is made from the same building blocks as bunker discourse. The player controls a single, autonomous, invaluable protagonist; progress is measured in territory conquered and resources claimed; guns are the primary tool of interaction with the world. One critic who did manage to detect what Far Cry 5 was 'saying' identified this as a right-wing or Republican game made to mock Democrats (Pessgrove 2018). I disagree–describing these principles as 'Republican' is too restrictive. Before anything else, these principles are those of white liberal America. They are indebted to the ethics of American individualism, property rights, and regeneration through violence.

The greatest irony of this story is that Far Cry 5 was made in Canada. A left-wing critic might hope that my snowy socialist homeland would have sterner words for American preppers and gun cults, but it was not to be. When I say that bunker discourse is American, I mean it champions virtues that are traditionally associated with the United States–but that does not mean that those virtues cannot spread to Canadian developers[59], especially not when these virtues are embedded in a discourse. Bunker discourse has a vice grip on the Canadian post-apocalyptic

[59] Or, as the bunker company Oppidum proves, to Swiss architects.

imaginary too, and when making media that will largely be consumed by Americans, Canadian artists have no incentive to challenge the fundamentals. If we want to find a proper challenge to bunker discourse in the form of post-apocalyptic media, we may have to look a little harder, or a little further afield. This will be the role of this dissertation's conclusion.

The reception of Far Cry 5 was a direct result of its inability to tear out its roots in bunker discourse, and this particular relationship is exactly why I chose to make this chapter about video games, rather than post-apocalyptic fiction in any other medium. Bunker discourse and American video games matured on roughly the same timeline in a culture that valorized independent heroic action, and thus they bear a fitting family resemblence. In this chapter, we have discussed both how video games grant players the illusion of perfect willpower, a splendid world to conquer, an unimpeachable license to kill, and countable rewards in knowledge and resources. These affordances scratch the itches that bunker discourse is meant to satisfy in a way few other fictional media can. Importantly, this connection relies not only on everything video games can do, but on the popular understandings of what a game should do. The breadth of experiences that video games can potentially create is truly staggering, and yet the "blockbuster" games developed by large Western studios often fail to disrupt certain assumptions. They assume there should be one human main character, and the player should be attached to their perspective throughout the game. The game should take place in a vivid digital world that, as technology develops, ever approaches complete visual realism and lifelike interactivity. Big-name developers do not often question the importance of heroic central characters, the power of player choice, or the allure of conquering richly detailed spaces, and it may seem that all of these unquestioned priorities mesh neatly with the unquestioned goods of bunker discourse. It is more

accurate, however, to say that the priorities of the digital game helped create the rules of bunker discourse.

As a reminder, media archaeological theory argues that there are no subjects separate from their representation; media do not merely reflect culture and subjecthood, but play the primary role in the construction of *both.* In this particular case, games are instrumental in constructing the heroic subjecthood and epistemologies of bunker discourse. This construction occurs through the unique affordances of the video game, and how they are marshalled to enshrine the position of the able-bodied, masculine, military-colonial perspective. Paul Edwards argues that the Cold War-era discourse surrounding computers argued that real spaces could be mastered through accurate mathematical simulation within the world of the computer–and it was from these simulations that video games were eventually derived (1997). As an outgrowth of computer technology, digital games reconstruct this militaristic way of seeing in the civilian player; the avatar moves through and perceives the world in the same way as the soldier. Digital games present the idea that survival is equivalent to combat in that both can be *simulated.* In fact, the entire practice of survivalism–whether undertaken through gameplay or LARP-like combat training–follows the logic of simulation. It uses data, however faulty, to predict what life will be like after the end. In the same way military strategists assume the best combat results can be achieved through predictive and iterative simulations, bunker discourse assumes that the subject can confront the end of the world through statistical optimization. Survival guides offer to 'increase your *odds*', and these odds are modulated through rations, resources, schedules, and other prefigured numerical models that will allegedly maximize the objective chance of survival. In digital games, the player moves through iterative simulations of survival until their victory is guaranteed. In this way, video games, more than almost any other media, are ideal instruments

for constructing the survivalist subject. And, as this chapter has reviewed, these instruments have as consequence enshrined ableism and the exercise of white colonial power as part of the survivalist subject position.

Additionally, bunker discourse is ultimately a discourse of space. The practice of creating safety through spatial isolation can thus be "played out" by the subject of bunker discourse in any game that falls under its jurisdiction. In describing the relationship between video game spatial politics and American culture, Soraya Murray says "truly, the great story of the United States of America – with the exception of Native Peoples – is the story of arriving from someplace else and making space for one's self in the nation." (Murray 2022, 277). Claiming and making space, in bunker discourse, is not just a demonstration of power or wealth—it is done out of a desire for security and control. In these video games, the terrors of a vast, unknown digital space are slowly claimed, tamed, and mastered, and the rewards of such mastery are admittedly exhilarating. The avatars of these worlds only get stronger as the world gets less mysterious, and is slowly emptied of its value. Ironically, the all-powerful avatar, acting as an idealized survivalist subject with their inhuman resilience and impeccable knowledge of the world, will never bring permanent comfort or satisfaction. This is not just because games end as ruins once the player has depleted them. It is also because the ownership and mastery of space cannot create perfect security, even as bunker discourse pretends it can. *Far Cry 5* seems to be sensitive to this irony, as it ends with the player retreating back to the bunker as the world is destroyed–until *Far Cry: New Dawn,* when a very similar game space is re-opened for re-conquering in a nearly identical manner.

Without this media archaeological context, it is easy to dismiss bunker discourse as an obsession for extremists or a hobby for paranoid billionaires, but in truth, bunker discourse has

been built into our perception and spatial understanding on a broader cultural level, as the continued success of post-apocalyptic open-world games suggests. This is partly because bunker discourse is the logical extension of so many fundamental elements of American culture—the frontier myth, the myth of autonomy and self-sufficiency, and the fetishization of wealth and ownership–but it is also because it has the ideal co-conspirator in the digital game. Our desire for security persists, driven by fears of violence, otherness, and catastrophe, and the fantasies produced by the digital games of bunker discourse indulge those fears and sate that desire. But as we have seen throughout this dissertation, this model of safety and security perpetuates all manner of injustices while being quite ineffective when actual disaster strikes. As such, addressing catastrophe equitably requires a major shift in our epistemology. In Murray's piece, she theorizes that "speculative spaces" in video games could "break from the presumptive narratives we have been telling ourselves about space" (2022, 277). This dissertation will conclude with a search for that break.

CONCLUSION: Reimagining the End of the World

Doomsday preppers of all stripes tend to justify their practices with this logic: whether or not the world ends, having a bunker will bring me peace of mind.

In the course of this dissertation, I have shown that bunker discourse categorically devalues women, queer people, racial minorities, and disabled bodies. It disparages modern culture and society, and sees humanity as inherently greedy and violent. It fundamentally misunderstands how crises are triggered and how they spread, and discards proven methods of mitigating them. In fact, bunker discourse has no interest in resolving crises at all: it is at best apathetic, and at worst accelerationist. It preaches that the only way to improve the world is to scour it clean. All of these beliefs are masked under a veneer of practicality, and this gloss is so effective that everyone from tech billionaires to academic ethnographers find themselves swayed. The companies discussed in previous chapters are growing, and bunker discourse is proliferating as a design philosophy.

This does not bring me peace of mind.

Many of the ideas of bunker discourse are dangerous. Some feed into larger problematic narratives that also merit overturning, and as such these narratives have been attracting criticism for centuries. One of the more unique challenges created by bunker discourse is that it actively sabotages our ability to address crises as they happen, and it is this particular challenge that I will address in this conclusion. Bunker discourse fabricates a quick, destructive, and total end for society, and it is the nature of that end that justifies many of its more repulsive principles. The way that bunker discourse presents the end of the world can misinform us in regards to actual crises, which can be slow, invisible, localized, and which are almost always influenced and exacerbated by established inequities.

With that said, there are different ways of imagining safety, disaster, apocalypse and survival already available to us. I am far from the first person to realize how the conventions of mainstream imagined futures replicate oppressive power structures. All manner of marginalized artists and scholars have found revolutionary potential in imagining the future differently: this is the creative project found in afrofuturisms, queer and crip futurities, and Indigenous futurisms (Taylor 2023). These futurisms–all plural, to reflect the different experiences within select communities–are typically spread across various genres of science fiction, under which post-apocalyptic imaginaries are simply one subgenre. They are also growing: as I was writing this dissertation, four editors compiled The Routledge Handbook of Co-Futurisms, a broad survey of anti-imperial and anti-colonial science fiction media. These revolutionary ideas are not my own; my role here is simply to elucidate how they challenge the futures constructed by bunker discourse in productive and constructive ways. Itemizing all the ways that these different futurities disrupt bunker discourse would require a second dissertation, but I will use this conclusion to gesture to the most relevant examples.

