

#AnthropoceneChild: Speculative Child-Figures at the End of the World

by

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We acknowledge with respect the Lekwungen peoples on whose traditional territory the university stands and the Songhees, Esquimalt and WSÁNEĆ peoples whose historical relationships with the land continue to this day.

## **Supervisory Committee**

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## Abstract

In this dissertation I think-with figures of #AnthropoceneChild in speculative texts that story the end of the world through some form of climate catastrophe. In these post-apocalyptic tales, the child-figures do different things. Firstly, child-figures reflect problematics of the contemporary world without interrupting dominant patterns of thought, materiality, and governance. In these stories, the child is the future and the future is the child. Secondly, some child-figures are tasked with protecting a world in which they have been made disposable. This incites critical questions about distributions of racialized harm and also exposes the limits of survivalist logics. Thirdly, a few child-figures refuse current arrangements of existence and set in motion new worlds, even if the contours, forces, and politics cannot yet be fully described. These are speculative worlds of *not this*, *what if*, and *not yet*. Different aspects of this assemblage are centred at different moments in this dissertation. The looseness of the framework allows me to move between the unsettled complexities of bionormative childhoods, anthropogenic climate change, reproductive futurism, and structures of anti-blackness, settler colonialism, and white supremacy in relation to (1) child-figures at the end of a world, (2) child-figures who save their world, and (3) child-figures who destroy the world.

This dissertation is organized into two main sections: Part I provides the theoretical background for the speculative arguments developed over Part II. In Part I, I unpack my proposal that #AnthropoceneChild bookends the Anthropocene. By this I mean that the language of birth, origin, and innocence finds repetitious form in scholarly discussions of Anthropocene beginnings, and that child-figures are pivotal to playing out the end of the world in pop culture performances of Anthropocene pedagogy. Part II consists of three chapters that engage with speculative child-figures that inherit and inhabit a damaged planet. This includes grappling with

racialized technologies of care and abandonment, folding parent-child relations into environmental discourses of stewardship, and gesturing towards imaginaries of what might be possible after the end of the (white) world. The conclusion pulls the ideas and figures of previous chapters together in a queer-kin consideration of geos-futurities for #AnthropoceneChild wherein the end of the world might not be a cause for mourning but a possibility for an otherwise.

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## Chapter 1: #AnthropoceneChildhoods: Situating Speculative Child-Figures

At the United Nation's sponsored COP24 climate conference in Katowice, Poland, the voice of *Planet Earth*, Sir David Attenborough (2018), opened the summit with a grave warning: "We're facing man-made disaster of global scale...time is running out...the collapse of our civilization is on the horizon." Other punchy headlines of late include: "The Earth is in a Death Spiral" (Monbiot, 2018), "Climate Change is Damaging Male Fertility" (University of East Anglia, 2018), "Stop Biodiversity Loss or We Could Face Our Own Extinction" (Watts, 2018), "CO2 Emissions Reached an All-Time High in 2018" (Harvey, 2018), and "We Have 12 Years Left" (Nunn, 2018). While it might seem bad form to date the opening of a dissertation so strictly, the point I wish to make is that these headlines have become anything but exceptional. It is increasingly difficult to imagine a time when these will not be the page grabs, and even harder to envision a time when the constitutive exclusions of "man-made," "civilization," or "we" will be given careful mainstream analysis. The exact wording gets shuffled around but climate change, humanity, extinction, disaster, reproduction, and various geotemporal slights of hand make up the discourse of the Anthropocene—the proposed geological epoch marking destructive human impact on Earth system processes—and what in one of its more figurative iterations has been called the "Anthropomeme" (Macfarlane, 2016, para. 34).

Words are not the only things meming these days. The new Anthropocene normal is also taking shape through the repetition and replication of images. A view of planet earth from space burning red, polar bears wasting away on melting icebergs, population graphs with rhapsodic curves, and plastic islands polluting acidic oceans to name but a few. One particular image, however, has stood out to me. The colours are brown, the landscape is barren, the sky is dark, and the ground is cracking: it is a dying earth. In the foreground is a lone figure—a young boy

sitting in the dirt, playing with the bones of the deceased livestock that once grazed his family farm (Mitchell, 2018). When the recent Intergovernmental Panel on Climate Change study was released (IPCC, 2018)—the report that moved up the global over-warming threshold to 2030—this image accompanied summaries from *The New York Times* to the academic journal *Nature* to the *Black Science Fiction Society* blog. But, as I said, I have seen the image before. It was first used closer to its home as part of a series on the devastating effects of drought in Warrumbungle Shire, New South Wales, Australia, in June 2018, and later picked up in that context by *Newsweek* (Watling, 2018). Since then, and now available for institutional purchase via Getty Images, the Boy with the Bones has achieved rapid international circulation.<sup>1</sup>

Another viral success of seeming juxtaposition is a four-and-a-half-minute short film in which global conglomerate Unilever asks, “Why Bring a Child into this World?” (Falduit, 2013).<sup>2</sup> Since its multi-country launch on World Children’s Day in 2014, the commercial has been viewed more than 70 million times on YouTube alone. The film-within-a-film captures an affectively-amped process of doubt-reflection-hope as racially diverse sets of expectant parents in five different countries are recorded viewing a prenatal film. After the requisite close-ups of the we-are-all-the-same near-term bellies, parents express to the camera their worries and fears about the future. Next the couples watch the prenatal film while the camera pans between their reactions and the film itself. The film opens with horrifying scenes of war and poverty before quickly moving to overhead shots of pristine green fields, children splashing in water, and life-saving prophylactics being administered to toddlers. The reassuring voiceover—delivered in a

<sup>1</sup> The image can be viewed at <https://www.gettyimages.ca/detail/news-photo/harry-taylor-plays-with-the-bones-of-dead-livestock-on-the-news-photo/1007071402?adppopup=true> or <https://www.theguardian.com/environment/2018/jul/19/you-count-your-blessings-farm-families-battling-drought-photo-essay>.

<sup>2</sup> I became aware of this advertising campaign in Clark (2017).

tone just as comforting as Attenborough’s drawl—tells a heteronormative love story that culminates in the instructive: “Our children will have better chances of meeting their great-grandchildren than we ever did. Breathe calmly. Bring your child into world. There has never been a better time to create a future for everyone on the planet, of those yet to come.” Then, through happy tears and soft touches, the parents narrate a renewed faith in tomorrow. It is emotionally manipulative, heavily moralized, subtly commercialized, and utterly compelling. It urges everyone to “make a change” because “there’s never been a better time to create a brighter future. #brightfuture,” right? But which child-figures have a future—are the future—in these times called Anthropocene?

Who could argue against a #brightfuture? What “would it signify *not* to be fighting for the children? How could one take the *other* side?” (Edelman, 2004, p. 3). That is assuming that there are still sides. One of the charges of the Anthropocene has been a re-universalization of a complementary pan-humanity—a generalized species-anthropos of the “*we* are all in *this* together” sort (Braidotti, 2016, p. 24), which has been amplified with the COVID-19 global pandemic. To this suggestion I take the position, regardless of where the italics are put, that “rather than touting togetherness, we fight best by embracing our not-togetherness. The fact that there are sides....So we start with the non-totality of the ‘we’” (Miéville, 2015, para. 39).<sup>3</sup> It is to those who theorize the non-totality of “we” that I turn to in order to build my understanding of the Anthropocene in this dissertation, specifically in Chapter 2. To pretend there are not sides, or

<sup>3</sup> In this dissertation, I occasionally use the pronoun “we.” I recognize that power relations, positional privilege, and constitutive exclusions can be obscured in this performance. For the most part, I use “we” in follow-up to a theorist and quotation that sets the terms for belonging. Other times, I employ “we” in the sense of making space for a shared readership and viewership of speculative texts. While “we” may interpret these texts differently, I want to gesture towards collaborative meaning making that nonetheless maintains space for refusal. I understand “we” as an ephemeral invitation to think with me about contemporary problems that gather us together—not in sameness—but as differently situated beings inhabiting this ecologically damaged planet. As much as I do attempt to qualify my “we” in the pages that follow, I acknowledge that there are slippages.

at least imbalances of power and relations of domination, is to be complicit in the ongoing whitening of the Anthropocene.

My focus in this dissertation is on various child-figures in speculative texts of literature, television, and film that story the end of the world through some sort of climate related disaster. I argue that these speculative child-climate relations form an important part of the “public pedagogy of the Anthropocene” (Sheldon, 2016, p. 150). My effort is to think through how ideas of children, family, reproduction, and future relate, and, in turn, overlap with ideas circulating in the Anthropocene discussion and in contemporary critical theory. I am interested in, for example, what issues rise to the fore when one of the world’s largest consumer products companies gives permission to bring children into the world while one of the world’s most accoladed critical theorists markets the reverse in her own hashtag-worthy jingle of “Make Kin, Not Babies” (Haraway, 2016). I may have shed a few tears watching the Unilever commercial, but my enduring emotion is offence at how sentimentality is secured and difference is dismantled through invocation of the child-figure. I scolded Unilever in my mind: how dare you profit from a father crying because he had trouble imagining a childhood with clean tap water so plentiful as to splash around in it. I was upset with Donna Haraway too when I first heard her mantra, even though I knew her argument would be much more complex than the simple slogan suggests. Even with the revised publication of “Make Kin, Not Population” (Clarke & Haraway, 2018), the earlier #NotBabies remains imprinted on my mind.<sup>4</sup>

<sup>4</sup> While I am curious about Haraway’s (2017) “Make Kin, Not Babies,” there is not space in this dissertation for close analysis. For a critical take on “Make Kin, Not Babies” see Sophie Lewis’s (2017) book review and Michelle Murphy’s (2017, 2018) work on the economization of life wherein she problematizes the reconfiguration of the biopolitical motive of ‘some must die so that others can live’ to the Anthropocene relevant “some must not be born so that future others might live more abundantly (consumptively)” (p. 41). Murphy’s work strongly contests any evocation of population discourse. I should also make clear that I am not calling-out Haraway as a neo-eugenicist or racist or anti-child or some other bad name, but I am taken by her insistence that population is a figure up to the task of engaging Anthropocene problematics in anti-colonial and anti-racist ways.

While I singled out Haraway as an important figure in contemporary thought, I do not intend a dismissive critique. Much critical theory has turned to the child-figure to think through and with worlds under threat (e.g., Ahmed, 2014; Berlant, 1997; Edelman, 2004; Povinelli, 2011). I am massively complicit in foregrounding child-figures in my work as well. It is in my title twice for goddess sake. My stance is that it is “not sufficient to renounce or denounce the child” because, as a figure, the child continues to do important work in the making of worlds (Sheldon, 2016, p. 21). The bigger question at work in these musings is, “Why,” as Rebekah Sheldon (2016) asks, “when we reach out to grasp the future of the planet, do we find ourselves instead clutching the child?” (p. vii). In this dissertation I confront the taken-for-granted relationship of the child-figure and the future, but in a way that aims to “stay with the trouble” rather than enact a straight disavowal (Haraway, 2016).

In a related way, Veronica Barnsley (2010) queries, “what happens if the child-image fails to suggest a future?” (p. 328). However, rather than attempt a peremptory response my desire is to add a follow-up question: what if the future fails to suggest a child-figure? My addendum is just as difficult to answer because it first seems not to suggest any difference at all. However, it does call the imbrication of the child and the future to account differently, in that, at minimum, the order of reliance is reversed. Instead of the child-figure failing to invoke a future, the Anthropocene casts doubt on the very possibility of a future and thus of a future-child. This encourages me to consider what might become possible if instead of the future the child-figure is thought in relation to the end of the world. For whom might the end of the world not be cause for mourning (Fanon, 1963; Wilderson, 2015)? For whom has the end of the world already happened (Davis & Todd, 2017; Maynard, 2019; Whyte, 2017a, 2018)? What happens when apocalypse is

not an event that ends the world once and for all, but something that happens again and again and again (Jemisin, 2015; Yusoff, 2018)?

Haraway is not alone in making statements that link children and reproduction to an anthropogenically threatened future. Speaking to her 2.5 million followers on Instagram Live, United States Representative Alexandria Ocasio-Cortez (2019) expresses a similar sentiment to #NotBabies, but as a more open-ended inquiry than declarative statement. “There’s scientific consensus that the lives of children are going to be very difficult, Ocasio-Cortez shares, “And it does lead young people to have a legitimate question: Is it ok to still have children?” This was followed by a barrage of news stories the next day exploring the question. What societal transformations have transpired so that this is now a legitimate query? By way of “what grounds or by what logic is the border between the acceptable and unacceptable drawn” anew in the Anthropocene (Colebrook, 2014, p. 203)? Part of the argument developed over the course of this dissertation is that what might appear to be divergent positions offered by Unilever, Haraway, and Ocasio-Cortez instead mark a “converging of anxieties over planetary futures on the question of reproduction,” what Nigel Clark (2017) names a “crisis of natality” (p. 12). In this way, the Boy with the Bones and the #BrightFutureChild are two sides of the same Anthropocene coin that Attenborough flips in the opening paragraph, even as the futures they figure might widely diverge. Nonetheless, it is not just “a waning of that resurgent hope attending the coming into the world of new life” that is being embodied by what I am calling #AnthropoceneChild, but the possibility of questioning the attachment to bionormative life and the reproduction of the human as *prima facie* good (p. 17).

## Situating #AnthropoceneChildhoods

I locate my work in the interdisciplinary field of childhood studies. As such, I am able to draw on a range of theoretical perspectives including Black studies, Indigenous studies, and critical theory to think through ideas related to children and childhoods. The broad premise of childhood studies is that childhood is a socially constructed category that changes over time and place in negotiation with dominant governmentalities. Its field-defining mantra over the last thirty years has been that “the immaturity of children is a biological fact of life but the ways in which it is understood and made meaningful is a fact of culture” (James & Prout, 1997, p. 7). Related to this bio-sociocultural perspective are three dominant images of the child: the child as vulnerable and in need of protection; the child as monster or evil doer; and the child as becoming-adult (Murriss, 2016; Sellers, 2013; Woodrow, 1999). Included in the last image is the idea of the child “as a redemptive agent ensuring futurity” (Sellers, 2013, p. 71). Less often considered has been the constitutive exclusions of whose futurity the child-figure guarantees. Elements of these images appear throughout this dissertation, however, my goal in working with child-figures is additive. Rather than attempting to fit speculative child-figures into these pre-established constructions, I want to think about how child-climate relations generate new possibilities for theorizing childhoods. I approach the Anthropocene as a condition of possibility for a geos-reconfiguration of the image of the child. With geos I signify not only the geological knowledge base of the Anthropocene concept but also how speculative child-figures “intra-act” with inhuman figures of the virus, zombie, cyborg, and earth in ways that cannot be contained by a bio-sociocultural model of childhood (Barad, 2007).<sup>5</sup> As variations of hybrid monster-figures,

<sup>5</sup> Karen Barad (2007) proposes intra-action, rather than the usual interaction, to get at “the mutual constitution of entangled agencies” (p. 33). What the “intra” foregrounds is that figures do not preexist their relating but “emerge through their intra-action” (p. 33). When I use the prefix “intra” in this dissertation, I am gesturing towards this understanding of relationality.

many of the speculative child-figures in these pages embody modalities of childhood that refuse a bionormative enclosure. Overall, my aim is to embolden speculative imaginaries of child-climate futurities that respond to urgent problems of the present without being beholden to a “settler futurity” (Tuck & Yang, 2012, p. 35).

In seeking to interrupt bionormative childhoods I draw on a rich body of work in childhood studies and reconceptualist early childhood education that challenges the images listed above in addition to the construction of the child as a developmental subject (Burman, 2017; Cannella & Viruru, 2004; Dahlberg et al., 2006; Fendler, 2001; Nxumalo, 2017b; Pacini-Ketchabaw, 2011; Rautio & Jokinen, 2016). These scholars make visible how the developmental child-figure is rendered knowable by deficit-based scientific theories and constructed as an incomplete, disempowered, and individualized becoming who is acted upon by adults. Also contained within the bionormative frame is a narrow conception of kin-as-bio-family based on a heterosexist parental regime of shared genetic code (Baker, 2008; TallBear, 2013). While a bionormative imaginary has long structured work in child related disciplines, I argue the Anthropocene moment invites an extension. How might a turn towards “geos be a refusal of the child development perspectives that shape” and delimit children’s worlds (Nxumalo, 2017a, p. 559). My problematizing of bionormative childhoods is also intended as an opening into larger discussions about “our present culture’s purely biological definition of what it is to *be*, and therefore of what it is *like* to be, human” (Wynter, 2000, p. 180). How might the Anthropocene “realize the child and the human in new ways” (Castañeda, 2002, p. 45)? How might child-figures of inhuman geos-monstrosities interrupt bio-centric formulations? Can #AnthropoceneChild help “re-imagine human origins and endings within a geologic rather than an exclusively biological context” (Yusoff, 2016, p. 5)? Can the antagonistic relation of bios and

geos further dissolve into an intra-dependant and generative relationship? What possibilities emerge from speculative geos-fabulations wherein child-figures are “human—*but not only*” (de la Cadena, 2014, p. 256).

Rebekah Sheldon (2016) argues in *The Child to Come: Life after the Human Catastrophe* that the dominant image of the child has slid “from the child in need of saving to the child that saves” (p. 2). The introductory figures of #AnthropoceneChild offer insights into this transition. As he travels from Warrumbungle Shire to the global stage, the Boy with the Bones transforms from a “representation of life-in-particular” to a figure of universalized “life-itself” (Lewis, 2018, p. 3). At the same time, with bones as playthings, he marks an intimacy with the nonhuman world. This same movement of life from particular to universal is undertaken by the #BrightFutureChild as five countries become a single stage in an edited re-production of reproductive fears and futuristic dreams. What is happening in these movements of the #AnthropoceneChild is a sort of “double duty in that these child-figures embody species survival” at the same time as they engage—through risk in the Boy with Bones and safety in #BrightFutureChild—the “human fantasy of reproduction” (Sheldon, 2016, p. 3). The child-figure is asked to secure not only the reproduction of the human in a generational landscape but also the reproduction of the species in an evolutionary one (Sheldon, 2016). However, while it may be true, as Unilever narrates, that children today might have a greater chance of knowing their great-grandchildren—at least in the aggregated statistical form of life expectancy models—those great-grandchildren have a much smaller chance of ever encountering a pangolin, arctic fox, western prairie fringed orchid, or coral reef. As well as staving off human extinction, then, #AnthropoceneChild is asked to close the gap between the human and nonhuman world while continuing to elevate humans in the Great Chain of Being.

Many children today seem to demonstrate an awareness of the transition from protected to protector. A prominent example is the growing number of students striking from schools on Fridays to protest global climate inaction. This movement is growing every day. In an open letter released ahead of a global day of action on March 15, 2019, the student coalition writes, in part:

Climate change is already happening. People did die, are dying and will die because of it, but we can and will stop this madness. We, the young, have started to move. We are going to change the fate of humanity, whether you like it or not....You have failed us in the past. If you continue failing us in the future, we, the young people, will make change happen by ourselves. The youth of this world has started to move and we will not rest again. (Global Coordination Group of the Youth-Led Climate Strikes, 2019, para. 1)

These young people understand that climate change is happening now, and they have no problem calling out adults—politicians specifically—who talk a big game but do little to address real problems. Additionally, amongst the youth activists there seems to be an intersectional awareness being advanced in social media and protest speeches that runs counter to the mainstream. This is especially evident in the work of youth of colour activists who recognize that “there have always been, and will always be indigenous, black and brown youth at the forefront of creating systemic change and challenging injustice” (Martinez, 2019), and that “the climate crisis is everything. It’s health care, it’s racial justice, it’s criminal justice—everything” (Hirsi, 2019).

A contribution I make to this discussion comes by way of further grappling with Sheldon’s proposal about contemporary shifts in the image of the child. I am interested in whose futures child-figures are expected to save in the Anthropocene and how this saving is to occur. The Youth Strikes for Climate movement’s response to how is civil disobedience, social media

presence, and direct action whereas the theory of change for some speculative child-figures in this dissertation is instigating the end of the world. The idea of saved/saving in childhood studies is a tricky concept whose contours are unraveled throughout this dissertation. For now, I phrase my “matters of care and concern” as a desire to “think-with” figures of #AnthropoceneChild in ways that interrupt an overlay of saving with reaffirming and protecting with sustaining (Puig de la Bellacasa, 2017)?<sup>6</sup> What possibilities emerge when “refusal and resistance” are the child-figure’s response to saving the world (Hartman, 2016, p. 166)?

In addition to the scholars cited above, another key thinker for me in childhood studies is Lee Edelman. The sacred, capital-letter Child of Lee Edelman’s (2004) reproductive futurism represents the symbolic encapsulation of “an imagined proper, natural, and secure social order” that never was or will be (Out of the Woods, 2015b, para. 12). The Child as a universal, sentimental figure through which all matters of ethics and politics are articulated is wavering; it is not that ethics and politics are no longer spoken in their name, but that the child-figure’s supposedly redemptive ability of “renewal of the barren world through the miracle of birth” is more and more difficult amidst ongoing environmental destruction (Edelman, 1998, p. 21).<sup>7</sup> Deputized pre-emptively and perpetually as the future, the Child that Edelman rages against

<sup>6</sup> María Puig de la Bellacasa (2012) proposes “thinking-with” in recognition that thinking happens with “many people, beings and things; it means thinking in a populated world” (p. 199). Thinking-with is an invitation to collaborate. Puig de la Bellacasa (2011) also works with “matters of care and concern,” in which matters of care is an extension of Bruno Latour’s (2004) matters of concern. In brief, as these matters are examined in Chapter 5, matters of care adds a relational dimension to matters of concern and includes attention to “exclusions and critiques of power dynamics” (p. 86). In response to the partiality of matters of fact, Latour proposed matters of concern to bring attention to desire, attachment, and the multiple agencies at work in any assemblage. As with Barad’s “intra,” I do not cite Puig de la Bellacasa each time I use “matters of care and concern” even though their scholarship informs every incarnation.

<sup>7</sup> The Child that stands for the future in Edelman’s (2004) theory of reproductive futurism is of a particular—rather than universal—composition. Edelman’s Child is a protected, privileged figure endowed with assurances of futurity that are denied to racialized children. José Muñoz (2009) puts it succinctly: “The future is the stuff of some kids. Racialized kids, queer kids, are not the sovereign princes of futurity” (p. 95). Andrea Smith notes an incommensurability of Edelman’s Child with Indigenous futurities. Smith (2010) quotes Colonel John Chivington of the 1864 Sand Creek massacre who told his fighters to not only kill the Indigenous inhabitants but “to mutilate their reproductive organs and to kill their children because ‘nits make lice’” (p. 50). “In this context,” Smith continues, “the Native Child is not the guarantor of the reproductive future of white supremacy; it is the nit that undoes it” (p. 50).

“now stands for a future out-of-date” (Gill-Peterson et al., 2016, p. 495). In *No Future*, Edelman (2004) posits that the Child is “the pledge of a covenant that shields us against the persistent threat of apocalypse now—or later” (p. 18). But the world has changed since Edelman wrote his much-cited polemic: the apocalypse seems all the more imminent and for many it is already here or has already happened. In the Anthropocene, Edelman’s “no future” is no longer an alternative to reproductive futurism but “a reflection of it under conditions of catastrophic climate change” (Out of the Woods, 2015b, para. 20). However, I want to question whether “no future” as implied above is necessarily something to be mourned and salvaged or if the end of the world might offer something different.

Edelman (2004) is adamant that his figure of the Child not “be confused with the lived experiences of any actual...children” (p. 11). I do not think the lines between child-figures in texts and children in the everyday are so clear cut; instead, they are entangled. To engage these complexities, I try to keep Elizabeth Povinelli’s cautionary words in mind when working with child-figures. Povinelli (2011b) asks, “Why don’t we ever ask what it is like to be this figure?” (31:45). A particularly potent example is six-year-old Hushpuppy from the critically acclaimed film *Beasts of the Southern Wild*, which moves indeterminately between ecologically damaged landscapes and fantastically imagined worlds (Zeitlin, 2012). What is it to be a child living in endemic poverty, to be abandoned by parental figures, to be in a place literally sinking into the water, to be a protector for a precarious community, and to be celebrated in film reviews as a new-age environmental steward? Povinelli (2013a) questions how much contemporary critical theory has thought about what it is to endure as a figure of potentiality: what happens when figure meets ground and when theory meets lived experience? In other words, what are the ethical implications of locating hope for an otherwise in figures and bodies already exhausted,

disciplined, and disposed (Povinelli, 2013c)? In this dissertation some related questions that move between worlds include: What is it to be a toxic-child? What is it to be “born pre-polluted” (MacKendrick & Cairns, 2019)? How can I think-with child-figures at the end of the world in ways that grapple with the kinds of conditions, resources, and imaginaries required to capacitate lives actually capable of flourishing (Benjamin, 2016b)? Given that many of the speculative child-figures I think-with in this dissertation are Black and Indigenous, I refuse to stay solely within Edelman’s symbolic realm and instead connect issues of speculative worlds to pressing problems in this one.<sup>8</sup>

### **Monstrous Provocations**

Two particular moments moved me to grab onto monsters/monstrous as an intra-active aspect of #AnthropoceneChild. The first is a scene from *Beasts of the Southern Wild*. In the fantastic mind of Hushpuppy, a band of extinct aurochs are released from the polar icecaps and make their way to The Bathtub, an impoverished bayou community disappearing into the waters of a post-Katrina world and primed to experience another weather catastrophe. At the film’s climax, the wild aurochs come face-to-face with the young Black child whose daily life is a feat of endurance. The camera offers two views—one from the side and one from the back—each capturing the enormity of the animals and the smallness of the child. Yet Hushpuppy must face them down and she must turn them back around. She must save and protect. She says to the

<sup>8</sup> While capitalizing Indigenous is widely accepted, I have gone back and forth about the capitalization of Black, blackness, white, and whiteness in this dissertation. There is wide variation and the rationales often go unspoken. For example, the Associated Press puts both white and black in lower case letters, while the APA instructs to capitalize racial and ethnic groups specified by proper nouns. In this dissertation, I have decided to capitalize “Black” when referring to “Black people, organizations, and cultural products” (Dumas, 2015; see also Lanham & Liu, 2019; Johnson, 2019; Tharps, 2014). I do so in order to align with Michael Dumas’s (2015) teachings that understand Black “as a self-determined name of a racialized social group that shares a specific set of histories, cultural processes, and imagined and performed kinships” (p. 12). I write “white” in lowercase letters “because it is nothing but a social construct, and does not describe a group with a sense of common experiences or kinship outside of acts of colonization and terror. Thus, *white* is employed almost solely as a negation of others” (p. 13). Finally, also relying on Dumas’s guidance, “I write *blackness* and *antiblackness* in lower-case, because they refer not to Black people per se, but to a social construction of racial meaning, much as whiteness does” (p. 13).

ancient beasts, “you’re my friend, kind of” (1:22:05). Throughout the film, Hushpuppy figures the interconnectedness of the world: “She understands that everything is tied together, everything—not only animal species, plant life, and human-made product and waste, but also our very origins and histories” (Joo, 2018, p. 9). She experiences environmental racism, species extinction, and child poverty, while also possessing an animist gift that allows her to hold a baby chick up to her cheek to sense the heartbeat of the whole world. There is too much racialized history for Hushpuppy to overcome for her to be a figure of #BrightFutureChild, but she is #AnthropoceneChild. The demand placed on Hushpuppy in the transition from protected to protector is to re-imagine and re-enact “humans’ relationship to the world within the Anthropocene” (p. 8). As examined in later chapters, how child-figures intra-act with racial, economic, fantastic, and environmental relations at the end of the world is fraught with dangers of figurative and material consequence.

The second monster moment was one of those serendipitous occasions when I encountered something that I felt was important, but I was not yet aware of its significance. In preparation for my PhD studies at the University of Victoria I decided to make the cross-country move from New Brunswick a bit of an adventure by driving the nearly 6000 kilometres. Departing from the homelands of the Wolastoqey and Mi’kmaq, I made my way through kébek and ontarí:io, alternating nights between campsites and the sort of roadside motels that *Schitt’s Creek* has now made cool. Arriving in Treaty 1 territory, I decided to splurge on a more up-scale hotel for the night and the next morning I looked out my seventh-floor window to see a billboard for “Fairytale, Monsters, and the Genetic Imagination” atop the Winnipeg Art Gallery. I spent all day exploring the artistic representations of more-than-human child-hybrid creatures. In particular, I was taken by the work of Patricia Piccinini (2008) and her *The Long Awaited*

installation. This hyper-realist, life-size sculpture features a boy around ten years old sitting on a bench with his eyes shut and his head resting supportively on the shoulder of an adult-sized creature. The creature is lying on their side, fully stretched out with their head on the boy's lap. They resemble something of a naked, frumpy, gentle, wrinkled, hairy, mermaid-tailed figure. The boy and creature are in a sleepy embrace, and a sort of multigenerational, multispecies loving warmth radiates from the mix of silicone, fiberglass, human hair, leather, and plywood. I stood transfixed for a long time.

The brochure for the exhibit begins with an etymological entry for “monster,” which in its Latin origins means “I show.” I wondered what the sculpture showed. What was monstrous here? Was it the adult-mermaid figure? Was is the affectionate relationship of boy-creature? What was that initial uncomfortable feeling I had all about? What meaning should I make of my transition from a tensive “Oh!” to a reflective “Oooooooooohhhhhh”? In writing about another of Piccinini's multispecies works called *Undivided*, which also features an intimate child-creature relationship, Affrica Taylor wonders about how this co-presence speaks to the always already entangledness of “post-colonial and post-human worlds that children inherit” (Taylor et al., 2012, p. 52). How might the relationships Piccinini depicts reframe “challenges of co-existing with radical difference” (p. 53)? These sorts of challenges do not seem profound at all for the boy or the mermaid figure, but they are likely received as such by those of us used to thinking in binary moral frames of good/bad, natural/unnatural, human/monster, life/nonlife, and bionormative parent/child rather than multispecies relations. An important component of reimagining geos-childhoods in this dissertation includes rethinking children's relationships with other existents that cohabit a climate-altered world.

As a last introductory note about monsters, I shift frames from the monster as creature to the monstrous as provocation. In an interview, Kathryn Yusoff asks Povinelli if she considers the Anthropocene a “monstrous geography” meaning “a kind of suicidal exhausting of earth materials” (Povinelli et al., 2014, paras. 20-21). Povinelli responds that she reserves “the idea of the monster for that which decisively disrupts the current organization of the actual—the current distribution of sense,” and given the present state of Anthropocene discussion that something akin to her definition of “monstrous” has not emerged (para. 21). If the Anthropocene is to be a monster, Povinelli suggests, it will be because it “forces us to experience the threshold of a coming impossibility” of “distinguishing forms and arrangements” of life and nonlife (para. 22). In other words, what would be monstrous for Povinelli is a paradigmatic disruption of the life and nonlife distinction that constitutes contemporary modes of knowing, being, and governance. Life for Povinelli includes that which is sentient, animate, and can be born, grow, and die; nonlife is that which is inanimate, inert, unfeeling, and includes geologic and spiritual substances. Povinelli (2016) names the dissolving of the life-nonlife division as geontology, which is examined closely in later chapters. I make use of this concept to explore how child-figures at the end of speculative worlds variously sustain, call into question, and subvert arrangements of life and nonlife—particularly in the ways that child-figures become with cyborg, toxin, earth, and virus. These child-figures “intensify the contrasting components of nonlife (*geos*) and being (*ontology*) currently at play” in the wider Anthropocene discussion in ways that might also interrupt bionormative childhoods as the dominant configuration in childhood studies (Povinelli, 2016, p. 4). As both hybrid-monsters and monstrous provocations, speculative child-figures engage other modes of being, other ways of relating, and other worlds that might be more liveable.

## Spectres of #AnthropoceneChild

In building an archive of texts to inform this work, I have been attempting to look at the #AnthropoceneChild more sideways than straight (Stockton, 2009). I have noticed that what Clark (2017) calls a *crisis of natality* plays out in registers other than just child-related disciplines (p. 12). For examples, I am struck by how the language of childhood (e.g., reproduction, birth, generation, development) has become a major trope of the Anthropocene. This perhaps should not be such a surprise given Edelman's (2004) insistence that all contemporary politics is subsumed under the "baby's face" (p. 75). Unpacking the scholarly discussion concerned with Anthropocene origins is the emphasis of Chapter 2. The remaining chapters play out concerns with Anthropocene endings. As mentioned, much of this work involves speculative texts that depict futuristic post-apocalyptic variations of climate catastrophes. In most of these stories, however bleak the horizon, there seems to be at least one child or the promise of one that endures. In this way, the child-figure bookends the beginning and end of the Anthropocene discussion, sometimes in ways invisible and at other times in ways hypervisible.

The relation of childhood imaginaries to the Anthropocene first felt significant after I encountered Jeremy Davies (2018) book, *The Birth of the Anthropocene*. In a related blog post, Davies (2016) designates the contemporary moment as "not so much the Anthropocene as the *birth of the Anthropocene*, the period of disruptive change between one geological epoch and the next" (para. 7). Another popular framing is that because humans are considered to be living "through the last years of one Earth epoch, and the *birth* of another—we belong to 'Generation Anthropocene'" (Macfarlane, 2016, para. 5; emphasis added). Appeals of Generation Anthropocene have been featured in magazines like *The Economist* (2011), a successful Stanford

University podcast ([www.genanthro.com](http://www.genanthro.com)), roundtable engagements by the Contemporary Studies Network (Sykes et al., 2007), and texts of posthuman theory (Braidotti & Hlavajova, 2018). Designations generation and birth are conceptual vocabulary and temporal framings most familiar to childhood and youth studies (Alanen, 2001a, 2001b; Lesko, 2012), so why are they so common in the Anthropocene conversation? Theoretical work on generation has largely focused on how children/childhood is in a formative and dependent relationship with adults/adulthood (Alanen & Mayall, 2001; Leonard, 2015; Qvortrup, 2000). How are the traditional binaries that delimit childhood (e.g., adult/child, child/animal, structure/agency, nature/culture, innocence/guilt, etc.) recycled in the Anthropocene? What would Generation Anthropocene look like if childhood was understood as being in *relation-with* the world rather than in opposition to adulthood? “How inclusive and how representative is the Generation Anthropocene” anyway (Braidotti & Hlavajova, 2018, para. 11)?

I include this brief glance at generation because it gestures towards how categorizing terms loosely used in the Anthropocene discussion are intertwined with ways of organizing children and childhoods. I name this phenomenon the *spectre of childhood* in hopes of capturing how these connections are not necessarily intentional or even made explicitly in texts, but that they are nevertheless present whenever birth, origin, innocence, and development are invoked. I have gone back and forth about how to name this claim. In addition to spectre, I have considered grammar, ghost, genre, shadow, imaginary, and fetish—to name but a few possibilities. Each term has its own genealogy and I will attempt a brief walk through of these concepts as a means of introducing key theoretical ideas and perspectives that impact the chapters that follow in ways not limited to discussions of spectres.

To consider a *grammar of childhood* is to owe a large debt to Hortense Spillers’ (1987)

theorizing in “Mama’s Baby, Papa’s Maybe: An American Grammar.” In this landmark article, Spillers maps how grammar—specifically technologies of naming—has “overdetermined nominative properties” that function as a form of “telegraphic coding” that marks certain bodies “with mythical prepossession [so] that there is no easy way for the agents buried beneath them to come clean” (p. 257). Spillers opens her article with examples of racialized names that bury: “‘Peaches’ and ‘Brown Sugar,’ ‘Sapphire’ and ‘Earth Mother,’ ‘Aunty,’ ‘Granny,’ God’s ‘Holy Fool,’ a ‘Miss Ebony First,’ or ‘Black Woman’” (p. 65). These racialized terms carry with them collections of meaning that are “assigned by a particular historical order,” and when that order is whiteness then grammar carries weighted, punitive, and dehumanizing material effects (p. 65). In a key move, the “American grammar” Spillers’ undercuts is that of an idealized family form that faults Black women for racial subjugation because they have supposedly inverted the patriarchal family structure.<sup>9</sup> For Spillers, this grammar starts at the “beginning,” which is the Middle Passage because “we write and think...under the pressure of those events” (p. 228). Spillers’ suggestion is “actually claiming the *monstrosity*” as a possibility for rewriting the future (p. 229), an action many of the child-figures in this dissertation perform to varying degrees.