Unlike the rest of the dissertation, where I emphasized the sheer breadth of global disasters represented in bunker discourse, this conclusion mostly draws on examples related to climate catastrophe. This is only partly due to the relative credibility of climate catastrophe as a threat next to, for example, a magnetic pole reversal. It is also because effective responses to climate catastrophe also serve as ideal counterexamples for how bunker discourse imagines disaster. Climate catastrophe is global in scale, but it manifests as a whole network of complex, interconnected problems caused by the excesses of human consumption. Some problems are immediate, violent, and obvious (like record-breaking hurricanes and forest fires), and others take place over time in ways that are difficult for the average person to perceive (such as ocean

acidification). Bunkering up on an individual level would solve none of these problems, except perhaps by strengthening one's immediate chance of survival in the wake of a superstorm; instead, the means of effectively mitigating climate catastrophe are likely just as complicated as the problem itself, and our responses must be coordinated on appropriately varied levels.

As a final note, I would like to underline that bunker discourse is ultimately deployed to construct a feeling of safety. This feeling is so imperative that its construction can supersede everything from scientific claims to critical awareness. Simplifying the cosmic horror of neoliberal capitalism into a set of digestible conspiracies and prophecies is indeed very tempting. Bunker discourse masks its main emotional motivator—fear—under a veneer of practicality, often focusing on material tasks rather than broader societal questions. In the spirit of this affective dimension, this conclusion does not stray from these questions and occasionally takes on a more personal tone. Bunker discourse is a dangerous cultural paradigm. If I wish to offer routes to overturn it, then that means challenging every single one of its foundations—including, in this case, the impulse to muffle the emotional and existential elements of this conversation.

It turns out that writing about the apocalypse can be emotionally draining. It has involved repeatedly reiterating how the exploitative institutions of neoliberal capitalism, white supremacy, and patriarchal politics are unimaginably difficult to disassemble. It has also involved reflecting on the likelihood of the end of the world as we know it, including the potential of nuclear war, the ongoing slow decline of the biosphere due to pollution and climate change, and how ill-equipped we are to understand and handle either event. Situating the conversation in powerlessness and fear is a difficult emotional position to inhabit.

But when I say that addressing the emotional and existential elements of bunker discourse is an important task, I do not mean to return to that state of fear. Fear is what makes

digging a bunker so tempting. It is not a coincidence that mitigating fear is the only thing that bunker discourse and effective systems of disaster preparedness share. Luckily, this means that the conclusion of this dissertation is somewhat more optimistic than its preceding chapters. There are strategies of resistance and resilience available to us, and they often tie into projects that ensure greater social justice and equity. In fact, ensuring survival in the face of disaster often depends on elevating the knowledge and position of marginalized groups.

Apocalypses have a strong symbolic relationship to hope. One book I relied on heavily for this conclusion is Steven Charleston's We Survived the End of the World. Charleston is a Christian preacher, religious scholar, and Choctaw elder. The mission of his book is to look back at the apocalyptic dreams of Indigenous groups that first resisted, and then eventually survived, colonization. Charleston makes a perceptive observation that apocalyptic prophecies are often tied to hope, explicitly or implicitly. The Indigenous prophecies in Charleston's book sought paths to circumvent the scourges of colonialism. Historically, the apocalyptic prophecies of the Latter-Day Saints expressed the hope of escaping government persecution. Even the apocalyptic prophecies of bunker discourse rest on the troubling, problematic hope that societal collapse will create the exact conditions to make traditional white masculinity integral to survival. Paradoxically, the apocalyptic imaginary is constructive, in that it creates the impetus and conditions for drastic transformation. Thus, while an anti-bunker-discourse paradigm can certainly be critical, it must also move in a constructive direction—or it is simply not addressing the same epistemological practice, which is that of imagining a society so drastically different that only catastrophe could facilitate its emergence.

So, the driving question of this conclusion is this: what principles of bunker discourse must we re-imagine in order to understand disaster and coordinate our responses to it more effectively?

Importantly, many of these principles can be challenged simply by decentering the white male protagonist from the narrative. Many stories of human resilience in the face of disaster exist already, but these stories are often neglected or suppressed in bunker discourse specifically because they happened to non-white groups, often at the hands of white supremacists or colonial powers. These stories also tend to subvert the idea of a singular protagonist altogether, as most stories of resilience are collaborative. Resilience more often takes the form of community than the form of the 'lone eagle'. Similarly, acknowledging that marginalized groups have many stories of facing disaster requires acknowledging that disasters tend to impact us along established lines of social inequality. Politics does not cease to exist when the floodwaters rise; rather, they become more important than ever. The daydream that capitalism or patriarchy or the United States of America will collapse if the world is simply shaken hard enough is a futile one, and so it is worth looking at some examples of how power actually responds to crisis.

Once these principles are addressed, I turn to the principle of safety, arguably the principle that is central to bunker discourse. Bunker discourse conceives of safety as a thing that is only achievable through the construction of boundaries, preferably by constructing boundaries around the things we own. As I have pointed out, this idea is fundamentally flawed as soon as we apply it, whether we apply it to a bunker or an electric truck. This means we must examine different ways of establishing and preserving safety. A sophisticated understanding of automobile safety requires a relational epistemology: it must understand the networked interactions of cars, drivers, pedestrians, and physics. Alongside this networked approach, we

will also contemplate how some things are more secure when they are broadly available. Additionally, the bunker discourse conception of safety is contingent on ownership, particularly on ownership of land. Subjecting land to capitalist ownership has not made the land itself safer—rather, it has turned parcels of land into containers of resources, where valuables are extracted or garbage is disposed of (Liboiron 2021). As our treatment of the environment is perhaps the greatest contemporary apocalyptic concern, rethinking the way we interact with land is doubly important.

Lastly, I plan to address the pervasiveness of apocalyptic thought in progressive cultural discourses. While bunker discourse should not, in theory, appeal to those of us fighting for equity and sustainability, it can sneak into our conversations regardless. That universal applicability is what makes bunker discourse so insidious (and, incidentally, what makes it a discourse to begin with). Climate catastrophe is perhaps the most credible apocalyptic threat of our time. In the face of increasing temperatures, biodiversity loss, drought, famine, and intensifying natural disasters, it can be infuriating – and disempowering – to watch the machines of neoliberal capitalism charge forward without pause. A similar feeling might be encountered when trying to push back against the deep entrenchments of patriarchy, white supremacy, heteronormativity, and ableism, particularly during the contemporary resurgence of far-right politics. In these throes of these frustrations, the fantasy of collapse can feel comforting. It is a particularly vivid fantasy in the case of environmentalism. Apocalyptic media are greener than ever before; many apocalyptic fantasies, whether they present themselves as fiction or nonfiction, suggest that if humanity's industrial project stopped all at once, nature would take over and reclaim the earth. Unlike doomsday prepping, these rewilding fantasies are not burdened by any affiliation with right-wing

extremism. However, I argue that these fantasies may be no less harmful. A refusal of relations is almost always harmful, regardless of who is doing it or for what reason.

While I do plan to retain my critical stance toward bunker discourse, I also recognize the role of the apocalyptic imaginary in its more general application across history: it provides an opportunity to reimagine society in new and better forms. If I am proposing a discursive revolution in the apocalyptic imaginary, I think preserving this idea of dramatic societal transformation, and of finding potential on the other side of disaster, is imperative. I plan to keep my promise of ending this apocalyptic work with something constructive. I have included tentative sketches of new paradigms of disaster resilience throughout this conclusion, including some steps toward an alternate metaphor of safety by imagining what structure might be called an 'anti-bunker'.

Indigenous Apocalypses

Any interrogation of the apocalyptic imaginary should emphasize that our settler-colonial states are already built on post-apocalyptic grounds. Colonial regimes inflicted apocalyptic-level crises on North American Indigenous groups; the flourishing of Indigenous cultures and people in spite of these conditions are living exemplars of post-apocalyptic resilience. Contemporary Indigenous scholars, spiritual leaders, and artists approach the idea of the apocalypse not as a distant fantasy, but as a shared historical experience. On the one hand, Indigenous Knowledge is extremely relevant to the most pressing apocalyptic issue of our age—climate change—and it is now being acknowledged as vital to natural disaster preparation and recovery. This shared experience of apocalypse also means that Indigenous speculative fiction often imagines very

different futures, whether utopic or dystopic. The ideas expressed in Indigenous art are also well-suited to overturning the colonial principles of bunker discourse.

The central idea of Indigenous apocalyptic futurism is that of *survivance.* Indigenous scholars argue that after the end of their world through colonial genocide, resilience took the form not of survival, but of cultural persistence, which included restoring Indigenous epistemologies and relationships with space and nature. Resisting the apocalypse of colonization involves the preservation of Indigenous Knowledge and traditions in a way that encourages flourishing and rejects notions of defeat and victimhood; Indigenous scholar Gerald Vizenor calls this flourishing *survivance* (Vizenor 2008). Survivance is not the same as survival; it is, in fact, meant to be juxtaposed against it. While *survival* implies a way of being concerned only with basic subsistence, constantly teetering on the brink of extinction, *survivance* places emphasis on creative and aesthetic traditions. Survivance requires seeing Indigenous people as living, creating, and contemporary, rather than residents of the past and victims of apocalyptic tragedy. The idea of survivance thus stands in opposition to the subsistence-obsessed world of bunker discourse and its dismissive shrug towards the growth or preservation of culture.