To think-with the grammar of childhood then is to notice the racializing structures underlying its terms. This includes critical attention to the assumptions and exclusions embedded in taken-for-granted constructions; for example, not everyone has access to the category child. As a point of both grounding and departure, consider the following definition of childhood:

“Western childhood has become a period in the life course characterized by social dependency,

<sup>9</sup> Spillers writes about the supposed breakdown of the Black family in response to a report by Daniel Moynihan (1965). Moynihan’s thesis can be summed up as such: “In essence, the Negro community has been forced into a matriarchal structure which, because it is too out of line with the rest of American society, seriously retards the progress of the group as a whole” (p. 18). “American” in this usage defaults to white “as the norm to which family life *as such* should aspire” (Nyong’o, 2009, p. 4). A connection can be made to the colonial destruction of the honoured and sacred position of women in many Indigenous communities in Canada, including disavowal of lineages of matrilineal descent, which took legal form in the 1876 *Indian Act*.

asexuality, and the obligation to be happy, with children having the right to protection and training but not to social or personal autonomy” (James et al., 1998, p. 62). I have already noted Sheldon’s reversal in dependency and protection positionings for #AnthropoceneChild.

Additionally, autonomy as a form of individualized, neoliberalized agency has been challenged by childhood studies’ theorists, including a recent push towards more relational understandings and a de-idealization of independence (Taylor & Pacini-Ketchabaw, 2018). There is also much racialized politics unaddressed in the hanging modifier of Western childhood. Exclusions within this figuration include, as Christina Sharpe (2016) articulates, how “Black children are not seen as children” (p. 89). Black children are either animalized, objectivized, sexualized, and/or adultized; they are positioned “outside of the category of the child” (p. 89). The grammar of childhood expressed above has never been equally available or experienced.

Robin Bernstein’s (2011) historical work in *Racial Innocence* maps the division of childhood into white and Black tracks in the early nineteenth century. At that time, “black children were libeled as unfeeling, noninnocent nonchildren” (p. 33), and white children became the embodiment of innocence. Bernstein argues that childhood and innocence came together as inseparable concepts wherein each re-invented the other, including their shared exclusions. In writing about the Anthropocene, Yusoff (2018) demonstrates that innocence is a central strategy to “naturalize (and thus neutralize)” anthropogenic climate change through the “grammar of geology” (p. 6). “Recast as development,” Yusoff continues, the ongoing colonial theft of minerals, bodies, and lands gets reframed in positive terms of accumulation and modernization and therefore cut off from “modes of objectification that the genre of the Anthropocene both unleashes and maintains” (p. 6). Critical work in childhood studies notes how developmental discourse acts as a “recapitulation theory” in that the child’s development “is compared to the

development of the species (with the child as nature, as the origin of the species) from ‘savage’ to ‘civilized’ (Murriss, 2016, p. 81). This same overlay applies to the development of the nation state. Read with Yusoff’s framing, the perceived innocence of a geology that relies on divisions of human/inhuman, nature/culture, and savage/civilized recapitulates childhood into an unexpected surround. In childhood studies, with some key exceptions (e.g., Hatfield-Hill & Zara, 2019; Nxumalo, 2017a), geology and childhood are not often thought together. This complex entangledness is revisited in Chapter 2, including the work of theorists introduced next.

In one sense, my attempt to link the child-figure to the Anthropocene is to muddle up understandings of bionormative reproduction that are tied to a maternal-child imaginary. For example, I attempt to presence how “reproduction is a materialist and a planetary issue—that is, all reproduction comes with consequences for the global environment, economies, and social practices” (Sturgeon, 2010, p. 108). This requires moving from an idea of reproduction understood as human fertility or procreation to reproductive politics in “a wider view, always thinking about the environmental consequences of those social, economic, and political practices we presently engage in” (p. 108). This is something akin to “planetary reproduction, an approach that could be labeled environmental reproductive justice” (p. 108). While I concur with the argument that “all environmental issues are reproductive issues” (Di Chiro, 2008, p. 278), I do so with the accompanying caveat that reproduction must be thought within histories of settler colonialism and anti-blackness. In other words, all reproductive issues “inevitably involve racial politics” (Roberts, 1997, p. 9), and racial politics are too often erased in the Anthropocene conversation. Saidiya Hartman’s (2016) theoretical work traces how birth, labour, slavery, maternity, and childhood are foundational to the world as it is now organized: “*Partus sequitur ventrem*—the child follows the belly” (p. 166). Additionally, Alys Eve Weinbaum (2004) argues

in *Wayward Reproductions* that “the race/reproduction bind...organizes the modern episteme” (p. 5). In tying race and reproduction (and therefore childhood) together, these theorists make an important intervention in how the human is understood and how power operates, and this work can be extended to examine how race and reproduction structure the Anthropocene. When these racialized relations are not part of the discussion, race and reproduction become a *grammar and ghost* of the Anthropocene (Wilderson, 2009).

Frank Wilderson III (2009) adds to Spillers’ notion of grammar with his notion of “grammar and ghost.” For Wilderson, grammar is unspoken even as it structures what can be said, whereas ghosts take form as memory and are “without verifiable substance” (p. 120). Grammar embodies “a structure of feeling, a shared sense” that can be intensely felt but more often than not is inconspicuous (p. 119). Grammar, in this sense, moves with ghosts as figures of spectral haunting. Taken together, “grammar and ghosts are rarely the subject of direct reflection. How often does one speak one’s grammar; how often does one touch a ghost?” (p. 123). In thinking about childhood as grammar and ghost of the Anthropocene my impulse is to make explicit and direct the intra-relations of how they form, deform, and reform each other. Grammar and ghost are analytic tools to trace the “syntax and morphology” of world making (p. 120), and, in this sense, it matters deeply what language wor(l)ds the Anthropocene. As an example, Michelle Murphy’s (2017) critical work on the economization of life reveals how “race is the grammar and ghost of population” (p. 135). In critically analyzing globalized population control strategies and technologies of family planning and birth control that are implemented in the Global South, Murphy maps how race subtends “which lives are worth bring born, protected, or extended, and which lives might be abandoned or, even better, unborn” (p. 12). For Murphy, population cannot be articulated outside racialized rationalities, histories, and technologies that

have made disposable and avertable many humans. As the grammar and ghost of population, racism is spectrally present even if not explicitly addressed—its complete exorcism is an impossibility. This is similar to how I argue childhood acts within Anthropocene discourse.

In the end, I choose *spectre* as my designate figuration. Whereas grammar might be thought in terms of structuring what is said (or not said), spectre has etymological roots in what is seen (or not seen). My understanding of spectre draws largely from Natalie Baloy (2016). Baloy proposes that “non-Indigenous ideas of Indigenous alterity shape and are shaped by processes that render Indigeneity spectacular and/or spectral” (p. 209). To break this down, Baloy uses the spectacular in reference to how public displays of Indigeneity in settler spaces of Vancouver—for example, the totem poles in Stanley Park or the occupants of the Downtown Eastside—are “experienced by non-Indigenous people as spectacles: cultural not political, visual not otherwise sensorial, passively observed not participatory” (p. 209). Despite this hypervisibility, which sometimes also means invisibility, Indigeneity haunts settler colonial worlds. Baloy explains, “despite dispossession, erasure, and displacement, Indigenous people return again and again to exercise their sovereignty and refuse conditions of disappearance and display” (p. 209). In these combined ways, “Indigenous alterity functions almost holographically: apparent and visible in some contexts, erased or minimized in others” (p. 211). I need to be careful not to imply an exchangeability of Indigenous alterity and *all* child-figures as spectres/spectacles; for example, there are massive differences between the actual elimination of Indigenous peoples and the discreet presence of childhood imaginaries in the Anthropocene discussion. However, Baloy’s framing does help me think about how childhoods and child-figures flank the current Anthropocene discussion. By this I mean that they are an almost invisible presence in the discussion of Anthropocene beginnings (i.e., language of origin, birth,

growth, innocence) and hypervisible in imaginaries of its end (i.e., characters in speculative fiction and film). It is because of this dual regime of invisibility and hypervisibility that I selected the *spectre of childhood* as my framing device. I do not explicitly address the spectre of childhood in all chapters to come, but as grammar and ghost the point is that it is nevertheless present.

Often in this dissertation I move between Black and Indigenous theorists, texts, figures, and futurities. The fields of Black and Indigenous studies have different genealogies and different temporal, spatial, and placed-based obligations. Sometimes I point out overlaps between these ways of worlding while at other times I remain silent—sometimes it feels right not to interrupt or follow-up. I do not want to enact the violence of commensuration. These worlds are however put into contact through conquest (Byrd, 2012; King, 2019), even though genocide/settler colonialism and slavery/anti-Black racism differ in their ongoing technologies of repossession and dispossession. Another point of overlap involves the constitution of the human “as an exclusive category [that] demands an outside and requires the death of Indigenous and Black people” (King, 2019, p. 20). The Human *is* because Black and Indigenous *are not*. My work challenges how the dominant narrative of the Anthropocene sustains this erasure through recourse to childhood imaginaries.

### **Chapter Outlines**

This dissertation is structured in two main parts: Part I continues to detail the theoretical background for the speculative arguments developed over Part II. In Part I, I carry forward my argument that #AnthropoceneChild bookends the Anthropocene. In doing so I further play out how the language of birth and innocence finds footing in scholarly discussions of Anthropocene origin stories (Chapter 2), and how child-figures are entangled with post-apocalyptic tropes of the end of the world. Part II consists of three chapters that engage with speculative child-figures

that inherit and inhabit a “broken earth” (Jemisin, 2015). This includes grappling with technologies of care and abandonment (Chapter 4), parent-child and environmental relations (Chapter 5), and imaginaries of what might be possible after the end of the (white) world (Chapter 6). The conclusion pulls ideas and figures of previous chapters together in a queer-kin consideration of geos-futurities for #AnthropoceneChild wherein the end of the world might not be a cause for mourning but a possibility for an otherwise.

## **Chapter 2: Anthropocene Births: Origins, Innocence, and the Spectre of Childhood**

In the last few years, the Anthropocene has become a matter of intense scholarly concern. However, “its constitutive concerns—global warming, genetic technology, biodiversity loss, environmental racism” have been felt-lived for much longer (Leong, 2016). As such, I examine how the Anthropocene is *more than* a proposed name for Earth system epochal change; in other words, the Anthropocene is *not only* a scientific concept. Temporal, ethical, and political challenges of thinking deep time and deep responsibility have encouraged scientists, politicians, artists, activists, writers, educators, and academics of all sorts to take-up the Anthropocene as a gathering term. This widespread interest, as reflected in the plethora of alternative nomenclature for example, entails a “complex web of significances—material, philosophical, scientific, ethical, political, textual” that are not always commensurable with one another (Saldanha, & Stark, 2016, p. 433).<sup>10</sup> In this chapter, I surface some incommensurabilities that arise as the Anthropocene travels between disciplinary fields of analyses. I proceed under the assumption that the

<sup>10</sup> Some of the more critically-attuned alternative names are: Anglocene (Bonneuil & Fressoz, 2016), Anthrobscene (Parikka, 2015), Anthropo-not-seen (de la Cadena, 2015), Anthro-po-scene (Lorimer, 2017), a/Anthropocene (Revkin, 2016), Anthropomeme (Macfarlane, 2016), Capitalocene (Moore, 2016), Chthulucene (Haraway, 2016), Ecocene (Armstrong, 2015), Manthropocene (Raworth, 2014), Planthropocene (Myers, 2016), Plantationocene (Haraway et al, 2015; Haraway & Tsing, 2019), Narcisscene (Sagoff, 2018), and white-supremacy-scene (Mirzoeff, 2018). Much of this alter-terminology foregrounds power relations and localized inequalities in questions of global change and climate justice, often centering more-than-human relations as well.

Anthropocene “will be an obligatory passage point for critical thinking” for some time to come (p. 431).

This chapter is organized in three main sections which inventory the main ideas of the scientific Anthropocene discussion alongside their social science and humanities challenges. The first section frames the Anthropocene as the birth of an idea which begins with Paul Crutzen’s turn of the century eureka conference moment and follows key developments onwards from there. The second section looks at the Anthropocene as the birth of an epoch, specifically the discussions and debates around Global Boundary Stratotype Section and Points, otherwise known as golden spikes, which will quite literally ground the origin of humanity’s earth-altering impact. The third section examines the Anthropocene as the birth of a geologic subject and discusses how origin stories function as a method of worlding. Theoretical work on origin stories from Indigenous and Black studies scholars is foregrounded as I bring together alternative origin stories that contest the composition of *Anthropos* as another “overrepresentation of Man as the human” (Wynter, 2003, p. 260).

### **Chapter 3: Anthropocene Apocalypse: Figurations of the #EndOfTheWorld**

This chapter maps out various figurations of the end of the world. I take as inspiration Colebrook’s (2018b) two locations of post-apocalyptic imaginings from which to gauge the Anthropocene condition. I expand upon her first site as an “obsession with ends” taking form in speculative fiction that often closes with a redemptive child’s strength and survival as a form of embodied hope (p. 276). While some writers take care to differentiate between terms, I use speculative fiction as an umbrella term that interchanges apocalypse, post-apocalypse, disaster, catastrophe, cli-fi, sci-fi, and Anthropocene fictions. I interpret the *speculative* as a practice of affirming *not this* and critically imagining *not yet* and *what if*. As for *fiction*, my archive is

composed mainly of novels, films, and television shows. For me, what brings variations of speculative fiction together with the Anthropocene is an interest in the end of the world.

“Regardless of when the Anthropocene started,” Hee-Jung Joo (2018) notes, “the ending of it is what is driving the current public preoccupation with it and marks its cultural significance” (p. 2).

Colebrook’s (2018b) second location theorizes the end of the world as a site of counter-Anthropocene. Following Colebrook, I “look to literary experiences of what it is like to be already without a world, to have already experienced social death” as a means of thinking differently about the end of the world (p. 276). This comes with a danger of treating social death as a metaphor or narrative device to make a better story (or better dissertation), for example as in the appropriation of the Black female slave experience in *The Handmaid’s Tale* (Abraham, 2017; Bastián, 2017; Berlatsky, 2015, 2017; Priya, 2017), but I believe this risk can lead elsewhere. I grapple with both of Colebrook’s locations—the end of the world and the end of social death—along with the ethical and political concerns these worldings raise in this chapter. More specifically, this chapter moves through various ways to figure the end of the world that include: tropes of the end of the world, creativity at the end of the world, temporalities of the end of the world, ethics of the end of the world, and, the concluding section, child-figures at the end of the world.

#### **Chapter 4: Monstrous Love for Regenerative Cyborgs**

In “Love Your Monsters: Why We Must Care for Our Technologies as We Do Our Children,” Bruno Latour (2011) reads *Frankenstein* as an analogy for the Anthropocene condition. He argues that Dr. Frankenstein’s true sin has been grossly misunderstood: *Frankenstein* should not be read as “as a cautionary tale against technology....For Dr.

Frankenstein's crime was not that he invented a creature...but rather that he *abandoned the creature to itself*" (p. 19). The figurative leap Latour makes is that "we" should treat technoscience creations like "our children" and "love our monsters." In other words, manufactured technologies, like children (i.e., human creations), will fail, but "when they disappoint us—you don't abandon them, you improve them. You make them better" (Shellenberger & Nordhaus, 2011, para. 8). Engaged as I am in childhood studies, this equivocation raises many red flags, which are examined in this chapter as a way to speculate about pronouncements and practices of care. This chapter begins with a close reading of Latour's (2011) article and proceeds by situating his ideas in relation to the Breakthrough Institute's (BTI) conceptualization of ecomodernism. Latour's article is published by the BTI, which is the think-tank who coined the "Good Anthropocene" and strongly believe geo-engineering will not only save humanity but make it better (Asafu-Adjaye et al., 2015).

The central speculative text in this chapter is Ruha Benjamin's (2016b) "Ferguson is the Future," which is a short story that gives #BlackLivesMatter an Afrofuturistic face in the techno-scientific regeneration of Black lives ended prematurely by police violence. The story's main characters take the names of children who have been killed in this world and who are re-born as child-cyborgs in Benjamin's speculative world. This includes 7-year-old Aiyana Mo'Nay Stanley-Jones who was murdered while sleeping on her grandmother's couch on May 16, 2010. In the story, however, a political reparations movement has been advanced alongside scientific stem cell technologies so that Black children murdered by police are given a second life. Benjamin's story "tests" out a speculative future in a way that encourages critical scholars to "anticipate and intervene" now in racialized "logics of extinction" (p. 22). Additionally, I read Benjamin's (2019) notion of "race as technology" as a cautionary rejoinder to Latour's call to

care for technologies, especially given María Puig de la Bellacasa's (2011) noticing that "a way of caring over here could kill over there" (p. 100). The chapter ends with a provocation: a "kinship of the infertile" as a regenerative cyborg praxis for the Anthropocene (Klein, 2014a).

### **Chapter 5: Parental Stewardship: Bionormative Care as Environmental Surrogate**

It is not unusual for a dystopic novel or apocalyptic film to end with a child as sole survivor. Instead of attributing their survival to a bildungsromanish move of innocence to experience, I wonder if it is because they are capable of loving our monsters. In linking back to the previous chapter, I consider if parental-figures in speculative texts demonstrate similar capacities. How have the adults of speculative texts cared for their creations? In this chapter, I use Latour's provocation to consider how the father in Cormac McCarthy's (2006) *The Road* and the mother in *The Handmaid's Tale* television adaptation of Margaret Atwood's (1986) novel refuse to abandon their offspring. This refusal comes at a price as the parents make all else secondary. It may seem at first this kind of intense parental care is a refusal of Sheldon's (2016) swing from the child in need of protection to the one who does the saving, but, while these texts put this in relation in tension, I do not think they void the transition. My analysis in this chapter adds to what Sheldon names as "sterility apocalypses," which combine crises of heteronormative fertility, preservation of the human species, and the threat of a dying earth. In such apocalyptic texts, I contend that child survival becomes a metonym for species survival and parental love becomes analogue to "planetary stewardship" (Steffen et al., 2011). As such, it is the bionormative parent-child relationship that is the focus of this chapter rather than a specific child-figure per se.

*The Road* is a post-apocalyptic tale of a father and son journeying south across a deadened America after an unnamed extinction event years before. *The Handmaid's Tale* tells

the story of a small group of fertile women called Handmaids who are forced into reproductive servitude by the totalitarian, puritanical, patriarchal government of Gilead. The world of *The Handmaid's Tale* also experiences an unknown environmental catastrophe whose effects drop fertility rates to near zero and make bodies and lands toxic. Alexis Lothian (2018) traces how the end of the world stands as a conventional plot device that can be overcome “through the resolution of a heterosexual family plot” where “children, and the possibility of children, allow a future for humanity in its current form to be salvaged from the world’s end” (p. 182). Where I differ slightly from Lothian (2018), and side with Colebrook (2017b), is that I do not believe it is humanity in its current form that gets redeemed in these stories but humanity as it “should” be (12:44). What survives via the child-figure is the possibility for a better future, but what counts as better is complicated in these texts. Ultimately, this chapter aims to make problematic “parental love as the antithesis and antidote to environmental destruction” (Johns-Putra, 2016, p. 521), and child survival as surrogate for the “anxieties surrounding the demise of white supremacy” via the family form at the end of the world (Joo, 2018, p. 4).

### **Chapter 6: Child-Monsters at the End of the (White) World**

Yusoff (2016) proposes that the dominant subject emerging from scientific discussions of the Anthropocene is “a mythic Anthropos as geologic world-maker/destroyer of worlds” (p. 5). In this chapter, I think through the ethics of making and destroying worlds with two child-figures: Melanie, a zombie child called a “hungrie” in the novel and film *The Girl with All the Gifts* (Carey, 2014; McCarthy & Carey, 2016); and the orogene child-figures in N. K. Jemisin’s (2015, 2016, 2017) Broken Earth trilogy, particularly Nassun. Orogeny is a geologic term that refers to how mountains are made overtime by seismic displacements in an upward folding of the earth’s crust. Orogenes in Jemisin’s world have geos-powers derived from the earth. As an

example of their abilities, they can quell or cause earthquakes. Melanie also troubles the strict bionormative construction of a human-child. She is a hybrid-child who is infected by a fungal pathogen that has made mindless, flesh-eating zombies of the rest of humankind. Hungrie-children are not typical zombie-figures; they are conscious and able to learn at the school on the military base on which they are imprisoned. Toxic-bodies and geos-powers, these child-figures push the boundaries of bionormative childhoods. The line between life and nonlife is put into tension with child-figures of hungries and orogenes.

All child-figures in this dissertation inhabit and inherit a broken earth in one way or another. In this chapter, however, I focus on the details of how exactly the end of the world plays out in Melanie's and Nassun's worlds. This includes the possibilities for an otherwise that arise in the wake of destruction. I draw from Black studies and Indigenous scholars who theorize the end of the (white) world as a means to create different systems, institutions, forms of belonging, and futurities. Bringing together speculative texts and theoretical ideas allows me to think-with some really big questions: What kind of world is worth saving? What if survival is not taken-for-granted as good in and of itself? "What is it about humanity that one would want to accept?" (Colebrook, 2014, p. 190). What happens if the end of the world incites an otherwise world?

### **Chapter 7: Beyond Survival: Geos-Futurities for #AnthropoceneChild**

According to Povinelli (2016), geontology breaks with a biopolitical assumption that power works via tactics of making live and letting die and is instead concerned with maintaining the division of life from nonlife. The three figures Povinelli finds illustrative of this form of governance are the Desert, the Animist, and the Virus. For Povinelli (2014c) these figures are not escapes from power—neither bio-power or geontopower—but symptoms of it. In this way, late liberalism (i.e., biopolitics + multiculturalism + neoliberalism) pre-figures the figures by shaping

but not determining their form. At the same time, these figures distort and disrupt dominant political formations, futurities, and figurations of existence in the present. A primary line of inquiry I pursue in this chapter is how the speculative child-figures in this dissertation intra-act with Povinelli's figures. This includes plotting how child-figures are positioned differently along a biopower-geontopower continuum.

Additionally, Povinelli (2013a) points out that a limit of certain critical theories of immanent potentiality is their non-material relationship to the forms of existence that they claim as their base. In other words, when critical theories of potentiality “go social” into the world their affirmative imaginaries often hit a wall bricked with concerns of existence, emergence, and endurance (Povinelli, 2011). This is particularly potent with Hushpuppy from *Beasts of the Southern Wild*, who returns as a key figure in this chapter. Hushpuppy foregrounds concerns about multispecies relations, racialized structures of abandonment, and the ethical harms of locating hope for the future in the precarious child-figure. Another familiar figure to this introduction, the Boy with the Bones makes a reappearance in a discussion of the infiltration of nonlife into the lively domain of childhood. Finally, I turn to Métis author Cherie Dimaline's (2017) speculative novel *The Marrow Thieves*, in which the child-figures care for each other and their more-than-human relations in order to endure another settler apocalypse. There is no heroic individual in this text and no kin are abandoned; there is a multigenerational community wherein Indigenous children set in motion a liveable future through regenerative relations to language and land. This chapter gestures towards a potential queer common world of #AnthropoceneChild that attends to both systems of governance and speculative imaginaries.

### **Figures as Methodology**

In her book, *Willful Subjects*, Sara Ahmed (2014) describes her methodological strategy as following a figure around to see what collects. This allows for “gathering materials that would

otherwise remain dispersed or scattered” (p. 17). In this way, #AnthropoceneChild instigates a kind of archive that is composed of multidisciplinary theory, literary works, newspaper stories, advertisements, blockbuster and indie films, social media posts, hashtags, and critically-acclaimed television shows. Spotlighted are speculative works (of theory, of fiction, of fact) that act as a catalyst for analytical grapplings and otherwise imaginings. Brought together under the broad category child-figures, the speculative figures embody and enact conflicting ideas and imaginaries that mingle and relate. Adi Kuntsman (2009) recommends paying “close attention to the relations *between* figures,” and how, the Anthropocene for example, might “take shape not only through each figure, but also through substitution and transformation of different figures into each other” (p. 30). I attempt this while also endeavouring to stay attentive to relations of difference so that writing-with figures requires an approach that is “cumulative rather than comparative” (Castañeda, 2002, p. 45), or, as Marilyn Strathern (1991) similarly instructs, one that makes “connections without assumptions of comparability” (p. 38). Bringing figures together is an act of assemblage that is never innocent (Puar, 2007). Figures travel, link up, and make worlds, and, as such, my methodological framework builds in its enactment throughout the chapters that follow.

A danger in following particular child-figures around is that the field of vision is narrowed. Focusing intently on specific figures can cut them off “*from the histories of its determination...the social and material relations which overdetermine their existence, and the consequent perception that such figures have a ‘life of their own’*” (Ahmed, 2000, p. 5). The slippage into a fetishism of figures is easy and it is something I am learning (and failing and trying again) to pay attention to. Following figures around also comes with the possibility of slipping up or tripping. Haraway (1997) takes up the Greek meaning of tropos as “turn or

swerve” as an indication of the “nonliteral quality of being and of language” that figures embody (p. 135). To perform analytical work with figures is to “always be ready to trip” and after the fall to get up and think and think again (Haraway, 2004, p. 2). This sort of stumbling can “take you somewhere you weren’t before, because something didn’t work,” which in my field of study are childhoods delimited by bionormative rationalities (Haraway & Gane, 2006, p. 152). Figures can open up speculative worlds that are not necessarily beholden to the disciplinary framings of this world, including those that I have become accustomed to in my own education. Ultimately, I approach the child-figures in this dissertation “as a turning point, a point around which to turn, that includes not only generation but also performativity in avoiding absolute repetition and fostering attention to the new terrain to which it is applied” (Burman, 2013, p. 234). The catch, which I revisit in the conclusion, is not to mistake a turning point for an individualistic, heroic centre.

“Following the child” is frequently invoked in childhood studies and early childhood education as a catchphrase for child-centred pedagogy. It supposes an intentional process on behalf of both educator and child in that the teacher steps back and the student leads. This pedagogical instructive has recently been challenged for positioning the child as individualistic and anthropocentrically elevated in a hierarchical and non-dependant agentic relationship to others, including existents of more-than-human worlds (Common Worlds Research Collective, n.d; Hodgins, 2019b; Nxumalo, 2016; Taylor & Pacini-Ketchabaw, 2018). Similar dangers haunt my analytic practices in this dissertation. In focusing intently on child-figures, what is missed? Instead of turning “*away* from dominant discourses that reproduce grand narratives of transcendent heroic solutions...and, that represent children as the ‘solution’ for the future” (Nxumalo, 2017b, p. 2), how might turning *towards* child-figures reaffirm those discourses and

positionalities? The researchers I cite above work resistantly by thinking-with children and with more-than-human worlds in situated encounters and places. Their work aims to “eschew the heroic tales of major individuals on the big stage and seek out alternative, minor, but powerful polyphonic stories of multiple small players, quietly changing worlds together on the margins” (Taylor & Pacini-Ketchabaw, 2019, p. 7). My work is different in that it builds out of speculative instantiations of child-figures and worlds rather than ethnographic multispecies encounters; there are differences between working with texts about child-figures and working with children in everyday encounters (Taylor, 2013).<sup>11</sup> Nevertheless, I share with these scholars many matters of care and concern about inhabiting and inheriting ecologically damaged worlds. As such, my work is in conversation with the ethnographic work of the Common Worlds Research Collective.

In a framing distinct from “following the child,” Claudia Castañeda (2002) announces figuration as a “simultaneously semiotic and material practice” (p. 3). If I break apart the material-semiotic relation for a moment, I can see how Castañeda’s discursive efforts are concerned with unpacking “the domains of practice and significance that are built into each figure,” and that the material component links these discursive valuations to “the making of worlds” (p. 3). As such, Castañeda is able to describe the material and semiotic processes of child-embodiment across scientific, popular, cultural, technological and theoretical sites. She is concerned with both the emergence and exchange of child-figures; in other words, this is figuration’s “double force: constitutive effect and generative circulation” (p. 3). As such,

<sup>11</sup> While Taylor (2013) does not dismiss textual work, she does note methodological differences between deconstructive discursive analyses and experimental reconstructive methods (pp. 61-66; 87-89). For Taylor, deconstructive methods are effective in exposing how and why particular images of the child are “enduring and seductive idea[s],” but limited in their capacity to create “alternative conceptualizations” (p. 62). In other words, deconstructive methods tend to rehearse and trace arguments while reconstructive methods “neither jettison nor valorize...but queer” (p. 62). This is not to say that there is something inherently reconstructive in ethnographic practices either but that they can enable an “irreverent and political” playfulness (p. 65).

Castañeda attends to the particularities and specificities of a figure's emergence in and across discourses (p. 43). In my application of her methodology, I propose #AnthropoceneChild as a figure that circulates through fields of study and through texts of speculative worlds in ways that generate critically accumulative questions about how worlds are made and sustained. In addition to raising matters of care and concern about worlds, #AnthropoceneChild is simultaneously engaged in the making of worlds in these same texts.

According to Castañeda, figuration can be practiced as a mode of storytelling. What kinds of stories can I tell with figures? What stories do figures tell? There are many. Here are two. First, one kind of story gets at how power operates—it tries to see it, explain it, and expose its limits. To extend this line of thinking, figures can reflect problematics of contemporary worlds without interrupting the current arrangement of power-knowledge (Povinelli et al., 2014). For example, the Boy in *The Road* might provoke critical questions about survival without producing a new arrangement of existence. With these kinds of stories, I can foreground critical questions of the present that point to how the world works fine for some and not so well for others. Second, another sort of story grapples with openings that can extend enough for new worlds to be imagined and even begin to form. These stories can explode the frames of how the world is normally understood; for example, the orogenes of Broken Earth exist in symbiosis with geological forces rather than only biological ones. This sort of geos-story has implications for childhood studies and the Anthropocene in their co-constitution of the human.

Povinelli's (2016) recent uptake of figures stems from her desire to understand the current formation of power underway today, which she names geontopower. Povinelli sets up her argument by alluding to Foucault's four figures of sexuality (i.e., Masturbating child, Malthusian couple, Perverse adult, Hysterical women). Povinelli does not repeat their details but uses them

to point out how Foucault was not overly concerned about sexuality per se but with the dominant formation of power in which he lived that remade life as a target and telos of governance.

Povinelli's (2013c) aims to think-with figures that organize formations of power in the present.

Figures of analytic worth for Povinelli are those that figure-forth contemporary problems of governance, and through which the differently situated consequences of "climate change, the emergence of the security state, and the shaking of neoliberalism" can be thought through

(Povinelli, 2014c, para. 1). Also important is that figures are not governed absolutely and can

indicate "a possible world beyond themselves" (Povinelli, 2014c, para. 1). In other words, while

figures can stand-in for something else in representative analyses, most important for me is how I

am also obligated to figures in ways that exceed their analytic instrumentalization. To repeat a

concern expressed earlier: what does it mean to *be* a figure of #AnthropoceneChild?

One last methodological note addresses the figure of the hashtag in #AnthropoceneChild.

First, the hashtag locates #AnthropoceneChild in the contemporary moment by using a mode of address best known through social media platforms. With this technology, I can refuse divisions of high or low culture and appreciate how hashtags do important work in today's world.

Hashtags form "digital archives" which are "sites of memory and preservation, but also records of erasure and void; they are maps of knowledge and interactions, readership and witnessing, but

also signs of things to come" (Kuntsman, 2009, pp. 4-5). Hashtags are not innocent. Second,

hashtags offer a method of making a "frozen moment" (Haraway, 2004, p. 23). In other words,

hashtags enact a strategy of holding something that is ephemeral still just long enough to think-

with it. Reading #AnthropoceneChild is a bit awkward and my intention is that the hashtag slows

down thought for a moment (Stengers, 2005). Third, and in seeming contrast to a frozen

moment, the hashtag also conveys a sense of virality. Virality in the way I intend means an

affirmation of contagion, movement, mutability, and animacy. Patricia Clough and Jasbir Puar (2012) describe the viral as “a form of communication and transmission in and across various and varying domains: the biological, the cultural, the financial, the political, the linguistic, the technical, and the computational” (p. 13). Of particular interest to me is how the viral is a non-bionormative practice of “replication without reproduction,” which I return to in later chapters (p. 14). In as much as the viral is associated with a notion of contagion understood as “spreading harmful material, the viral can also transmit generative products” (Wade, 2015, p. 35).

In putting forth the concept of *Black feminist hashtags as becoming*, Tara Conley (2017) notes that “hashtags of consequence” can “proliferate to mediate connections across time and space” (p. 23). These hashtags “rupture standardized forms of knowledge production and normative discourses around feminism and race” (p. 24). #SayHerName is a paradigmatic example of such a practice of rupture and refusal. In the context of #BlackLivesMatter and #Ferguson, Ashleigh Wade (2017) theorizes the hashtag as a “virtual-physical assemblage,” which both spreads ideas in virtual space and invites bodies to mobilize together (p. 40). This relates to Castañeda’s (2002) conceptualization of a figure as “simultaneously semiotic and material practice,” but, for Wade, the material is emphasized and the racialization of material-semiotic practices is taken into account. I return to Wade’s provocative theorizing in Chapter 6. Lastly, Ashon Crawley (2015) closes his powerful prose titled “Otherwise, Ferguson” with support of the hashtag as a critical form of anti-oppressive, collaborative activism: “Hashtags moved from Gaza to Ferguson, from LA and NYC and Detroit and Atlanta to Ferguson and back boomeranged, all creating loops, spaces of otherwise modes of sociality. Otherwise than this. Otherwise” (para. 18). I am not intending to appropriate #BlackLivesMatter or #Ferguson, nor the work of these Black scholars, organizers, and activists. Instead I want to work with deep

respect to these ways of worlding and in ways that attend to the “the cultivation of viral response-abilities” (Haraway, 2016, p. 114).

## Chapter 2: Anthropocene Births: Origins, Innocence, and the Spectre of Childhood

In a relatively short time, the Anthropocene has become an important scholarly watchword. The Anthropocene “has become the closest thing there is to common shorthand for this turbulent, momentous, unpredictable, hopeless, hopeful time—duration and scope still unknown” (Revkin, 2016, para. 1). As shorthand, however, Anthropocene conversations often gloss over the material violences, temporal scalings, and incommensurable worldings that figure a “shadow” behind the “shine” of its current popularity (Andreotti, 2012). To flesh out this glossing, I juxtapose key texts in the scientific literature with a growing body of social science and humanities work that raises concerns about the Anthropocene, often problematizing what is hidden, occluded, delimited, and, sometimes, celebrated in more uncritical deployments. The range of texts reflects the difficulty of locating the Anthropocene in one particular domain, even geology, because as the Anthropocene has “come into fashion...it has picked up a variety of incompatible meanings, each implying different concepts and commitments” (Davies, 2016, p. 41). In this chapter I trace the contours of some concepts and highlight where different figurations collide, overlap, and diverge. Additionally, my theoretical commitments to anti-colonialism, anti-racism, and childhood studies encourage me to consider how the dominant Anthropocene imaginary conjures, deposes, and mobilizes #AnthropoceneChild.

In this chapter I work through how the Anthropocene is thought in language most often associated with births and beginnings. I grapple with how the concepts usually associated with children and childhood (e.g., birth, growth, innocence, reproduction, nature) underwrite scientific discourses of environmental and political consequence. I push forward the concept of *spectre of childhood* as a way to get at what is most likely the inadvertent presence of imaginaries of childhood in Anthropocene scholarship that nonetheless do important work. I am not arguing that

this has been a conscious effort on behalf of Anthropocene discussants, but, rather, that it fits Lee Edelman's (2004) theory that "the image of the Child invariably shapes the logic within which the political itself must be thought" (p. 2). As such, this chapter is organized around three births: first, the birth of an idea to address the entrance of the Anthropocene concept into scholarly spaces; second, as the birth of an event which engages discussions around golden spike origin moments; third, as the birth of a geologic subject in order to examine how the language of natality and origin underwrite figurations of geological innocence that unevenly take form in the Anthropocene, and, consequently, produce and reflect racialized geos- and sociopolitical practices that "discipline humanity into full humans, not-quite-humans, and nonhumans" (Weheliye, 2014, p. 4). These birth stories are important because the "story we tell ourselves about environmental crises, the story of humanity's place on the earth and its presence within geological time determines how we understand how we got here, where we might like to be headed, and what we need to do" (Davis & Todd, 2017, p. 63).

### **Birth of an Idea**

#### **Moment of Conception**

At a conference outside Mexico City on Earth system science in late 1999, participants were discussing the Holocene epoch—the current, official geologic period in earth history—when Nobel-prize winning atmospheric chemist Paul Crutzen was overcome with an aversion to this particular chronostratigraphic designation. At once he rose, coughed loudly to command attention, and fumbled out, "Stop it... We're not in the Holocene anymore. We're in the... [thinking pause] ... the ... [dramatic pause] ...the Anthropocene!" The exact wording varies depending on who is telling the tale, and he probably did not exactly rise and exalt, but the story is most remarkable, in my opinion, for how much it is retold, especially as the narrative hook into writings about the Anthropocene (e.g., Davies, 2016; Kolbert, 2011; Macfarlane, 2016;

Revkin, 2016). Why is there such widespread interest in this eureka moment? What is it about the birth of a concept—and the Anthropocene idea in particular—that invites so many retellings? I doubt it is a response to Fredric Jameson’s (1981) mantra to “always historicize.” Instead it might do the opposite and lend the Anthropocene conceptual beginning an air of ingenuousness, spontaneity, and *ex nihilo* wonderment. It creates an origin myth that re-inaugurates a sense of natality that will be problematized in later sections of this chapter. It also offers a kind of narrative punch that helps make Earth system science more approachable to those outside its disciplinary bounds. Momentarily, at least, something so big as deep time and deep strata becomes less daunting. The story is what Jeremy Davies (2018) calls a “seductively memorable starting point” (p. 42). But to distill the birth of the Anthropocene to one moment of natality—as concept or event or subjectivity—has proven much more complex than the clever anecdote that delivers it.

Other noted moments for the birth of the Anthropocene idea include, firstly, a two-page newsletter submission by Crutzen and freshwater biologist Eugene Stoermer in 2000 (Crutzen & Stoermer, 2000). Stoermer had been using the term informally for almost 20 years but had never published it until Crutzen contacted him (Kolbert, 2011). Secondly, two years later, Crutzen (2002) repurposed the earlier co-authored piece in the more widely read *Nature* journal, therein marking “the emergence of the concept into widespread scientific awareness” (Davies, 2018, p. 44). Precursors to the term Anthropocene include 1870s Italian geologist Anthonio Stoppani who proposed the term “Anthropozoic era” to signify human impact on the earth, and even further back to 18th century naturalist Comte de Buffon’s “seventh epoch” proposal amongst others (Lewis & Maslin, 2015; Steffen et al., 2011). A more recent instance involves American journalist Andrew Revkin’s (1992) book, *Global Warming*, which offered these prescient

remarks: “Perhaps earth scientists of the future will name this new post-Holocene period for its causative element—for us. We are entering an age that might someday be referred to as, say, the Anthropocene” (p. 55). This brief review is meant to highlight that “all ideas have a birth....Yet all ideas have multiple antecedents” (Editorial Board, 2016, p. 316). However, my hesitation in (re)emphasizing these conceptual beginnings is that by repeatedly (re)counting an origin moment or (re)citing the same publications, the complexity of and conditions for the emergence of alternative Anthropocene figurations are made more difficult. What typically happens is that the dominant origin moment is cited in a text’s first paragraph for context and then the authors quickly move on to their own work; for example, Crutzen’s (2002) article has over 4300 citations according to Google Scholar and a 97.454 prominence percentile on Scopus.

As a relatively young concept the Anthropocene has experienced its fair share of growing pains. Taking Crutzen’s work as a pattern of trends in the wider scientific field, I notice that some of these revisions have been corrective and some speculative. Davies (2018) notes two important additions to Crutzen’s (2002) rewrite from the earlier co-authored piece. First, Crutzen makes an explicit recognition that human-induced system changes are not attributable to a “mankind” universal but “have largely been caused by only 25% of the world population” (p. 23). Second, Crutzen forwards a call for “internationally accepted, large-scale geo-engineering projects...to optimize climate” (p. 23), in a new emphasis on finding solutions that will continue in later articles (e.g., Crutzen, 2006; Rasch et al., 2008). Crutzen’s initial proposal for an Anthropocene start date has also been revised. Originally, he suggests the invention of James Watt’s steam engine in 1784, but later turns to a multi-stage version that places the key moments of emergence at the Industrial Revolution beginning around 1800 and then the Great

Acceleration circa 1950 (Steffen et al., 2007).<sup>12</sup> Currently, there is wide-spread acceptance in the scientific community of the Great Acceleration hypothesis that encompasses population growth, urban development, economic change, increased consumption, and political reformation after World War II (Zalasiewicz et al., 2017). In noting broad approval, I am alluding in part to the recent vote of Anthropocene Working Group (AWG) members at the 35<sup>th</sup> International Geological Congress in South Africa that overwhelmingly chose a ~1950 date in response to the question, “When should the Anthropocene begin?” (p. 58). This is not to say that even in scientific circles that this birth date is decided once and for all. Debates, reservations, and objections to the dating of the Anthropocene will be explored in later sections.

### **Fathers of Formalization**

The crux of current scientific work surrounding the Anthropocene relates to its formalization as an official geological measure of time within the International Chronostratigraphic Chart.<sup>13</sup> The work is led by the AWG which is headed by Polish geologist Jan Zalasiewicz. The AWG currently has 35 members composed mainly of Earth system scientists of the geologist and palaeontologist variety, some climate and polar scientists and ecologists, and a few social scientists and journalists for good measure (Zalasiewicz et al., 2017, p. 56). Its leaders note that this working group represents a “broader community than is typical,” and while their “breadth of expertise” might be evident in their CVs, some other characteristics are all too familiar (p. 56). A cursory look through the group photos that cover the AWG annual

<sup>12</sup> In Steffen et al.’s (2007) proposal, the Anthropocene is divided into three stages: Industrial Era (1800–1945) marked by fossil fuel expansion, the “Great Acceleration” (1945–2015) marked by rapid industrialization and population growth, and the third stage “Stewards of the Earth System” (2015 onwards), a speculative period marked by growing awareness of humanity’s impact on nature. The third stage is further investigated in Chapter 3.

<sup>13</sup> The International Commission on Stratigraphy (ICS) publishes the global geologic time scale, officially known as the International Stratigraphic Chart, which plots the 4.5 billion year history of the Earth along a numerical scale that uses a time unit of a million years (chronometric scale) and a scale in relative time units, for example periods or epochs (chronostratigraphic scale). See <http://www.stratigraphy.org/index.php/ics-chart-timescale>

newsletters from 2009-2018 reveals a few monocultural trends: white, male, old, and collared shirts.

In an article published by *The Guardian*, Kate Raworth (2014) asks of the AWG: “Must the Anthropocene be a Manthropocene?” At inception only one of the 29 AWG members were women and at its peak membership there were five women amongst 36 members (Raworth, 2014). Additionally, as of December 1, 2018, despite claims on their website to have representation from six continents, I count only two current members with institutional affiliations outside of the United States, Canada, Australia, and Europe—one Kenyan and one Chinese organizational membership (AWG, 2018). This is why I nod along when Raworth remarks, “Leading scientists may have the intellect to recognize that our planetary era is dominated by human activity, but they still seem oblivious to the fact that their own intellectual deliberations are bizarrely dominated by white northern male voices” (para. 3). This is not to doubt the AWG members’ hopes that the “Anthropocene might be used as encouragement to slow carbon emissions and biodiversity loss” (Zalasiewicz et al., 2010, p. 2228), or that how to measure methane concentration, detect fuel ash particles, or explain the transition from Greenlandian to Northgrippian stages requires specialty knowledge. But if history has taught me anything, including the history in the mud that will turn into rocks and provide evidence of anthropogenic activity in the years to come, it is that the same dominant “overrepresentation of Man as if it were the human” that got us into this mess might not be the one to get us out (Wynter, 2003, p. 267).

While I am weary of making generalizations (including my use of “us” in the last sentence), I think it a fair noticing that much Anthropocene scholarship tends towards an erasure of coloniality and anti-blackness as foundational to the worldings underwriting its formulation

and formalization.<sup>14</sup> This is not exclusive to Earth system science but applicable to some work on the Anthropocene in the humanities as well. “As a Métis scholar, I have an inherent distrust of this term, the Anthropocene,” Zoe Todd (2015) writes, given that it has been produced in the “undeniably white intellectual space of the Euro-Western academy” (p. 247) where “not all humans are equally invited” (p. 244). While not writing about the Anthropocene, Anishnaabe and Haudenosaune scholar Vanessa Watts (2013) offers a useful framework for examining the incommensurabilities between Indigenous and Euro-Western ways of knowing and being. Watts names Indigenous Place-Thought as a “theoretical understanding of the world via a physical embodiment” that is “based on the premise that land is alive and thinking and that humans and non-humans derive agency through the extensions of these thoughts” (p. 21). This is paradigmatically different than the epistemological/ontological divide of Euro-Western knowledge production that locates agency in humans, even in its Anthropocene update of humans-as-geologic-force. Can Indigenous analytics insisting that land is sentient be honoured within an Anthropocene birth story where humans are the dominant geologic force? Who is excluded in scholarly announcements of the Anthropocene? How does the dominant discourse “discredit and delegitimize ways of understanding contemporary conditions that are less thoroughly grounded in the narratives of Western modernity” (Simpson, 2018, p. 3)?

<sup>14</sup> Key work from Latin American scholars maps how coloniality continues to organize everyday life (Grosfoguel, 2008; Mingolo, 2011), and Anthropocene scholarship is thought and practiced within these relational structures. This sense of coloniality includes “patterns of power that emerged as a result of colonialism,” and extends to practices “that define culture, labor, intersubjective relations, and knowledge production well beyond the strict limits of colonial administrations” (Maldonado-Torres, 2007, p. 243). Additionally, Black studies scholars argue the anti-blackness is “central to the ways in which European modernity has cemented its global rein,” primarily through “anti-Black logics so deeply embedded in various normativities that they resist intelligibility as modes of thought” (Walcott, 2014, pp. 93-94). These logics are more fully detailed in consideration of Patterson, Wilderson, and Wynter in later sections.

## Earth System Science Fiction

It is hard to know what to make of the claim that the human species is now a geomorphic agent altering the atmospheric, stratospheric, biospheric, lithospheric, and hydrospheric conditions of the earth. Is humanity en masse responsible for the Anthropocene condition? Is this what scientists and academics are saying? Does it matter what they are saying if this is how it is being taken up? Andreas Malm and Alf Hornborg (2014) note that an argument provided by some scientists for a species-based neologism, even given the recognition that humans are just one small part of the Earth system, is that “what really matters is that climatic disruption originates from *within* the human species, even if not *all* of it is to blame” (p. 65). In response to the naming debate of the Anthropocene, Zalasiewicz (2014) admits that the term has “some resonances that are non-ideal,” but that “the Anthropocene is not about being able to detect human influence in stratigraphy but reflects a change in the Earth system” (para. 2). Donna Haraway’s (2016) adds to the conversation with her refutation of human exceptionalism: “No species not even our own arrogant one pretending to be good individuals in so-called Western scripts, acts alone; assemblages of organic species, abiotic actors make history” (p. 99). One alternative script is Zalasiewicz’s (2008) *The Earth After Us*. In this text, Zalasiewicz takes the perspective of an alien arriving on earth a million years from now to seek meaning in massified fossils located deep in the earth’s core. This speculative thought-experiment points towards the many ways the “scientific question of the Anthropocene can only be answered through an act of *science fiction*....[it] requires a future geologist [or alien], living on, returning to, or visiting the Earth, and blessed with the sensoria and apparatus capable of interrogating the planet’s strata” (Lorimer, 2017, p. 128). How can the speculative aspects of Anthropocene knowledge be given more space to percolate and disrupt?

Zalasiewicz's main disciplinary affiliation is Earth system science, which understands the earth as "a single complex system at the planetary level with its own emergent properties, states and modes of functioning" (Brondizio et al., 2016, p. 319). Earth system science is a term that has popped up too many times in my preparatory readings to continue skipping over. Its leading practitioners, many of whom form the AWG, define it as the "suite of interacting physical, chemical and biological global-scale cycles and energy fluxes that provide the life-support system for life at the surface of the planet" (Steffen et al., 2007, p. 615). From my novice understanding, this means, for example, that the climate system cannot be understood apart from other systems in a fight to end global warming because changes in the atmosphere impact the biosphere and lithosphere too. Earth system science understands the planet as dynamic in that it houses constantly changing interconnected processes and systems. From this standpoint, the Anthropocene encompasses "a change of state in the Earth system" (Waters et al., 2016), wherein what is currently being experienced is "the phenomenal growth of the global socio-economic system, the human part of the Earth System" (Steffen et al., 2015, p. 93). Within this conceptualization, humans are not impacting the environment from some place outside or above nature but from within the Earth system itself. However, a large drawback of this framework is that the human is typically figured in aggregate and composite form therein denying differences and distributions amongst humans, places, and geopolitical systems. So, while Earth system science "now has a clear view of the physical, chemical, and biological threats to our world, [it] offers little insight into the underlying causes of the postwar explosion of environmentally destructive activity" (Angus, 2015b, para. 34).

Ian Angus (2015a) argues that concerns about Anthropocene scientists proffering a homologous humanity are "understandable, but overstated" (para. 2). Angus posits that most

critiques “seem to reflect preconceptions about what the Anthropocene concept might mean, rather than serious engagement with the work of the scientists who have defined it” (para. 2). Again, from my perspective, given the Greek etymology of *Anthropos* being “man, human being” it is easy to see how such concern and care might be warranted. Undifferentiated journal article titles such as “The Anthropocene: Are Humans Now Overwhelming the Great Forces of Nature?” (Steffen et al., 2007), or “Humans are the World’s Greatest Evolutionary Force” (Palumbi, 2001), easily lend themselves to such a cautioning. Magazine headlines like “The Anthropocene: A Man-Made World” (Economist, 2011) and documentaries like *Anthropocene: The Human Epoch* (Baichwal et al., 2018) feed into the universalization and generalization of humans as one causal agent, even if the details of their analyses say otherwise. My concern is that the “Anthropocene label tends to universalise and normalise a small portion of humanity as the human of the Anthropocene” (Baskin, 2014, p. 7), and that this is important to address rather than quickly dismiss as simply not what scientists are intending. Popularization of concepts often removes the intricate details of multilayered theorizations and figures tend to take on a life of their own (Ahmed, 2004; Moore, 2016). This is not unique to science. So, while most scientists working on the Anthropocene might not support the idea of humanity-as-One that does not mean that the possibility of it being taken-up as such should not be subject to critical discussion.

Writ-large the Anthropocene covers over the human species’ profound interdependency on other species and non-life existents, but that does not have to be the dominant narrative. The “gathering of all humans back into one lump” can be refused—it is actively being refused by many of the scholars cited in this chapter (Hamilton & Neimanis, 2016, para. 5). Part of the critical strategy is to rebuff efforts to “cross out of decades of academic and social justice work that refuses such pretensions to a singular concept of Man as the only subject of history” (para.

5). The question that lingers for critical scholars is if “we [can] really mend our ways with a concept that puts humans right back at the centre” (para. 4). One of the Anthropocene’s more vocal critics, Ellen Crist (2013), is adamant in her repudiation because the “discourse of the Anthropocene refuses to challenge human dominion, proposing instead technological and managerial approaches that would make human dominion sustainable” (p. 129). Less carbon-dependant ways of life can be blocked from view as viable alternatives in pledges for technofixes and geo-engineering feats. Where I depart from Crist, even though we both lean into the language of refusal, is that I do not think the Anthropocene discourse is set in stone. What might happen to the figure of the Anthropos is that its human exceptionalism may prove to be “delusional and self-sabotaging” (Taylor & Pacini-Ketchabaw, 2015, p. 6). Later sections of this chapter show how humans are “only made possible through a diverse network of technological, cultural, organic, and geological entities” (Palsson et al., 2013, p. 7).

### **Birth of an Event**

#### **Golden Origins**

Previous modifications to the International Chronostratigraphic Chart emerged from samples taken from strata and advances in both the technology and scientific knowledge needed to measure and read the data, for example, radiometric dating and stable isotope chemostratigraphy (Zalasiewicz et al., 2017). Conversely, the Anthropocene first emerged as a concept (e.g., Crutzen’s eureka moment) with less initial regard for the geostatal record. Following this, the focus of the AWG became whether there was robust enough evidence of global change beyond that of normal variation to warrant a new chronostratigraphic unit. Now satisfied with the evidence, scientists are searching for a boundary indicator to formally index a transition between geological epochs. A readable stratigraphic imprint in a specific layer of strata must be located, or a specific date of major global change to the Earth system must be widely

agreed upon. The latter is called a Global Standard Stratigraphic Age (GSSA) and the former a Global boundary Stratotype Section and Point (GSSP), colloquially called a golden spike. The golden spike must be a globally synchronous alteration to the Earth system; in other words, even if the inscription in strata is not yet readable it is assumed to eventually be soluble worldwide. Although 05:29:21 Mountain War Time on July 16, 1945, was an early favourite for a GSSA, which is the instant that the United States military exploded the first nuclear device at the Trinity test site in New Mexico, the AWG voting members and the wider geological community prefer a GSSP (Zalasiewicz et al., 2017). So, for example, geologists are now searching rock core, glacial ice, and marine sediment where radioactive isotopes from the bomb's detonation are evident. Once discovered and studied, they will drive a literal pin-sized golden spike into the strata at one specific point.<sup>15</sup> As Kathryn Yusoff (2018) explains, however, “these spikes are not real places as such; they are trace effects in material worlds that infer the event/advent of this most political geology” (pp. 23-24).

I make no claims of competency to evaluate the stratigraphic accuracy of proposed Anthropocene start dates, especially given that around twenty possibilities have been proposed (Waters et al., 2014). In this section, I nevertheless review the top three proposals with a focus on their geosocial and geopolitical implications rather than their geologic merits. I am most interested in the stories the spikes make possible: what is at stake in the origin stories of the Anthropocene? This is important because the discussion around golden spikes provides climate change and its related issues with not only temporality but narrativity. Emphatically, Arun

<sup>15</sup> As an example, the origin marker denoting the boundary between the Mesozoic and Cenozoic eras—the K/Pg boundary—is a layer of iridium deep in rock caused by the massive asteroid strike responsible for the extinction of dinosaurs more than 66 million years ago. The golden spike is located in El Kef, Tunisia, where in 2006 geologist hammered a tiny golden spike marker into the rock face, but on every continent paleontologists are able to locate fossils of large dinosaurs below this stripe of rock and none above it (Molina et al., 2006).

Saldanha and Hannah Stark (2016) state that what is “at stake is nothing less than the understanding of the impact of the human species on its planet” (p. 430). The stakes of spikes are huge. “It matters what stories tell stories” (Haraway, 2016, p. 2). It matters what origins originate the Anthropocene.

Saldanha and Stark (2016) summarize the stakes in the three frontrunners for an Anthropocene birthdate. They explain that a date of 1610 makes our world “a story of empire and genocide,” a date in the 1950s highlights “capitalist and consumerist greed or of unleashing the potential subatomic powers of the universe,” and a date of 1800 recognizes the “dark side of industrial and scientific progress” (p. 430). Less critically inclined tellings of these same scenarios might relay tales of adventure and civilization, technological and economic progress, and the right side of scientific triumph and innovation. None of these stories are innocent. Simon Lewis and Mark Maslin (2015) note that the “event or date chosen as the inception of the Anthropocene will affect the stories people construct about the ongoing development of human societies” (p. 178), and therefore it matters to worlds beyond geology. A stratigraphic mark has a direct overlay with human stories of life on earth and therefore “the choice of geological marker [is] a political story about human agency, culpability, the past, and the future” (Gergen et al., 2018, p. 5).

### **#OriginColonialism**

Lewis and Maslin (2015) forward their “Orbis hypothesis” as a golden spike contender that dates the birth of the Anthropocene at 1610. The Orbis hypothesis captures the substantial drop of carbon dioxide in the atmosphere, evident deep in present day glacial ice, which was the Earth system response to the rapid reforestation of the Americas as a direct consequence of the genocide of Indigenous peoples. The prehistory of this carbon sequestration involves the arrival

of the Europeans in the Caribbean in 1492 that set into motion “the first global trade networks linking Europe, China, Africa and the Americas, and the resultant mixing of previously separate biotas” (p. 174). What Lewis and Maslin problematically term the “Columbus Exchange” brought new plant and animal species, diseases, and violences to so-called new lands in a process of empire building. The exchange was not mainly about plants however but about bodies. Equivocating Black people forced into slavery with other goods like plants, minerals, and food stores suggests enslaved Africans as inert and non-sentient, and as yet another commodity “that could be traded and transplanted like gold or *anything* else” (Yusoff, 2018, p. 30). The language of exchange slips too easily into the property equation of what Aimé Césaire (1983) theorizes as colonization equals thingification. As Brian Wagner (2010) explains, “blackness indicates existence without standing in the modern world system. To be black is to exist in exchange without being a party to exchange” (p. 1). Exchange also erases the enormous number of Indigenous deaths on stolen lands. An estimated 54-61 million Indigenous peoples were decimated down to 6 million by 1650, which is an astonishing 50 million deaths in less than 200 years. While disease definitely played a role in the annihilation, again, it was mainly about bodies—in this case, bodies on land, which for many Indigenous worldviews are inseparable existents. The language of exchange displaces the racialized violences that underpin this potential golden spike moment. There is a perceived innocence to exchange—an imagined, reciprocal, give-and-take relation that glosses over “the directed colonial violence of forced eviction from land, enslavement on plantations, in rubber factories and mines, and the indirect violence of pathogens through forced contact and rape” (Yusoff, 2018, p. 30).

At its most generative, the 1610 golden moment of Anthropocene origin could encourage a geological, educational, and political about-face if the spike is understood to indict colonialism,

imperialism, slavery, and genocide directly. Lewis and Maslin never use the word genocide, or something so evocative of mass killing, even though they cite horrific death totals. As mentioned above, they write of the Columbus Exchange instead of the Middle Passage and Indigenous genocide. They only use “colonialism” once and that is in their conclusion (p. 177).

Nevertheless, their article has sparked critical work that rereads their Orbis hypothesis with explicit emphasis on colonialism and anti-Black racism. Heather Davis and Todd (2017) hope that locating the start date of the Anthropocene coterminous with the colonization of Turtle Island and the horrors of the Middle Passage “names the problem of colonialism as responsible for contemporary environmental crisis” (p. 763). This link asserts Anthropocene-colonialism as “ecocidal” dependents and not as natural or inevitable relations (p. 763). The Anthropocene is “the result of a series of decisions that have their origins and reverberations in colonization. From this place, we can begin the project of decolonizing” (p. 763). Part of this decolonization of the Anthropocene is recognizing how the violent division of mind, body, being, and land is located securely within Euro-Western worldviews and settler colonial practices that have always desired this cut between humanity and the rest.

In related work, Audra Mitchell and Todd (2016) support this golden spike because it makes explicit the “distinctively colonial violence enacted through the forces reshaping the Earth and the discourses arising to describe them” (p. 2). Whereas Maslin and Lewis focus on the geological evidence and name the spike the Orbis hypothesis, which has an effect of voiding its violent connotations much like the language of exchange does, Mitchell and Todd “focus on the violence itself” (p. 2). They note how settler colonialism and slavery set the stage for later “geo-traumas” from the likes of nuclear bombs to the “slow violence of capital accumulation, industrialization and extinction” (p. 2). This was not a harmless “collision of the Old and New

World peoples” (Maslin & Lewis, 2015, p. 177), but intentional genocide and forced enslavement.

By linking the Anthropocene with colonization, it draws attention to the violence at its core, and calls for the consideration of Indigenous philosophies and processes of Indigenous self-governance as a necessary political corrective, alongside the self-determination of other communities and societies violently impacted by the white supremacist, colonial, and capitalist logics instantiated in the origins of the Anthropocene. (Davis & Todd, 2017, p. 763)

Potawatomi scholar Kyle Powys White’s recent work on the Anthropocene, apocalypse, and environmental justice lists as ongoing settler colonial climate technologies the practices of deforestation, pipelines, overharvesting, and terraforming. These have made it much more difficult for Indigenous peoples to adapt to ecological changes, but it does not mean there has not been continued resistance and refusal (Whyte, 2017b).<sup>16</sup> If this golden spike is to hold the kind of political clout that is open to reparations and/or decolonization, anti-Black and settler colonial critique need to be foregrounded in the discussion—and done so carefully so that death and victimization do not become the only story of Black and Indigenous lives (Hartman, 1997; Sharpe, 2010; Tuck, 2009).

### **#OriginCapitalism**

For many years the leading golden spike moment was Crutzen’s (2002) early suggestion of Watt’s invention of the steam engine as the event that inaugurated the Anthropocene. As

<sup>16</sup> There are many examples of resilience, resistance, and responsibility from Black and Indigenous communities around the world, including those practices shared in the *Indigenous Climate Change & Climate Justice* bibliography (<https://kylewhyte.cal.msu.edu/climate-justice/>) and *Intercontinental Cry* daily email updates (<https://intercontinentalcry.org>). Work by the Land Relationship Super Collection, led by Eve Tuck (Unangax) and Wayne Yang, is yet another example (<http://www.landrelationships.com/>). I would be remiss to not also include the work of Indigenous land defenders who are refusing pipeline expansion through territories of the Wet’suwet’en nation, which has been forefront in the news cycle in early 2020.

technological triumph, the steam engine is reimagined “as the one artefact that unlocked the potentials of fossil energy and thereby catapulted the human species to full-spectrum dominance” (Malm & Hornborg, 2014, p. 63). The reasoning behind the proposal is that the steam engine metonymizes the burgeoning dependency on fossil fuels and accompanying CO<sub>2</sub> intensification, in addition to massive societal changes brought about by the Industrial Revolution. Lewis and Maslin (2015), however, refuse this start date because humans have long engaged in industrialized manufacturing (not new), the date could be used to assign blame to specific countries so does it not reach a threshold of global change (too local), and the spread of fossil fuel use was slow and the impact on emission levels gradual (too diachronous). On the other hand, if the Industrial Revolution start date is to be adopted as Anthropocene origin then the epoch is immediately linked to what Malm (2016) calls “fossil capital” and its undeniable ties to global warming and global inequity. Nevertheless, what seems to be key to me is if Britain or capitalism are emphasized as casual agents or systems then the inequitable globalized processes that underpin the transition to fossil fuels are expunged. This would conceal how genocide, colonialization, imperialism, and enslaved labour generated wealth for those who would lead the Industrial Revolution and whose descendants continue to benefit from it. There is a violent “prehistory of capital and its bodily labor, both within coal cultures and on plantations” that made the new industrial modes of material accumulation and technological development possible (Yusoff, 2018, p. 40). As Stephanie LeMenager (2014) comments, “oil literally was conceived as a replacement for slave labor” (p. 5).

As a show of British intellectual and technological prowess, Industrial Man becomes yet another entry in Wynter’s (2003) genre of the Overrepresentation of Man wherein Man does not

get problematized but instead celebrated. Applied to the Anthropocene, the figure of Anthropos-Man makes a series of heroic transitions:

The explorer as hero (Columbus) is replaced by the inventor as hero (Watt and his engine) in the progress narrative of Man as the agentic center and authority of power, cut with some European genius myth to rarefying the white male subject and his imperial intellectualism....It relocated the Anthropocene back to Europe, to Britain, and claimed the history of the planet from this origination point. (Yusoff, 2018, p. 39)

Attention to the colour line of the Anthropocene, however, as written into rather than external to its stratigraphic marks, instead makes clear “that it is not all people that are indicted by the onset of the Anthropocene but a specific set: colonial settlers, enslavers, and would-be imperialists” (Mizroeff, 2018, p. 140). These are not heroes in my history book. Another response has been to decentre humans in an analysis of systems; for example, the Capitalocene attributes global anthropogenic ecological change to a history of economic arrangements and the political systems that support them (Moore, 2016). It is an ongoing debate as to whether a focus on systematic factors (i.e., capitalism) displaces anthropogenic blame (i.e., human action), or vice versa. I believe that there is space for an integrated approach. Nevertheless, while the Industrial Revolution has had a massive impact on Earth system functioning there is no longer consensus amongst geologists that this is *the* originary moment.

### **#OriginConsumption**

Consuming plastics, spraying pesticides, detonating weapons, extracting oil, marketizing economies, globalizing trade, and rising human numbers are all factors of what has been anointed the Great Acceleration. In a moment reminiscent of Crutzen’s conference exclamation, the term was first used in a 2005 workshop by Steffen and colleagues to capture the fact that

since the end of World War II three quarters of the cumulative total of carbon dioxide has been released into the atmosphere (Lane, 2019, p. 11). This statistic was one data point compiled for what are now widely known as the Great Acceleration graphs.<sup>17</sup> Originally published in 2004 and revised in 2015, these graphs plot data from 1750 to 2010 and track 12 features of Earth system functioning and 12 “human enterprise” factors (Steffen et al., 2004; Steffen et al., 2015).<sup>18</sup> The Earth system indicators include, for example, measurements of methane concentration, carbon dioxide, nitrous oxide, and surface temperatures. The “human enterprise” indicators include population, GDP, energy use, and urbanization, amongst other factors. What has received far less attention are the post-War geopolitical sensibilities that promote resource extraction, global trade, unprecedented consumption, and, above all else, economic growth. These practices and values did not emerge spontaneously but from a long history of exploitation and opportunism. Additionally, a major critique of the Great Acceleration framework has been its tendency to downplay connections between ecology, politics, and geosocial relations, and instead present change “through brute macro-social categories and the impacts of a totalised humanity” (Lane, 2019, p. 12). This is to say that while the Great Acceleration might present “an accurate depiction of the past seventy years, it does little to register the very real differences

<sup>17</sup> Work on these graphs predated the popularization of the Anthropocene concept, but nevertheless they have become its defining proof. The data was part of a synthesis project undertaken by the International Geosphere-Biosphere Programme (IGBP) from 1999-2003 to pull together various projects and come up with a global picture of how the Earth system functions interdependently (Steffen et al., 2015). With the take-off of the Anthropocene, the work of the IGBP was reconfigured to focus on building “a more systematic picture of the human-driven changes to the Earth System, drawing primarily, but not exclusively, on the work of the IGBP core projects” (p. 81).

<sup>18</sup> The Great Acceleration indicators can be considered alongside the Planetary Boundaries framework that is composed of nine Earth system processes. These include climate change, ocean acidification, ozone depletion, atmospheric aerosol loading, biodiversity, freshwater use, land system change, chemical pollution, and biogeochemical flows (Rockström et al., 2009). These nine processes structure and regulate the functioning of the Earth system, and, despite periodic fluctuations, have maintained the Earth system in a relatively steady state for thousands of years. Through “threshold estimates,” the nine boundaries form a “safe operating space” for the planet to continue operating within sustainable parameters (Galaz et al., 2012; Lenton & Williams, 2013). Planetary Boundaries are a speculative form of scientific modelling that predicts future harm through “tipping points” while the Great Acceleration graphs plot the past (Biermann et al., 2012).

between peoples, governments, and geographies in their complicity with these processes” (Davis & Todd, 2017, p. 766).

In the 2015 formulation of the graphs, where data permitted, the human enterprise indicators were disaggregated from a composite humanity and sorted into categories used by the Organisation for Economic Cooperation and Development (OECD) to distinguish between developed, emerging, and developing economies.<sup>19</sup> The original graphs “clearly show that strong equity issues are masked by considering global aggregates only” (Steffen et al., 2015, p. 81), and that “by treating humans as a single, monolithic whole, it ignores the fact that the Great Acceleration has...been almost entirely driven by a small fraction of the human population” (p. 91). The new graphs are a partial response to the strong critique by social science and humanities scholars, although questions about some indicators remain. For example, a noticeable update was substituting a telecommunication measure (i.e., mobile phone use) for the number of McDonald’s restaurants as the measure of what counts as globalization. Like the Earth system factors, the human enterprise indicators show a sharp graphic upturn around 1950 with measures of economic activity (i.e., GDP) continuing to rise at a steep rate. However, when differentiated the graphs show clear differences between, for example, an increase in population in non-OECD countries and an increase in GDP (i.e., consumption) in rich countries. The authors summarize:

In 2010 the OECD countries accounted for 74% of global GDP but only 18% of the global population. Insofar as the imprint on the Earth System scales with consumption, most of the human imprint on the Earth System is coming from the OECD world. This points to the profound scale of global inequality, which distorts the distribution of the

<sup>19</sup> The OECD is currently comprised of thirty-six member states, most of which have a high-income economy or are projected to have one soon. A full listing can be viewed at <https://www.oecd.org/about/members-and-partners/>. I find the description of the OECD as a “club of rich nations” largely fitting, as their member countries account for nearly all of world trade and investment.

benefits of the Great Acceleration and confounds efforts to deal with its impacts on the Earth System. (p. 91)

The population measurements show that fertility rates are dropping globally—not only in OECD countries—and that “exponential population growth will soon be over...Humanity has passed ‘peak child’” period (p. 89). What this data could do is help problematize the overpopulation blame-game as the biggest cause of ecological degradation—a game where the losers are always women and children of colour— and refocus attention on the consumption and waste practices of an affluent minority.

Presently, the graphs are used to establish the Great Acceleration as the top candidate for the Anthropocene birth date. Advocates maintain that only “beyond the mid-20th century is there clear evidence for fundamental shifts in the state and functioning of the Earth system that are beyond the range of variability of the Holocene and driven by human activities” (Steffen et al., 2015, p. 81). While human activity has left discernable traces on the Earth system for millennia, the argument is that the impact has only intensified to statistically significant levels circa 1950. The Great Acceleration thesis is “by far the most convincing from an Earth System science perspective” (p. 81), which I take to mean that from other perspectives other dates and events might matter more. Nevertheless, for their proponents, the Great Acceleration graphs provide solid evidence that humans have altered the Earth system in unprecedented rate and magnitude since the 1950s. This unparalleled speed and intensity of change and its deep tie to human activity is what is new (for geologists) about the Anthropocene, and what makes these changes consequential enough to warrant the designation of a new epoch.

While the Great Acceleration has unofficially been accepted as the birth of the Anthropocene both its formalization as an epoch and its pointed place in the earth’s core are still

to be determined. Geologists are currently analyzing environments in which “stratigraphic signals” are most likely to be found (Zalasiewicz et al., 2017, p. 11). Amongst the possible golden spike indicators is nuclear fallout from early atomic bomb detonations. Nuclear fallout resulted in radioactivity and plutonium being “recorded in high-resolution ice cores, lake and salt marsh sediments, corals, speleothems and tree-rings from the early 1950s onwards” (Lewis & Maslin, 2015, p. 176), none of which were present before. Even though nuclear bombs were not detonated everywhere in the world, trace evidence of their impact can be found globally as fallout entered the stratosphere within months of the first denotation in 1952 and spread from there (Zalasiewicz et al., 2010). For example, plutonium has been absorbed into clay and organic compounds on every continent, and every human body on earth contains traces of strontium 90 in their bones and teeth (Wark, 2019). Returning to the agentic-caustic human versus system argument raised earlier, the nuclear bomb as golden spike uncomfortably fulfills the title “Age of Man,” as in a definite moment of human activity, agency, and hubris with earth altering effects. As Nicholas Mirzoeff (2018) points out, “to date the Anthropocene from the first atomic weapon is to give a certain set of humans far more deliberate power” (p. 141).