In *We Survived the End of the World,* Choctaw Elder Steven Charleston looks at the history of survivance in the context of apocalypse, with the stated goal of searching for guidance on modern disaster. Charleston describes four Indigenous prophets from different periods of American colonization and discusses how their revelations helped foster Indigenous survivance in the face of genocide. Charleston also divides apocalyptic experiences into two movements—the revelation, and the event. The event is the apocalyptic catastrophe and its results, while the revelation (which predates the event) is the prediction of an apocalyptic event and the subsequent realization of how our lives must change in order to survive. The words of Indigenous

apocalyptic prophets were contextual responses to social and political conditions—much like all of the other apocalyptic prophecies we have discussed so far. The difference in Charleston's case is that these apocalypses actually arrived, and Indigenous groups put theories of survivance into practice. Charleston believes that the lessons from these apocalypses can be reapplied to contemporary problems.

While this route toward a critique of bunker discourse is extremely promising, I am conscious of the fact that it occupies a particular cultural position. I am guided in this element of my dissertation by Charleston's work and Max Liboiron's *Pollution is Colonialism,* which both make Indigenous ways of understanding disaster available while setting useful boundaries against the appropriation of Indigenous knowledge. Many of the ideas of Indigenous futurity are simply not 'for' settlers like me—including its core concept of survivance—but the general principles of Indigenous futurity are nonetheless invaluable in changing our understanding of disaster. Not every argument in this conclusion comes from Indigenous scholars. However, I do find that Indigenous apocalyptic thought provides the best framework for structuring a pushback against the epistemological monopolies of bunker discourse.

When bunker discourse argues that the world is on the brink of destruction, it identifies certain events and places as apocalyptic templates, while discarding other apocalyptic narratives that do not align with the narrative of bunker discourse. It is useful for bunker discourse to point to cities that have historically suffered significant catastrophe; it can then say "the apocalypse will be like that, but a thousand times worse". In *Dancing at Armageddon,* Mitchell describes supply shortages and violence during the siege of Sarajevo. The VIVOS website invokes the Rodney King riots in Los Angeles. *The Sovereign Individual* uses Detroit as an example of inevitable post-industrial decline. After 1986, Chernobyl is perhaps the most obvious "post-

apocalyptic" locale, and this is where Bradley Garrett concludes *Bunker: Building for the Endtimes*.

Using these crises as examples often involves focusing on the destruction wrought by the catastrophe itself, and ignoring both the history of the conflict and how the city went on to handle it. Dora Apel, in *Beautiful, Terrible Ruins,* says this of modern Detroit:

> To the annoyance of Detroit's residents, the city's deterioration tends to overwhelm any sense of its vitality, or, more acutely, its living population of nearly seven hundred thousand people." (Apel 2015, 3)

Depictions of Pripyat as a post-apocalyptic ghost town are equally disingenuous. Until very recently, there were around 1000 people in the nuclear exclusion zone at any given time, including everyone from tourists to photographers to scientists to IAEA inspectors and power plant staff. Just because a particular location is deemed legally "uninhabitable" does not mean that location is insulated from humanity. This became particularly clear in 2022, when the Russian army captured Chernobyl during its invasion of Ukraine. Troop movements stirred up radioactive fallout in the earth, causing several Russian soldiers to contract radiation poisoning—including one case that would prove fatal. Moreover, the vast majority of the original inhabitants of Pripyat survived the meltdown incident. Most were relocated to nearby Slavutych. Many are still alive. Some even returned to Chernobyl to assist in its post-meltdown management. As to our other "apocalyptic" locations, Los Angeles has survived repeated agitations for social justice and catastrophic fires, and Sarajevo is now a popular tourist destination, where the scars from shelling have been filled in with red resin and dubbed "Sarajevo roses". None of these areas endured these events without casualties, but all of them remain functional cogs in the machine of modernity, and all of them produced different types of knowledge and different strategies of resilience through their survivors.

However, narratives of resilience in the face of disaster are almost always erased from bunker discourse. One reason for this is that many of these narratives are stories about minorities–Indigenous groups, Black Americans, women, and queer and crip subcultures–and bringing their struggles to light can very easily undermine the fiction that white men are currently the largest victims of modernity and state power[60]. In the cases of the Rodney King riots and the collapse of Detroit (which has a population that is 75% African American or Black, at time of writing), the factors of racial justice and equity are rarely examined. Neither of these events were apocalyptic, but both involved intolerable living conditions for people of colour. Focusing on the racial justice element of these events is impossible for bunker discourse because it risks humanizing the Other and decentering the white protagonist. At the same time, systemic injustices against these groups are often not considered "disasters" worth addressing. Many of these populations have, at one time or another, been considered "already dead", or lives less worth saving. Achille Mbembe identifies these populations as the disadvantaged subjects of necropolitics—those whose lives are less valued, either due to the precarity of their existence (and thus, their proximity to death) in the first place, or because democratic governments have placed them in a 'state of exception' in which their civil rights are indefinitely suspended and their executions excused (Mbembe 2019). Other specific analyses extend this designation of 'already dead' to racial minorities in order to justify their exposure to pollution (Attebery 2023, la paperson 2013), or to black bodies rendered disposable due to their high risk of exposure to gun violence (Ellcessor 2022), or to disabled bodies, which are assumed to lead lives of suffering, not worth living (Kafer 2014). Certain bodies are considered less "alive" to begin with,

[60] The siege of Sarajevo is not a counter-example here. Minoritization and ethnic discrimination, including the ethnic cleansing of the Bosniak Muslim minority, were also significant factors in the Bosnian War and thus the siege of Sarajevo.

rendering their deaths less visible. Ironically, their continuous existence in precarious conditions renders their survival stories less remarked upon.

Another problem for bunker discourse is that nearly all stories of resilience call the methods of bunker discourse into question, because these stories tend to reflect the necessity of cooperation. The rare exceptions—solitary survival stories of the Robinson Crusoe variety—are favourites of bunker discourse, but they are far more common in fiction than reality. In real disaster scenarios, bunkering up is not usually an effective method of survival, and it is certainly not an effective method of sustaining one's culture or community. Acknowledging that interdependence is imperative undermines all the strategies bunker discourse sets out to valourize. When confronting the aftermath of 9/11, Bruce J. Clayton was forced to acknowledge that most humans try to help each other in crisis scenarios—and yet his advice in Life After Terrorism is that survivalists should do the opposite, that they are "solitary eagles" who must place their independence above the need for cooperation (Clayton 2002, 139)[61].

The purposeful disregard of knowledge outside the experiences of moderately successful white men operating under capitalism prevents bunker discourse from accessing evidence-based narratives of resilience. In other words, disadvantaged groups experience disaster quite often, and their experiences expose new ways of predicting it, preventing it, and persisting beyond it. Activist Alice Wong coined the term "disabled oracles" to reflect how disabled people can identify discriminatory policies in disaster mitigation that abled people may not see (Wong 2020). The term arose during the COVID pandemic, as disabled people already understood the

[61] Thinking of any animal as a "solitary" creature is emblematic of how insidious bunker epistemology can be, and so thoughtless cliches like this one merit challenge. Even outside the general interdependency every living creature exhibits with their environment, eagles are not solitary: mated pairs will co-parent their hatchlings for several months. Nor do they always adhere to the traditional family structure–a "throuple" of bald eagles in Illinois was livestreamed raising their hatchlings in 2019 ("This trio of eagles").

importance of things like preventative measures (wearing masks) and creating accessible spaces long before the lockdowns. This statement was also issued in response to the fact that COVID policies could lead to disabled people, as "high-risk" patients, losing access to ventilators. Alice Wong would also later use the term "disabled oracles" to refer to those who have sounded the alarm on the eugenic project of gene-editing technology. Disabled people were well-suited to predicting who would be left behind by medical technologies or pandemic policy due to their familiarity with the inequities of the healthcare system.

Recovery from any kind of catastrophe is often a much longer process than we imagine; it may require decades of continuous investment. Here, too, if we explore the stories of marginalized communities, we can find model narratives and opportunities for support and positive intervention. Detroit is no longer known exclusively for its economic decline and urban decay, but for the quality of its locally driven urban revitalization projects. Urban Detroit was left behind by the financialization of municipal governments–conditions under which impoverished or lower-income residents were not considered profitable customers. The residents of urban Detroit lacked the access to resources such as food and water that a municipality would normally provide. In response to these conditions, local networks of resilience formed to address everything from property vacancies to water shortages (Kinder 2017). Stories gathered from Detroit in the past few decades almost universally undermine the idea that survival is a practice best undertaken alone, as the most effective revitalizations have been democratic and collectivist (Ligon 2017). They also undermine the necessity of violence, even in a potentially violent situation. In one story collected by an ethnographer, a Detroit resident found the vacant property next to hers had been taken over by gang members for use as a weekend drug den. Instead of turning the gang members over to the police, she rallied her neighbours with the promise of

barbecue, and together they dismantled the doors, stairs, and fixtures in the empty house, and used the spare wood to barricade the entrances. Once the gang members returned, they had no way into the house, but they also had no singular culprit to target for retaliation (Kinder 2017). A potentially violent situation was resolved with clever thinking, community participation, and a dash of property crime.