An atomic bomb origin moment allows for the Anthropocene to be told as “a story of an elite-driven technological development that threatens planet-wide destruction” (Maslin & Lewis, 2015, p. 177). In much of the discussion, the bomb spike as birth event obscures the politics and power relations behind the so-called technoscience achievement. In other words, technological triumph is emphasized over necropolitical impact. Rarely are the death tolls of Hiroshima and Nagasaki mentioned nor “the effects on the people and ecologies of the Pacific and the more widespread nuclear colonialism and its ongoing presence as nuclear waste” (Yusoff, 2018, p. 48). However, if the formalization of the Anthropocene epoch signifies a point in “which time

stratifies into discernible historical events, it also holds within it internal geosocial stratifications that complicate the ground of that event” (Yusoff, 2016, p. 14). Thus far, discussions of atomic bomb golden spikes have been largely devoid of an analysis of the “geosocial stratifications” that accompany them. This includes those humans and non-humans that were impacted by the detonations, those still affected by the radioactive pollution, and the militaristic systems that celebrate detonations as triumphs. I also extend the ground Yusoff mentions to include the literal land that is infected. Who, human and non-human, inherits the poisonous terra? Who is rewarded? It is no accident that “the most bombed nation on earth” are the Western Shoshone and South Paiute Indigenous peoples whose bodies and lands have experienced 814 nuclear detonations since the Great Acceleration began (Cultural Survival, 1993). The flesh and fossils of these Indigenous peoples and their kin hold the geosocial histories of settler militarism and radioactive fallout in their cancerous bones. This is not the dominant story geologists are telling; however, it is one that the golden spikes carry in their semiotic-materiality.

### **Interlude: Interruptive Origin Stories**

#### **Monumentalizing Flesh**

Another way to think of the semiotic-materiality of golden spikes is as a practice of monumentalization. This conceptualization understands the spikes as “cultural edifices of political geology and monuments to extractive–racialized–industrialized complexes” (Yusoff, 2018, p. 59). But does the Anthropocene origin story have to make a monument to Man? I am struck by how there is also a vulnerability to monuments, especially white ones. Monuments can become a collective call to decolonize and they can be torn down, as students at the University of Cape Town insisted upon in 2015. The students demonstrated for the removal of a statue of colonizer Cecil Rhodes and opened up conversations about what it might mean to decolonize education in Africa (Mbembe, 2015). I think these student protests with Frank B. Wilderson III’s

(2010) argument that “anti-blackness manifests as the monumentalization and fortification of civil society against social death” (p. 90). Monumentalization, in this sense, is a tactic rooted in systematic infrastructures and sedimentations in bodies by which a border is fixed around what and who counts as human. The Rhodes statue was an everyday reminder of the presence of whiteness, anti-Black racism, and colonialism amidst claims of truth and reconciliation; the statue was a continuous enactment of who counts as human and that colonization is not over. The students, however, proved that monuments are not final or forever; legacy, like cement, though durable, can topple.

Like monuments, origin stories convey instructions for how to make sense of the world. They carry material effects that include how knowledge of cement, statues, “rock and climate are bound to flesh” (Davis & Todd, 2017, p. 767). The geologic evidence that qualifies and excludes potential golden spikes belongs to a particular way of knowing the world. The rock-hard evidence sought by geologists does not “entail the fleshy stories of kohkoms and the fish they fried up over hot stoves in prairie kitchens,” Todd explains (p. 767). However, these “fleshy philosophies and fleshy bodies are precisely the stakes of the Anthropocene” (p. 767). All the golden spike proposals relay histories that “exacerbated existing social inequalities and power structures and divided people from the land with which they and their language, laws, and livelihoods are entwined” (p. 767). A matter of care and concern I raise is how the spikes might pierce and yet fracture under the weight of fleshy origin stories? How might flesh undo stone? What are the material compositions of origin stories? What makes up the Anthropocene “geophysics of flesh” (Yusoff, 2018, p. 60)?

Given its colloquial name of golden spike, it is hard not to imagine violent connotations for proposed Anthropocene beginnings. For Yusoff (2018) the spike is not an abstract concept

but a maker of marks of bodies: spikes impale skin; spikes split flesh; spikes mark the geo-traumas that subsidize the Anthropocene present. This makes me think of the August 16, 2012, Marikana Massacre in South Africa where 34 striking miners stopped digging platinum out of the ground in protest of their disposability only to become premature fossils in it as they were shot down by corporate security forces—what will the future geologist say about their bones? I think also of Indigenous peoples in Canada whose state-apportioned lands are made toxic by extraction, pollution, and waste disposal—they endure within “sacrifice zones” of “everyday exposure” (Wiebe, 2016, p. 119). John Schertow (Haudenosaunee) reviewed the National Pollutant Release Inventory (NPRI), a database of Environment Canada, and found over 4000 known toxic sites on treaty territories, which works out to an average of 1.5 sites per reserve (Tarachansky, 2008).<sup>20</sup> The numbers would be much larger if all unceded lands were taken into account. These African miners and Indigenous peoples are living-dying the slow violence that Rob Nixon (2011b) theorizes. Additionally, as Watts (2013) explains, “Our truth, not only Anishnaabe and Haudenosaunee people but in a majority of Indigenous societies, conceives that we (humans) are made from the land; our flesh is literally an extension of soil” (p. 27). How does flesh extend soil? What if the soil is poisoned?

I wonder if the geologists studying golden spikes have ever considered the ocean. I feel fairly confident that they have not. Maybe they should. A critical section of Christina Sharpe’s (2016) *In the Wake* recounts the 1781 slave ship *Zong*’s voyage from the Gold Coast (now Ghana) to Jamaica where 130 captive Africans were thrown overboard in an effort to conserve

<sup>20</sup> Using the same data, the proximity of Indigenous communities to industrial toxic producers was also mapped: within 50 kilometers were 130 Indigenous communities to mercury-polluting companies, 150 communities to arsenic-polluting facilities, and more than 300 communities within range of lead and cadmium polluters (Tarachansky, 2008). Sarah Wiebe’s (2016) ethnographic and policy work with Aamjiwnaang First Nation, who are living and dying in the centre of Canada’s Chemical Valley, is another example of state-sponsored toxicity.

food and water and collect insurance money. Sharpe prefaces the section with a quotation from Patricia Saunders: “We sing for death, we sing for birth. That’s what we do. We sing” (p. 38). Bringing birth and death together, Sharpe asks how to care for “those living lives consigned to the possibility of always-imminent death, life lived in the presence of death” (p. 38). Sharpe recounts the tragic events to assert their continued presence. I quote Sharpe at length:

It is likely, then, that those Africans, thrown overboard, would have floated just a short while, and only because of the shapes of their bodies. It is likely, too, that they would have sunk relatively quickly and drown relatively quickly as well. And then there were the sharks that always traveled in the wake of slave ships....What happened to the bodies? By which I mean, what happened to the components of their bodies in salt water? Anne Gardulski tells me that because nutrients cycle through the ocean (the process of organisms eating organisms is the cycling of nutrients through the oceans), the atoms of those people who were thrown overboard are out there in the ocean even today....The amount of time it takes for a substance to enter the ocean and then leave the ocean is called residence time. Human blood is salty, and sodium, Gardulski tell me, has a residence time of 260 million years. And what happens to the energy that is produced in the waters? It continues cycling like atoms in residence time. We, Black people, exist in the residence time of the wake, a time in which everything is now. (pp. 40-41)

Residence time. Deep time. Long durée. Anthropocene time. Now time. Wake time. “The time of slavery” (Hartman, 2002). The time of childhood. “Sing for death, sing for birth.” Fred Moten (2003) might describe this watery scene as “the ongoing event of an antiorigin and an anteorigin, replay and reverb of an impossible natal occasion...that (dis)establishes genesis” (p. 14). Alexander Weheliye (2014) proposes a “surplus and excess” of Black flesh and of Black

sound that offers different possibilities for “subjects that lived and dreamed other ways of being human” (p. 122). The ocean is a golden spike that moves, that sounds, that reverbs, and that sings. It is getting bloodier, fleshier, denser, and louder with each new African refugee who drowns in the Mediterranean today. It is an Anthropocene depot of violence past, present, and future. But the ocean will not do as a golden spike because it cannot be impaled. It is a violence that transits (Byrd, 2011). It is impermanent even through it lasts millions of years. The ocean is not ground or rock or ice core; it cannot be monumentalized. A golden spike is “a place in which to drive a stake, make a claim, to the conversion of the Earth into a human dominion” (Mitchell & Todd, 2016, p. 1). What cannot be spiked? What cannot be monumentalized?

In a talk on the Anthropocene at the *Landbody: Indigeneity's Radical Commitments* conference, Mitchell and Todd (2016) provide the audience with gold-painted railroad spikes to handle and pass around as they speak. As the audience feels the spikes, they are asked “to reflect on their materiality and its potential for violence: their weight and shape, their utility as weapons, the intention of penetration with which they were forged into phallic forms” (p. 2). The presenters take turns telling origin stories of the spikes that include the Canadian railroad construction that drove the buffalo to near-extinction, the replacement of Indigenous land title with treaty rights, the exploited labour of 1500 temporary Chinese workers, the resistance of nêhiyawak and Anishinaabe peoples in active refusal of settler colonial westward expansion. Not only representative of the railroad, the material composition of the spikes asks for further consideration given that they are made “of metals torn from soil and stone to fuel the demand for industrial resources and capital speculation” (p. 4). Instead of recourse to scientific neutrality, Mitchell and Todd make the spikes personal and affective. They made the spikes heavier. Todd ends the presentation with the following:

I think of how much it hurts the land back home. I think of how so many Nations back home deal, still, with the incursion of Euro-Western ideologies into space-time through the colonial violation of land and bodies....So my question to you is; where does it hurt—in the continuum of space and time—for you? (p. 5)

This turn to hurt challenges the neutralization of affect in discussions about the Anthropocene. It makes the Anthropocene a place, space, and time where the matter of stories matters. Alternative spike stories like Todd and Mitchell's show how coloniality and the Anthropocene are "already inscribed in the flesh that carries golden spike moments" in presences that are not past (Yusoff, 2018, p. 59). It is also part of the reason why I think there has been no big crisis—no game change—brought about by the Anthropocene because white flesh has not yet been spiked in these same ways. I find Mitchell and Todd's argument persuasive and necessary. I also see a line of connection to how hurt connects with work on sentience and innocence, and, therefore, childhood.

As explored elsewhere in this dissertation, what counts as properly human is an ability to feel pain, a concept that has a long anti-Black history, specifically in the denial of sentience to create the slave as property (Wilderson, 2010). In brief, the dominant narrative was that enslaved Black persons did not feel pain—therefore they could be worked to the bone, beaten, and raped—but after the abolition of slavery these racist tropes needed a new place to land. In *Racial Innocence*, Robin Bernstein (2011) traces how the "libel of insensateness" was regrafted onto "children's culture" after abolition in the form of the unequal allocation of childhood innocence (p. 51). In this refiguration, whiteness equals innocence and blackness equates insensateness. Childhood becomes "a cover under which otherwise discredited racial ideology survives and

continues, covertly, to influence culture” (p. 51).<sup>21</sup> At stake in a perceived ability to feel pain is “inclusion in the category of the child and, ultimately, the human” (p. 36). Saidiya Hartman (1997) argues a supportive point in that “the purported immunity of blacks to pain is absolutely essential to the spectacle of subjection” (p. 51). How does the hurt Mitchell and Todd attribute to the golden spikes connect with Bernstein’s discussion on pain? How does the hurt of Anthropocene spikes take different form in different bodies, including children’s bodies and childhoods?

### **Otherwise Theories of Origins**

Watts (2013) offers a partial telling of the Haudenosaunee origin story of Sky Women in forwarding her analytic of Indigenous Place-Thought. Watts’s intent is to refuse the settler colonial technique of “mythologizing Indigenous origin stories” (p. 20). In the contemporary settler colonial paradigm—including as Watts points out the Euro-Western epistemological/ontological divide—emphasis is put on the second term in the phrase origin stories—stories—as in fictional, made-up, immaterial, and not real. In sharing how Sky Women fell from a hole in the sky to land safely on the back of a turtle and together with her animal-kin made Turtle Island, Watts is insisting that these “events took place. They were not imagined or fantasized. This is not lore, myth or legend....This is what happened” (p. 21). There are few dissenting voices in the Anthropocene literature I have reviewed that would dare read stratigraphic signals as myth. I am not suggesting these claims are false but asking how their

<sup>21</sup> There are numerous contemporary examples of this attribution of insensateness, including systemically giving Black children less pain medicine when injured (Cheney-Rice, 2015). The disproportionate composition of prisons, school suspensions, social service removals of children from homes, and the poisoned drinking water in Flint are further examples. Another is the desire to prove Trayvon Martin a “child” in the spectacle surrounding the miscarriage of justice that was his killer’s trial where Martin was villainized, animalized, and adultized, which is addressed in Chapter 4 (Vargas & James, 2013). In Canada, the medical atrocities inflicted on Indigenous children at residential schools, specifically the ruse of nutrition research at six schools from 1942-1952 (Mosby, 2013), is a potential point of connection amongst others between Black and Indigenous lives.

truth a/effects further marginalize alternative knowledges, including otherwise figurations of childhood. Why is a mark of human impact as a layer of plutonium 239 in the earth's core that will be detectable for the next 100,000 years becoming a taken-for-granted truth of human existence? Why is Man as economic-rationale-bio-being-turned-geological-force taken as a natural development, despite what scholars such as Sylvia Wynter (1995, 2003) reveal in their own theoretical language as mythoi or genre? Sky Women and other creation histories of Indigenous peoples tell of a world where "creatures, land and earth had existed long before us" (Watts, 2013, p. 27), yet the Anthropocene discussion seems determined to mark out the world as beginning (again) with Man. This is not so much a question of which origin story to believe, but that origin stories bring different worlds into being and offer different analytics of truth-making.

Cathy Peppers (1995) reads Octavia Butler's *Xenogenesis* trilogy (also known as *Lilith's Brood*) through Haraway and Foucault to reassert a value for origin stories outside hegemonic narrative patterns. Butler's trilogy stories the "genesis of an alien humanity" wherein the complications and complicities of a new beginning for humans and more-than-humans are considered (p. 47). The first book, *Dawn*, begins after an earthly apocalypse brought on by nuclear war and a few remaining humans are "rescue" by an alien species of Oankali. The human subjects are put to sleep for years and unconsciously prodded, tested, sampled, and studied before being awoken to the "choice" of reproducing with the Oankali or being made sterile. *Xenogenesis* is a therefore an origin story but not one in which humanity as it has been survives. It "is a story with difference...reproduction with a difference, the (re)production of difference" (p. 47). This is not an innocent story either. Humans and aliens do not escape legacies of forced consent and miscegenation. Peppers' argument for revaluing origin stories like *Xenogenesis* proceeds with a close reading of Haraway:

While Haraway claims in “A Cyborg Manifesto” that “the cyborg has no origin story in the Western sense,” it is important to note that *she does not say that cyborgs have no origin stories*. She makes a distinction between traditional Western origin stories, which are based on “salvation history,” and are “about the Fall”...and cyborg origin stories, which “subvert the central myths of origin of Western culture” by focusing on “the power to survive, not on the basis of original innocence, but on the basis of seizing the tools to mark the world that has marked them as other.” (p. 47; emphasis added)

With support from Haraway, Peppers calls to account the “anti-essentialist, anti-origins attitude taken up by mainstream” critical theorists who fail to recognize that those “whose stories have been written out of the dominant accounts have different *stakes* in the desire to re-write origin stories” (p. 48; emphasis added). It is only possible to disavow origin stories when you have them; it is only safe to reject foundations when you are already on solid footing.

My reading of Pepper’s critique finds support in Watts’s (2013) work which also rejects a reflex-like refusal of strategic essentialisms. For Watts, “categories of Indigenous cosmologies should not be measured against the products of Euro-Western mistakes,” because, for many Indigenous peoples, “to disengage with essentialism means we run the risk of disengaging from the land” (p. 32). On the point of essentialisms, Peppers pulls apart a quotation from Foucault in which he notes that the search for origins will always be a failed “attempt to capture the exact essence of things, their purest possibilities, and their carefully protected identities; because this search assumes the existence of immobile forms that precede the external world of accident and succession” (Foucault, 1984, p. 86). Peppers, on the other hand, reads Butler’s stories as offering an “excess of genealogies” in which “oppressive ideologies are exposed and resisted and simple essential identities are contested” (p. 49). Butler was never after an exacting or innocent essence.

While Peppers recognizes how origin stories can reproduce “logics of domination,” she also sees the power of otherwise origin stories “to destabilize, contradict, and contest the traditional discourses of origin on their own turf” and to “partake of the enabling power that marks all discourse about origins” (p. 48). The response-able question becomes, enabling for whom? What do Anthropocene origin stories enable? Not all origin stories are immobile—are monumentalized—some, like Sky Women, move.

Working in a deconstructive historical mode, Wynter (2000, 2003) understands origin stories as narrating a “specific genre of being human” into reproductive circulation. These stories are not the truth of the human but the “truth-for” a specific version of the human—not humanity in toto but “partial humanisms...enthnohumanisms” defined by a “descriptive statement” (Wynter, 2015, p. 196). Origin stories provide a narrative framework through which humans are initiated into worlds and then repeatedly make sense of themselves within these worlds. What this also means is that the dominant genre of Anthropos-Man has inclusions and exclusions already built into the script; however, the story is not determined once and for all. It is possible to “give humanness a different future” (Wynter & McKittrick, 2015, p. 9), and to write new genres and new worlds into being. This is why it is important for Wynter and her followers to speak of genres of “being human as praxis” and “as performative enactment,” rather than take Man as the human as given and timeless (p. 31). As Wynter (2000) says, “The *history* for Man [is] narrated and existentially lived as if it were the history-for the human itself” (p. 198), and therefore we can learn to “deny the storytelling origins of the ‘ground’ that constitutes it as such an order of truth/knowledge” (Wynter, 2015, p. 16). Adding to Watts’s and Pepper’s arguments, this is why otherwise origin stories matter.

Wynter (2000) traces the current genre of the human to “the history of the expansion of the West from the fifteenth century onwards” (p. 198). Unlike the Orbis hypothesis that sets the Anthropocene beginning in 1600, Wynter’s (1995) work suggests that the origin of Anthropos-Man (though she does not use this term) coincides with the first forced relocation of African people, plants, and microbes to the plantations of Madeira in 1492. In “1492: A New World View,” Wynter (1995) argues that the “new world view” born with this event was a species account of humanness, which entails a move away from theology towards biology in constituting the human. This new bio-based humanity further settles its origin story in a take-up and revision of Darwin and his evolutionary narrative which parses a supposedly “species-inclusive” human into selected/dysselected categories (p. 15). In Wynter’s words, this is “our present Darwinian dysselected by Evolution until proven otherwise descriptive statement of the human on the biocentric model of a natural organism” (p. 267). This “descriptive statement” of the human maps onto geos- and biopolitical differentiations of white/black and European/Native, and continues to become-with histories and practices of violence, genocide, slavery, extraction, and coloniality (Wynter, 2000, p. 198). Extending to the present day, the dominant conception of the human has moved from a story of religious-man to biocentric-man, and this genre of the human has been rearranged to include homo-economicus-man. In other words, the dominant genre of the human today consists of a “biocentric macro-origin...narrative of survival-through-ever-increasing-processes-of consumption-and-accumulation” so that scarcity, climate change, and species extinction become thinkable as “being naturally determined” (McKittrick, 2015, p. 11).

This genre of the human has become, as expressed by Wynter (2015), “the overrepresentation of Man as the human itself,” and, therefore, understood as “truth-in-general” instead of a “genre-specific order of truth through which we know reality, from the perspective

of the no less genre specific who that we already are” (p. 32). As noted, Wynter does not accept the Overrepresentation of Man as the human as inevitable and “offers a different origin narrative possibility” (p. 31). To do this, Wynter extends Franz Fanon’s work to redefine the human as “a hybrid being, both *bios* and *logos*,” which might “draw attention to the relativity and original multiplicity of our genres of being human” (p. 31). Loosely translated, this human is biology and story, which adds a layer of analysis to my exploration of speculative child-figures and texts in the chapters to come. For now, as I move into the last section of this chapter, I am wondering about how Man as the human and a geos-subject overlay. Is Anthropos-Man another figure of the same Overrepresentation of Man? Is the turn towards geos an interruption of “bio-centric man,” a new origin story, or does the dominant genre swallow up the potential otherwise and read the human back into the same “truth-for” descriptive statement? Wynter seems to lean towards the latter interpretation in her critique of a *Time* magazine story on anthropogenic climate change where the “referent-we” of Anthropos is “not the referent-we of the human species itself” but “isomorphic with” it (p. 31). Along with the “natural scientists” who author the report, Wynter calls out as complicit other “bourgeois subjects” working in academia who “logically assume that the *referent-we*—whose normal behaviors are destroying the habitability of our planet—is that of *the human population as a whole*” (p. 4).

The “we” who are destroying the planet in these findings are not understood as the *referent-we* of *homo oeconomicus* (a “we” that includes themselves/ourselves as bourgeois academics). *Therefore, the proposals that they’re going to give for change are going to be devastating!* And most devastating of all for the global poor, who have already begun to pay the greatest price...So for us to deal with global warming, this will

call for a far-reaching transformation of knowledge...a new mutation of the answer that we give to the question as to *who as human we are* (p. 5)

Wynter seems to imply a modification to bios-economic-Man rather than a break and shift to a new geos-human brought about by the Anthropocene. What lingers for me is the question of “*who as human we are.*” This concern haunts all the chapters in this dissertation and is engaged in the next section by focusing on how anti-blackness constitutes humanity. This includes an origin story of the human forwarded by Afropessimist scholars that I argue needs to be taken account of in Anthropocene scholarship.

### **Birth of a Geos-Subject**

#### **Spectre of Childhood**

In this section I consider how the Anthropocene carries implicit attachments to imaginaries of childhood innocence, even if, or maybe even because, the relations are not an overt matter of concern. My focus is not intended to monumentalize the child in accounts of the Anthropocene, thus the figure of the spectre, but to surface moments in which imaginaries of childhood appear. I aim to take seriously how the “grammar and ghost” of childhood might be a foil to the Anthropocene desire for redemption in the birth of the geos-subject (Wilderson, 2009). Natalia Cecire (2015) remarks that the disavowal and attribution of innocence in “environmental representation dovetails with already fraught allocations of child innocence” (p. 167), and, in this context, I extend environmental to include wider aspects of the Anthropocene. By invoking the spectre of childhood, I am not suggesting that is necessary to think the Anthropocene in terms of the child—nor that those I cite do—but suggesting that the spectre of childhood lends itself to particular ways of making sense of the Anthropocene, including its claims of origin. This section begins by looking at the birth of the geos-subject and the inhuman within a framework that attributes innocence to geology as a discipline of the natural sciences. Subsequently, Hannah

Arendt's (1958) natality and Orlando Paterson's (1982) natal alienation are read through Anthropocene discourses of newness and uniqueness. I end by wondering if instead of birth and origin maybe Anthropocene scholars might look to "afterlife" (Benjamin, 2018) and "alterlife" (Murphy, 2018). As I will suggest, these concepts are also entangled with the spectre of childhood through their evocations of reproductive justice.

### **Geos Genesis**

Yusoff (2016) coins the term "anthropogenesis" to signify, in part, a new origin story for the human ushered in by the Anthropocene. As genesis, the Anthropocene stories the birth of a new subject in that the Anthropocene enacts "the threshold event of becoming a geologic agent of the planet" (Yusoff, 2018, p. 25). The dominant figure born of anthropogenesis is a "geologic world-maker/destroyer of worlds" (Yusoff, 2016, p. 5), where powers circulate in unequal relations of creation and destruction. I am also struck by Yusoff's noticing of an illusion of sameness and "unity as a communization of the strata or collectivization without differentiation" that comes attached to the new geos-subject (p. 14). What differences (still) matter in matters of the Anthropocene? I find myself constantly summoning Diana Leong's (2016) refrain: "*Black lives matter, black lives matter, black lives matter*" (p. 2).

Related to Yusoff's formulation is a description of the Anthropocene subject as an "agent of destruction and endangered species" (Colebrook, 2016c, p. 89). When such pole positionalities are suggested, I am curious as to whether the figure of the human is simultaneously both/and (i.e., maker-destroyer; agent-endangered) or if some humans are regulated to one end while others are delimited to the opposite side. A geos-agent capable of mass destruction ought to incite questions about practices and conditions that enable this subject to emerge and endure. It is worth debating what concerns are embedded in attributing a force to

make extinct and to become extinct. For me, this means asking difficult and uncomfortable questions that I return to in later chapters: “Maybe it would be better *not* to survive?” (Sheldon, 2016, p. 55). What is it about humanity that is “worth saving” (Colebrook, 2016b, para. 23)? Origin stories inflict a “moral line of time [whereby] if there is a point at which humanity becomes catastrophic at a planetary level, then there is the possibility both of attributing blame, and of retrieving and saving another humanity” (p. 86). What does a humanity look, feel, and act like that should be retrieved and saved?

On the other hand, Wilderson (2015) posits the impossibility of redemption in a world in which “Human Life is dependent on Black death for its existence and for its conceptual coherence” (para. 19). Redemption, in Wilderson’s purview, requires not an endangered humanity for its constitutive realization but an “abject inhumanity,” and this inhumanity “*stabilizes* the redemption of those who do not need it” because they are already guaranteed it through the inheritance of whiteness (para. 6). I think this with Yusoff’s (2018) naming of the Anthropocene as a “White Geology” that requires the inhuman as matter and the inhuman as anti-blackness for its formulation. The inhuman, Yusoff argues, is where geology and humanism merge in the Anthropocene: “the *inhuman as matter* and the *inhuman as race*” (p. 5). They “share a natal moment” (p. 6). I take from Yusoff that the “extraction of gold, silver, salt, and copper” and the “intensive implantation of monocultures of indigo, sugar, tobacco, cotton” were only made possible with the genocide of Indigenous peoples and the enslavement of Africans (p. 6). Indigenous peoples were killed to free-up land and enslaved Africans were made property as labourers. This is the silenced story behind every proposed golden spike. To quote Yusoff at length:

There is an invisible agent that carries those Golden Spikes, in their flesh, chains, hunger, and bone, and in their social formations as sound, radical poetry, critical black studies, and subjective possibility realized against impossible conditions; there *are* a billion Black Anthropocenes that are its experiential witness and embody its modes of mattering that have no resource to the agency of history, only to being historicized in this -cene. Thus to organize a Golden Spike repressing those geologic relations that have carried it socially is to reproduce the ongoing violence of those relations. (pp. 59-60)

Can Anthropocene origin stories be otherwise than “the sort of note that sutures Black suffering to romance and redemption” for a new geos-subject (Sharpe, 2010, p. 6)? I have my doubts, which is why I turn to speculative texts in the ensuing chapters. I am interested in stories that refuse to redeem humanity in its overrepresentation and instead imagine futures for those who have borne the spikes. What are the speculative stories of a billion black anthropocenes?

With regards to the inhuman, anthropogenesis includes re-imagining “human origins and endings within a geologic rather than an exclusively biological context” (Yusoff, 2016, p. 5). This intertwined subjectivity, history, and future forms a “geologic social body politic” for which neither a biopolitical commitment to life nor death can fully engage. In other words, bionormative life cannot take account of what Yusoff (2013) elsewhere calls “geologic life,” which operates on a queer plane of planetary existence formed by the “intra-polation of geology into the social strata” (p. 9). Human agency in this purview is in symbiotic relationship with viral and geologic intimacies. Humans as a geologic force is a misnomer if “geomorphic power is conferred as an extension of human capabilities, a *techne* of the human, rather than as a condition that belongs to the earth” (Yusoff, 2016, p. 17). As such, a reconceptualized geos-subject does not end at the skin but does mark flesh and move with flesh into the earth, and, as was mentioned

above, this flesh carries histories of anti-blackness and coloniality. The golden spike origin stories are about “the very bodies that undo strata—the theft of bodies, of the flesh that hews the rock, that plants the sugar plantation, that blasts and gets blasted in the mines, that transports and carries the pathogens and pollutions” (Yusoff, 2018, p. 59). This fleshiness is revisited in later chapters that feature stories of worlds similar in many ways to this one, but where the power to make live and let die is figured as a geos-power that obscures boundaries between life and nonlife. In these stories, the end of the world is entangled with the well-being of inhuman-child figures that literally “hew with rock” and “carry the pathogen,” but that also embody the geos-traumas of anti-blackness. These child-figures engage Yusoff’s (2016) call for thinking the “earth as an inhuman substratum that preconditions what life becomes” (p. 8). These complicated conceptualizations of inhuman child-figures are taken up in ways where humanity and the planetary are in intra-active relationship and where neither redemption nor innocence are the ethical relations the child-figures are after.

### **Inhuman Innocence**

The concurrence of childhood and innocence is ubiquitous in most child-related disciplines, even though the pairing has a slippery, complicated, and contested history. Much critical effort from scholars both in and outside childhood studies has been spent challenging the naturalness and normalness of this union rather than supporting innocence as something inherent to children or childhoods (e.g., Cannella, 1997; Edelman, 2004; Halberstam, 2011; James et al., 1998; Jenkins, 1998; Robinson, 2008; Stockton, 2009; Tobin, 1997). For example, important work has traced the historical join of innocence and childhood to the invention of modernity (Aries, 1962; Cunningham, 2006); problematized the image of the innocent child in relation to early childhood pedagogies (Dahlberg et al., 2006); posited innocence as the binary pivot

between adult and child in narratives of social reproduction (Katz, 2008; Malkki, 2010); located innocence as a geopolitical imaginary of Northern childhoods used to perpetuate paternalistic discourses about children elsewhere (Burman, 1994; Penn, 2007); and troubled the relation of innocence, desire, and sexuality from queer and psychoanalytic perspectives (Blaise, 2005; Davies, 1990; Kincaid, 1998; Taylor, 2010; Walkerdine, 1997). Less familiar to childhood studies are critiques of childhood innocence from perspectives of Black, Indigenous and environmental studies, with some key exceptions that I will address next.

For Bernstein (2011) it is not possible to hold childhood in one hand and innocence in the other because they are wholly sutured together. This lends itself to the understanding that I am pushing in that innocence cannot be thought free from the spectre of childhood. Since at least the mid-19th century, “childhood was not understood as innocent but as innocence itself; not as a symbol of innocence but as its embodiment” (p. 3). And from the start this “innocence was raced white” (p. 3). Nevertheless, what typically happens is that the child-figure is wielded as a “human shield against criticism” where a “universalized conception of the innocent child effaces gender, class and racial differences, even if it holds those differences in place” (Jenkins, 1998, p. 14). As Bernstein’s genealogical work makes clear, however, childhood innocence was never for all children—the birth of innocence as a concept, subjectivity, and performance had racialized exclusions built into it from the start. Bernstein (2011) names “racial innocence” as the performative ability “to make political projects appear innocuous, natural, and therefore justified” (p. 33). How does the Anthropocene perform racial innocence? And how does the spectre of the child connect with environmental discourses of the Anthropocene?

The “power of the discourse of childhood innocence lies in the positioning of the child as both natural and universal” (Dahlberg et al., 2006, p. 68). As I aim to show, by coopting

childhood imaginaries—for example, of naturalness and universality—geology claims an innocence in and for the Anthropocene. Childhood (like nature, science, or strata) is often understood as race-neutral. One of the results of arranging childhood with innocence is the child’s strategic use-value in matters of power and politics—recourse to the child-figure makes power appear apolitical. For example, it is common to hear both politicians and activists speak of environmental protections as necessary for their great grandchildren. I am not necessarily critiquing such a strategy but pointing out its normalness and thus normalizing function. From the political left and right, climate change discourse revolves around saving the future for the child because the future is the child. In such cases, “the child lends its humanity to the planet, and the vulnerable innocence historically associated with the child enshrouds Earth” (Sheldon, 2016, p. 26). In this enshrouding, the figures of the child and earth are co-constituted as innocent and as natural; they combine in a promise to reproduce humanity into the future. However, the realities of environmental damage have put this promise at risk. The presence of greenhouse gasses, rising temperatures, and toxic waste, for example, have increased anxiety about “spectres of mutation, pollution, proliferation, and dehiscence” that feed into an “apprehension of nonhuman agency” (p. 177). Rebekah Sheldon (2016) argues that the child-figure is called to “bind [nonhuman agency] back, reconsolidating liveliness within the charmed circle of human futurity” (p. 177). Through the spectre of the child, the multi-faceted Earth system can be brought back to human auspice, thereby reiterating the ideological elision of continuing ecocide.

As mentioned, Bernstein (2011) argues that innocence has to be actively performed. From Bernstein, I extend racial innocence from childhood through geology to the Anthropocene in situations where social categories like race, class, gender, ability, and location are said not matter to matter. Innocence is instrumental in the big picture of forces that allows for “the

production of racial memory through the performance of forgetting” (Bernstein, 2011, p. 8), and the Anthropocene origin stories are one such act of erasure. Stories of rings in tree stumps, minerals in ice cores, and fossils in rocks are told and received as stories of the natural world. Yusoff (2018) challenges the “the racial blindness of the Anthropocene as a willful blindness”—and therefore a performance of forgetting—that relates to the normalization and naturalization of geology as a field of study whose objects of knowledge (e.g., rocks, soil, minerals) exist outside of politics. In seeking to “undermine the *givenness* of geology as an innocent or natural description of the world,” however, Yusoff (2018) rereads golden spike moments in ways that address how geology is already racialized and attached to bodies that matter (p. 10).

The reciting of Anthropocene origin stories—because of their relation to birth and natality through the spectre of the child, or, so my argument goes—desires to reclaim an innocence for the human. Part of how this is accomplished in the Anthropocene is by drawing on “the idea of the neutrality of geology as a language of the rocks and deep time, which is immune or innocent of its current deadly configurations” (Yusoff, 2018 p. 10). What this idea overlooks is the intimate relationship of racialized bodies with inhuman matter, as was introduced in the last section. This relationship forms what Yusoff has named *Black Anthropocenes*:

It is an inhuman proximity organized by historical geographies of extraction, grammars of geology, imperial global geographies, and contemporary environmental racism. It is predicated on the presumed absorbent qualities of black and brown bodies to take up the body burdens of exposure to toxicities and to buffer the violence of the earth. Literally stretching black and brown bodies across the seismic fault lines of the earth, Black Anthropocenes subtend White Geology as a material stratum. (Yusoff, 2018, p. xiii)

In childhood studies, Fikile Nxumalo (2019) forwards a call to “unsettle whiteness: toward a Black Anthropocene” (p. 117). White Geology, as conceptualized by Yusoff and re-interpreted by Nxumalo, can be likened to a “romanticized formation of environmental education...in which contemporary couplings of childhood and nature remain framed by whiteness” (p. 117). Instead, Nxumalo encourages educators to find means of “encountering nature places in ways that resist erasures and deficit constructions of Blackness and erasure of Indigenous dispossession in Anthropocene discourses,” which includes challenging the entanglement of innocence, whiteness, and nature (p. 119). Storying alternative origin stories of the Anthropocene is a discursive form of engaging child-climate relations that interrupt whiteness without reifying Black and Indigenous erasure.

Further to the production of innocence and its work in the Anthropocene discussion, childhood is often positioned as “a state of nature” (Robinson, 2008, p. 115). As such, Affrica Taylor (2013) opens her book *Reconfiguring the Natures of Childhood* by articulating the taken-for-granted: “childhood and nature seem like a perfect match” (p. xiii). Taylor spends the remainder of the text deconstructing and then reconstructing the nature-child relationship so that purity and innocence are no longer the ties that bind. One of the many creative innovations of Taylor’s theorizing is that instead of only focusing on how childhood is naturalized she also troubles the “naturalization of nature” (p. xiv). This includes how nature is made innocent through its relationship to childhood and not just the reverse. Taylor disrupts “a singular notion of Nature as an indisputable cover-all explanation or rationalization...[that] has been and still is deployed to naturalize and normalize associated terms, such as race, gender and sexuality” (p. xx). This recourse to the child and nature with its underlying racializations has consequences for the configuration of the human and its mobilization in the Anthropocene discussion.