Stories like these prove that bunker discourse is misleading, if not fundamentally wrong, in its core assumptions. Disasters are more likely to have nuanced local impacts than instigate global collapses; marginalized people, not governments, are their most common victims; and projects of resilience and restoration are not only more effective than giving in and bunkering down, but they are also better undertaken together.

Catastrophe and inequality

The collapse of political, social, and economic institutions is critical to the pleasure of the post-apocalyptic fantasy. The fantasy of collapse offers freedom from state tyranny, alienation of labour, and global interdependence that attracts dreamers from all corners. The popular idea that this will result in an anarchic survival-of-the-fittest situation is central enough to the fantasy to have its own acronym—WROL, or "without rule of law". And yet this is also one of the places where bunker discourse could not be more wrong. The idea that any catastrophe—plague, war, natural disaster—could lead to a total collapse of law and order on a significant global scale is historically unfounded[62]. Instead of posing a threat to political power, disasters typically function

[62] As mentioned in the introduction, this particular historical misconception is addressed in *Questioning Collapse,* an essay collection edited by Patricia McAnany and Norman Yoffee. This collection revisits a number of renowned historical "collapses", such as the depopulation of Easter Island, in order to demonstrate how these catastrophes were more often reorganizations of power than collapses. These authors explain that "resilience in the face of societal crises, rather than collapse, is the leitmotif of civilization until now" (2010, 11).

as a justification for its deployment. Examples of this are endless, and not all of them are negative. Governments took charge of distributing COVID vaccines, implementing lockdown and masking laws, and deciding when those restrictions would be lifted—and, generally speaking, stricter laws meant lower rates of infection and mortality. Yet it is also very often true that catastrophe provides an excuse to strengthen political control over a particular sector. The Rodney King and Black Lives Matter protests were characterized as violent catastrophes in order to legitimize the use of military force against civilians. The September 11th attacks ushered in an era of invasive security and surveillance procedures domestically, and served as justification to start wars abroad[63].

In *The Shock Doctrine,* Naomi Klein argues that neoliberal political movements have used catastrophe as leverage to uproot social services and instill free-market systems, "finishing the job of the original disaster by erasing what was left of the public sphere and rooted communities" (2007, 8). This strategy was first suggested by a theorist we have already encountered: one of the founding thinkers of apocalyptic economics, Milton Friedman.

> For more than three decades, Friedman and his powerful followers had been perfecting [a] strategy: waiting for a major crisis, then selling off pieces of the state to private players while citizens were still reeling from the shock, then quickly making the "reforms" permanent (Klein 2007, 6)

Klein's work reveals that the consolidation of power after disaster is not simply automatic, but a known quantity that has been exploited for gain. It is also undoubtedly true that disasters often reinforce systemic inequality rather than wiping it away. Catastrophic climate change poses a more significant threat to people living in poverty and in the Global South, and to Indigenous

[63] This relationship between disaster and power means that certain conditions can be positioned *as* disasters in order to incite government action. White supremacist movements leverage this rhetoric by reframing non-white immigration as a catastrophe, even describing refugees using the language of disaster ("waves" or "floods" of refugees). This legitimates the use of force and detention against immigrants in order to avert this disaster by any means.

groups. Disaster response may also exacerbate pre-existing inequality, from the obvious ways—like the American government neglecting the AIDS crisis while it was thought to only impact gay men—to subtler ones—as in how the victims of Hurricane Katrina were often characterized as either "looters" or "survivors" based on whether they were black or white (Rhodes 2010). This is often because social inequality is compounded by infrastructural inequality and vice-versa. Hurricane Katrina was so devastating in part because the levees were shoddily designed and underfunded, and so lethal in part because many lower-income families could not afford to evacuate. Impoverished people and Indigenous groups are often pushed to live on less desirable land, which may be more prone to crop failure, flooding, fire, or other natural disasters. Furthermore, "rural livelihoods that depend on subsistence activities are vulnerable to even slight variations in weather and are therefore particularly sensitive to climate change." (Lambert & Scott 2019, 8). Natural disasters have even been found to impact women disproportionately (Neumayer and Plümper 2007). And we have also seen that the inverse is true: wealthy white men are able to move more freely between different locales to escape disaster, and they have the resources to rebuild. Richard Branson's private resort on Necker Island was devastated by Hurricane Irma and then restored and reopened within two and a half years (latteluxurynews, 2021).

Thus, the narrative that a significant disaster could bring about a long-term global collapse of order goes hand in hand with the unfounded idea of disaster as a social equalizer. Because these concepts are well understood by experts in disaster preparation and environmental activism, I am interested in repairing the breach between this gathered evidence and apocalyptic imaginaries as represented in fiction. Fictional texts are just as valuable in discursive analysis as non-fictional texts, and in apocalyptic survivalism the barrier between the two is particularly

thin. Therefore, it is lamentable that post-apocalyptic fantasies are often also post-racial and post-feminist, and social issues are detached from racial or gendered contexts[64]. Contemporary social issues can also be rendered unimportant by reverting the politics of a fictional space to 'survival of the fittest'. The assumption is that nobody will care about race or gender presentation when there are zombies at the door.

Land and stewardship

Bunker media logic presents safety as a matter of isolation and impermeability, and this model relies on colonialist logics of land ownership. Under our colonial model, ownership of land confers the right to defend one's property, even to the point of murdering trespassers. It is therefore the very ownership of land that empowers one to use violence and thus secures the property on that land. Bunker discourse assumes that this logic of ownership will persist beyond societal collapse, and thus colonial land relations also justify the violence of the post-apocalyptic imaginary. Recall that Clayton emphasizes that the purpose of arming the survivalist is so the survivalist can *defend* their bunker, and any violent action in defense of that bunker is assumed to be ethically justifiable, even imperative. In a broad sense, the right to property and land in the colonialist model surpasses the right to life, and it does so often and indiscriminately.

The bunker discourse imaginary also benefits from colonial land relations in more concrete ways. Before VIVOS xPoint was a doomsday compound, it was a part of the territory signed over to the Očhéthi Šakówiŋ (Sioux) nation in the Treaty of Fort Laramie in 1868. VIVOS xPoint sits just south of the Black Hills, which were violently seized by American

[64] As one example, the world of *Horizon Zero Dawn* features slavery as a part of its recent past, but as the perpetrators and victims of the slavery system are depicted as mixed-race, the experience of slavery becomes entirely detached from the question of race.

prospectors after rumours of a gold rush in the 1870s. After a nearly sixty-year litigation in the 20th century, the Supreme Court took the rare step of recognizing that the Black Hills had been stolen from the Sioux. Even describing this land as "stolen" presents an epistemological problem; this suggests that the land was "owned" by Indigenous groups in the same way colonizers would seek to own it. In the settlement of Sioux Nation vs United States, the Sioux were granted monetary recompense, which has been accumulating interest since the decision in 1980. The Sioux have refused the money—which now totals over a billion dollars—because the Black Hills are sacred, not a commodity that can be traded, and accepting the money would legally forfeit their claim to the land[65].

Ironically–or perhaps not, as so many of the principles of bunker discourse are self-defeating–the colonial model of ownership has actually brought us much closer to apocalypse due to its persistent, profit-driven mishandling of land. Ownership of land confers the right to determine how resources in that area are extracted, or what contaminants can enter it, and so resources have been unsustainably removed, and pollution indiscriminately spread. Alongside this large-scale disruption of the carbon cycle, we have created a number of small-scale apocalypses through the unsafe disposal or transportation of hazardous waste—oil spills, coal fires, chemical contaminations, and nuclear meltdowns.

The colonialist model primarily understands land as an inert collection of resources—or as standing reserve, in the Heideggarian sense. I would like to push the metaphor further, and suggest that land is often viewed as a *container* for its resources—in other words, land is seen as a neutral storage medium. Land might be valuable because it already "holds" water, timber, minerals or oil, or it might be usable as a container for pollution and waste. As Liboiron argues,

[65] It is difficult to find the exact location of VIVOS's other American property, VIVOS Indiana; Fortitude Ranch is similarly secretive about its exact locations.

even when Western science attempts to approach the problem of pollution in the name of environmentalism and sustainability, it interprets land as a container; it measures the capacity each area has to absorb an "acceptable" amount of toxic chemicals or radioactive particles (2021). This also makes land *itself* somewhat fungible; distinctions come only from what wealth-generating potential the land *holds*. In colonial thought, parcels of land can be appraised and exchanged–either for each other or for other currencies. We can see this reflected in bunker discourse because the bunker is agnostic to its biome; it is imagined that an underground fortress will be equally as effective in Hawaii as it is in South Dakota[66].

Importantly, the role that ownership plays in colonial land relations also exacerbates environmentally-related social inequalities, and thus, the inequitable impacts of disaster (Holifield 2012). As an example, the US Superfund environmental remediation program was developed to clean over one thousand sites that have been impacted by hazardous waste–however, the distribution of superfund sites was historically biased toward white, wealthy neighbourhoods (Hird 1993, O'Neil 2007). Hazard remediation is also beholden to the same metrics of capacity identified by Liboiron: after a certain point, an area of land is considered "clean enough", and therefore no longer in need of attention. This can happen even if a natural disaster would pose a significant threat of re-releasing the hazards in question, as in many cases, these chemical hazards can only be *contained* rather than eliminated (Summers et al. 2021). Putting thresholds on disaster remediation, whether those thresholds are marked in dollars or parts per million, leaves the door open for governments and corporations to exit the scene at those thresholds. Exxon paid off the legal damages caused by the 1989 Exxon-Valdez oil spill by

[66] Bunkers are also products of the American cultural imagination, and so another unfounded assumption of homogeneity is the assumption that an American cultural product will suit the survival strategies of Canada, Switzerland, New Zealand, and so on.

the year 2009–but there are layers of spilled oil under the beaches of Prince William Sound to this day (Lyndon 2019). And, lest we lose sight of our target, let us not forget that the bunker discourse fantasy recommends a very specific response to toxic hazard disasters: build a wall between yourself and the contaminated area, and stay inside where it will be safe. It's the dirt that does it.

With this in mind, rethinking land relations is an important element of this dissertation not only because it disrupts a fundamental element of bunker discourse, but also because it is an important step toward disaster mitigation and social equity. Both Charleston and Liboiron emphasize the need for more compassionate and responsible land relations. Liboiron draws a distinction between *land*, the inert, colonial, standing-reserve definition of land under colonial capitalism, and *Land*, the living, historically embedded and spiritually significant places tended by indigenous people. This distinction encourages more personal, contextual, and historically engaged relationships with each unique place. Similarly, Charleston reflects on the teachings of the Wanapum prophet Smohalla. Smohalla's principles of resistance were grounded in the Indigenous relationship to land, and distinctly opposed to the settler-colonial understanding of land as an inert container for resources. Smohalla instructed his followers to resist technologies of resource extraction–in particular, firearms and farming technologies, which disrupted established means of hunting and gathering–on the grounds that they violated the Indigenous relationship with the earth. In his speeches, Smohalla and his followers often refer to the earth as their mother, such as equating mining with digging bones out from under his mother's skin (Charleston 2023).

Here, any reader coming from a western tradition must proceed carefully. Most forms of North American Indigenous land relations understand land as alive, with its own agency and

spirit, and this is often expressed in Indigenous testimonies by referring to land as one's mother. When we as settlers attempt to transform our land relations, and we are supplied with this sketch of Indigenous understanding, it can be tempting to recklessly personify nature in ways that will be at best reductive and, at worst, counterproductive. Personifying nature as feminine is already part of the western tradition, but this personification has a very different effect in a culture that categorically devalues both women and nature, and that sees nature and civilization as separate, antagonistic entities. However, Indigenous scholarship sees the relationship between womanhood and land as essential, and so this is not a relationship that can be deconstructed while remaining true to Indigenous thought (Watts 2013). At the same time, it may present frustrations to queer settler scholars who might need to think through Western sex and gender construction in their own futurities[67]. While we do need to revise our relationship to land and construct an anticolonial one, we cannot clumsily carve a shortcut to that revision out of Indigenous Knowledge (Watts 2013).

That said, this idea of a familial relationship with land can still serve as a starting direction. Charleston, through the words of one of Smohalla's followers, frames land as a mother figure, but also as a party in a negotiation:

> Young Chief is pointing to the missing voice in the land negotiation. He is asking if the earth herself has anything to say in the conversation. He is inviting the governor to notice that a key player has not been invited to the table. (2023)

This idea of land or nature as a presence at a negotiation imbues it with certain traits of consciousness: with its own understanding of value, desires to fulfill, dependencies to consider,

[67] These sorts of incommensurabilities do not discredit either critical formulation, and incommensurability is often discussed in different critical cultural disciplines—particularly in decolonial work, which may be pointedly incompatible with other progressive social movements like queer liberation (la paperson discusses this, as does Liboiron, as does Kafer). This is another reason why I am emphasizing a multiplicity of post-apocalyptic and futurist narratives throughout this conclusion, and why all the futurities in *The Handbook of Co-Futurisms* are plural. We can, and in fact *must,* work with these incommensurabilities instead of erasing them.

and sacrifices it would never willingly make. However, the value of this specific type of personification is not in prescribing all land a singular identity with unified demands, but rather understanding that each space has its *own* identity and thus its own desires. This identity is built from the land's soil and rocks and water, its plant and animal life, and its history with its Indigenous partners. The identity of each place is also not purely historical, but rather evolving and alive, and Indigenous knowledge evolves with it. Indigenous scholarship has acknowledged that some western theories of more-than-human networks—such as those proposed by Latour or Haraway—are moving toward theoretical integrations of the more-than-human world without completely grasping the Indigenous relationship with it (Watts 2013). Typically, these theories still see elements of the land, like dirt, as less conscious or agential, and therefore somehow subordinate to human consciousness. In Indigenous thought, inanimate agents also possess willpower and consciousness.

This might be a difficult leap for some readers to make, specifically for those raised in skeptical Western traditions. Liboiron's instructions on anticolonial science are useful here. In particular, their approach does not try to impose a singular epistemological structure on anticolonial land relations, but rather suggests sketching out anticolonial processes through critical thought and persistent action. This requires thinking about colonial infrastructures and then creating protocol to topple or elude those infrastructures. Protocol is a detailed way of performing processes that reflects value, as they "reinforce and perpetuate what is right and meaningful in an activity." (Liboiron 2021, 122). Even if I can't quite wrap my head around the idea of land as a conscious being yet, I can perform protocols that "invite it to the table". Another way Indigenous scholar Shawn Wilson has put the Indigenous worldview is that relationships are reality, in a way that collapses ontology and epistemology (Wilson 2008, 7). Existence is

constituted entirely by relationships, including the relationships between us and the earth, and thus we are obligated to orient ourselves toward the maintenance of those relationships. We are not in an unfriendly or coercive negotiation with land; we are in a relationship with it, which will require maintenance through thoughtful action. Charleston says that land is "a conscious partner in the covenant of life" (2023). This covenant can be preserved with action even if the exact nature of it escapes description. Hence, protocol.

Alongside its role in maintaining these relationships, relationship-driven land relations also help address one of the overarching questions of this conclusion, which is the question of 'feeling safe'. In their discussion of protocol, Liboiron says, "yes, we think about (and survive) genocide…but when you're standing at a bench with a beaker in your hand, those questions are hard to bring to earth" (2021, 122). When confronted with apocalyptic-level trauma, protocol can serve as stabilization. It is calming to have a concrete process to follow, and helpful to address structural problems in incremental yet impactful ways. Many of the apocalyptic prophets in Charleston's book created songs and dances to pair with their teachings–in part, these performances are tools for memory and dispersion, but they also create ceremonial processes that acknowledge new struggles and sanctify the knowledge to overcome them. They, too, are protocol. And the therapeutic utility of protocol is also what preppers have been tapping into via their shopping lists or firearm-handling courses. These processes also reduce existential terror to a series of manageable steps. However, because protocol reflects what the performer considers "right and meaningful", prepper protocols—keeping your bunker secret, practicing firearm defense drills—reinforce the importance of violent masculinity, colonial land relations, isolationism, and the hoarding of material wealth. Therefore, when we seek to change our

relationship to land in survival and disaster preparation contexts, the protocols we adopt must reinforce a different kind of meaning.

An anti-colonial disaster preparation protocol should deepen one's understanding of place, risk, and resilience. This still leaves the door open for some established disaster preparation practices, as they are not strictly colonial on their own. It is not discursively harmful to keep a month's worth of clean water and non-perishable food on hand, or to familiarize yourself with disaster warning systems and evacuation policies. However, there is more to be done. When you move to a new place, learn about the history and biology that gives your place its character. Learn which Indigenous groups live there and which have been displaced[68]. Learn where your water comes from, where your food comes from, and promote local and Indigenous sovereignty over those resources. Learn what kind of earth your house was built on. Learn what people are actively doing to reduce the impact of future disasters in the area. And recognize that insisting on an Indigenous role in disaster preparation in your community should always be part of your process.

On a practical level, the necessity of Indigenous participation in disaster preparation and resilience has already been acknowledged by western experts. Indigenous Knowledge involves an irreducibly local understanding of particular natural worlds and their histories (Lambert & Scott 2019), and disaster mitigation strategies are often part of that knowledge. Indeed, Indigenous knowledge has proven extremely effective in reducing casualties and damage from natural disasters in the past–despite the fact that colonial infrastructures often expose Indigenous groups to outsize risk from natural disasters (Lambert & Scott 2019). The UN's Sendai

[68] Native Land Digital, a Canadian not-for-profit organization, maintains an interactive map of Indigenous territories at native-land.ca. The website also includes a teacher's guide that addresses the challenge of using maps, which are artifacts of colonialism, to explore this history.

Framework for Disaster Risk Reduction now includes provisions that acknowledge the role of Indigenous Knowledge. This kind of cooperation can of course be organized on a governmental level, but it—along with the locality of disaster preparation—suggests that we should also be able to take smaller steps to facilitate it. Preparing for disaster and changing our land relations, luckily, can be achieved through similar protocols.