Due to its tangled relationship with innocence and nature, children and childhood have long been used to promote a certain understanding of humanity (Castañeda, 2002). The child “is conceived as the origin of the human” (Bignell, 2005, p. 380), and, as I have endeavoured to show, the Anthropocene (re)surfaces questions of origins. Early childhood reconceptualist scholars Gaile Cannella and Radhika Viruru (2004) argue that “part of the definition of what it means to be human has been a construction of what is not human—humans are not *animals*, humans are not part of the *earth*, humans are not *inanimate*, and so forth” (p. 35; emphasis added). What is most interesting to me is how the child figures spectrally into this listing as a “not-quite human being” (Lury, 2010, p. 284). For example, countless picture books and films show the child as kin with animals; from Rousseau’s romanticism to Taylor’s problematization, the child is positioned close to nature; contemporary debates about abortion rights put arguments about foetal aliveness back in the legal spotlight. Tyson Lewis explains, “children have always been precariously placed in a zone of indistinction between ‘not yet’ fully human and ‘no longer’ simply animals” (p. 285). However, all this boundary play is only tolerable when the innocent white child is the referent. The child as “not-quite” and “less than fully human, unfinished or incomplete” (Jenks, 1996, p. 10) takes on other meanings when anti-blackness and Indigeneity are considered. The Black child *is* animal, the Black child *is* primitive, the Black child *is* non-sentient—as in impervious to pain. Not *close* but *is*. And unlike the white child, the Black child cannot develop or mature out of it.<sup>22</sup> Similarly, though not thought through enough in my work, the Indigenous child shares much of this spacing with the Black child. As one note of difference,

<sup>22</sup> A growing body of empirical research confirms the unavailability of innocence to Black children: they are often thought to be older than their biological years; associated with animals, in particular, apes; and consistently judged as more culpable than white peers (e.g., Dancy, 2014; Dumas & Nelson, 2016; Ferguson, 2001; Goff et al., 2008, 2014; Ladson-Billings, 2011).

however, the Indigenous child is not *close* to nature and animals but *too* animist in their kin relations with the more-than-human world. This final point is revisited in the conclusion.

### **Afterlives of Natal Alienation**

Patterson (1982) names natal alienation as a constitutive element of slavery. Natal alienation indicates the “loss of native status,” the “loss of ties of birth in both ascending and descending generations,” and the birth of the enslaved person as “a socially dead person” (p. 5). Patterson evokes not only a loss of connection with present-day family, but also ancestral relations of the past and kin relations of future. Natal alienation also includes forced dislocation from place. In the context of the Americas, ties to homelands were broken in the trauma that was the Middle Passage and its afterlife: slaves were made homeless, there was no sense of belonging to birth place, as there is “no *place* of the slave” (Wilderson, 2015, para. 7). Children born to enslaved mothers were considered a “spatial extension of the master’s domination” (Patterson, 1982, p. 7). Slavery made kin claims ephemeral, as enslaved persons, regardless of familial ties, could be sold off at the enslaver’s whim. Enslaved persons were stripped of their names, language, culture, ceremony, and flesh, and forced to take on the designations of their enslavers as a technology of dehumanization and ownership. These were just some tactics used to eradicate enslaved people’s abilities to “integrate the experience of their ancestors into their lives, to inform understanding of social reality with the inherited meanings of their forebears, or to anchor the living present in any conscious community of memory” (Patterson, 1982, p. 5). This is in no way meant to suggest that enslaved people did not form powerful kinship networks, or that they did not manage to sustain some sense of belonging to their homeland and ancestors, but to

suggest that those relations were always in danger and considered dangerous.<sup>23</sup> Natal alienation works both systemically and intimately.

At times I feel like I am trying to draw a line between the Anthropocene and childhood where there is not one. At other times, I am struck by how the spectre of childhood haunts the contemporary moment in multifaceted ways. Hartman (2016) writes: “*The slave ship is a womb/abyss*. The plantation is the belly of the world. *Partus sequitur ventrem*—the child follows the belly” (p. 166).<sup>24</sup> At least a doubled violence of origin is captured here. The slave mother’s only claim, as she was natally alienated herself, was to “transfer her dispossession to the child” (p. 166). Children were born chattel—brought into the world as units of economic value. A child’s very being as a non-being assured that slavery continued (Fanon, 1952). Birth was a “scene of subjection” (Hartman, 1997). Slavery made sure not much new and unique could be expected—the birth of an enslaved child is an origin story of a “nonoriginal origin” (Sexton, 2010, p. 41). Hortense Spillers (1987) argues that slavery made the very category of motherhood impossible and I extend this to childhood also. Sharpe (2016) evocatively captures this awareness as “Black un/mothers grieving Black un/children” (p. 77). As a consequence, “even though the enslaved female reproduced other enslaved persons, we do not read ‘birth’ in this instance as a reproduction of mothering precisely because the female...has been robbed of the parental right” (p. 78). The Black woman’s womb is figured as the “corporeal extension of the Middle Passage, as it births Black children into a world in which they are to be treated as slave”

<sup>23</sup> Katherine McKittrick’s (2013) “Plantation Futures” is a powerful example of a different kind of embodiment and emplotment as the plantation shifts to the city, including “the actual growth of narratives, food, and cultural practices that materialize the deep connections between blackness and the earth and foster values that challenge systemic violence” (p. 10).

<sup>24</sup> An alter-term suggested for the Anthropocene is Plantationocene, which spotlights how land, crops, microbes, plants, racialized labour, slavery, “displacement and dispossession,” and the overall “discipline-of-people/discipline-of-plants conjuncture” has devastating effects on world ecology (Haraway & Tsing, 2019, pp. 7-8).

(Wright, 2018, p. 10). What sort of world are racialized figures of #AnthropoceneChild birthed into?

Arendt's (1958) concept of natality is a note of optimism in her large corpus of work most recognized for incisive accounts of totalitarianism and the banality of evil. Arendt describes natality as when "something new is started which cannot be expected from whatever may have happened before...so that with each birth something uniquely new comes into the world" (p. 177). Each child is "unique, each capable of new initiatives that may interrupt or divert the chains of events set in motion by previous actions" (p. xvii).<sup>25</sup> I posit that there are natality-overlaps with how the Anthropocene is being conceptualized. Leading scientists argue that the Anthropocene is "a new and unique phase of our planet's geological history, and one that will inevitably now send history (and geology) on a new trajectory" (Zalasiewicz et al., 2018, p. 177). "A no-analogue state" is perhaps the most succinct and repeated natalistic refrain (e.g., Angus, 2015a; Crutzen & Steffen, 2003; Kammer, 2017; O'Farrell, 2018). Recalling the discussion in Chapter 1, Clark (2017) flips Arendt's hopeful concept on its head by suggesting that the Anthropocene encapsulates a looming "crises of natality: a waning of that resurgent hope attending the coming into the world of new life" (p. 159). However, Clark also holds onto something generative in Arendt's insistence that natality "stresses that the birth of a child has a miraculous potentiality, repeating—as it does each time—the improbable of emergence of organic life from the domain of inorganic matter" (p. 164). Clark therein extends natality from biopolitical reproduction to geontological possibility.

<sup>25</sup> It is interesting to think this capacity of the child to "divert" and "interrupt" with regards to the Arendt's (1959) much criticized "Reflections on Little Rock" essay in which she problematizes the desegregation of public schools. In an effort to trouble the famous photo of a young Black girl walking away from school hounded by a mob of screaming white peers, Arendt asks: "Have we now come to the point where it is the children who are being asked to change or improve the world? And do we intend to have our political battles fought out in the school yards?" (p. 50). A close reading of Arendt's essay is beyond my scope here, but I am struck by the pull of the child-figure between protected/protector and optimism/impossibility—the latter which might be conceptualized as natality/natal alienation.

Returning to Paterson (1982), I wonder about relations of natal alienation and natality in the Anthropocene. Is the new and unexpected possible for the nately alienated? How does birth into an anti-Black world make problematic the idea of “emergence of organic life from the domain of inorganic matter” (Clark, 2017, p.162)? How does the inhuman, as previously described by Yusoff and Wilderson, interrupt the redemptive transition of matter to life? While not in the context of the Anthropocene discussion, I am not the first to think natal alienation and natality together. Ewa Ziarek (2012) concludes that the “spectral character of social death...destroys the principle of natality, understood in the most broad terms, not only as the biological birth, but also as the claims of genealogy, the principle of a new beginning” (p. 153). In this scene/cene, natal alienation makes the genealogical inheritance impossible. I recognize that my reading of natal alienation as a collective birth into a system of anti-Black oppression and natality as an individualistic birth into a possibility of freedom limits the generative possibilities of thinking these concepts together. For the most part, I think them as incommensurable because I fail to see how natality is sustainable for many.<sup>26</sup> In the sense of natality as the “fact of birth,” or the coming into the world of life at childbirth, I can understand this as an ephemeral moment of newness and possibility (Arendt, 1958, p. 96). However, this natal occasion assumes that all life manifests as life, which is what many Afropessimists and the #BlackLivesMatter movement contests. Another sense of natality that overlaps with natal alienation encompasses the child’s entrance into a “web of human relationships” defined by

<sup>26</sup> I do not mean to dismiss natality and invention outright, especially in minor moments. For example, Haraway speaks about how in bouts of play, subjects—dogs in her example—use their “inherited repertoire” to “do something...that has quite literally never happened on this planet before” (Haraway & Tsing, 2019, pp. 18-19). As someone who has lived and worked with children, I have no trouble seeing play as an ephemeral form of natality. However, play and players exist in a world structured by institutions and systems of power. For me, I cannot help but think of Tamir Rice’s last moments throwing snowballs in a park before he was killed by police. Additionally, Klein (2014b) notes that “the worst health impacts of...fossil fuels” are “systematically dumped on indigenous communities and on the neighborhoods where people of colour live, work and *play*” (para. 13; emphasis added).

Arendt as respect for plurality, community belonging, and the possibility of freedom itself (p. 54). I have much suspicion about natality in that I fear it overlooks the structures, institutions, and histories that insist on the ongoingness of anti-blackness and makes these natal features inaccessible for many. However, I wonder if in refusing what might be called the *natality of the bio-human* if a *natality of the inhuman* might emerge in ways in which the inhuman is figured neither as pejorative nor ahistorical. I play this out further in later chapters by grappling with how the end of the world might generate a natal occasion for the no-longer-natality-alienated. As cryptic as such a statement may seem at this juncture, I believe it will become clearer as the pages turn. For now, Ruha Benjamin's work offers a different sort of worlding.

Benjamin's (2018) proposal for #BlackAfterlivesMatter engages Hartman's afterlife and Patterson's natal alienation in offering "afterlives" as an alter practice of care and kin-making. Benjamin invokes the co-presence and the living-on of ancestral presences in spite of the ongoingness of anti-blackness. Benjamin sets up her proposal by first pointing out that "white life and black death" are inextricable relations of reproduction (para. 1). Reproduction in Benjamin's usage includes biological, social, geological, and political relations. Racialized structures—I count geological origin stories as one such arrangement—not only "produce, but *reproduce* whiteness, by resuscitating the myth of white innocence that inheres in the racial status quo. Racist systems are thereby reproductive systems" (para. 1). In each recitation of the golden spike moments or eureka conference exclamations, a rebirth for whiteness is initiated. Each telling reproduces the "colonial assumption for the responsibility for and of the world...as the white man's burden—a paternalism that is tied to a redemptive narrative of saving the world...while maintaining the protective thick skin of innocence" (Yusoff, 2018, p. 27). Maintaining this semblance of innocence in the face of so much contradiction requires "ongoing

sterilization...as with a baptism. White people are not just born once, but over and over” (Benjamin, 2018, para. 2), a point of focus in Chapter 4. In this sense, natality is not new but more so repetitious.

Given these challenges, Benjamin manages to hold on to reproduction by insisting that it be joined by justice—reproductive justice as a strategy to affirm blackness in the afterlives of slavery. Benjamin draws on the work of Black feminists to (re)propose reproductive justice as encompassing a full range of practices that extend well beyond the body and child: reproductive justice is a “practice of making kin, not only *beyond* biological relatives, but also *with* the materially dead/spiritually alive ancestors in our midst” (para. 11). Kin-making is not exceptional to the bio-centric human but includes ancestors, which is an understanding and practice shared with many Indigenous peoples. Part of this reconceptualized notion of reproductive justice is to seek afterlives “under the earth” in the place of the subaltern—literally—that is, given the subaltern’s etymological origins. The earthly realm is not only where the geological world of strata exists but “coffins, seeds, roots and rhizomes. And maybe even tunnels and other lines of flight to new worlds...other life forms and ways of living” (para. 10). This finds an echo in Jared Sexton’s (2011) observation that “Black life is not lived in the world that the world lives in, but it is lived *underground*, in outer space” (p. 28). I find the intra-play of underground and outer space immensely provocative. As more of a preview of what is to come, the geos child-figures in Chapter 6 carve out existence underground, but also in outer space in terms of the unknown, the unknowable, the more-than-human, and the speculative.

Michelle Murphy (2018) offers “alterlife” as a figuration of reproductive justice capable of grappling with the Anthropocene problematic. Influenced by many of the same Black feminists as Benjamin, Murphy also links her proposal to Indigenous conceptions of

reproductive justice. Key figures for Murphy include the ground-breaking work of the Black feminist organization Sister Strong in the United States and the Indigenous youth-led Native Youth Sexual Health Network in Canada. From these leaders, Murphy marks out her starting point as “the *affirmative making of the conditions that support collective life* in the face of persistent racist, colonial, and heteropatriarchal life-negating structures” (p. 109). Important to the gestures I am making in this chapter about the spectre of childhood (as a presence regardless of actual textual reference), Murphy insists that “reproduction here is not just the baby” (p. 109). She maintains that anti-racist and decolonial distributive reproductive justice “stretches beyond bodies, choice, and babies to extensively include all our relations and responsibilities within damaged worlds” (p. 102). These relations include land, water, sky, air, and chemical and economic infrastructures. Murphy moves reproduction from a frame enclosed by children reproduced biologically in female bodies to an understanding of land-body relations and how they interlace and interface as damaged life-support systems needing nourishment and replenishment. Importantly, alterlife also inquires into “what relations should be dismantled, refused, shunned” (p. 110); not everything deserves resuscitation. New births are not the only way forward either as care can also be regenerative, a key premise of Chapter 4. From this point, Murphy moves to engage with apocalypse by insisting that alterlife occupies “a different temporality, recognizing the many long-standing world world-destructions, from settler colonialism to plantation slavery” (p. 117). Murphy does not refute the reality of a damaged earth but repeats the point that the apocalypse has already happened and continues for many today. Alterlife resides in the ongoing aftermath of violence present and future, and nevertheless holds “capacities to alter and be altered...Alterlife is life damaged, life persistent, and life otherwise” (p. 112).

It remains to be seen if the Anthropocene continues to be deployed in ways that attempt to interpolate us all equally as agents of geologic destruction with unequal chances of survival let alone flourishing. Even with its broad uptake in the sciences and humanities, and with all its compositional variants in names and figures and concepts, the Anthropocene is still a concept in the making. One of the ways to keep it from monumentalizing is to insist on keeping the questions of origins moving (Yusoff, 2016), and to look outside the boundaries of Anthropocene science for alterlife stories and otherwise ways of conceptualizing origins. An important location where the spectre of childhood and the afterlives of slavery meet is speculative fiction. Speculative stories can “engage with visions emerging from movements that are grappling with ongoing apocalypse: their narratives do not succumb easily to a dystopian future, calling instead upon powerful themes of endurance and refusal” (Gergen et al., 2018, p. 15). It is to imaginaries of end of the world that affirm ongoingness that I now turn.

### **Chapter 3: Anthropocene Apocalypse: Figurations of the #EndOfTheWorld**

This chapter is provoked by the observation that “fantasies of apocalypse are both a product and a producer of our current epoch—the Anthropocene” (Ginn, 2015, p. 352). The etymology of apocalypse as “revelation, disclosure” connects to this idea (Online Etymology Dictionary, n.d.). The Anthropocene, or so the dominant narrative goes, finally reveals the detrimental effects of human consumptive and extractive practices on the earth. The recognition of humans as destructive agents—as producers of apocalypse—should hardly come as a surprise to those paying attention to how power has been exercised. So, in this way, while the Anthropocene “might seem to offer a dystopic future that laments the end of the world, imperialism and ongoing (settler) colonialisms have been ending worlds for as long as they have been in existence” (Yusoff, 2018, p. xiii). This bemoaning of the end of the world is nevertheless remarkable in both contemporary scholarly and popular discourse. Recall, for example, the news headlines that open this dissertation. While the last chapter sought to interrupt scientific discourses of Anthropocene origins, this chapter takes as its starting point cultural meaning making around endings. In other words, I move from discourses of the birth of new epoch to figurations of the end of the world. The #EndOfTheWorld is the thread that runs through the remaining chapters of this dissertation because “regardless of when the Anthropocene started, the ending of it is what is driving the current public preoccupation with it and marks its cultural significance” (Joo, 2018, p. 2).

Perhaps, most noticeably, apocalypse as a product of the Anthropocene manifests in the deluge of pop culture disaster film and cli-fi literature in recent years. This Anthropocene-allied genre “plays out a fantasy of human near-disappearance and redemption” where exalting life through survival is poised as the most worthy goal (Colebrook, 2014, p. 197). Limited shelter,

limited water, limited food, limited leisure, limited transport, and, overall, limited things make up the plot points and settings. Rarely is it considered that these same limits are the actual conditions many in the world face daily. Anthropocene imaginaries of future ends are the real worlds for many now. Alongside these pop culture texts are speculative non-fiction bestsellers that imagine humanity's end. Noteworthy examples include *The World Without Us* (Weisman, 2007), *The Sixth Extinction* (Kolbert, 2014), and numerous self-help preparation-preservation guides along the lines of "how to survive a zombie apocalypse" (e.g., Thomas & Thomas, 2009). Furthermore, apocalyptic thinking merges with policy when instead of being overrun by a tsunami in New York City (e.g., *The Day After Tomorrow*) or giant beasts after a nuclear meltdown (e.g., *Godzilla*), climate change migrants and refugees become the futurized "object-target" of "white affect," which finds form in increased security and scarcity measures and racialized fear-mongering (Baldwin, 2016). In these examples, we may begin to see how the Anthropocene is produced and reflected as apocalyptic trope. This chapter outlines nine additional ways that the Anthropocene entangles with the end of the world, beginning with a more detailed look at apocalyptic filmic tropes and ending with a discussion of child-figures in speculative texts.

For my purposes, an important amendment follows this chapter's opening quotation. Ginn (2015) continues: "fantasies of apocalypse...also take us beyond this epoch [to] what might be to come" (p. 352). While what is to come is often depicted as an amplified intensification of the same, that is not the only vision available. Critical imaginings also exist as a form of "social dreaming that makes different futures possible" (Gergen et al., 2018, p. 5). These are speculative gestures that are an "Otherwise than this" (Crawley, 2015, para. 18). Much of this important

work is found in Indigenous Futurism/futurities and Afro-futurism/Afrofuturism.<sup>27</sup> While each genre has its own genealogy, artists, theorists, and audiences—and the futures they animate might not be entirely commensurable—they do come together in that “whenever we envision a world without war, without prisons, without capitalism, we are producing speculative fiction” (Imarisha, 2015, p. 10). My contribution to these discussions is better understood to be in conversation with, and to be read alongside, Indigenous futurities and Afro-futurisms, wherein I turn my critical lens on those for whom the future is not necessarily a critical act of imagination but an accumulative continuation. This means having to ask hard questions of myself with regards to my social justice values and how they impact my work in childhood studies. Summed up by Frank B. Wilderson III (2014) in the context of #BlackLivesMatter, and for which I am included in his “they”: “Because what are they trying to do? They’re trying to build a better world. What are we trying to do? We’re trying to destroy the world. Two irreconcilable projects” (p. 20). Some speculative futures exist where settlerness and anti-blackness do not, and, as such, there are limits to my telling.

### **Tropes of the #EndOfTheWorld**

It is no accident, Bruno Latour (2015) implores, that the most vocal detractors against contemplating ecological apocalypse are those “who are so far beyond doomsday that they seriously believe that nothing will happen to them and that they may continue forever, just as before” (p. 224). Anna Tsing takes from Latour’s warning on the apocalyptic a suggestion to dig

<sup>27</sup> For theoretical overviews of Indigenous Futurisms see Anishinaabe scholar Grace Dillon (2012), Cherokee scholar Sean Teuton (2018), and Anishinaabe-Nehiyaw scholar Lindsay Nixon (2016). For creative arts approaches see Elizabeth LePensee (Anishinaabe, Métis), Rebecca Roanhorse (Ohkay Owingeh/Black), Christi Belcourt (Métis), Sonny Assu (Ligwilda’xw Kwakwaka’wakw), Daniel Heath Justice (Cherokee) and so, so many others. For Afrofuturism see the founding work of Alondra Nelson (2002) and YtahsaWomack (2013), the critique of the African American centrism in much Afrofuturism (Mashigo, 2018; Okorafor, 2017; Ryman, 2017), and creative works by Octavia Butler, Wangechi Mutu, Janelle Monae, Wanuri Kahiu, and N. K. Jemisin. These few names and citations do not do justice to the vast amount of critical and creative works by Indigenous and Black artists and scholars, but it is a start.

in deeper: “why not use it? We know it is a trope. We know it can get us in trouble. But it also enables a kind of serious play that allows us to think things that we would have never been able to think without that trope” (Haraway et al., 2016, p. 547). What are the tropes of apocalyptic speculative fiction? What can textual motifs of apocalypse generate? Donna Haraway (2007) embraces tropes as an indication of the “nonliteral quality of being and of language” that might make “us swerve or trip” (p. 135). When movement is thrown off course—after we fall—there might be some impetus to “slow down reasoning and create an opportunity to arouse a slightly different awareness of the problems and situations mobilizing us” (Stengers, 2005, p. 994). What might tropes enable us to think if we slow down thought?<sup>28</sup> As much as I see generative potential in speculative fiction of the apocalyptic sort, there are also concerns. The play with apocalypse must be careful, as Tsing contends above, because oftentimes “concepts and narratives of crises, dystopia, and apocalypse obscure and erase ongoing oppression against Indigenous peoples and other groups” (Whyte, 2018a, p. 234). I return to these concerns later in this chapter. For now, the tropes of pop culture post-apocalypse are of foremost interest.

With regards to contemporary post-apocalyptic blockbusters there is a predictable narrative sequence to most texts. First, a select group of humans led by a Man (e.g., family man, scientist man, military man, will-be-president man) comes face-to-face with humanity’s mistakes (e.g., hubris, capitalism, ecological waste, gene manipulation) and realizes he must act. In many cases the actual disaster happens off-screen as a prequel event to the main story at hand. Another

<sup>28</sup> Years ago, I gave a conference presentation on “slowing down thought” to sit with the incommensurability of including/enclosing Indigenous knowledges within settler early childhood curriculum. In her thoughtful discussant remarks, Dr. Sandra de Finney pointed out that perhaps another relation is needed. In other words, there has been an awful lot of slowing down by some when others do not have that same privilege. An example de Finney gave was epidemic of Missing and Murdered Indigenous Women and Girls—how much slower could the state and public response be—women, children, and two-spirit people are dying now. These remarks have stayed with me. I think it offers something to the Anthropocene conversation also: how can you slow down when your house is on fire (Thunberg, 2019)?

instigating action might be an apparent no-human-fault accident (e.g., asteroid strike, giant wave, alien invasion) in which planetary survival nevertheless becomes precarious. Urban centres are typically threatened, flooded, or destroyed, but a transport hub or military structure remains for temporary safety and world-saving meetings. The plot progresses as humanity comes closer and closer to the brink of extinction and a few good men are lost along the way. At the climax, and after just the right amount of earthly destruction, the hero and his ensemble save both the day and his family. Lastly, a proper humanity—not what caused the destruction at the beginning of the story—emerges, and oftentimes this is with/through/in the figure of a child. In other words, “perhaps more than any other genre, what has come to be known as the post-apocalyptic provides a way for humanity to view itself, find itself threatened by a nonhuman other, and then re-find itself by reaffirming its proper modes” (Weinstein & Colebrook, 2017, p. xxii). This sequence gestures towards how the object-subject of redemption has altered form in recent years in that it is now “man’s proper mode that triumphs: Man as consumer, destroyer, and dominator is redeemed by man as ecologically attuned life” (p. xxiii). However, this road to ecological and moral redemption in speculative texts still relies on figurations of terrorists and aliens via anti-blackness, territorial displacements and new frontier continuities of settler colonialism, and technoscience advancements rooted in capitalism, militarism, and imperialism that instead of devastating humanity will somehow now save it triumphantly. Summarized, the tropic plot line typically proceeds as follows: (1) humanity is in trouble, (2) humanity is near extinction, (3) humanity is saved, and (4) proper humanity is (re)becoming.

In cli-fi productions, apocalyptic tropes tend to evoke “fears of an ecological catastrophe fuelled by industrialization and overconsumption” that get metaphorically played out as a revengeful nature wreaking havoc on a disenchanting humanity (Gergen et al., 2018, p. 6). The

severity of white precarity gets an added dose of urgency when disaster is forecast as both imminent and attributable to an untamed nature run amuck. The eventfulness of cli-fi disaster deletes the deep time of anthropogenic climate change and enacts “a temporal trickery that erases the already existing racial apocalypse” by pushing it out of the way or into the far past or even the far future (p. 12). The long, incremental “environmentalism of the poor” is not spectacular enough for most cinematic showings (Nixon, 2011b). On the surface, the cli-fi genre appears to problematize climate inaction by showcasing its dangers; however, “by sensationalizing extreme events...cli-fi obfuscates the connections between climate change and structural conditions in a battle of Man v. Nature” (Gergen et al., 2018, p. 6). When the victorious agent is once again white Man (even an eco-redeemed Man or whiteness embodied by a child-figure), cli-fi texts become just “another storyline for proclaiming white victory” (p. 6). In their “portrayal of a universal human threat through the experience of a white Western core,” most speculative texts enact a serious disconnect from the everydayness of climate change (p. 8). In making climate disaster the shared horizon for everyone, differences and distributions of liveliness are sidelined.

Post-apocalyptic narrative tropes connect to broader Anthropocene discussions when critical attention is paid to how “Anthropocene markers evoke apocalypse” (p. 5). The search for origins or golden spikes, as was examined in Chapter 2, extends beyond scientific realms to popular fabrications when the intimate relations of “Anthropocene markers” and racialized discourses are unwound, and the newness of Anthropocene thought is challenged. The tropes that connect Anthropocene science and speculative film are threefold according to a recent proposal by Mabel Gergen, Sara Smith, and Pavithra Vasudevan (2018). Firstly, “The Great Deluge” are films about nature’s revenge (e.g., tsunami, volcano, earthquake) where scientists become planetary stewards and geo-engineering triumphs. The Anthropocene connection is a

reverberation of “science as savior” that “obscures how a scientific rationality laid the foundation for Enlightenment thinking and the Industrial Revolution” (p. 7), and has had irreversible impacts on the environment. Secondly, “Nuclear Cataclysm” are films that stoke fears of nuclear war and present desert wastelands as fantastical cinematic settings. These films find geologic connection in the Anthropocene Working Group’s preferred golden spike of nuclear fallout in strata. Thirdly, “The Population Bomb” are contagion films (e.g., zombies, outbreaks) that evoke population-related anxieties and overlap with discussions about the Great Acceleration thesis where consumption versus population is an ideological debate point. This framework pulls pop culture and science together and further muddles any boundaries between the apocalypse as producer and product of the Anthropocene.

The tropes outlined thus far point to how pop culture and science offer “parallel imaginings of apocalypse” that can be overcome triumphantly by human exceptionalism (p. 4). To recap, human protagonists are differentiated, and thus made innocent, from their over-exploiting, over-consuming, and over-violent kin. The action proceeds as the human heroes are threatened but ultimately survive a battle with monstrous foe (e.g., aliens, virus, nature, bad humans). A big achievement of post-apocalyptic film is “the thought of a proper humanity that would not be guilty of the Anthropocene scar,” which is achieved by stabilizing “narrative frames and trajectories” (Colebrook, 2017e, p. 84). These frames, which overlap with an understanding of tropes, stage the end of the world as a moral battle between good and bad humans and good and bad nature. In a bit of a mind twist, the narrative trajectory entails “a destructive humanity becom[ing] the catalyst for human triumph, with a proper humanity emerging with sublimity from near death” (p. 85). In surviving the end of a world, the improper humanity that caused the apocalypse is extinguished so that a proper humanity can take its

rightful place atop the species hierarchy (Colebrook, 2017b). To explore this further, I turn to the relationship of humanity and catastrophe.

### **Catastrophe at the #EndOfTheWorld**

In a much-cited article, Dipesh Chakrabarty (2009) suggests that a new humanity is emerging in conjunction with the Anthropocene. For Chakrabarty, humanity is no longer figured as a “Hegelian universal arising dialectically out of the movement of history,” but as a “universal that arises from a shared sense of catastrophe” (p. 222). I am interested in the ethical and political implications of ontological figurations of this sort; in other words, what does it mean when “we are the world (but only at the end of the world)” (Joo, 2018, p. 4)? While Chakrabarty’s (2009) theorizing of a “negative universal history” is much more complex than the excerpt above conveys, within it, the danger of a generalized humanity-as/in-catastrophe nevertheless subsists. In having to imagine a future “without us in order to visualize it,” Chakrabarty contends that “the exercise of historical understanding” as a progressive reflection is thrown “into deep contradiction and confusion” (p. 198). What a future-oriented historical practice might also do, however, is expunge the long histories of peoples who have always had to imagine a history without themselves due to violence, extraction, genocide, and slavery. Also passed over are peoples whose ways of being in the world do not have the human species as their pivot point. What does humanity-as/in-catastrophe do for discussions of past reparations and for future worlds of less systemic harm? What does humanity-as/in-catastrophe entail for more-than-human relations? What kind of disaster composes humanity-as/in-catastrophe? What are other ways of thinking humanity that do not lump everyone into a sense of shared, imminent tragedy?

Further to this analysis, Daniel Hartley (2015) offers a two-fold framework for interpreting what I have taken to calling humanity-as/in-catastrophe. First, Hartley argues that the “we” emerging from the prospect of collective catastrophe belongs to a “genre of survivalist

reasoning,” which is a logic that places human survival atop the species hierarchy thereby making all other political commitments and earthly existents secondary (para. 17). This is illustrated later in Chapter 5 with how fertility is the main impetus for action in *The Handmaid’s Tale*. Survival logic allows *The Handmaid’s Tale’s* television showrunner Bruce Miller to argue: “It just felt like in a world where birth rates have fallen so precipitously, fertility would trump everything” (Dockterman, 2017b, para. 10). In this formula, childbirth equates species survival and therefore provides the rationale for and even acceptance of totalitarian rule. Second, Hartley proposes that the “we” of catastrophe is an example of “the genre we might call ‘catastrophism’: that type of reasoning which sacrifices all determinate negations in the face of the one abstract negation of a general doom” (para. 18). In apocalyptic films, catastrophism often takes form as spectacular events that have little connection to the daily lives of their viewers. This “encourage[s] disavowal of the potential reality of the outcome of ecological and other disasters,” as rescue spaceships and terraformed planets are unlikely to save the non-filmic world (Fojas, 2017, p. 12). In addition to what Hartley describes, a sense of species extinction expedited by catastrophism can displace the critical recognition of the differential distribution of life chances. For example, Black Lives Matter becomes All Lives Matter because All Lives are precarious now (or will be in the very near future). This apocalypse-anxiety is one place where the Anthropocene doubles down on #AnthropoceneChild who “stands in the place of the species and coordinates its transit to the future” (Sheldon, 2016, p. vii).

### **Temporality at the #EndOfTheWorld**

The Anthropocene encompasses a challenge to taken-for-granted notions of temporal scale in that human time and geological time are coming into contact. In other words, the “time of politics and the time of the planet, once deemed to be distinct are now colliding” (Colebrook, 2017d, p. 5). The Anthropocene is not delimited to either human lifetimes or earth history but

can be thought in both modes at once (Chakrabarty, 2009). The Anthropocene reconfigures geologic and human histories so that they co-complicate and co-implicate each other. To navigate this complexity—geological change within human experienced time and species induced ecological change within geological periods—narrative becomes essential (Nixon, 2011b). As such, speculative fiction is a mode of tackling the accessibility and affectivity problems of the geological timeline, but it can also camouflage important differences by collapsing deep time into spectacular time. This can be thought in relation to Rob Nixon's (2011b) theorizing of slow violence. Slow violence is “a violence that occurs gradually and out of sight, a violence of delayed destruction that is dispersed across time and space, an attritional violence that is typically not viewed as violence at all” (p. 2). Slow violence is “neither spectacular nor instantaneous but instead incremental, whose calamitous repercussions are postponed for years or decades or centuries” (Nixon, 2011a, para. 2). While I do not mean to imply that anthropogenic climate change has been hidden from view, for the most part it has happened gradually yet is made into an event in post-apocalyptic texts. In other words, slow violence is eventalized by being spectacularized.

I relate slow violence as put forth by Nixon to Saidiya Hartman's (2007) conceptualization of the “afterlife of slavery” as indicative of the “racial subjection...that still haunts us” (p. 766). The afterlife of slavery and slow violence come together when thinking about how environmental violence disproportionately impacts Black and Indigenous communities. Katrina is perhaps the most well-known example of such disasters: what happened and to whom it happened was manufactured over many years, yet it was presented as a singular event—as one hurricane that broke the levees. Similarly, disaster films evade engaging with complications and complicities of afterlives through dramatic moments of “violence that are often perceived as

immediate, explosive, spectacular and instantaneous” (Joo, 2018, p. 3). However, deep time Earth system change does not happen in a single, devastating event like a white squall, massive earthquake, or torrential rain. The eventfulness of disaster films distorts slow violence and geological time whereas instead a *billion black anthropocenes* are ongoing, gradual, and residual in their effects (Yusoff, 2018). Making external, spectacular, and instant what are otherwise the protracted intimacies of anthropogenic climate change and racialized extractive economies displaces a violent distribution that has long been present (Davis & Todd, 2017). The temporal displacements and spectacular emergencies of apocalyptic films once again leave slow violence without proper narrative form. Whereas slow violence and the afterlife of slavery reflect a buildup of geos-historic sedimentations, most end of the world narratives subvert the non-eventfulness of disaster and claim a position of innocence by storying apocalypse as an unforeseen and unmediated futuristic happening.

I find thinking the temporal dislocations of the Anthropocene a challenge because I am used to thinking in biopolitical frames, as in the life course of individuals within populations. The temporality of the Anthropocene is a multi-scalar, multi-dimensional timescape which poses challenges to the imagination. Chakrabarty (2009) explains how the present moment of ecological crisis interrupts the normalized sense-making practices of history that are based on an assumption of linear time where past-present-future are linked by the “continuity of human experience” (p. 197). An alternative temporality proposed by Métis scholar Zoe Todd (2017) understands time as moving like a “slinky”—stretching and compacting, slowing down and speeding up, in different moments and cycles. In addition, Whyte (2018b) writes about Indigenous “spiral or accordion conceptions of time” as a practice of “seasonal round governance” organized to respond to local ecosystems and adapt to changing environments (p.

130). This kind of time is in “constant evolution” and can “fold back” on itself—spiral time is a time of caretaking according to cycles, storytelling, and movement (p. 130). Whyte further suggests that the present moment is “what our ancestors would have likely characterized as a dystopian future. So we consider the future from what we believe is already a dystopia” (Whyte, 2017b, p. 3). Whyte continues:

This historically brief, highly disruptive moment, “today’s dystopia of our ancestors,” sounds a lot like what others in the world dread they will face in the future as climate destabilization threatens the existence of species and ecosystems. Yet for many indigenous peoples, the Anthropocene is not experienced as threatening in precisely the same sense because the particular era of settlement I am describing forced many of our societies to let go of so many relationships with plants, animals and ecosystems at a wrongfully rapid pace. (pp. 3-4)

The present moment for Indigenous peoples is the post-apocalypse or the ongoing-apocalypse. Yet many Indigenous peoples still imagine a world in temporal scales not determined by settler colonialism. Molly Swain of the podcast *Métis in Space* describes the temporalities of Indigenous futurism powerfully:

Armed with spirit and the teachings of our ancestors, all our relations behind us, we are living the Indigenous future. We are the descendants of a future imaginary that has already passed; the outcome of the intentions, resistance and survivance of our ancestors. Simultaneously in the future and the past, we are living in the dystopian now. (cited in Wikler, 2016, para. 4)

Despite the potential for a form of temporal disruption that Chakrabarty attributes to the Anthropocene, I perceive the golden spike origin moments and Great Acceleration graphs as

plotting history as a linear experience. However, as these Indigenous scholars point out, this is not the only way to think-with and live-within temporal landscapes. For me, this awareness impacts my conceptualization of what counts as finitude at end of the world.