With so much emphasis on localized Indigenous Knowledge, a local example may be illustrative. I am writing the final segments of this dissertation in my hometown in Victoria, British Columbia, Canada[69]. The incidence of wildfires in this heavily forested province has increased dramatically due to drought induced by climate change. After two years of record-breaking wildfires in 2017 and 2018, each devouring over ten thousand square kilometers of forest, the provincial government has recognized the role of Indigenous groups in wildfire prevention (Brend 2022). In the centuries before colonization, the Interior Salish practiced cultural burning, which would clear the forests of the dry leaf litter that allows wildfires to spark and spread. 18th century settlers banned the practice of cultural burning, but as our forests get drier and hotter, these burns have become increasingly invaluable in wildfire prevention. The practice of cultural burning is being revived here–most notably by the Interior Salish Fire Keepers Society, founded by Joe Gilchrist–but is still heavily constrained by governmental red tape and, more broadly, a lack of public knowledge that some fires are good for the forest. Neighbourhood complaints are sometimes enough to cut cultural burning practices short (Gilchrist 2023). In this case, Indigenous Knowledge preserved a sophisticated understanding of the relationship between fire and the regeneration of forested land–an understanding that proved to be three hundred years ahead of colonial science and politics. Cultural burns are still restricted

[69] On the traditional lands of the lək̓ʷəŋən (pronounced Lekwungen) speaking people, currently represented by the Songhees nation.

by colonial policies, which limits their effectiveness, and First Nations groups often live in or near fire-prone forests that puts them in more danger from wildfires than most other Canadians (Gilchrist 2023). B.C.'s firefighters are now coordinating with the Salish Fire Keepers, but there are still legal and social barriers preventing this coalition from performing at their complete effectiveness. Hopefully this tense web of relations can strengthen over time.

Lastly, there is one specific transformation that this change in our relationship with land should facilitate, one that is relevant to the apocalyptic imaginary. In this formulation—acknowledging our obligations to land—bunkering becomes essentially unthinkable. We cannot build a wall between ourselves and the land, because regardless of our knowledge of it, we live on and with the land whether we like it or not. This relationship with land persists even when that dirt is poisoned by oil, chemicals, or radiation. In our colonial capitalist formulation, land can be treated much like the 'already-dead' bodies discussed above—doomed to destruction, therefore not worth mourning. la paperson calls this land terra sacer, or 'sacrificed land', which is any land deemed toxic or empty enough to justify massive transformative violence against the landscape. la paperson uses the example of ghettos, which are often characterized as contemporary ruins in order to justify bulldozing them to the ground (2013). However, as production, capitalism, and catastrophe persist, ghettos, tainted water tables, oil slicks, and other 'intoxicated' lands are inevitably created. As an extension of accepting our interdependency with land, Stina Atteberry advocates for exploring intoxicated land as a place where "new forms of posthuman kingship, obligation, and futurity emerge" (2023, 24). She points to the art of Bunky Echo-Hawk as an embodiment of this particular intoxicated futurity, describing how his figures become more-than-human cyborgs, restructuring the Indigenous relationship with land and reappropriated imperial technology in order to account for our bonding through toxicity. This

viewpoint is particularly illuminating when contrasted to our discussion of Superfund sites and the Exxon-Valdez. We can remove Superfund sites from the list of government concerns, but we cannot remove ourselves from our relationship with land. This perspective encourages us to see natural disasters or chemical disasters not as deal-breakers or land-killers, but as long-term transformations of this relationship. Disasters often work this way already, even if the perspectives of colonial capitalism or western science obfuscate these ongoing commitments. Scientists, Indigenous groups, and settlers in Prince William sound are continuing to learn about and adapt to the presence of oil under their beaches (Lydon 2019). Scientists continue to supervise Chernobyl, and the sarcophagus around the no. 4 reactor will need to be replaced in a thousand years' time, regardless of costs. We do not "destroy" land when we poison it in these ways; we create new obligations to it.

Figure 14. Bunky Echo-Hawk's Inheriting the Legacy, painted 2004. ByArcadia, accessed March 26, 2025. Retrieved from https://www.byarcadia.org/post/transferring-native-artwork-into-modernity-bunky-echo-hawk

Technology and Knowledge

So far, I have suggested a handful of revisions to our understanding of disaster. Persisting in the wake of disaster is often a community effort rather than a solitary one; disasters tend to exacerbate power imbalances and social differences rather than solve them; disaster response can be more effective when it is bespoke, locally focused, and Indigenous-led; and this local focus demands a more thoughtful relationship with land. Many of these statements challenge the assumptions of bunker discourse. In this subsequent section, the bunker itself is at issue. I chose

the name *bunker* discourse because, regardless of the presence or absence of a literal underground shelter, the bunker provides the perfect symbol of the mentality behind this response to disaster. The bunker argues that safety is best achieved through isolation and segregation, and this is true regardless of what is being isolated. Your family is the safest when separated from other families; your wealth is safest when the government can't touch it; your food is safest in vacuum-sealed packaging. In this way, bunker discourse is an argument for safety technologies being a subset of storage technologies. This means that reimagining safety and/or storage technologies offer another effective line of attack against bunker discourse–and it is another case in which historical examples exist that unsettle its core assumptions. Therefore, the key question in this section is this: where should we look for alternative conceptualizations of storage technology or safety technology? Importantly, safety and storage are not objectionable terms on their own: disaster response is still an attempt to ensure safety[70], and "storage" is simply a narrow, object-oriented means of preservation–also a reasonable goal. With that in mind, how can we use these alternatives in preparation for disaster?

Consider: I have already pointed out that Indigenous Knowledge is one of the most important contributions to disaster mitigation. Western science has also accumulated other types of knowledge about disaster. There is, even by my own admission, a significant body of survivalist knowledge–such as Howard Ruff's careful caloric breakdown of an apocalyptic food storage program–that might be useful. So how do we "secure" this knowledge?

At North Carolina State University's Hunt Library, the books are primarily handled by a multi-million-dollar "Book Bot". This Book Bot moves on tracks in a secure subterranean

[70] An important reminder: *safety* is both an actual structure *and* an affective response. Therefore, this reconceptualization is as much about fostering the emotion of safety as it is about exploring alternative technologies. In order to make a proper dent in bunker discourse, these revisions must be both practical *and* convincing.

warehouse, where all the Library volumes are stored in metal lockboxes. I know this because anyone in the Library can stand at a window on the first floor and watch Book Bot at work. Book Bot is another result of bunkerish thinking. The books in its domain are certainly secure–the lockbox arrangement allegedly protects books from theft and damage–but they are also considerably less accessible. Students can no longer browse a shelf and stumble upon useful neighbouring texts, and if Book Bot should be down for maintenance, or if the power grid of Raleigh should fail in some catastrophic EMP attack, it would be difficult, if not impossible, to retrieve most of the books from Book Bot's bunker. In terms of storing *knowledge*–here, literalized in book form–the Book Bot is neither sustainable nor reliable, but actually quite exclusionary. In most situations, "securing knowledge" does not usually mean sequestering it, unless it is in reference to national intelligence; securing knowledge more often refers to preserving it from the danger of being forgotten.

For example, much of the Indigenous Knowledge I have been referencing here is passed down through oral tradition. In his book *We Survived the End of the World,* Charleston describes the teachings of various apocalyptic prophets from different Indigenous groups. Charleston emphasizes that his ancestors stored much of this knowledge in songs and dance–his ancestors "sang and danced their way through the apocalypse." (2023). Rhythm and music are reliable tools for stimulating memory. Charleston is able to reiterate the teachings of these Indigenous prophets with confidence because they were repeatedly performed and retold. One of the apocalyptic prophets he discusses is Wovoka of the Paiute:

> As late as 1924, for example, when Wovoka was older, he was invited…to visit the outdoor set of a Western movie. When he arrived, the Native Americans who had been hired as extras for the movie gathered around him and showed him great reverence, because they had all heard of his teachings and they remembered what he had said.

And again, while settlers do not have identical methods of knowledge storage available to us, we have used similar methods quite productively in the past. The idea of public knowledge is very well explored–but here I wish to emphasize it as a method of *securing* knowledge. Security through proliferation is, in fact, something anyone reading this dissertation (promptly) should be familiar with. We know now, from our recent experience of a global pandemic, that the swift distribution of information (the importance of mask-wearing, or the free exchange of vaccine research) was key to eventually mitigating the effects and spread of COVID.

One might argue that knowledge can be preserved through proliferation because it is not material, and concrete things are better preserved in bunkers. This counterargument is somewhat faulty from the start—it neglects kinaesthetic knowledge, or types of knowledge that are intimately tied to particular material artifacts (such as knitting, or driving, or computer programming). However, it is also faulty because certain material objects are best preserved through proliferation. An illustrative example of this is food security. Food security is a key problem to address in a world that will increasingly be impacted by drought. Our agricultural and food production systems could also stand to be revised, considering the exceptional waste created by the current system and the conditions forced upon both animals and agricultural labourers. It is a problem that can be addressed in part by Western technologies, such as gene editing to create drought-resistant corn, but it is also an area that could benefit from Indigenous Knowledge of local plant cultures. (And it is also an area where Indigenous Knowledge might once again be repurposed for colonial exploitation[71]).