### **Finitude at the #EndOfTheWorld**

Popular end of the world narratives seem to be largely incapable of imagining what their name intends: the end. There is an active refusal to not end. The “performative function” and “performative force” of post-apocalyptic imaginings of this sort is to come extraordinarily close to facing our demise so that we insist on our future (Colebrook, 2017b). The repetitious playing out of the possibility of non-survival is a powerful way of silencing critical questions around whether, how, and what forms of humanity ought to survive (Colebrook, 2017b; Sheldon, 2016). Despite long bouts of attempted recall, I cannot list any speculative fiction that actually ends with the end of human life. I have previously listed some non-fiction titles (e.g., *The World After Us*, *The Earth After Us*) but when it comes to visual media especially, I draw a blank.

I find it disconcerting how announcements of a new global humanity emerge and are “generated by a robust flirtation with fragility” (Colebrook, 2017c, p. 10), both in performances of Anthropocene science and popular narratives. Particularly, post-apocalyptic speculative fiction provides a means to engage with the end without having to live it; one thing flirtation alludes to in Colebrook’s phrasing is a desire for risk without the livingness of it. The Anthropocene limit of imagination evident in these formulations is “that any form of existence other than our own is deemed to be the end of the world” (Colebrook, 2017b, 27:25). This entails a slide from the end of *the* world to the end of *a* world, or, more scrupulous still, the end of the world as the end of *our* world. In figuring the end of the world as the end of *our* world, the question that needs to be asked is who is included in the *our*? A follow-up can be: “what [does] it cost to attain our world, and whether we were entitled to such a world in the first place”

(Colebrook, 2017a, para. 5). In this framing, *world* refers not so much to the physical space of earth, but something more akin to a lifeworld: “a horizon of sense, expectation, social fabric and sedimented meanings” that is entangled with economic and socio-political orders (Colebrook, 2017c, p. 5).<sup>29</sup> And *our* world at the end of *a* world in most speculative fiction turns out to be a very specific one—a Western, rich, affluent, leisurely, reflective, readerly, liberal, anti-Black and white-settler world that exports fragility outside itself by making other bodies and other non-human existents disposable. Rarely do apocalyptic speculative stories actually engage *the end* of the end of the world. Instead it is the *potential* end of *a* and *our* world that is rendered at risk and risky by imaginaries of Anthropocene post-apocalypse.

I join with Claire Colebrook (2014) in finding troubling that “just as the human species starts to approach the real possibility of its actual non-existence...there is a barely perceived and half-articulated problem of how and whether humans ought to survive” (p. 190). In this way the “post-apocalyptic is best read as a question posed” wherein the key “half-articulated” question needs to be pushed into full expression: what exactly about humanity is worth saving (p. 190)? This question takes on particular political potency in light of #BlackLivesMatter, #MMIWG, #WetsuwetenStrong, #NoDAPL, #NoJusticeNoPeace, and where survive can stall at mere life and refuse to engage hard questions about contemporary conditions of flourishing. For critical white settler scholars like myself who ally themselves with anti-colonial and anti-racist ethics, politics, and pedagogies there seems to be an unwillingness to seriously consider that an end of racism and coloniality also entails the end of whiteness.

<sup>29</sup> In reflecting on the first sentence of her Broken Earth trilogy, N. K. Jemisin explains a multifaceted end of the world as such: “I had a sentence in mind: ‘Let’s start with the end of the world.’ That can mean the literal end of the world, it can mean the end of a civilization, or it can mean grief” (Khatchadourian & Jemisin, 2020, para. 9). I cannot help but think the resonance of Jemisin’s last meaning with regards to the COVID-19 pandemic—how many worlds have ended?

The end of the world that many Black studies scholars are after is better described as the end of “humanity under whiteness” (Ziyad, 2017b, p. 143) and/or of “whiteness as humanness” (Wright, 2018, p. 5). The end of the world intended by these scholars is the end of the structures, institutions, and disciplinary practices that normalize and require the premature death of Black, Indigenous, and other racialized peoples (Gilmore, 2006). Whiteness, in this sense, pertains to the dominant arrangements of power, privilege, governance, and existence in late liberal worlds (Povinelli, 2011). An end of whiteness requires the end of a particular modality of the human, which in many respects means the end of the world as it is currently configured. Vanessa Andreotti and colleagues (2019) speak about this as “not the end of the world ‘period’: this is just the end of certain ways of knowing, feeling, relating and being in the world and the opportunity for something else, possibly wiser, to emerge” (p. 23).

The reactive, often loud and forceful, response to such calls for the end of the world tend to confuse whiteness and white people and double down on a refusal to admit—let alone give up—inherited privilege and power. When I write about the end of whiteness, I do not mean the elimination of white people. Too often, it is as though an end of whiteness can only be imagined as some kind of brutal physical harm, an unrecoverable assault on white bodies rather than institutions. It is as though an end of humanity as whiteness equates a literal putting to death of white men instead of the end of White Man, even though the killing perpetuated by this same genre of the human should not go unaccounted for. The end of whiteness that I desire is elucidated by Tiffany Lethabo King (2019) when she writes of the need of whiteness to “enact a self or self-actualize—in a way that requires the death of others” (p. xii). The end of this requirement would be the end of *a/our* world.

In their work on the end of the world, Déborah Danowski and Eduardo Viveiros de Castro (2015, 2016) set up a framework of a “world without us” and an “us without the world” to capture some ontological and cosmological differences between Euro-Western traditions and Amerindian cosmologies. The “world without us” is an end of the world formulated “as a separation or divergence, a divorce or orphaning resulting from the disappearance of one pole in the duality of world and inhabitant—the beings whose world it is” (Danowski & Viveiros de Castro, 2015, para. 1). In other words, a “world without us” is the end of the human species as earthly inhabitants but the continuation of other forms of existents including the planet. On the other hand, “us without a world” is a “humanity bereft of world or environment, a persistence of some form of humanity or subjectivity after the end of the world” (para.1). An “us without the world” is the living on of humans without anything left to allow themselves to know themselves as human—humanity without a referent. As Colebrook (2019) further explains:

There is very little sense, however, that—despite the common recognition that the Anthropocene has a violent, destructive, and barbarous human history as its cause—other (less robustly global and relational) forms of existence might be viable, desirable, or recognisable. Those other forms of human existence, which were erased in order to achieve the state-centred history of humanity that recognises itself as “Anthropos,” are deemed to be the “end of the world.” (p. 179)

A world continuing on “without us”—after the human and after whiteness—seems much harder to imagine than the end of the world altogether. As the torrent of post-apocalyptic film of late entertains, however, a “world without us” usually still leaves a few humans behind to get the whole thing started again.

The end of the world as it is imagined in post-apocalyptic pop culture does not typically signify the end of life, especially human life, even though its vitality might be much reduced. There would not be much of a Hollywood story line to be acted out in the obliteration of a planet where all life ceases to be. Yet that “the world will end (soon) seems to be so much a part of the cultural imagination that we entertain ourselves by imagining how, not whether, it will play out” (Colebrook, 2017a, para. 14). How these stories play out, however, is more accurately understood as *save the world* narratives rather than *end of the world* depictions (Colebrook, 2017b). Humans persist. Humans endure. Humans survive. Even when the earth is dead. These are not post-human stories. Life in these narratives is tethered to the human who is threatened with conditions of mere existence, and it is this very condition that must ultimately be overcome. But this is life of a particular sort that gets resuscitated. It is life that knows itself to be life and life that knows itself to be world (Colebrook, 2017a). So, what counts as the end of the world is typically the end of things other than human life, as was expressed in the previous paragraph as “us without a world.” For Colebrook, this understanding of the end of the world can otherwise be thought as: the end of the aesthetic, the end of the archive, the end of relation, the end of globalism, and the end of stability. This long listing of ends is combined and addressed in the next two sections on fragility and creativity at the end of the world.

### **Fragility at the #EndOfTheWorld**

As I have discussed, the conventional plot of post-apocalyptic texts finds humanity approaching conditions of limited existence. Perhaps portrayed most famously in Cormac McCarthy’s (2008) *The Road*, humans wander down dusty streets, pick through the ruins of stores, and suffer the violence of lawlessness. The kind of precariousness that marks the cutting narrative edge in much post-apocalyptic culture mirrors “the sorts of conditions that most humans have been living in and are still living in for the sake of this world that is now imagining

its end” (Colebrook, 2017b, 26:15). The exportation and distribution of fragility maps onto divisions of Global North and Global South worldings. As an example from my disciplinary field, childhood studies scholar Erica Burman (1995) documents the inequity as Northern children develop while Southern child survive. Development, in the sense intended by Burman, includes not only child development but globalized economic and political development as well.

Colebrook (2017a, 2017b) traces how “developed” values held to be most universally human—ideals akin to life, liberty, leisure, justice—were made thinkable because Northern powers experienced a prolonged state of manufactured stability achieved by way of conquest and extractivism. In outsourcing fragility through intensifying unequal divisions of labour, and making conditions of survival a daily effort for most of the world’s people, “a specific portion of modern liberal affluent humanity” was free to develop “a sense of a world, a sense of futurity, and a sense of a right to be human” (Colebrook, 2017b, 16:25). So-called universal pronouncements of human rights, human dignity, and human freedom “came about only because the beneficiaries of ‘humanity’ had secured their own comfort and status by rendering those they deemed *less* than human even *more* fragile” (Colebrook, 2017a, para. 8). So, this manufactured humanity has always had the spectral presence of people living insecurely as its ghost. In a seeming counter-factual move, Colebrook asks, what is “more precarious than a species that contracts itself to a small portion of the Earth, draws its resources from elsewhere, transfers its waste and violence, and *then* declares that its mode of existence is humanity as such” (para. 18)? And while “what is more precarious than” might seem to set up a false equivalency between those who are materially precarious and those who are existentially so, what the Anthropocene discussion does is diminish this difference as one that matters. The precarious/potentially-precarious positioning is flipped, amplified, and dramatized so that “any diminution of this

hyper-humanity is deemed to be an apocalyptic event” (para. 17). This is what it means to see the end of *a/our* humanity as the end of the world.

Ideas of stability/fragility play out in the geological narrative as well. The Holocene epoch is described as a nearly 12000-year period of relative climate stability where Earth system functioning remained within limits of so-called natural variation. With the Anthropocene, humans en masse have been named as deep time stability destroyers. What does this mean for the outsourcing of fragility? Does the event of the Anthropocene make sudden a long history of global inequity? Rather than see anthropogenic climate change as an interruption of stability, Colebrook (2017c) argues that it would be better to see “stability as the carved-out exception that ultimately intensified climate change to the point that what is now known as the Anthropocene” (p. 11). One of Colebrook’s (2017a) main points is that instead of perceiving the Anthropocene-apocalypse as a sudden “inhuman horror show” (para. 19), discords of liveability have always been subcontracted to those considered less-than, other-than, and inhuman. This framing acknowledges on whose backs stability bears weight and argues against the continued exclusion of those who are living the end of the world from imagining its future (although inclusion has its own problems).

The Anthropocene can be perceived as “an intense resurgence of the fragility that had been held at bay and outsourced for the sake of global modernity” (Colebrook, 2017c, p. 11). For those of us who have enjoyed the leisure and livelihood of material surplus, this resurgence is not so much an end to current systems and institutions of stability-making but their reconfiguration. This way of thinking ourselves threatened amplifies a search for practices through which we will not only save ourselves but will save the future. Saving ourselves includes personal choices like eating organic, buying local, cycling to work, staycations, upcycling, and having less than 2.3

children. Global sustainable development goals, back-to-nature forest schools, and carbon taxes are institutional examples. Whether or not these fragility-prevention methods are “novel noble endeavors” is not the issue because the point I want to highlight is that “they all serve to sustain the notion that there is our world and that it must be saved” (Colebrook, 2017b, 27:50). In thinking ourselves as newly fragile after decades of stability (or after an Epoch of stability according to the Holocene timeline), we can “proceed with a necessary logic of redemption” (Colebrook, 2017b, 16:05). The Anthropocene renews and intensifies the possibility that a stable humanity might not only slip into a state of precariousness but that it will get stuck there as a new normal. In post-apocalyptic pop culture this risk is not so much cautionary as perversely exciting: “To imagine ourselves as tragically vanquished, and yet somehow surviving the end of the world, this is today’s sublime” (Colebrook, 2017c, p. 10).

### **Creativity at the #EndOfTheWorld**

In most post-apocalyptic texts, the end of the world is not the end of life and “not even human social life but human life that is aware of itself as globally human” (Colebrook, 2017b, 6:30). In Colebrook’s recent work, this performance of the end of the world takes overlapping form as the end of the aesthetic, the end of art, the end of the archive, the end of globalism, or, in just as complexifying terms, the end of the human who is “rich in world” (33:25). “To be rich in world,” Colebrook (2017b) explains, “requires conceptually, materially, geopolitically and existentially other worlds. So, the end of the world is the end of the human being who’s always been able to view and trade in other worlds” (38:05). This is a complicated mouthful so let me peel back the layers by way of examples. There is a key scene in *The Road* when audiences are indirectly asked to mourn for the last can of Coke in seeming equal intensity as for the half-cannibalized humans imprisoned in a house cellar a few scenes before. In *The Road*, after the materiality of pre-apocalyptic life has disappeared, all that remains is humans travelling

aimlessly around without a relational world: without phones, without television, without books, without stores, without cars, without socializing, and without Coke, humans are reduced to mere existence (Colebrook, 2019). The bodies found in the cellar are already dead according to this framing—they are bare life (Agamben, 1998)—whereas, as long as there is Coke, there is still a world out there somewhere. Colebrook (2017b) explains that Coke’s extinction symbolizes “a world reduced to immediacy.” The immediacy is the next meal and the next shelter, and not the next travel book, WhatsApp message, or gourmet cooking show. Thinking-with Colebrook, to be “rich in world” is not so much an indication of economic standing or high-culture—pop culture memes will do—so long as this media provides the medium of imagining an outside, or an other world, even if it is just the fragment of one. This sense of an “aesthetic” as an other by which to know oneself is a “specific mode of worldly humanity where one is able to regard objects, others, and fragments as signs of another world” (Colebrook, 2019, p. 9). In other words, there needs to be something outside the self to tell the self that it is human, which is oftentimes a role attributed to the child figure. The example of a can of Coke may seem trivial but it is an instance of the big picture and its lessons are transposable. It connects to a Black studies critique of the human wherein the human “as an exclusive category demands an outside” (King, 2019, p. 20), and the form the something outside more often takes is racialized and “affectable others” (da Silva, 2007, p. xl).

I agree with Colebrook (2017b) that post-apocalyptic culture discloses what is important to humans, so what else besides Coke (as a figure) matters in the pop culture Anthropocene-related archive? A battered Statue of Liberty is a repeated artefact of disaster films. Beginning with Charlton Heston weeping on the beach at the feet of a broken, buried Lady Liberty at the end of *Planet of the Apes*, she has made appearances in *Deep Impact*, *Independence Day*, *The*

*Day After Tomorrow*, and *Cloverfield* to name but a few films. The true tragedy of the Statue of Liberty in dystopic films, Colebrook (2017b) argues, is not her diminished form but the possibility that she will not be recognized as an icon of freedom—as the symbolic representation of the American Dream (31:05). In all these films, the planet still exists, and some humans survive, but it is the end of the world because the aesthetic has died (or, at least, remains severely threatened). Without the aesthetic, humans cannot know themselves as properly human. Without the aesthetic, there is no possible redemption. This is the post-apocalyptic punch: without the exteriority that tells humans of their interiority, they become zombies (Colebrook, 2017a, 2017c). Mindless. Wandering. Desert. Futureless. Without the aesthetic, humans are left to wither away as mere beings—existents without purpose or possibility for reflection. Coke and Lady Liberty are not only symbols of civilization (and civilizational destruction) but metonyms that allow for the sort of self-reflection and interiority required by a particular understanding of the properly human (Colebrook, 2017b).

If “to be human is to have a world,” as Colebrook states above, what is the relation of art and creativity to world? *Never Let Me Go*, a prize-winning novel by Kazuo Ishiguro (2005) and later adapted into a film (Macdonald et al., 2010), is a dystopic, speculative retrospective of three child-figures—Kathy, Tommy, and Ruth—growing up in England in the late 1990s. According to the block text on the opening screen of the film, there was a medical breakthrough in 1953 which allowed for the average human lifespan to exceed 100 years by the 1970s. Most of the story follows the children’s early years at Hailsham, an isolated boarding school in the English countryside. The school appears to be much like any other school—dorm rooms, well-kept grounds, school gardens, and team sports—but one thing that stands out is the importance of imagination and creativity. A young Tommy is bullied on the playground not because he is bad

at sports but because he fails at art. There is also a mysterious Madame visits to the school periodically to collect the children's artwork to display in a public gallery. Slowly the big picture starts to come together: the daily pill regimen, lectures on smoking, no last names, no family visits, no contact with the outside world, teachers called guardians, and passing mentions of carers and donors. A teacher named Miss Emily breaks rank and tells that children what is going on: they are human clones created to be organ donors and after a few donations they will "complete" (i.e., die) in early adulthood.

Before they begin the donation process, the students leave school at eighteen for the Cottages where they experience a brief taste of freedom before the medical procedures begin. Once settled, the protagonists begin to hear rumours of a deferral program whereby donors who are truly in romantic love, and can prove it, can apply for a few years extra reprieve before starting their donations. Meanwhile, a love triangle plays out antagonistically and the main characters separate after the Cottage. Years later, Kathy, who is a now caretaker for donors, meets Ruth in the hospital. Ruth, who is near completion after her second donation, wants to reunite the gang for one last adventure. Once together again, Ruth apologizes to Kathy and Tommy for being jealous of their true love and sabotaging their chance to be together. Ruth's dying gift to them is the street address of Madame and Miss Emily who they must visit and plead for a deferral. Tommy reveals that he has been working on his art over the years and has put together the true purpose of the childhood art exhibits. While a young student, he overheard a conversation with Miss Emily where she told a student that pictures, poetry, and creative works "revealed what you were like inside. She said they revealed your soul" (Ishiguro, 2005, p. 160). Art could reveal their soul, their truth, their love, and their humanity. Tommy and Kathy travel to see Madame and Miss Emily and find out the actual reason for the school's creative ambition. It

was a key part of a public campaign intended to prove that donor-children were children—that they were human: “‘There, look!’ we could say. ‘Look at this art! How dare you claim these children are anything less than fully human?’” (p. 239). In a haunting exchange, Miss Emily corrects Tommy’s earlier interpretation: “We took away your art because we thought it would reveal your souls. Or to put it more finely, *we did it to prove you had souls at all*” (p. 238). To have a world, the children had to create an archive and demonstrate an aesthetic; they had to externalize their interiority to others in order to prove themselves human. As Sheldon (2016) explains it: “the careful documentation of feelings were all in the service of building an archive of evidence to prove the children’s humanity” (p. 2). The Hailsham children had to be more than coding, genes, and organs, and become a work of art themselves. The end of the world for the Hailsham children, however, turned out to be finding out that they had always been thought of as being without one anyway. As figures of #AnthropoceneChild who move from protected to protector, these children could not “be saved because they have too much saving of their own to do” (p. 2).

### **Hesitations about the #EndOfTheWorld**

Chakrabarty (2009) argues that global warming will ultimately affect the rich and poor alike. He states, “unlike in the crises of capitalism, there are no lifeboats here for the rich and the privileged” (p. 221). This prompted a rejoinder from Andreas Malm and Alf Hornborg (2014) that “as long as there are human societies on Earth—there will be lifeboats for the rich and privileged. If climate change represents a form of apocalypse, it is not universal, but uneven and combined” (pp. 66–67). Even with Chakrabarty’s (2017) later revision that perhaps the lifeboat metaphor was “too cryptic,” the idea of the classless, raceless, genderless, and ageless universal nevertheless persists (p. 31). It seems quite reasonable to assume that global warming will *eventually* make everyone’s “survival difficult,” but “difficult” is always a situated proposition

(p. 31). This does not always come through in Chakrabarty's (2017) work, for example, in the following passage: "the rich, for all their money...would not find it easy to live in a world whose supply of oxygen had dried up; even they are subject to biological processes!" (p. 31). The impending demise of the world's oxygen supply displaces the urgency of anthropogenic climate change happening now. Furthermore, when I hear variations of "I can't breathe," I am taken to a very different scene—one of Black death and white irreproachability.

Whyte (2018a) wonders about how texts that "trade in narratives of finality and last-ness" might be received "by Indigenous persons who see their societies as already having endured one or many more apocalypses" (p. 236). The Anthropocene and apocalyptic film end times tend to gather everyone up in a post-racial, post-nature embrace. As part of a non-differential grasp, and happening more so off-screen than on, end times would also symbolically mean that Indigenous peoples are finally permanently eliminated (Wolfe, 2006). Anishinaabe scholar Lawrence Gross (2016) coins the term "post-apocalyptic stress syndrome" to capture how living through real apocalypse(s) has multi-dimensional harmful effects for Indigenous peoples. Indigenous peoples have "seen the end of their respective worlds," and this trauma is inherited intergenerationally (p. 31). To this line of thought Todd (2016) adds:

What does it mean to have a reciprocal discourse on catastrophic end times and apocalyptic environmental change in a place where, over the last five hundred years, Indigenous peoples faced (and face) the end of worlds with the violent incursion of colonial ideologies and actions? What does it mean to hold, in simultaneous tension, stories of the Anthropocene in the past, present, and future? (para. 5)

What are the ethical reverberations of asking people to "consider the future from what [they] believe is already a dystopia" (Whyte, 2017b, p. 2)? Can dialogue be reciprocal between

Indigenous peoples and settlers given the unequal distributions of harm? April Anson (2017) submits that a more accurate label for stories of “Anthropocene apocalypse” is “settler apocalypticism.” Anson asks, “What are the stakes of narrating environmental crisis and the systems of racialized violence coterminous with climate change through the lens of apocalypse?” (p. 1). This encourages me to ask follow-up questions specific to my area of study: What are the stakes of storying childhood through a damaged earth, racialized politics, and apocalypse? What are the stakes in storying a damaged earth, racialized politics, and apocalypse through child-figures?

It is also important to note that apocalypse is not the only way to know worlds that are under threat. For Gross (2016), while he speaks of intergenerational harm, he also notes that Indigenous peoples are actively engaging a “process of building new worlds, worlds that are true to their past history, but cognizant of present realities” (p. 33). Collected works such as Anishinaabe scholar Grace Dillon’s (2012) *Walking the Clouds: An Anthology of Indigenous Science Fiction* offer stories where apocalyptic endings are not the only experiences of Indigenous peoples, and where disaster is not the only way to figure futurities. Ohkay Owingeh writer Rebecca Roanhorse (2018) posits: “We stand with one foot always in the darkness that ended our world, and the other in a hope for our future as Indigenous people. It is from this apocalyptic in-between that the Indigenous voices in speculative fiction speak” (para. 3). From the in-between are new imaginings, re-visioned futurities, and forceful assertions of regenerative relations. Included are Anishinaabek/Neshnabék’s restorative projects of nmé (sturgeon), manoomin (wild rice), and nini (water) detailed by Whyte (2017b) that might not have the dramatic impact of cinematic spectacle but are nonetheless world-building. For Whyte, such projects “raise questions about environmental justice and colonialism that are too often

marginalized in global discussions of the future” (p. 9). This is a corrective to the sensationalism repeatedly played out in post-apocalyptic narratives that “erase Indigenous peoples’ perspectives on the connections between climate change and colonial violence” (Whyte, 2018a, p. 225).

While there are drawbacks to the post-apocalyptic genre, there is also subversive potential. In addition to the Indigenous interventions above, the post-apocalyptic genre *hints* at the fact that Anthropos-Man as the “universal subject...who has been elevated to a position of ecological mastery—cannot continue indefinitely” (Ginn, 2015, p. 351). This challenge gets at not only the limits of Man as the human, but at the limits of being human in an inhuman world. One of the central questions of *The Road* is “what is the difference between human and inhuman?” (Joyce, 2016, p. 2). This teases out as the difficulty of staying humane on a dead earth, and of staying human when all reflective sense of the world is lost (Colebrook, 2017b). As explained more fully in a later chapter, the Boy asks his father on multiple occasions if they are still the “good guys.” In the end, enveloped by a barren world, *The Road* ultimately refuses to “de-dramatize human life” (Povinelli, 2016, p. 28), and, instead, bases its plot on the minutiae of male survival. It is a mourning call of “carbon-heavy masculinity” (Alaimo, 2017). This is why I italicized *hints* above because although post-apocalyptic film exhibits an obsession with finitude, its dominant assembly showcases an incapability of “imagining the end of man” (Colebrook, 2018b, p. 265). That said, there are speculative texts that refuse this trajectory, some of which are introduced in the chapters to come.

The current pop culture fascination with the end of the world coincides with a vitalist surge in critical theory (e.g., Bennett, 2010). Apocalypse and vitality can become two sides of the same Anthropocene coin when life as *prima facie* good goes untroubled (Colebrook, 2018a; Povinelli, 2016; Sheldon, 2016). For all the exciting work being undertaken on the “nonhuman

turn” (Grusin, 2015), Colebrook (2014) cautions: “What if social political revolution among human beings were still to leave the relation between the human species and life in the same place” (p. 213)? The apocalypse-as-Anthropocene and Anthropocene-as-apocalypse can strengthen a tight-hold to life in the face of uncertain climate futures and obscure how reproductive futurism endures behind calls of/for post-racial and post-nature commons. Any ethical engagement with the future, Colebrook (2012) argues, “certainly cannot be contained by any thought of saving, surviving, enduring, or maintaining life” (p. 205). I admit to struggling to think otherwise than life; it is a practiced habit that is deeply engrained. Alternative imaginaries of regenerative black cyborgs (James, 2013) and a “kinship of the infertile” (Klein, 2014a) are thus explored in subsequent chapters as a means to interrupt the hegemony of life and add moments of hesitation. In the next section I continue to grapple with matters of care and concern in regard to the theorization of an otherwise.

### **Otherwise at the #EndOfTheWorld**

Most end of the world scenarios in speculative texts are not so much apocalyptic but post-apocalyptic. That is, some humans survive the catastrophe, and, as such, live on “after the end of Western liberal affluence” (Colebrook, 2018b, p. 263). As I have tried to show, it is the precarity of whiteness that most often comes to count as the end of the world. In considering popular films in particular, rarely are other modes of existence presented as viable or desirable. As a thought-experiment, however, what if the end of the world is the beginning of an otherwise world? For whom might the end of the world offer a chance of existence beyond mere survival? How might the end of the world generate new worlds instead of rewriting the same old story in the same old genre of the human? None of these concerns are innocent. They are about being for “some worlds and worldings and not others” (Haraway, 2016, p. 41). Nor should this be about taking pleasure in imaging ourselves (i.e., Western-liberal-settler-critical-affluents) reduced to

the kind of conditions much of the world already experiences. A danger is the “romance of precarity,” where environmental racism is consumed in hopeful and exciting tones (Brown, 2013; Sharpe, 2013). While caution must be exercised, and there are many ethical concerns involved, it does not mean that imagining otherwise is not necessary work. As Ruha Benjamin (2018) offers, “here is where our stories of *what is* and *what is possible* matter. They produce meaning and material with which to build (and destroy) what we call ‘the real world’” (para. 21).

As cited earlier, what I want to take seriously is the end of the world as an end to “humanity under whiteness” as Hari Ziyad (2017a) phrases it, or, as Willie Jamaal Wright (2018) expresses it, as an end to “whiteness as humanness” (p. 14). It is the end of *a/our* world, not the end of *the* world. The end of the world as the end of whiteness entails grappling with what Franz Fanon and his comrades gesture towards when theorizing that the only thing worth beginning is the end of the world (e.g., Fanon, 1952; Vargus & James, 2012; Wilderson, 2010). This is the end of the world as the beginning of a new one that Melanie from *Girl with All the Gifts* and Nassun from *Broken Earth* enact, at least partially, and that I will revisit in detail in Chapter 6. What these child-figures embody is that “blackness bears or is the potential to end the world” (Moten, 2015). Part of the weight of blackness is carrying whiteness: how much can the #AnthropoceneChild bear? For well-known Black studies scholars like Sexton, Wilderson, Hartman, Moten, and Crawley the end of the world as an “otherwise than this” has yet to happen on a full-sized scale, but that does not mean it cannot or will not. Despite differences amongst themselves, what these theorists seem to agree on is that anti-racist and anti-colonial attempts to improve the world are not enough. There is no fixing a fundamentally anti-Black world within current structures. The hope, if I dare use such an optimistic word in this context, is to interrupt how it is sustained and destroy it. Denise Ferreira da Silva (2014) wonders, “Is it an ethics,

which, instead of the betterment of the World as we know it aims at its end?" (p. 82). I want to suggest that it is a necessary ethics and a politics. What would an ethics and politics of the end of whiteness look like in the Anthropocene? And how is this mediated and denied through child-figures?

In a world arranged so that "black life is *lived* in social *death*," it seems almost obligatory to desire catastrophe (Sexton, 2011, p. 29).<sup>30</sup> Drawing from earlier sections, the world that "must end is the world that came into being with a form of leisured, reflective ease enabled by slavery and the technologies slavery made possible" (Colebrook, 2017c, p. 13). As it exists now perhaps Black life might be most alive in speculative worlds: "Black life...lived underground" is a provocative proposal by Sexton (2011, p. 28), which reconceives blackness as lived in an otherworldliness of the "so below" that Wright (2018) otherwise theorizes. To quote Wright at length:

It is death, not precarity, that white Americans must embrace....Only in shared social death will the foundation (i.e. anti-Blackness) upon which America's socio-spatial structure (i.e. civil society) was erected, and has been continually rebuilt, be repurposed....This necrosis would encompass "a complete end of the world" and provide a socio-spatial basis for new ontologies...the death of *whiteness as humanness* and the recognition of Black humanity ("so above") would set the stage for a repositioning of human-environmental relations ("so below"). (p. 14; emphasis added)

<sup>30</sup> Wilderson (2015) argues that: "Blackness *is* social death, which is to say that there was never a prior meta-moment of plenitude, never a moment of equilibrium, never a moment of social life" (p. ii). Blackness is "a paradigmatic position" (p. ii). In stating there was no a priori moment, Wilderson is getting at the existence of blackness (and anti-blackness) as co-emergent with slavery. One way of reading this is to understand the Middle Passage as instigating a transformation of the African to the slave along with the economies that this transition enabled. As quoted earlier: "*The slave ship is a womb/abyss*. The plantation is the belly of the world" (Hartman, 2016, p. 166).

This provides another challenge to the universal precarity of the Anthropocene thematic discussed previously and also to the positioning of what is found underground (e.g., geologic matter) as apolitical (Yusoff, 2018). It is also important to clarify that the end of the world is not only a physical death for Black people but social death (although for Black bodies the two are often inseparable). It does not take much digging to see how the conditions of social death that took form in the Middle Passage transition to contemporary arrangements and distributions. Social death is a persistent aspect of Hartman's (2007) "afterlife of slavery," where slavery persists "because black lives are still imperiled and devalued by a racial calculus and a political arithmetic that were entrenched centuries ago" (p. 6). This includes high infant mortality rates, overrepresentation in prisons, poor housing and schools, and premature death (Gilmore, 2006). In this context, and to repeat a point made earlier, the ethical question of ending this world (i.e., structures of whiteness and anti-blackness) does not seem like much of a dilemma to me. As N. K. Jemisin (2017) writes in *Broken Earth*: "Don't lament when those worlds fall. Rage that they were built doomed in the first place" (p. 7). In later chapters, I consider how child-figures gesture towards an otherwise even amid social death.

### **Child-figures at the #EndOfTheWorld**

How do child-figures fit into this discussion about the end of the world? I have noticed that it is rare for a post-apocalyptic text not to feature a child in some form. Child-figures can be the main protagonists (e.g., *Girl with All the Gifts*, "Ferguson is the Future," *Beasts of the Southern Wild*), the central motivating force (e.g., *Children of Men*, *The Handmaid's Tale*, *Snowpiercer*), or sometimes it is the possibility or dream of a child that concludes the text (e.g., *Blade Runner*, *The Road*). In such cases, the child marks the end of the end of the world by ushering in a new world, or, at least, the promise of one to come (Sheldon, 2016). Even in the "most reduced, enslaved, depleted and lifeless terrains are still opportunities for humanity to

confront the possibility of non-existence in order to achieve a more resilient future” (Colebrook, 2017a, para. 15), and what tends to withstand the confrontation is the resilient child-figure. In the climax of *The Road*, for example, the father dies and the Boy is left alone. How will he survive? Before readers have much time to contemplate the end of the Boy at the end of the world, a makeshift family emerges from the wind-swept ruins of the beach. Survival. Kin. Hope. Future. Perhaps the most well-known example of the interweaving of a child-figure with the end of the world is Alfonso Cuarón’s (2006) film adaptation of the PD James’s (1992) novel *Children of Men*. This is the ur-text of the Anthropocene-affiliated genre Sheldon (2016) calls “sterility apocalypses” (p. 151).

In my reading of Sheldon, sterility apocalypses are never really the end of the child per se but the *threat* of no children figured as the backdrop of the “specter of human extinction” (p. 54). In these texts, there seems to always be a few fertile women remaining (e.g., *The Handmaid’s Tale*), or at least one reproductive woman (e.g., *Children of Men*), even after many years of fertility crisis. At the end of these worlds all the technological advances of reproductive technoscience seem to have vanished, and it is men who are infertile even though women always seem to be blamed for childlessness. A fertility crisis can only be overcome by natural births—not artificial ones (Sheldon, 2016). While films such as *The Road* engage questions of reproduction (mainly in their absence and through anxieties over human finitude) and feature child characters, they do not make-up the genre of Sheldon’s sterility apocalypse. For Sheldon, “*The Road* grounds its notion of human futurity firmly in the colonial civilizing project,” where white fragility needs restoring by the white child and the potentiality of white offspring (p. 155). Conversely, sterility apocalypses “invert this coding, proffering the future of the species through the miraculously restored fertility of women who are both racially marked and in positions of

extreme vulnerability to racialized state violence” (p. 155). For example, take the powerful scene in the film version of *Children of Men* where the first woman in nearly twenty years to be pregnant is revealed to the audience: standing in the midst of cows in a barn stall, Kee, a Black teenage refugee, removes her top to reveal ample breasts and a protruding belly. The imagery brings up many racialized tropes. Chattel. Slavery. Animal. Sexualized. Body. Exotic. Black.

Sterility apocalypses suggest a “return to racialized reproductive labor as mystified fleshy surplus,” where reproductive women of colour are momentarily idolized and protected before becoming (re)enclosed in a system of economized life (p. 158). In the transition from mass sterility to miracle child, however, what cannot stay hidden are “the racists and racialist systems at stake in species anxiety” (p. 156). Reproductive women are surplus rather than savers because the real value is the child. In Sheldon’s theorization, the main problematic for sterility apocalypses is “who can be induced to do labor on another’s behalf?” (p. 156). And, as shown in previous discussions of reproductive justice in the first two chapters, reproductive labour is not only about childbirth. Reproductive labours are agricultural labours; reproductive labours are manufacturing labours; reproductive labours are social labours; reproductive labours are racialized labours. As Dorothy Roberts (1997) insists, “reproductive politics inevitably involves racial politics” (p. 9).

An Anthropocene tie-in to the genre of sterility apocalypses is that it is not only women who are cast as sterile, but the figure of Earth-as-Mother is also un(re)productive, or, at least, on her way to becoming infertile (Sheldon, 2016). In producing “Earth as a barren woman,” Sheldon explains, a film like “*Children of Men* aligns climate change with disruptions in proper gender relations and makes women’s reproductive labour key to the salvation of humans” (p. 155). While women’s reproductive capacity might be crucial to the survival of the species, the

child is typically left at the end of the world to bring about new beginnings. In *Children of Men*, a non-governmental organization called Human Project arrive on a ship aptly named Tomorrow to pluck Kee and the savior-child from the waters. Kee's job is now done; it is the child's turn. Heard in the background as the film fades out are sounds of laughter from the future's children. I should make clear that sterility apocalypses as outlined by Sheldon are not my main area of focus even though I am indebted to her theorizing. For Sheldon, "women's reproductive capacity is the beachhead" (p. 151), while my attention is directed towards the post-born child. In other words, in sterility apocalypses the child-figures are almost always the unborn child—the foetus gestating in the mother's womb until the close of the text. This is the "not-yet-here child, as the counterpoint to bare life" (Latimer, 2011, p. 53). The foetal-child represents vitality and a cessation of the ecological catastrophe that caused the fertility crisis in the first place. In the Anthropocene, the figure of the foetus, which I extend to the post-born child, encircles "the future in the promise of generationality" and species survival (Sheldon, 2016, p. 5).

Additionally, in the transition from page to screen, some child-figures featured in this dissertation "racebend" in the move (Racebending.com, 2011), thereby potentially rendering invisible and inconsequential processes, histories, and animacies of racialization. Melanie—the child-zombie figure in *The Girl with All the Gifts*—is Black in the screen adaption whereas from the first lines of the novel the reader is made explicitly aware of the importance of whiteness: "Her name is Melanie. It means 'the black girl', from an ancient Greek word, but her skin is actually very fair so she thinks maybe it's not such a good name for her," followed a paragraph later by, "she has skin like a princess in a fairy tale; skin as white as snow. So she knows that when she grows up she'll be beautiful" (Carey, 2014, p. 1). Is this a zombification of Toni Morrison's (1970) *The Bluest Eye*? Or an occasion where the onscreen racialization of Melanie

transforms a run of the mill zombie narrative into something significant? I think Melanie's transformation in conjunction with Hulu's television adaption of *The Handmaid's Tale* where Black characters are hyper-visible on screen in a kind of colour-blind casting but restricted to two sentences in Margaret Atwood's (1986) source text. How might a reproductive dystopia mask a racist one? Also coming to mind is the child protagonist of *Beasts of the Southern Wild* who is a young ten-year-old boy in the one act play named *Juicy and Delicious* (Alibar, 2013), but transforms into a small, exoticized, poor, and abandoned six-year-old Black girl for the film (Zeitlin, 2012). In making an environmental fairy-tale out of racialized environmental precariousness, Hushpuppy faces down a hoard of wild aurochs in a symbolic realization of the new image of #AnthropoceneChild: a slide from a child in need of saving to a child that saves, which Sheldon (2016) suggests "coincides historically with the first articulation of the concept of the Anthropocene" (p. 6). The racial politics are complex in these texts and require more space to unpack, which I undertake in the chapters that follow. In addition to the previously mentioned texts, my focus on racializing technologies also includes how race figured through the child goes unmarked (e.g., *The Road*) and where anti-Black racism is central (e.g., "Ferguson is the Future"). In underscoring the racialization of apocalypse and of child-figures, I hope to avoid the misstep of depicting "the end of the white world as the end of the world" (Joo, 2018, p. 4).

Gerry Canavan (2017) studies the genre of "apocalyptic children's narrative," which consists of stories about the end of the world marketed to children as a form of "proto-politics instruction, even propaganda" (p. 84). Canavan finds "troubling" that these texts, for example *The Lorax*, *Captain Planet*, and *Frozen*, "position children as paradoxically the agents responsible for preventing their own disastrous future from coming to pass" (p. 84). Canavan's paradox points out that the inheritors of a damaged planet are tasked with reversing the

ecological destruction to which they have contributed little. These texts dismantle childhood innocence in order raise-up children capable of “preventing the necrofuture that is already in motion” (p. 84). However, rather than reading innocence as always already constructed, contested, and unequally distributed in the first place, Canavan sees this newfound challenge as a coerced and premature demand of becoming-adult. In other words, the texts actualize a hailing (Hey, you adult!) where the child who turns is made responsible but not yet response-able. This way of thinking receives these stories as a “highly cynical and brutally effective exercise in victim-blaming” (p. 84). I agree with Canavan on quite a few points; for example, that these sorts of texts can obscure and displace accountability (p. 85), that “offloading” responsibility for environmental justice onto children is inequitable and ineffective (p. 101), and that there is something perverse in children being made consumers of their own necrofutural demise (p. 87). However, I am not on board with his finding that “child-empowerment” or even children’s knowledge of climate change equates a kind of excessive precocity. I am interested in thinking-with child-figures as *more than* locked in a constitutive relation with adults wherein agency is only available to the latter. In this dissertation, the speculative child-figures are *more than* archetypal heroes or villains or innocents; they are complex and contradictory figures who engage with a difficult set of ecological, colonial, and anti-Black inheritances in non-innocent ways.

As a way to sum up this chapter and move into the more speculative ones to come, I offer the following framework. In speculative post-apocalyptic stories, child-figures do different things. What follows is one possible arrangement. First, child-figures can reflect problematics of contemporary worlds without interrupting the current distribution of sense (Rancière, 2004). For example, the Boy in *The Road* might provoke critical questions about survival without producing

any sort of movement or change. *The Road* is a rather conservative imagining of reproductive futures. Second, child-figures who protect a world in which they have been made disposable incite critical questions about how and why the world works fine for some and not so well for others. This is the speculative scene of “Ferguson is the Future.” The story invites an understanding of racism as “group-differentiated vulnerability to premature death” that the Anthropocene condition heightens (Gilmore, 2006, p. 28). Third, child-figures might explode the frames of how the world works, for whom it works, and how new worlds are possible even if the contours, forces, and politics cannot fully be imagined yet. These are speculative worlds of *not this, not yet, and what if*. The end of the world for Melanie in *Girl with All the Gifts* is the end of the systems and structures that did her violence (Ziyad, 2017b). The end of the world is the refiguration of existence in another form; it is the possibility of a world in a different genre of the human (Wynter, 2000). Thinking-with child-figures in the next three chapters, different aspects of this assembly will be foregrounded at different moments. The looseness of the framework allows me to engage these unsettled complexities in relation to (1) child-figures at the end of a world, (2) child-figures who protect their world, and (3) child-figures who end the world in order to begin a new one.

#### Chapter 4: Monstrous Love for Regenerative Cyborgs

In “Love Your Monsters: Why We Must Care for Our Technologies as We Do Our Children,” Bruno Latour (2011) brings together classic gothic literature, technoscience ethics, nature-culture attachments, and child-centred metaphors to think through the Anthropocene predicament. As a starting point, Latour remarks that Mary Shelly’s (1818) *Frankenstein* endures in the contemporary world as a “cautionary tale against technology” (p. 11). This reading, Latour argues, is sorely mistaken. Not only is the doctor commonly confused for the monster, but the figure of Dr. Frankenstein has become “all-purpose modifier to denote technological crimes against nature” (p. 19). For example, Frankenfood is a popular expression for genetically modified foods. According to Latour, despite these misappropriations, the actual transgression is not that Dr. Frankenstein patched together a creature in a lab but that he deserted the monster. In Latour’s words: “Dr. Frankenstein’s crime was not that he invented a creature through some combination of hubris and high technology, but rather that he *abandoned the creature to itself*” (p. 19). The creature was “not *born* a monster, but...became a criminal only after being left alone by his horrified creator” (p. 19). The extension Latour then makes of *Frankenstein* is that “our iniquity is not that we created our technologies, but that we have failed to love and care for them. It is as if we decided that we were unable to follow through with the education of our children” (p. 20). Given my scholarly affiliation with childhood studies, I am particularly attuned to invocations of the child. So, while there is much in Latour’s article to support, I am left wondering just what he is doing evoking the figure of the child in such a way. After situating Latour’s offering within a wider context of ecomodernist discourse, I turn to Ruha Benjamin’s (2016b) speculative short story called “Ferguson is the Future” to further think through the technologicalization of care. Benjamin’s alter-tale of racialized regeneration troubles an

ecomodernist narrative of techno-fixes, and, ultimately, points towards a different future for Anthropocene imaginaries of the child at end of the world. I then bring Benjamin's and Latour's provocations together by thinking-with María Puig de la Bellacasa's (2010, 2011, 2017) work on matters of speculative care. The chapter ends with a gesture towards a "kinship of the infertile" as a regenerative cyborg praxis for the Anthropocene (Klein, 2014a).

### Frankencene Technologies

#### Breaking Up with Breakthrough

Across all versions Latour's "Love Your Monsters" is a love-technology-child relation that needs unpacking, particularly as it is formed by equivocating technology "as if" children (Latour, 2011, p. 20).<sup>31</sup> In an earlier iteration, Latour (2007) connects *Frankenstein* to contemporary technoscience by asking readers to "finally atone for: not technology itself, but the absence of *love* for the technology we have created" (p. 11).<sup>32</sup> This call for unconditional love creates a metaphorical ellipsis that is rewritten by the Breakthrough Institute (hereafter BTI) co-founders Michael Shellenberger and Ted Nordhaus (2011) as: "Our technologies, like our children, will go wrong. They will create new problems. We cannot create perfectly formed new technologies, only flawed ones. We must, thus, continually care for and improve them, just as we do our children" (para. 11). What work do child-figures do here? How is care composed? "Who

<sup>31</sup> Latour's (2011) article is an abridged version of ideas developed elsewhere, particularly in *We Have Never Been Modern* (1991) where he refuses a nature-culture split and *Armanis, or Love of Technology* (1992) where he first rereads *Frankenstein* as a modern environmental parable. "Love Your Monsters" (2011) was published in the *Breakthrough Journal* and the quoted text is attributed to the article unless otherwise stated. Latour's piece was also included in an edited e-book from Breakthrough Institute called *Love Your Monsters: Postenvironmentalism and the Anthropocene* (Shellenberger & Nordhaus, 2011). Latour's contribution was a shortened version of a piece called "It's Development, Stupid!" or: How to Modernize Modernization" (Latour, 2007), which is unpublished but archived on his personal website: <http://www.bruno-latour.fr/node/153.html>.

<sup>32</sup> Latour's "we" is unspecified throughout "Love Your Monsters," even as it occupies a pronounced placement in his subtitle: "Why We Must Care for Our Technologies as We Do Our Children." This appears to be a habit of Latour's that is evident in his most cited work titled *We Have Never Been Modern* (1991). In the present case, I am interpreting the "we" as including all those concerned for both technological and child development. However, I also caution that this "we" has exclusions already built in.

cares? What for? Why do we care?” (Puig de la Bellacasa, 2017. p. 61). What commensurabilities are drawn between children, technology, and improvement? What does this relational equation make acceptable (Colebrook, 2014)? Before discussing “Love Your Monsters” in detail, I first situate Latour’s work within the BTI. The BTI is a global think-tank that pushes technological and technocratic solutions to environmental problems. Latour was a senior fellow for the BTI when “Love your Monsters” was simultaneously published in their journal and e-book (Latour, 2011; Shellenberger & Nordhaus, 2011).

The BTI advances a vision of continued growth, consumption, economic development, and technological innovation under the auspice of a “good Anthropocene” (Asafu-Adjaye et al., 2015). This is a future where “humans use their growing social, economic, and technological powers to make life better for people, stabilize the climate, and protect the natural world” (p. 6). Instead of a cautionary diagnosis of the present, the Anthropocene is received as an occasion for intensified technoscience development and centralized management. Critics view the BTI’s take on the Anthropocene as not “a crisis, it’s an *opportunity* to build a global technological utopia...and we all enjoy US-style consumerism forever” (Angus, 2015b, para. 15). The BTI’s website names food, energy, and conservation as focus areas wherein articles and projects supporting GMOs, nuclear power, increased urbanization, and green-growth are the main content. The BTI are successful because there is enough in their writing that appeals to good sense and a #brightfuture—that is, if the inconsistencies are ignored. For example, they disavow environmental politics grounded in ideas of a pristine nature, which is an important principle shared by critical environmentalists. However, they also argue that the ultimate goal of ecomodernism is to “decouple” nature from humanity. They confront individualized acts of stewardship, for example backyard gardens and home composting, as inconsequential to

atmospheric pollution levels while also positing that “the move toward greater individuation, is universal and largely positive” (Nordhaus, & Shellenberger, 2009, para. 8). There is a seductive hopefulness to the BTI’s writings that is attributable to their rejection of a “politics of limits” for a “politics of possibility” (Shellenberger & Nordhaus, 2004; Asafu-Adjaye et al., 2015). As such, they lobby that there is “remarkably little evidence” that Earth has a finite capacity for life-support (Asafu-Adjaye et al., 2015, p. 9), which contrasts the warning of Earth system scientists in Chapter 2. For the BTI there is no climate emergency, there are no tipping points, and solving climate change is not only possible but plausible because of human ingenuity and exceptionalism. For societies that love to consume this comes as great news. T. J. Demos (2018) counters this rhetoric, “It’s not surprising, then, that its ‘politics of possibility’ fails to mention the terms ‘race,’ ‘equality,’ or ‘justice,’ which would help connect to the actual antagonisms of current social experience, while the lofty and generalizing language of ‘human,’ ‘technology,’ and ‘growth’ abound” (para. 6). The most well-known expression of the BTI’s ideas comes by way of the “An Ecomodernist Manifesto,” which is co-written by eighteen authors (Asafu-Adjaye et al., 2015).

“An Ecomodernist Manifesto” paints a picture of a world getting better, fairer, safer, and healthier. In this image, consumption and well-being go hand-in-hand. In many ways, the Manifesto provides textual accompaniment to Unilever’s “Why Bring a Child into the World” campaign that opened this dissertation. Both propagandize the fact that people today have a longer life-expectancy, less lethal disease, increased access to clean water, and more participatory governance. Presented in aggregate form the numbers may well tell this story, but the distributed story is quite different. Coated in the guise of liberal economic policy and development for all, the BTI figures a future world of “vastly improved material well-being,

public health, resource productivity, economic integration, shared infrastructure, and personal freedom” (Asafu-Adjaye et al., 2015, p. 28). According to the think-tank, all these feats are achievable through human imagination, innovative techno-fixes, and economic modernization. Modernization is their key watchword and yet its contours are never fully described, unravelled, or interrogated. Instead, blanket statements accumulate in ways that numb critical engagement. For example, modernization “has liberated ever more people from lives of poverty and hard agricultural labour, women from chattel status, children and ethnic minorities from oppression, and societies from capricious and arbitrary governance” (p. 18). Nowhere is it mentioned that more people have been condemned to poverty than freed from it, and that all agrarian lifestyles and physical work are not oppressive nor enchained. For the BTI, modernization is an assumed good and no dissenting voices are allowed. Importantly, refusing the “good Anthropocene” of the ecomodernists does not mean adopting the reverse—the bad Anthropocene—and an imminent doomsday mantra, despite what my focus on apocalypse might suggest. For me, it is about recognizing that there is no guarantee of a “smooth harmonious world” and proceeding carefully from there (Puig de la Bellacasa, 2012, p. 199).

For the BTI, the environmental movement’s most significant mistake was rejecting “technology and modernization” in the guise of a leave-nature-alone rationale (Nordhaus & Shellenberger, 2011, para. 8). This hands-off approach, they argue, has brought humans to the point where a new and improved “postenvironmental liberalism” is desperately needed (para. 8).<sup>33</sup> While seemingly strange bedfellows given the premise of Latour’s (1993) *We Have Never Been Modern*, Latour was initially attracted to the BTI because of their rejection of an imaginary

<sup>33</sup> I may be overstating the hands-off case as statements such as the following are common (and terrifying): “The issue is not whether humans should control Nature, for that is inevitable, but rather how humans should control natures—nonhuman and human” (Nordhaus & Shellenberger, 2009, p. 135), and, “Nature no longer runs the Earth. We do” (Lynas, 2011, p. 8).

of an unspoiled nature and their anti-technophobic standpoint. However, Latour (2015) has come to rethink, if not withdraw completely, his support (more on this later). Latour's view of "we must learn to love our technologies as we do our children" is translated by the BTI as, "we must understand technology as natural and sacred, not alien and profane" (Nordhaus & Shellenberger, 2011, para. 7). For me, the spectre of the child allows for this easy transition to the naturalization of technology and an accompanying attribution of innocence and goodness (i.e., sacredness), along the lines of what was discussed in Chapter 2. Who could argue against care and love for the child (Edelman, 2004)? Who could argue against "technology and modernization" that will bring "improved health or cleaner air" (Nordhaus & Shellenberger, 2011, para. 8)? However, what I find more interesting is not re-equating child-nature with technology-good but speculating about child-figures and technologies as "alien and profane." What might be possible in this otherwise embrace? If the Anthropocene "makes scientists arbiters, to an extent, of the human-environment relationship" who else besides the BTI might tell the Anthropocene story (Lewis & Maslin, 2015, p. 171)? The BTI are not my "master" storytellers (Latour, 2011, p. 12). Relatedly, is *Frankenstein*, a novel more than 200 years old, up to the present-day task of thinking-with the Anthropocene? Later sections of this chapter consider what "Ferguson is the Future" offers that the BTI and "Love Your Monsters" cannot.

### **Latour's "Love Your Monsters"**

There is a suggestion circulating that the Anthropocene is the realization of "Shelly's tale at a global scale" (MacCormack, 2018, para. 7; see also Ball, 2017), and, in ways discussed in this chapter, Latour enacts a rereading of *Frankenstein* writ large with such consequence. With "Love Your Monsters," Latour (2011) offers *Frankenstein* as an allegory with wide-ranging explanatory effects. Latour posits: "Let Dr. Frankenstein's sin serve as a parable for political

ecology” (p. 20). By invoking political ecology, Latour is calling for a reconceptualization of the relationship between nature, science, ethics, religion, culture, technology, education, law, and politics from supposedly divisible domains to a mixed-up scene of entanglement and attachment (p. 21). In evoking the figure of the child and care relations, Latour also makes any border between the personal/political and public/private spheres blurry. If someone believes these things can be separated “thanks to Science (capital S), you are modernist,” Latour argues, when what the Anthropocene needs are “compositionists” (p. 21). This message, however, is inconsistent in “Love Your Monsters” and especially so when considered in relation to the BTI. I think at least five readings are possible. There are many overlaps between them and my sorting work in this section is more for analytical purposes than ontological ones. In my interpretation of Latour’s re-interpretation of *Frankenstein*, “Love Your Monsters” works as a story of (1) techno-ethics, (2) environmentalism, (3) parent-child relations, (4) human creation, and (5) Anthropocene earth.

My first reading of “Love Your Monsters” understands the figure of the monster as a metonym for technology and more specifically the precautionary principle. In this way, “the monster is our collective technological powers, including their unintended consequences” (Douglas, 2017, para. 12). Latour’s point is that every technological innovation will have unexpected effects and that the technoscientist is intimately attached to those outcomes. Furthermore, the monster (re: technology) ought to be both an object of creation and care. The BTI picks up on the creation-consequence formulae and uses it to advocate for repealing the precautionary principle, which is an internationally recognized scientific research code that “denotes a duty to prevent harm, when it is within our power to do so, *even when all the evidence is not in*” (Westra et al., 2018, p. 121). The BTI re-presents this principle with inflationary flair as being “long evoked by greens to argue against any innovation unless it can be proven 100

percent safe” (Nordhaus & Shellenberger, 2011, para. 11). This allows the BTI to then argue that technologies, like children, will inevitably be flawed. The BTI seems to be implying that supporting the precautionary principle is akin to saying that people should not have children because there is no guarantee they will be good—children are not 100 percent safe. This is, of course, a rather narrow strawman equivalence. Nevertheless, the BTI does not give much response-space to argue that their casuistry is mistaken. The BTI’s focus on techno-fixes for the Anthropocene directs attention and “resources away from the *causes* of climate disruption, in favor of addressing *symptoms*” (Demos, 2018, para. 13). This means, in part, money and time spent on dreaming up technologies for carbon capture instead of looking at the systematic and infrastructural factors behind fossil fuel consumption. Latour (2011) is much more modest in his discussion of the precautionary principle. He argues for “reshaping...the myth of mastery” rather than the principle’s complete disbandment (p. 25). A reconfigured responsibility for Latour insists that “unexpected consequences are *attached* to their initiators and have to be followed through all the way” (p. 24). Latour is not saying that humans should recklessly invent, develop, and deploy technologies, but that even the most thorough and thoughtful actions will have some unanticipated results.

My second interpretation of “Love Your Monsters” foregrounds the figure of nature. Latour argues that the failure of American environmentalism is having made their object of enchantment a pristine wilderness. Conservationists endeavoured to keep nature separate from human activity; they aimed to rewild in order to restore. He summarizes the argument of the early environmental movement as believing that to save nature humans had to back away and just let nature be. However, an emphasis on both wilderness and a desire to “get back to nature” encourages a sense of “fear and guilt which turns technology into a monster” (Douglas, 2017,

para. 12). This position goes something like this: technology has damaged and destroyed nature; nature is pure whereas technology is manufactured; technology's ontology is incommensurable with the real nature of nature. Latour (2011) contrasts the national parks of France with those of America in order to highlight how nature has never been natural in such an idealized way. The French national parks are "rural ecosystems complete with post offices, well-tended roads, highly subsidized cows, and handsome villages" (p. 25). Instead of leaving nature alone, Latour makes the call to get more involved. Latour laments throughout the essay that just as humans started to realize the impossibility of a nature-culture disentanglement came a new push to retreat. This hands-off romanticism continues to pick up speed despite one of the lessons conservationists learned the hard way: that to protect the environment—for example, national parks—they had to intervene more and more in order "to keep it 'natural enough' for Nature-intoxicated tourists to remain happy" (p. 23). Outright separation of nature and culture is and has always been for Latour an impossibility. To meet the challenges of the Anthropocene, Latour warns that humans cannot "stop innovating, inventing, creating, and intervening" (p. 20).

In a third sense, Latour's article posits the monster as a child-figure resulting from bad parenting. The monster is not nature gone wrong—the non-bionormative birth is not an issue Latour engages (not that I am calling for reproductive purity here either)<sup>34</sup>—but the creature only becomes monstrous because he is abandoned by his maker. This has echoes of the child development debate around nature versus nurture. Latour appears to be on the nurture side with this parable, at least on the surface level. He offers quasi-parenting lessons with a theological

<sup>34</sup> Mary Shelley's biographer Anne Mellor writes in the preface to a 2017 special edition of *Frankenstein*, which was "annotated for scientists, engineers, and creators of all kinds," that the text "portrays the penalties of violating Nature...Nature prevents Victor from constructing a normal human being: His unnatural method of reproduction spawns an unnatural being, a freak" (Ball, 2017, paras. 1-2). This assumes both a biologically-delimited role for women, undesirability of an atypical child, and romanticizing of an innocent state of nature to be recovered. Inspired by Alexis Shotwell (2016), I am "against purity" of this sort.

bend: “The real goal must be to have the same type of patience and commitment to our creations as God the Creator, Himself” (p. 20). In reflecting on the piece years later, Latour (2015) does not seem to change his tune much in this regard. “As you know, if the creature became wicked, it is because it had been abandoned by its maker,” Latour laments, “The total hypocrisy of Dr. Frankenstein’s fleeing the creature instead of coming back and nurturing it to make it socially acceptable to its fellow organism” (pp. 219-220). Making socially acceptable seems to assign an awful lot of deliberate power to the creator-paternal figure. It seems to ignore the fact that the world is particularly cruel to those who are different. Not only was the monster cast aside by Dr. Frankenstein, but by all the humans he encountered while making efforts to belong, including learning how to speak and read English. This nurture heavy reading is entirely possible given the text of “Love Your Monsters,” however, nature versus nurture (i.e., nature versus culture) is the sort of division that Latour otherwise opposes. His early hyphenation of nature-culture conveys a joined rather than separated domain of practice (Latour, 1993). Addressed explicitly elsewhere, Latour (2015) argues: “‘Nature’ isolated from its twin sister ‘culture’ is a phantom of Western anthropology. What we are dealing with instead are distributions of agencies with which we are all entangled” (p. 221). With his larger body of work as reference, Latour (1993) understands the nature versus nurture antagonism as a myth of Modernity writ large—the falsity of an emancipation from nature through Science where the human is in charge rather than intimately attached. In “Love Your Monsters,” Latour’s larger point is that we must care for that which we are always already entangled, including what is commonly divided as nature and technology, or, in this framing, nature and nurture. This more nuanced point however has been disregarded by both supporters (e.g., the BTI) and critics alike (e.g., Klein, 2014a).

A fourth possibility understands the monster as an object of human creation. Another of the odder readings possible with “Love Your Monsters” is a depiction of technology as somehow an isolated human creation rather than as the entangled “distribution of agencies” mentioned above. While much of Latour’s other work interrupts such an individualist-humanist configuration, in this article the main actants are human and the non-humans are acted upon. Non-humans are not considered on the same creative level as the godlike Dr. Frankenstein, including any mention of the monster. For example, Latour writes: “we have taken the whole of Creation on our shoulders and have become coextensive with the Earth” (p. 19). Who is this “we”? In the context of “Love Your Monsters” this “we” are humans, even if “co-extensive” with the rest. In some ways, the marked terms do not quite go together—they jar up against one another instead of, as Latour says, attach. The “we” proclaims an intentionality and deific power for the human, while the “coextensive” speaks to the interconnectedness of everything. Coextensive with the earth does not mean omnipotent creators of it, but the way Latour’s polemic takes off in places allows for a reading that attributes intentionality to the human scientist alone and the BTI has seized onto this interpretation. In his later rejoinder to the BTI, Latour (2015) is strong on this point: “the ecomodernists are also uchronists, as if they were living a time where they alone were in command” (p. 223). Understandably, what gets overlooked in “Love Your Monsters” is Latour’s insistence on a “compositionist” story, as in the “process of becoming ever-more attached to, and intimate with, a panoply of nonhuman natures” with whom “we” owe a great duty of care (Latour, 2011, p. 20). I should note, however, that a compositionist responsibility does not erase all differentiations between monster and maker, for example, the cut between GMOs and Monsanto or oil and Deepwater Horizon.

Naomi Klein (2014a) launches a harsh criticism of BTI and Latour's essay in *This Changes Everything: Capitalism vs the Climate*. For Klein, the BTI fellows and supporters exemplify the mind-set of "we'll fix it later" (p. 239), which finds its bearings in a conception of humans as "The God Species" (Lynas, 2011), both ideologies she accuses Latour of promoting. In response to Latour's "whole of Creation on our shoulders" statement cited above, Klein (2014a) responds: "The earth is not our prisoner, our patient, our machine, or, indeed, our monster. It is our entire world. And the solution to global warming is not to fix the world, it is to fix ourselves" (p. 279). While I could make the case that Klein slips into a similar formulation where humans can save the world by saving themselves—for Klein by ending capitalism and for the BTI by developing techno-fixes—her subsequent discussion of geo-engineering should give everyone pause. This pause brings me to my fifth reading which understands "Love Your Monsters" as a petition to love and care for the earth. How these affective relations are configured varies between interpreters. On one hand, the moral of the ecomodernist story is to "not disown the planetary monster we have created—the earth of the Anthropocene—but rather learn to love and care for it through further technological acts" (Demos, 2018, para. 13).

For Klein (2014a), on the other hand, the monster requiring love "is not some mutant creature of the laboratory but the earth itself. We did not create it; it created—and sustains—us" (p. 241). Again, while the easy out might be to accuse Klein of reversing Gaia for God that would be to gloss over the ethical and political import of her argument. If love takes form as an uncritical relation to geo-engineering then the earth and all existents will be transformed in ways hardly imaginable now:

We very likely would not be dealing with a single geo-engineering effort but some noxious brew of mixed-up techno-fixes—sulphur in space to cool the temperature, cloud

seeding to fix the droughts it causes, ocean fertilization in a desperate gambit to cope with acidification, and carbon-sucking machines to help us get off the geo-junk once and for all... We would require machines to constantly pump pollution into the stratosphere and would be unable to stop unless we invented other machines that could suck existing pollution out of the lower atmosphere, then store and monitor that waste indefinitely... The earth—our life support system— would itself be put on life support, hooked up to machines 24/7 to prevent it from going full-tilt monster on us. (pp. 240-241)

The “unintended consequences” that Latour otherwise asks us to love will be multi-layered, cumulative, successive, and, likely, destructive. And they will be all the more deadly for those already vulnerable. Techno-fixes are no assurance of “nonexploitative forms of togetherness,” which make up an integral part of Puig de la Bellacasa’s (2017) theorizing of care for “antiecological times” (p. 24). Perhaps climate change and its Anthropocene relations are not monstrous because we do not care for the technologies, but because we have loved technologies and their corresponding logic of productionism too much.

Klein’s (2014a) opposition is important given that “Love Your Monsters” has “become a rallying cry in certain green circles, particularly among those most determined to find climate solutions that adhere to market logic” (p. 241). The ways of thinking and acting that Klein critiques can otherwise be conceptualized as a dominant form of “market environmentalism” (Lorimer, 2012, p. 1) that enacts “the unbearable whiteness of green” (Jones, 2007). Eat meat, maybe just not so much beef; consume lots of energy, just make it nuclear; live plentifully, just do it in the city. These sorts of supposed solutions are reiterated by multiple BTI authors on the campaign sections of their website. The widespread uncritical take-up of “Love Your Monsters” contributed to Latour travelling to Sausalito, California, to address a BTI gathering head-on in a

speech that was later published in *Environmental Humanities* (Latour, 2015). Latour clarifies that he was first interested in the BTI because “I have always been post environmentalist, I never believed in wilderness,” however, “I am not so sure that the ‘love your monsters’ argument has been fully understood” (p. 220). In his speech he names ecomodernism as an Anthropocene monster, and the sort of monster he is not so sure deserves love. Ecomodernism triggers in Latour “a deep antipathy” (p. 220). He further argues that any sort of “Good Anthropocene” that exudes a belief that “humans are still alone on stage, the only being who out of its own free will is in charge of apportioning space, land, money and value to the old Mother Nature” is simply wrong, inappropriate, and unethical (p. 223). “Wake up you ecomoderns,” Latour jabs, “we are in the Anthropocene, not in the Holocene, nor are we to ever reside in the enchanted dream of futurism” (p. 223). I must admit I enjoyed Latour’s impassioned comeback, especially when thought-with his earlier article on how critique has “run out of stream” (Latour, 2004). To my delight, Latour “snapped” his critical teeth (p. 232). As for the futurism Latour evokes, I turn elsewhere for guidance.

### **Speculative Frankenfigures**

#### **Benjamin’s “Ferguson is the Future”**

While Latour (2011) goes way back in time with *Frankenstein*, Benjamin (2016b) journeys to the future with “Ferguson is the Future.” The speculative sketch is set in the year 2064 in Oakland, California, yet this futuristic world remains deeply engaged with issues of the present. Much technological advancement has taken place, for example, there are hover cars and inventions of that sort all around. The most impressive innovations however are the medical-scientific breakthroughs of the People’s Science Council. Their front piece is the Reparations Movement and its key initiative of stem cell organ regeneration that serves to re-enliven child-victims of police violence. The story’s main character is Aiyana Mo’Nay Stanley Jones whose

job it is to protect the Trayvon Martin Biobank from Raiders looking to steal stem cells for resale on the “white market” (p. 4). Aiyana and her team of Risers—which includes Reika, Tamir, and Freddie—keep the biobanks and cryotanks safe and secure. This is especially important as the Council’s newest and biggest scientific achievement is about to be revealed at the Revival Ceremony in commemoration of the fiftieth anniversary of the Ferguson uprising. Led by Dr. Lack, the Council has worked tirelessly to regenerate Eric Garner, who has been held in cyrosleep since he gasped his last breath in 2014. Garner will be the first adult to “successfully undergo Doubling—resuscitation and organ renewal. Only children had survived up until that point, and even then not without complication” (p. 9).

The complications of the regenerative surgeries connect to what Latour (2011) calls the “unwanted consequences” of technological innovations (p. 26). The outcomes had been debilitating for many of the child recipients, particularly in the early days of the experiments. Aiyana suffered more than her fair share of “side effects, side affects” (Benjamin, 2016b, p. 9). Aiyana’s new heart, lungs, and spine engendered post-operative complications like infections, graft failures, seizures, blackouts, hallucinations, and headaches. This is in addition to the memories which rematerialized as nightmares from the “chronic stress of living [and living again] under siege” (p. 12). Despite the many techno-advances, these somatic traumas still did not have a cure. Recalling an argument made about sentience in Chapter 2, does the Council not care that Aiyana still feels pain? Given these after-e/affects many children in the reparations-regeneration program found that “being born again was more like purgatory” (p. 9).

Nevertheless, Aiyana considered herself one of the lucky ones because with a grant from the Humanity+ Foundation her “transplant team designed the Chairperson™, the first of its kind—an apparatus that maintained internal homeostasis so she no longer experienced the original side

effects” (p. 10). Aiyana is cyborg: part human, part child, part artificial organs, part machine, and part redress. With the publicness of the upcoming Revival Ceremony, it is vital for the Council to prove once and for all that the early issues have not only been fixed but that the technological possibilities have been extended to everyone regardless of age, gender, and race—as long as you can afford it, that is.

Overtime the healthcare system in the world of “Ferguson is the Future” transformed. Mandatory gene-testing is required for all citizens for any medical procedure, including for something as routine as a blood pressure check. Genome-mapping is now the first stage of healthcare, and it is packaged and sold as the best possible means to offer “precision medicine” (p. 16). Healthcare is doubly bankable—both money and genes are currency that can be deposited. But they are not equally valued as biocapital has surpassed economic assets in the world of “Ferguson is the Future,” although money is still needed to purchase procedures. Those who can afford the most cutting-edge techniques bank their own cells because regenerated tissue produced from one’s own body has fewer complications than donor cells or generic prophylaxis. The Council has just perfected a technique “in which they can take a mature human cell from a patient and reprogram it to create any other tissue in the body” (p. 11). In this world, loved ones open up “tissue accounts” for their children instead of college funds (p. 12). The only individuals who receive the regenerative services for free are those who qualify under the Reparations Act. This law mandates coverage of the treatment costs for child-victims of police violence, who—not by accident—are Black.

The day before the Revival Ceremony, Aiyana’s friend Sandra ushers her aside to share some stunning information. The break-ins at the biobanks and even the Raiders are all a ruse, an orchestrated “distraction” dreamed up by the Council (p. 16). Rumours of the first attacks had

coincided with a short-lived pushback to the Reparations Act and the requirement for universal genome-mapping. However, once enshrined in Law, the Council found themselves a pool of experimental bodies unable to resist or consent. Sandra *précise*: “There is only the People’s Science Council honing these techniques on the backs of brutality victims for free. Once they sort out all the kinks, the recipes are going to be patented...proprietary” (p. 17). But the Reparations Initiative is not all bad, Aiyana thought in response, the police and prisons have been abolished. There is even a permanent exhibit in the hallowed halls of the Council building which documents the history of decarceration, including the unjust murders of the child-transplant recipients. As Aiyana rewinds everything in her mind however she is stuck on how the museum makes a spectacle of not only her “own murder, but the whole idea of playing and replaying black death, the pornography of genocide. Why, in fact, did we need to *see* to believe?” (p. 12). Sandra further explains that there is a group of elites called the Immortocracy within the top tier of the Council who are obsessed with human finitude and that their regenerated bodies hold the secret to everlasting life. Sandra urges Aiyana to get to Eric before he becomes an unwilling spokesperson and ensures the continuation of the Council and their secret society. The next day, as Eric prepares to address the crowd gathered at the Revival Ceremony, he thinks: “Murdered by the hands of police, born again by the hands of scientists...both without asking” (p. 18). Next, he stands up and begins off-script, “Who will pay reparations on my soul?” (p. 18).