[71] Appropriation is heinously common in survivalism, particularly eco-conscious survivalism (la paperson 2023). For example, growing Indigenous plants for food is often seen as an environmentally friendly gesture to stabilize the local ecosystem, and thus this practice is often advocated for by green-minded survivalists. However, local food "fads" can raise the price of seeds and otherwise limit Indigenous access to traditional foods. If eco-conscious survivalism does not acknowledge the other people who live on the land–especially the people who have stewarded it for centuries–then it is simply self-centred survivalism.

We can pair the idea of security through proliferation with the previous section's emphasis on locality to create another paradigm; security might be best achieved through iterative repetition, by passing around a single idea or technology and iterating on it to help it adapt to a local climate. This is where the idea of food security transforms into food sovereignty– not only having a stable source of food, but also having control over one's food source, which should be both sustainable and culturally appropriate. Biologists and ecologists advocate for what is called in-situ conservation, which is the practice of "grow[ing] and maintain[ing] ancestral cultivars of diverse crop species, driven by farmers and located on ancestral land." (de Haan 2009, 24). Genetic diversity in crops is a valuable tool for disaster resilience, both because it helps resist crop blights and because different cultivars (strains) of crops may be resilient to different environmental conditions (Meldrum et al. 2018, de Haan 2009). The continued cultivation of Indigenous crops on small scales aids in "maintaining dynamic Indigenous Knowledge systems", which are also key in disaster resilience (de Haan 2009, 24).

It is interesting to compare in-situ crop conservation with one of the more democratically minded bunkers: the Svalbard Global Seed Vault. The Seed Vault is intended to serve humanity in general, but it follows the logic of bunker discourse. It contains over one million samples of different cultivars, which are kept secure and refrigerated in case of global catastrophe. Since the vault's grand opening in 2008, seeds have in fact been withdrawn from the vault to restore threatened crops—on a grand total of two occasions[72]. The goal of the Global Seed Vault is very admirable, and it does have utility in rare cases, but on a year-to-year basis, it does nowhere near as much work in preserving crop diversity (and feeding people) as do the millions of farmers

[72] On both occasions, ICARDA (the International Centre for Agricultural Research in Dry Areas) extracted seeds that were endangered by the Syrian civil war. ICARDA was able to grow and multiply the seeds and later return samples to the Svalbard vault.

who practice in-situ conservation. Crops can be stored in a bunkerish manner—frozen, secure, and only accessible to whichever group deposited the seeds in the first place. However, the same way a language is best preserved when it is regularly spoken, crops are best preserved when they are grown. This living, ongoing method of preservation promotes more active adaptations to more common disasters, both in terms of crop evolution and knowledge exchange.

A new understanding of safety and storage requires this kind of context-sensitive revision. It requires a greater consciousness of what we are storing, and how we are storing it. In prepper discourse, isolation and security are synonymous, to the point where even knowledge is somewhat jealously guarded. While preppers will teach each other to skin goats or pickle vegetables[73], their discourse comes with built-in mechanisms for refusing to spread that knowledge further. Telling your neighbours about your bunker might put you in jeopardy after the end of the world. And once the end arrives, the unprepared are always imagined as too far gone to be students; they are only threats to the prepper's stored resources, rather than potential apprentices and eventual cooperators. Truly disaster-resilient technologies are those that are simple, shareable, replicable, and adaptable. This is not always the case—I fear scientific complexity may hamper the post-apocalyptic pig insulin farm—but it should always be the goal. If complex medical technologies can only be manufactured in specialized circumstances, then ease and sustainability of distribution becomes the next priority.

As a final note, many of these ideas are well established in disaster preparedness research and organizations, but they do not appear as often in disaster media. They are particularly uncommon in prepper fantasies, whether those take the shape of instructional volumes or video games. Opportunities exist here to reimagine survival as a networked, collaborative experience,

[73] A skeptic might note that some will only do this for profit, as many prepper personalities run paid workshops, online courses, or paid subscription newsletters.

rather than an isolated and combative one. Before his death in 2021, Canadian survivalist Bruce Beach attempted to develop a universal auxiliary language for post-apocalyptic use (Elliott 2021). While Beach lacked the resources and expertise to complete his language, the idea was illuminating: it speaks to the types of challenges one might encounter when trying to survive collaboratively. How do you share knowledge or trade resources with someone who does not share your language? This is a question that could be contemplated in survivalist literature—and may present an interesting opportunity for authors, filmmakers, or game designers, as well[74].

The world is (not) too much with us

The purpose of this conclusion so far has been to address the elements of bunker discourse that relate to our conceptions of safety and disaster. However, this is obviously not the grandest narrative with which bunker discourse engages. Central to the bunker discourse imaginary is the regenerative possibility of annihilation found in the popular idea of apocalypse. This, too, merits some kind of challenge.

However, the apocalyptic past/present and the apocalyptic future are very different animals. The apocalyptic future is the apocalypse the current dominant culture likes to explore. It involves the symbolic annihilation of whichever social structure the culture in question believes is on the verge of collapse. Meanwhile, the apocalyptic past and present is found in the stories of those who lived through, or are living through, apocalyptic events, of which Indigenous genocide

[74] There are some examples of using limited communication as play material in digital games that could serve as models here. The 2012 game *Journey* is a short multiplayer game in which players can only communicate via a single chirping noise, which will also display a glowing symbol above the player's head. Online player interactions in FromSoftware games like *Dark Souls* and *Elden Ring* involve a catalogue of shared gestures, and players can leave messages for each other by choosing from a restricted catalogue of words.

has been my primary example. The apocalyptic past/present are connected here because the survivors of the apocalypse persist, and have learned how to flourish in dire circumstances.

These functions of apocalypse are larger than bunker discourse. Bunker discourse specifically facilitates the regeneration of the cultural position of white American heteropatriarchy, and not every apocalyptic future does this. For this reason, I do not see the overall metaphorical role of apocalypse as something that needs to be overturned. Apocalyptic pasts and presents are vital to our understandings of disaster and resilience. They are the stories we have been referring to throughout this conclusion. With this experience of apocalypse in hand, many strains of critical cultural work have begun to explore apocalyptic survival as a metaphor for community-building. Of course these understandings of apocalyptic pasts and presents become tangled up with the future, in that they often shape ways of moving forward and inform the apocalyptic or futurist fictions in different genres.

The apocalypses of the future, however, merit more consideration. Apocalypses of the future are rhetorical figurations, and thus always cleaner and more complete than the apocalypses of the past and present. They are more comfortingly absolute, and uncannily discerning about who lives and who dies. They should rarely be taken seriously as factual predictions, but always taken seriously as statements of political orientation and intent. It is because of their absoluteness that I am wary of the tendency of critical cultural work to dip into apocalyptic fantasy, and with it, into bunker discourse. Of course every avenue of cultural criticism calls for the disassembly of oppressive power structures in some manner, and this often translates into apocalyptic imaginaries or the use of apocalyptic language. This work is very often productive, and some of it has structured this dissertation.

But there is also a rare tendency for apocalyptic critical cultural imaginaries to veer into the logic of bunker discourse, seeking to construct freedom or safety through violence and exclusion. Sometimes the violence is unintentionally conducted against different marginalized groups; sometimes it is conducted against humanity as a whole. The authors of "Slavery is a Metaphor" note that decolonial critics Tuck and McKenzie tip over into a "fleeting accelerationist fantasy" in one of their works (Tapji Garba and Sara-Maria Sorentino 2020). Tuck and McKenzie claim that "decolonization may be something the land does on its own behalf, even if humans are too deluded or delayed to make their own needed changes" (Tuck and McKenzie 2015, xv). To me, however, the work most representative of this tendency is Lee Edelman's No Future, the polemic that codifies queer pessimism. Edelman's No Future advocates for a rejection of the future as represented by the white child, and insists that queerness should instead embrace its role as the death of the future–explicitly with the goal of unmaking the dominant social order. Queer pessimism in general, and No Future in particular, have been taken to task for a number of failures. In particular, the privileging of whiteness in Edelman's theorizations does not adequately consider the symbolic roles of black and brown children (Bliss 2015, Muñoz 2009). Edelman's approach stops him from recognizing coalitions, alternate readings, even things like the queer disruptive potential of reproductive technologies. The totalizing approach of Edelman's work enshrines white futurity as the sole function of politics, and the cis white gay man as its contrary apocalyptic force.

This passage from Pollution is Colonialism stuck with me:

> Often I hear scholars and activists alike talking as if capitalism (or patriarchy or racism, but mostly capitalism) is a solid monolith that we must dash our soft bodies against, to little avail. But that characterization gives capitalism and colonialism more power than they merit by erasing not only their diversity, but also the patchiness, the unevenness, and the failures of those systems to fully reproduce themselves. It erases the other kinds of economies and L/land relations

> that happen within, alongside, and in spite of capitalism, the university, and colonialism. So let's not. (Liboiron 2021, 130)

While Liboiron is specifically discussing anticolonial work here, this same logic can be reapplied to critical cultural theories, and thus this passage explains why I find approaches like Edelman's frustrating. If we do envision opposition to capitalism, patriarchy, or white supremacy as an attack on a "solid monolith", it can be tempting to suggest throwing bombs instead of bodies, both literally and theoretically. This is where *No Future* sits: attacking the white straight monolith with white gay bodies, a monolith that must either topple completely or exist forever, with no eye toward other subject positions, or even alternative constructions of sexuality. Antiutopian theorizations have a tendency to totalize–and just like actual disasters, the impacts on other minority groups are underreported.

Case studies that illustrate this point already exist in the world of environmental activism. Environmental catastrophe is now an everyday reality for the planet, and this change makes the fantasy of toppling our infrastructures of production very tempting. This desire has been co-opted by extremist movements, who seek to redirect our justifiable frustrations with pollution toward scapegoated Others–or humanity as a whole.

When discussing environmental justice, a temptation emerges to wish for earth to revolt and punish all human life. There is a whole genre of human extinction fantasy predicated on the idea that the natural world will 'bounce back' without humanity, exemplified by the book *The World Without Us.* In this book, journalist Alan Weisman paints an elaborate picture of vegetation shattering concrete, slowly reclaiming all that we have built. This seems like a harmless, soothing fantasy—until Weisman suggests population control as a means of dealing with climate crisis. Population control is a political practice with a deeply racist and classist history and yet it is often discussed uncritically, or even taught in environmental humanities

classes, under the banners of "lifeboat ethics" and "deep ecology" (Furedi 2008). It is also largely an unhelpful idea, as overconsumption is significantly more impactful in the realm of climate catastrophe than overpopulation (Mies 2017). Population growth is currently mostly centred in the Global South, in nations that consume a mere fraction of the resources that are consumed in wealthier nations. The fantasy of a rewilded world is often used as an excuse to dole out unearned punishment to impoverished, Indigenous, or otherwise minoritized groups. Ecofascism, which endorses this kind of racialized punishment explicitly, is also growing in stature and popularity. Some movements, such as the Voluntary Human Extinction Movement, are even more comprehensive in their targets (Furedi 2008). And, of course, there is an eco-survivalist movement, which encourages bunkering down and waiting for the planet to take care of the extermination (Katz-Rosene & Szwarc 2021).

This kind of bomb-throwing for the sake of nature must no longer be romanticized. Weisman's fantasy, and many others like it, are indebted to the kind of erasure that Liboiron discusses here. It *requires* believing, against evidence, that humanity cannot do better; that neoliberal capitalism, on its careening course to environmental catastrophe, is both the natural and only evolution of our species. Yet there are other economies and land relations available to us: this teleological capitulation to capitalism is also contingent on the erasure of Indigenous groups and others that do not live entirely in its shadow.

And if that is not enough, Weisman's fantasy is simply not true. The popular understanding of nature and human civilization as oppositional forces—an epistemological construct that undergirds both the frontier myth and bunker discourse—is not supported by historical or ecological evidence. Humanity has been tending to nature for thousands of years, and this tending is often key to the maintenance of global ecosystems (McAnany and Yoffee,

2010). Indigenous North Americans built similarly sophisticated means of managing their environments. The cultural burnings in British Columbia are not a practice unique to the Interior Salish—in fact, they were practiced by Indigenous groups across North America, all the way to the opposite coast, until they were outlawed in patchwork fashion. As an extension of this principle, there is mounting evidence that nature does not simply "bounce back" when humans abandon previously lived-in areas. Increasing urbanization across the globe has brought many rural towns to points of population collapse. Ecologists have returned to these semi-abandoned places to study this proposed natural rebound, and they often find compelling evidence that traditional methods of living alongside nature are cornerstones of the area's ecological balance (McClure 2024). While "rewilding" is a hot topic in environmental activist circles, most rewilding is carefully supervised, involving the re-introduction of select species and close post-introduction monitoring—once again, it is a case of humanity tending to nature rather than abandoning it.

And what about Chernobyl? Chernobyl is often held up as the exemplar of an unsupervised rewilded space—a conversation popularly centred around the return of the endangered Przewalski's horse to the area. In truth, the ecological health of Chernobyl is an extremely contentious topic. Whether or not the local wildlife are being negatively influenced by radiation is such a hot-button issue that conferences on the matter have devolved into scientists "hurling insults at each other" (Zimmer 2022). Some species appear to be thriving; others are mutating; some are disappearing—and which species are behaving in which way depends on which scientists you ask. More heavily irradiated areas around Chernobyl, such as the Red Forest, remain barren. Moreover, Chernobyl's ecological world has not been permitted to grow without supervision. There are dozens of wild dogs in Chernobyl—descendants of the

domesticated dogs of Pripyat who were not evacuated—and sterilizing those dogs in order to stop a population explosion of gently irradiated puppies is an ongoing charitable cause.

Indigenous scholars like Atteberry remind us that our relationship with nature continues even if that land is poisoned or intoxicated, and even if that relationship turns abusive. We have caused ecological damage as a species, but management and mitigation of that damage is also ongoing. What happens to problematic non-native species if the organizations curtailing them are suddenly depopulated? Perhaps the kudzu vine eats the southern United States, and the cane toad becomes the king of Australia. Domestic cats wreak havoc on native songbird populations–what happens to bird populations if there are no more facilities to spay or neuter wild cats? What happens to the unattended landfills, the untreated mine tailings, and the Great Pacific Garbage Patch? One of the most significant changes humans have made to the biosphere is the breeding of cows for the meat and dairy industry. Due to our intervention, cows now outweigh the biomass of humans–and *every other living creature*–on the planet. If humanity vanishes in the Rapture, do the cows inherit the earth?

It may seem silly to ask these questions about an event that is, outside religious revelation, extremely unlikely—but the fascination with the rewilded world after the death of humanity is, in itself, worth interrogating. The sudden, inexplicable vanishing of humanity from the planet's surface is such a tempting fantasy precisely because it discards the question of our responsibility to the earth on which we live. Imagining that the world will thrive without us is just bunker discourse for the eco-conscious mind: the only solution it can envision is stuffing humanity into a box and waiting for someone else to fix it. It is an abdication of responsibility akin to running to mother (nature's) basement.

When I say the ending of this dissertation is hopeful, here is what I mean: Bunker discourse requires a passive abandonment of responsibility to land and humanity. Rejecting bunker discourse thus requires accepting responsibility–not for the well-being of the entire planet, but for the community and land closest to us. Bunker discourse cannot properly think big or think small; it can only conceive of a homogenous global system that will crumple all at once, and the immensity of that is paralyzing. Rejecting bunker discourse requires us to develop a better grasp of infrastructure and community at micro and macro scales, to shake off the paralysis of modernity, and to act. I think it is no accident that, while they are in rare cases at odds, projects of disaster mitigation, Indigenous sovereignty, and social equity more often strengthen each other. It is also not a coincidence that none of these projects are compatible with the bunker discourse imaginary.

The anti-bunker

My supervisor once joked that I should conclude this dissertation by making a diorama of an anti-bunker. While I am not much of an architect, the idea stuck with me. What would an anti-bunker be? I thought it might be a bridge, or a public square, or a public library. Perhaps it would be a mobile, portable space. Perhaps it would be online. It would need to be a space that would still *feel* secure, but it would create the affect of safety in a non-bunkerish way—through connection, rather than isolation. With new anti-colonial land relations in mind, the anti-bunker would also need to be communally conceived, owned and managed, and it would ideally cooperate with the land around it. A community garden, maybe?

In an interview recorded in *Crip Genealogies*, disabled activist Leah Lakshmi Piepzna-Sarasinha describes a memory of growing up queer in Oakland:

> When I first moved to Oakland, I was struck by how some of the most popular dance nights for queer women of color happened in the afternoon. They were Black and Latinx queer spaces that went from two to eight p.m., they had free (or $5) barbecue and lots of places to sit down. Those spaces had accessibility, even if no one used the word, that made it possible for me to go dancing. And while I was there, I saw women in their fifties and sixties—dancing and hanging out and being able to be part of a queer women of color social world there. (Milbern and Piepzna-Samarasinha 2023, 106-107)

Maybe these dance halls were anti-bunkers. The openness of a dance hall and the accessible details stand in opposition to the bunker's obsession with walls and doors. Attendance and departure are both voluntary. Most importantly, this dance-hall space figures in a larger discussion of how to sustain a social world and knowledge network, as this answer was given in response to the search for disabled QTBIPOC elders. It is a space constructed for survivance, rather than survival. These dance halls also resonate with one of the primary tools of Indigenous survivance, which are songs and dances and the stories carried within them. This suggests the protective potential of public spaces that help marginalized groups to access their histories and promote their art forms.

Along similar lines, Mia Mingus coined the idea of "access intimacy" in 2008, referring to the feeling of safety experienced when one's access needs are understood—not even necessarily met, because that is not always possible, but comfortably acknowledged. Thinking of intimacy as a source of safety has also influenced my definition of the anti-bunker. The value of intimacy means that safety can be achieved by and through company, and not necessarily homogenous company—familiarity with each other's needs is more important. The bunker, with its windowless concrete walls and scheduled patrols, manages to be enclosed without being intimate; the opposite would be the kind of intimacy that can only be constructed from a certain amount of openness.

The conclusion that emerged from these musings is that there are, and must be, many anti-bunkers. They would all be different. Instead of creating safety through division, they would create security through greater awareness of the connections that form the world.

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