Do the names Tamir, Sandra, Freddie, Eric, and Reika sound familiar?<sup>35</sup> Does Aiyana Mo’Nay Stanley Jones? Jones was 7 years old when she was murdered by police. Shortly after midnight on May 16, 2010, Detroit’s version of SWAT charged into the house of Jones’s

<sup>35</sup> I use the child-figures’ first names when referring to characters in the speculative story (e.g., Aiyana) and the children’s last names when recounting events that have already happened in this world (e.g., Jones).

grandmother. Jones was asleep on the living room couch at the time. Accompanying the police was an A&E television crew shooting an episode of *The First 48*, which is a true-crime program where detectives have 48 hours to crack a homicide case or face likely failure. SWAT was looking for a man identified as a suspect in a murder committed the day before. This was not his home. The suspect stayed in the apartment upstairs. SWAT threw a flash-bang grenade into the house before entering, which is an unusual move according to those well-versed in police tactics (LeDuff, 2010). Perhaps the explosion was to make better TV (LeDuff, 2010)? One of the police officers fired a shot as he charged in. He has yet to be held accountable. His bullet struck Aiyana in the head and ended her short life. Benjamin's speculative story of a Reparations Movement with experimental biobanks and a People's Science Council with a finitude fixation are an example of how "white life and black death are inextricable" (Benjamin, 2018, para. 12). The real life of Aiyana Mo'Nay Stanley Jones (July 20, 2002 - May 16, 2010) is another.

After the autopsy, Dr. Carl Schmidt, Detroit's chief medical examiner, told an investigative reporter: "You might say that the homicide of Aiyana is the natural conclusion to the disease from which she suffered. The psychopathology of growing up in Detroit. Some people are doomed from birth because their environment is so toxic" (LeDuff, 2010, para. 8). What exactly composes this toxicity? Is it the 50% child poverty rate, the fact the 1 in 3 teenagers graduate high school, the lead in the tap water, the high child asthma rates from the smog, or the vacant Ford motor plants? Is it the indemnity of gun lobbies, the anti-Black police violence, and the kind of perverse pleasure derived from a reality television genre that confuses violence for entertainment? Detroit began its long precipitous decline during the 1950s, precisely when the Anthropocene Great Acceleration indicators began to peak. Is Detroit the creator or monster in this scenario? Either way, contrary to Latour's demand, it has been abandoned.

In other work, and as mentioned briefly in Chapter 2, Benjamin (2018) imagines “afterlives” as “a world of second chances” (para. 3). But what happens in most speculative pop culture productions of the end of the world is that “second chances are the currency of white supremacy” (para. 4). Benjamin’s story is particularly affective because it turns something taken-for-granted about this world, at least momentarily, on its head. “Ferguson is the Future” is a world where reparations for anti-Black violence are not only possible but have actually happened. The story plays out a seemingly radical intervention in which Benjamin (2016b) tests out the question: “what if the subaltern were positioned as beneficiary?” (p. 19). What if the Black child is the one being given a second chance at life? “In deciding which afterlives to engineer,” Benjamin (2018) proposes, “we select and reinforce criteria for what kinds of people to invest in, and who may be disposed of” (para. 36). However, as soon as readers begin to entertain the possibility of a world that materially follows through on an apology for racialized harms, Benjamin pulls back the proverbial curtain. Benjamin (2016b) asks us to consider instead: “What secrets are being concealed in the transplant rhetoric of gifts, altruism, scarcities and needs?” (p. 20). What cover does care provide? As the story proceeds, the reparations’ gift of regeneration is revealed to be other than it first seems. The Reparations Movement becomes another in a line of second chances for whiteness—this time a forever chance of immortality.

While there is no guarantee of social, reproductive, and technological justice in “Ferguson is the Future”—and I am not so sure that would be a fair request anyway—the story pushes in many probative directions. One of the important moves is that Benjamin does not succumb to a kind of technophobia of manipulating bio in/organic life, which would immediately exclude her from some important contemporary conversations. The reverse is equally pertinent—techno-fixes and productionist logic without reproductive justice are shown as insufficient for

reparative futures. Other provocations include how race can be reconceptualized as a technology (Benjamin, 2016a, 2019) and how the Black rebel cyborg (James, 2013; Maynard, 2018; Vargas & James, 2013) might offer an imaginary of the otherwise amidst anti-Black racism and anthropogenic climate change.

### **Figures of the Black Rebel Cyborg**

As a regenerative Chairperson™, Aiyana in Benjamin's (2016b) speculative worlding is cyborg. But what kind of cyborg is she? Marilyn Strathern (1991) describes the cyborg figure as bringing "together the imaginary and the real...that is, the connections of circumstances in the world today that make it useful to think with" (p. 36). This is what Benjamin does with her child-figures as she raises questions about technoscience, reproductive justice, anti-Black racism, police, bioethics, and futuristic forms of belonging. The child-figures move from the real to the imaginary and back again; they also move from the end of their respective worlds to a speculative world that cannot fully shake the oppressive practices of the past. The spectral presence of the children's real deaths haunts their imaginary futures, and in this spacing blackness and cyborgness become linked. Already denied the humanity conditioned by whiteness in their earthly existence, Benjamin's child-figures become Black rebel cyborgs in their speculative regeneration. The Black rebel cyborg "captures both the nonlinear and postapocalyptic positioning of black subjectivity, as well as the generative and subversive aspects of the black experience, in all of its hybrid, mutant resiliencies" (Maynard, 2018, p. 33).

Using Fanon's figure of the rebel intellectual and Haraway's figure of the cyborg as touchstones, Joy James (2013) figures forth a Black rebel cyborg that marks "not just the end of the world but the end of humanity" that is delimited by white supremacy (p. 64). The Black rebel cyborg cannot be "fully tamed and captured, excluded or subjected by the world that denies our

humanity” (Maynard, 2018, p. 33). There is a “radical alien-ness to blackness, and to black being” that cannot entirely be contained (p. 29). This excess provides a narrow pathway for a new form of cyborg humanity to emerge that might rewrite the dominant genre of Man (Wynter, 2003), including Anthropos-Man reborn by golden spikes. The Black rebel cyborg has the “ability to refuse blackness-as-victimization and reconstitute blackness-as-resistance” (James, 2013, p. 67), and the importance and difficulty of this transition should not be understated. James expands upon the speculative-historic relation of humanity and blackness, alluding to the difficulty of the Black rebel cyborg’s emergence:

Blackness no longer as the negation or target of white supremacy manoeuvres as something no longer human, or subhuman or deficient in humanity. Human and black have been constructed as oxymoronic for at least half a millennium in the West. The Underground Railroad, as an escape path away from the gravitational pull of whiteness-as-mastery, would entail a flight from the “human” as well. (p. 67)

This escape is not easy amidst the disciplinary structures of the afterlife of slavery (Hartman, 2006).<sup>36</sup> The children who inspired “Ferguson is the Future” figured the epitome of racism understood as “group differentiated vulnerability to premature death” in the white supremacist state (Gilmore, 2007). Their lives were disposable. Not all afterlives, as Benjamin (2018) theorizes, are doomed to perpetuate whiteness however—there is an “Underground Railroad,” as

<sup>36</sup> Saidiya Hartman’s (2006) afterlife of slavery captures the ongoing condition of slavery in the present so much as “the critical components of both are fungibility and accumulation, or the ability to be commodified and treated as an object” (Ziyad, 2017, p. 145). Fungible bodies make ideal experimental subjects; fungible bodies can also become cyborg bodies. For the People’s Science Council, Black child-bodies enact the otherwise abstract “interchangeability and replaceability” of the commodity (Hartman, 1997, p. 21). Their lives as well as their limbs and organs are interchanged and replaced. King (2016) describes “Black fungibility [as] the treatment of the Black enslaved body as an open sign that can be arranged and rearranged for infinite kinds of use” (p. 1025). The subjects for cyborg experimentation were not accidentally or innocently chosen but cultivated and procured systematically. “Arranged and rearranged” in a hospital, the commodified, experimental, vulnerable Black child-body is another story of the afterlife of slavery (p. 1025). This theme reappears in discussion of Melanie in Chapter 6.

James expresses above. In “Ferguson is the Future,” the speculative worlding cannot be entirely hopeful or hopeless because blackness remains a “target of white supremacy” (James, 2013, p. 67). But, then again, how these cyborg child-figures embark on a “flight from the human” (p. 67) offers a kind of “hope against hope, the possibility of politics not simply as hope for a different or better world, but as the ardent refusal of this world” (Bliss, 2015, p. 93).

Given the challenges of taking full flight from white supremacy, James (2013) suggests a continuum of Black cyborgs that makes differences between figures not points of negation but of relationality. A key matter of care and concern surrounds the histories and infrastructures that cyborgs need to wade through to endure as Black rebel cyborgs. Evident in the Movement for Black Lives is the confrontation of a harsh truth: Black “lives do not matter under the state of whiteness. They cannot because they are not thought of as lives” (Ziyad, 2017, p. 145). In the speculative world of “Ferguson is the Future” what resounds is that Black lives matter most in death—in their death lives on potential for whiteness. The real deaths of the child-figures in Benjamin’s text haunt her telling. In both speculative and real worlds of Ferguson, Black children are the constitutive exclusion for humanity proper. In Benjamin’s worlding, they become the literal key to finally solving human finitude, but only after their (first) death is this possible. Also take for example the Council’s museum exhibit which both monumentalizes and spectacularizes the death of Black children. In a powerful passage that feels like it was written in direct conversation with Benjamin, Hari Ziyad (2017b) reflects on displays of this sort:

Black people cannot make those operating within whiteness “feel our pain” because we are not understood to feel pain. Empathy-building projects encourage the incessant streaming and posting of videos and pictures of the bodies of our dead children, desperate to elicit tears that never come, or come only to refresh the liberal do-gooder’s spirit.

Importantly, whiteness requires dead Black children and that these deaths be unending.  
(p. 153)

These words are hard to read and type and repeat; they render the real-world precursor events of Ferguson inseparable from the speculative world of “Ferguson is the Future.” Benjamin’s story makes clear that the past is not past, and even in speculative worlds the spectre of Black childhood continues to haunt. The point of a museum is to historicize, to commemorate events that have already happened; after all, Benjamin alerts her readers, the police have been abolished so would not that be the end of gratuitous police violence? But the façade of abolition loses its pretence when the motives of the Immortocracy are revealed. Even before Sandra explicitly tells Aiyana of the plan, readers are subtly alerted to the reiteration of racialized politics in the speculative world. In Benjamin’s story, it is only victims of police violence that qualify for free stem cell procedures. Victims of systemic, unspectacular anti-Black environmental racism do not qualify for the state’s program for new cyborg lives.

Given the long *durée* of deathly socio-eco-political anti-Black harm, the Black cyborg cannot automatically be assumed as resistant and rebellious or able to escape systems of domination and oppression. This is true even in speculative worlds, as Octavia Butler’s work has long shown. As alluded to above, João Costa Vargas and James (2013) therefore propose a range of Black cyborgs, which includes those who reproduce existing structures, those who make modifications from within the system, and those who refuse “complicity with an empire based on genocide” (p. 202). Neither blackness, nor cyborgness, are ever one thing. Cyborgs who refuse to live within existing systems will not have an easy time or place; their emergence will be monstrous (Povinelli et al., 2014). Elizabeth Povinelli explains that she reserves the idea of the monster for situations that substantially alter current arrangements of existence—both systematic

and subjective. The more eventful the emergence (i.e., birth), Povinelli explains, the more dangerous the effort and less likely the chance of survival. The danger is not only to the figure, but to the systems, rationalities, positionalities, and technologies being challenged. The “hope of a monstrous world” (Haraway, 1991, p. 181) is not easily given and sometimes a gesture—like that made by Eric—will have to do. For now.

A cyborg continuum is banded by the figure of the “angelic negro/negress” at one end and the Black rebel cyborg at the other (Vargas & James, 2013, p. 194). A particularly exceptional, multifaceted performance of the Black cyborg-child is assigned to Trayvon Martin, a 17-year-old youth discriminatorily gunned down in his gated neighbourhood while walking home from the corner store. The public outcry engaged both ends of the continuum, which, in contrasting “younger and older Trayvons...bring[s] us to a space of impossible redemption” (p. 196). Widely circulated on media and protest placards was a picture of Martin at age 13 in a red Hollister t-shirt. Other popular images showed him carefully cradling a baby, playfully leaning on a snowboard, and smiling ear-to-ear in a cap and preschool graduation gown.<sup>37</sup> In an MSNBC interview, Martin’s father shared a story about how his son saved his life by pulling him from a house fire when he was just nine-years-old. Angelic and heroic: smiling, caring, playing, learning, saving, *childing*. I do not offer this as criticism—this effort of remembering seems a perfectly reasonable response to a life ended prematurely by anti-Black violence. The point Vargas and James argue is:

Trayvon can only be unmistakably innocent if he is angelic. To be angelical is to be supernatural or infantile; to not grow up, to not have autonomous agency, to not reach

<sup>37</sup> Not all public protests and campaigns invoked the sentimental image of an innocent child to mark their support of Martin and their resistance to anti-Black racism. For example, the Hoodie-movement and #WeAreAllTrayvonMartin made incontrovertible in a different imagery the link of blackness, boyhood, premature death, community, and the impossibility of innocence-redemption for the Black child in the United States (see Dumas & Nelson, 2016).

puberty, to never rebel against authority. When inflected by blackness, the gendered aspects of Trayvon's alleged "later," and therefore "truer," pictures, make it impossible for him not be threatening. (p. 195)

Images of an older Martin appeared in the media as the trial of his killer progressed. Much was made of Martin trying on a gold grill for a snap and giving the middle finger to the camera in another. These pictures circulated with a revised narrative of a problematic teen guilty of school suspensions, smoking and drug use, and other inflammatory framings that attempted to paint Martin as somehow responsible for his own death. I see this as the *childing* of the early images being replaced by a *wilding*—a form of disobedient, unlawful, youthful blackness and brownness that emerged into popular discourse with the villainization and animalization of the Central Park Five, who spent their formative years in prison for the brutal rape of a white woman they did not commit. In the anti-Black imaginary of wilding, Martin's murderer's actions could be perceived as somehow rational and justifiable and as "a preemptive measure" (p. 196). Martin was "a youth worthy of the right to life," but narratives of innocence and guilt both have the effect of delimiting his "right of refusal to wear blackness as victimization; the right to fight back" (p. 194). Both ways of figuring Martin then show the "space of impossible redemption" in the world as currently configured (p. 196).

Vargas and James work with the figure of Martin to bring attention to the sentimental allure of narratives of inclusion into worlds of whiteness. Martin could only be mourned if an innocent child; Aiyana could only be accepted as a reborn cyborg. "For a black person to be integrated," James and Vargas confirm, "she/he must either become non-black, or display superhuman and/or inhuman qualities" (p. 194). As such, they trace the allocation of innocence and desire for integration to figures of the "postbellum black cyborg" (p. 195),

embodied by history-makers like W. E. B. Du Bois and Martin Luther King Jr., or, at least, the whitewashed non-violent and happy-diversity versions of them (Ahmed, 2010). This figure of the Black cyborg is “a modified, improved human whose increased ethical, spiritual, and physical capabilities generate unusual strength, omniscience, and boundless love” (Vargas & James, 2013, p. 197). Presidents Mandela and Obama are other figures that come to mind. This particular “construction of black cyborgs—those who believe, endure, wait, and forgive against all odds and historical evidence—is appealing but ultimately ineffective” (p. 200). This cyborg configuration does not easily translate to child causalities of anti-Black violence: Martin could not forgive; he could not wait; he never had that chance. So, his survivors are made to take up the impossible task of forgiveness and to do so publicly. This is one reason why the Movement for Black Lives has been met with such contention. Many of its activists and scholars refuse to support a system that requires their death; they refuse to wait for another child to be killed; they refuse to forgive what is unforgivable. With the Black integrative/ed cyborg, the distribution of political sense stays as is, in that systemic racism remains unchanged and anti-blackness remains undisturbed. This, however, is only one arrangement of the Black cyborg figure: “There are black revolutionaries as cyborgs who have little hope for Western democracy’s ability to embrace black life” (Vargas & James, 2013, p. 200).

As potential revolutionaries, Black rebel cyborgs renounce “the unachievable goal” of “striving for a socially recognized humanity” (p. 200). As seen with Aiyana, Black rebel cyborgs are “part divine, part mechanical, part biological” and “capable of movements that inspire flight” (p. 201). Black rebel cyborgs recognize the incommensurability of democracy and freedom under white supremacy. They may even demand “reparations on [their] souls.” For Black rebel cyborgs, the great sin is not abandonment to the world as Latour suggests, but inclusion as

enclosure in a fundamentally anti-Black world. Black rebel cyborgs refuse what the state offers as care. One way of reading Eric's closing words in "Ferguson is the Future" is as a calling to account *and* as a relinquishing of claims to the nation-state. In asking the impossible of and under whiteness, Eric refuses re-incorporation into the structures that killed him, gesturing instead alongside Aiyana and their cyborg kin-kind "toward new ways of black becoming" (Maynard, 2018, p. 29). Eric's last words are a speculative form of *not this* and *not yet*, what Ashon Crawley (2016) elsewhere offers as, "Otherwise Ferguson. Otherwise. Otherwise than this" (para. 17). I will revisit the Black rebel cyborg in Chapter 6 by thinking-with the figures of Melanie and Nassun. Both these child-figures end their respective worlds rather than saving the systems and people who have oppressed them. In this way, they partially respond to the gesture of Eric's speech.

### **Innovating Race**

Benjamin's inspiration for "Ferguson is the Future" came from a photo circulated online of the phrase spray-painted on a brick wall in Ferguson, Missouri, in the days following Michael Brown's 2014 murder. These words depicted "a future," Benjamin (2019) thought, either "of militarized police who terrorize residents using technologies of war *or* a future of courageous communities who demand dignity and justice using technologies of communication?" (p. 7). As the future unfolded over the next weeks and months, both technologies of war (e.g., tear gas, military-grade tanks, implanted protestors) and technologies of communication (e.g., twitter, Facebook, marches, spray paint) were deployed in ways that brought each together to make "race as a technology" (Benjamin, 2016a, 2019). With these events as background, Benjamin (2016a) proposes race as a technology to engage how "parallel universes and premature death" are co-created (p. 1). "Ferguson is the Future" gives this insight space to speculatively play out. It is

important to note that Benjamin is not repudiating technology, but inquiring into what technoscience makes possible, including anti-Black racism. Benjamin's (2019) provocations include: "How can innovation in terms of our political, cultural, and social norms work toward freedom? How might technoscience be appropriated and reimagined for more liberatory ends?" (p. 3). These questions are particularly interesting to me because, on the surface, they sound similar to statements made by the BTI, although the ideas of freedom and liberation diverge widely between speakers.

In posing race as a technology, Benjamin (2019) is interested in how we might "understand the duplicity of technological fixes—purported solutions that nevertheless sediment existing hierarchies" (p. 3). In her speculative story, how is the abolition of police posed as a solution to ant-Black state violence? How do gene mapping and other healthcare innovations overlap with assertions of care and social welfare that nevertheless reaffirm prevailing inequalities? This kind of concern for racialized, hierarchical positionings is absent from Latour's "Love Your Monsters." Care and love, as they appear there, are a one-sided relation extended from creator to technology; care and love are not reciprocal relations in Latour's worlding. The actual qualities of care are not much discussed by Latour, we are only told that love must be unconditional. However, practices of love and care "are always shot through with asymmetrical power relations: who has the power to care. Who has the power to define what counts as care and how it should be administered" (Martin et al., 2015, p. 3)? Who can refuse care? The child-cyborgs of Ferguson never consented to a second life—to receiving technoscience care? Remember Eric's thoughts: "Murdered by the hands of police, born again by

the hands of scientists...both without asking” (Benjamin, 2016b, p. 18). Though unremarked upon by Latour, consent was refused to Dr. Frankenstein’s monster also.<sup>38</sup>

In contrast, Benjamin (2019) poses questions that address the power dynamics involved in technoscience:

Who and what are fixed in place to enable innovation in science and technology? What social groups are classified, corralled, coerced, and capitalized upon so others are free to tinker, experiment, design, and engineer the future? How are novel technologies deployed in carceral approaches to governing life well beyond the domain of policing? (p. 3)<sup>39</sup>

Does it matter that Dr. Frankenstein was a well-educated chemist, free to travel Europe collecting up knowledge and other things? Does it matter that Latour and the BTI share similar privileges? Puig de la Bellacasa (2011) asks: “Who or what is or is not counted or assembled here and why?” (p. 93). How does social positioning impact how love and care are figured, practiced, and received? The freedoms Dr. Frankenstein and Latour experience are those refused to the protagonists of “Ferguson is the Future,” both as child-cyborgs in a futuristic world and as humans in this one. As for the carceral link, Benjamin depicts a prison industrial complex as more than prisons and as more than police. In her story, the enforcement of discipline moves from the police state to state Science, wherein Science (i.e., People’s Science Council) even generates its own security force out of child-figures previously victimized. Even with their expressed reservations, Aiyana and her team become a modified form of what prematurely ended their lives in the first place. I think we are meant to be uncomfortable affiliating the names of

<sup>38</sup> The epilogue of *Frankenstein* contains a passage from Milton’s *Paradise Lost*. It reads: “Did I request thee, Make, from my clay/ To mould me Man, did I solicit thee/ From darkness to promote me?” While Latour enquires into the failed duty of care of Dr. Frankenstein, he glides past the questions of consent raised here.

<sup>39</sup> Benjamin’s (2019) work includes examining how technological innovations in policing are increasingly packaged as being more caring; for example, electronic ankle monitors instead of incarceration. What claims to care disguise in such scenarios is how technological innovations not only “extend prison spaces into the public sphere but also deepen racial hierarchies and engender new systems for social control” (p. 1).

children murdered by police with an innovative figuration of enforcement called Risers in the story. Technologies in Benjamin's speculative world are not strictly machines, tools, or computers either, but include tactics, strategies, and procedures for governing others and selves (Foucault, 1988). Race as a technology is not only located in formal settings like labs, prisons, courts, or schools, but "attends to the institutional *and* imaginative underpinnings of oppressive systems" (Benjamin, 2019, p. 3). This is one of the reasons why I think the speculative is so significant: how can speculative imaginings intervene in new racial formations before they become monumentalized?

"To say that race is a technology," Benjamin (2016b) argues, "is also to insist that racism is innovative and future-oriented, which implies that antiracisms are often playing catch-up" (p. 22). In this way, speculative methods are needed now to engage what might be the racialized technologies of tomorrow, including genome mapping and other Anthropocene-related inventions of geo-engineering.<sup>40</sup> This might involve further reconceptualizing of the precautionary principle mentioned earlier, but not in the way intended by the BTI. I recognize in Benjamin's work a rewriting of the precautionary principle as an incisive *speculative principle*. It seems reasonable enough to assume that we cannot know in advance all the consequences of technological inventions and innovations. However, we can "attend to the normative and political dimensions of technoscience in situ," meaning the contemporary political and ethical conditions of research, development, and distribution (Benjamin, 2016a, p. 7). Ethico-episto-techno-onto ways of knowing and being get built into technology's parts, much like how for

<sup>40</sup> Relatedly, a University of British Columbia research project recently received more than \$10 million in funding to "bridge Canada's gap in medical care for Indigenous communities" through genome sequencing and the development of precision medicine techniques (CBC News, 2018). The benefits of more accurate diagnoses are not my concern here. What raises flags for me is the possibility that DNA maps will become property of a settler state institution via supposedly neutral technologies of science. This gene databank may well become another means in a long, deadly line of claims of ownership over what Kim TallBear (2019) critically problematizes as Canada's other "natural resources"—not only lakes and trees but Indigenous bodies (see also TallBear, 2013).

Michel Serres (1982) in *The Parasite* that noise and vibration get built into the building's structure. How does racism figure as technology's noise?

In related conceptual work, Beth Coleman (2009) theorizes race as a technology in hopes of interrupting a biocentric understanding of race. The bionormative perspective, she argues, remains the dominant frame even though race's genetic and physiological bases have been proven false time and time again. Race as a technology, on the other hand, allows race to be “denatured—that is, estranged from its history as a biological ‘fact’ (a fact that has no scientific value perhaps, but constitutes, nonetheless, a received fact)” (p. 178). Instead of bracketing biology from technology, however, Benjamin (2016a) is interested in how “contemporary technoscientific practices coproduce racial classifications,” including how racism gets under the skin (p. 7). Consider the advancements in assistive reproductive technologies that allow clients to select desirable traits and edit out unwanted ones (p. 6). Or the popularity of genetic ancestry testing as both “recreation” and “reconciliation projects”; in other words, as a means of “social unification” despite geographical, cultural, political, and other differences that still matter (Nelson, 2013). Benjamin (2016a) gives as an example the ignorant, yet widely repeated, commentary of Congressman Steve King who asserted that Garner's death was attributable to a combination of obesity and asthma rather than a police chokehold. A report from the NYPD's top doctor submitted into evidence at the officer's disciplinary trial, despite the fact that the doctor never actually examined Garner's body, stated that Garner's size and overall physical health predisposed him to premature death. Garner was responsible for his own death, or so this story goes, because his biological body was defective and not cared for properly, which is to say nothing about the complicated relation of size, monstrosity, masculinity, and blackness.<sup>41</sup> Anti-

<sup>41</sup> The parallels between Garner and George Floyd are many. Floyd's murder has been attributed to “underlying health conditions” and not the policeman whose knee crushed Floyd's windpipe for eight minutes and forty-six seconds.

Black police brutality is let off the hook yet again when Garner's death becomes understood as a biological inevitability and the lethal force that was used a matter of the police officer's "natural preservation" whereby he eliminated the threat (p. 3). The so-called "biological facts" of Garner's murder were a process of "manufacturing natures—that is, biological facts that legitimate racial narratives" (Benjamin, 2016b, p. 22). These facts are not innocent or natural; however, they can be reconfigured as matters of care and concern.

### **Monstrous Love for Regenerative Cyborgs**

#### **Towards Matters of Care**

"Ferguson is the Future" makes up the middle section of a longer article by Benjamin (2016b) titled "Racial Fictions, Biological Facts: Expanding the Sociological Imagination through Speculative Methods." The article opens with the statement: "The facts, alone, will not save us" (p. 2). Benjamin's point is that the facts of racism are all around: wages, high school graduation, mother and child mortality, child apprehension, arrests, sentencings, and poverty. All these facts have numbers, rates, and percentages that do not attest to a problem of population but of anti-Black racism, settler colonialism, and white supremacy. Succinctly put, "we are drowning in 'the facts' of inequality and injustice" (p. 2). Yet scholars and activists of colour are repeatedly asked to prove racism exists (Wilderson, 2014). Constantly providing such evidence becomes another means that "subjugated people must petition again and again for admission into the category of human" (Benjamin, 2016b, p. 2). At most, facts relay a partial view of the world as is; facts cannot imagine the world as it might be. This is another of the reasons why I think the speculative is so important. In its attempt to "reimagine and rework all that is taken for granted about the current structure of the social world—alternatives to capitalism, racism, and patriarchy," speculative fiction apportions "windows into alternative realities, even if it is just a glimpse, to challenge ever-present narratives of inevitability as they relate to both technology

and society” (p. 19). Speculative worlds test out “different possibilities for creating more just and equitable societies” (Benjamin, 2018, para. 31), even when, as in the case of “Ferguson is the Future,” they are not yet sustainable.

Positioned by a different set of concerns, Latour (2004) also challenges the standing of matters of fact. Latour argues that social constructionism and its accompanying critique have gone too far. In showing the constructedness of all facts, neither knowledge nor politics has any stability anymore. “The mistake we made, the mistake I made,” Latour (2004) laments, “was to believe that there was no efficient way to criticize matters of fact except by moving away from them and directing one’s attention toward the conditions that made them possible” (p. 231). In pointing out the subjective relations of compositional practices, facts were labelled by detractors as made-up fictions. As an effect of this, for example, climate change deniers are able to claim that global warming is one interpretation of the evidence rather than a materialized truth. They refashion evidentiary underpinnings with nonsense statements like, “I believe that there is a change in weather and I think it changes both ways,” as Trump yelled in a June 2019 interview. Nevertheless, Latour (2004) argues for a move away from the “very partial...very polemical, very political” refutation of matters of fact towards matters of concern (p. 232). As critical academics, Latour argues, our goal should be no “longer debunk but to protect and care” (p. 232). Both Latour and Benjamin problematize facts, but where and how else they move when it comes to care is quite different.

With reference to Latour’s (2004) critique of critique, Puig de la Bellacasa (2011) suggests a framework of matters of care as an additive to Latour’s matters of fact and matters of concern. Puig de la Bellacasa (2017) is not looking to cancel out these other matters but supplement their limits with a more robust notion of relationality. Latour’s move to matters of

concern was important because it recognized the liveliness of things and how researchers are affectively entangled with technologies and the knowledges produced within relations. Matters of concern could not be as easily dismissed as matters of fact as attachment was already embedded into the figuration. However, Puig de la Bellacasa (2011) hesitates when it comes to Latour's dismissal of critique for an alternative of a "balanced articulation of the involved *concerns*" (p. 91; emphasis added).

Puig de la Bellacasa (2017) goes into detail about Latour's (2005) case study of an "angry environmentalist" and an SUV driver debating climate change wherein Latour chides the environmentalist for not being concerned enough for the point of view of the driver. Calls for respect and balance in such situations tend to "moderate a critical standpoint" and suppress oppositional knowledges and values (p. 48). In valuing both sides in seemingly equal fashion, Latour "exhibits mistrust regarding minoritarian and radical ways of politicizing things—here the environmentalist—that tend to focus on exposing relations of power and exclusion rather than just claiming inclusion in the prevailing gathering to reform it from within" (p. 48). In earlier sections of this chapter, I grappled with how inclusion can enact a violence that is not resolvable by polite discourse. For me, the point of care-full critique is not an "obsession with power and domination" as Latour polemicizes, but "a concern about the powerlessness of more or less 'unloved' others" (Puig de la Bellacasa, 2011, p. 94). Furthermore, what Latour's scenario fails to acknowledge that it is "not all of 'us' that have created SUVs and therefore that there is not a neutral 'we' to be held responsible for abandoning this technology to monstrosity" (Puig de la Bellacasa, 2017, p. 52). The lingering questions for Puig de la Bellacasa with regards to Latour's matters of concern are: "What are we encouraging caring for?" (p. 52), and, "For what worlds is care being done for?" (p. 65). I am in agreement with Puig de la Bellacasa that "in

a deeply troubled and strongly stratified world...we still need approaches that reveal power and oppressive relations in the assembling of concerns” (p. 39). These matters of care and concern apply to an analysis of Latour’s (2011) appeal to love monsters as if they are children/technology.

### **How to Care**

Puig de la Bellacasa builds her understanding of care from the work of feminist theorists.<sup>42</sup> In particular, she grounds her work in a “generic” conception of care offered by Joan Tronto and Berenice Fisher: care is “everything that we do to maintain, continue and repair our world so that we can live in it as well as possible” (Tronto, 1993, p. 103). Extricable from this definition is the importance of maintenance and repair work (Puig de la Bellacasa, 2010). This is significant because it recognizes the value and everydayness of women’s and often racialized women’s labour. However, it can also be misused. In “Ferguson is the Future,” technoscience innovations of stem cell regeneration “repaired” the child victims and made their cyborg second lives possible. The scientific advancements appeared to overhaul police violence but also created a new form of surveillance to sustain the status quo—or techno-quo (Benjamin, 2019)—of bio-wealth. In this way, the “rhetoric of human betterment that surrounds technoscience,” consisting of “noble aims such as health and safety serve as a kind of moral prophylactic for newfangled forms of social control” (p. 9). Similarly, global and individual well-being are strategic tenants of the ecomodernist platform. In their take-up of Latour’s article, and as previously cited, Shellenberger and Nordhaus (2011) argue that technologies “will go wrong” and that “we

<sup>42</sup> The danger of engaging care at a chapter’s end is that the rich feminist histories of care ethics are not given enough space. For introductory genealogies see Martin et al. (2015), Murphy (2015), Sevenhuijsen (1998, Chpt. 3), and Puig de la Bellacasa (2017, Chap 2); foundational works by Held (2006), Mol (2008), Nodding (1984), Ruddick (1989), Sevenhuijsen (2003), and Tronto (1993). Care research has been dominated by European and white-settler feminists so texts by Collins (1990), Crenshaw (1991), hooks (1992), and Sharpe (2016) provide necessarily perspectives. In early childhood education, see Dahlberg and Moss (2005), Hodgins (2019a), and Langford (2019).

must...care for and improve them” with even more technologies (para. 11). This sort of maintenance and repair work seeks to make reasonable continued consumption because new technologies will be invented to fix any future harm. This is a vision of the future as a promissory of techno-progress. However, the BTI message ignores the lesson advanced by feminist materialisms that humans are not fully “in charge of natural worlds” (Puig de la Bellacasa, 2017, p. 166).

The idea of humans in charge “reduces care from a coconstructed interdependent relation into a mere control of the *object* of care” (p. 186). Latour’s limited description of the qualities of care permits a unidirectional interpretation where the scientist-inventor-father is the “moral subject” separated out “from a naturalized object of caring” in the figure of monster-technology-child (p. 164). As mentioned, reciprocity and responsiveness do not feature into this paternalist, linear, and one-sided formulation. For me, I fail to see how Latour’s demand not to abandon necessarily translates into practices of care. Physical presence—the sort of non-leaving, non-abandonment Latour invokes—does not necessarily equal care in any affective sense. Latour tells us to stick with our monsters-children-technologies as if proximity is enough. As Michelle Murphy (2015) otherwise notes, “forms of attachment can work with and through the grain of hegemonic structures, rather than against them” (p. 719). A more generous take recognizes Latour’s demand for love as obliging that “we must take care of things in order to remain responsible for their becomings” (Puig de la Bellacasa, 2017, p. 43). I have no qualms with this interpretation so much as responsibility is carefully outlined and practiced. This is why the question of “How to care?” must be addressed in each situated encounter (p. 67). Care work is not easy or innocent; it is messy and complex. In fleshing out response-ability for care, Puig de la Bellacasa extends early feminist conceptions to include three interactive facets: care is “an

affective state, a material vital doing, and an ethico-political obligation” (p. 42). Conversely, Latour (2011) advocates for care as moral duty, which differs from Puig de la Bellacasa’s situated conceptualization of an ethics of care. Furthermore, Latour does not address the affective dimension (despite the language of love) and the attentiveness to power relations that further strengthens Puig de la Bellacasa’s articulation.

With respect to imbalances of power in the Anthropocene, Puig de la Bellacasa (2017) advises that an ethics of care be “capable of challenging dominant technoscientific productionist ways of thinking and acting” (p. 42). The most quoted phrase from Latour’s (2011) article is that “we” must not “stop innovating, inventing, creating, and intervening” (p. 21). So long as care is attached in principle, Latour seems to be advocating for innovation as an inevitable good in and of itself. In a sense, this is repair work without political and ethical obligation. Latour and the BTI fail to seriously consider how “emerging technologies reinforce interlocking forms of discrimination,” whether intentional or not (Benjamin, 2019, p. 3). Benjamin’s story reveals how technoscience innovation in the name of reparations (arguably a form of care) is not an end in itself but a means to an end of securing finitude.<sup>43</sup> I read Puig de la Bellacasa’s (2017) matters of care as challenging both the Immortocracy and ecomodernist standpoints. While not directly mentioned in her work, much of what Puig de la Bellacasa’s (2017) writes about productionism problematizes the BTI’s modernization doctrine.

Ecomodernists tout a form of productionism that promises to solve environmental problems through a “commercial logic of intensification and accumulation characteristic of

<sup>43</sup> Another key feminist formulation of an ethics of care “acknowledges vulnerability, interconnectedness, dependency, embodiment and finitude as basic characteristics of human life” (Sevenhuijsen, 2013). I find this conceptualization striking because of the inclusion of finitude as an inevitable characteristic of life. The People’s Science Council secretly designed a program—in the name of care—to overcome finitude. It also connects to the last section of this chapter on “kinship of the infertile” (Klein, 2014a).

capitalist economies” (p. 184). It is about more, more, more; it is “technology all the way down” (Nordhaus, & Shellenberger, 2009, para. 22). Productionism overdetermines and “colonizes all other relations: everyday life, relations with other species, and politics (e.g., farmers’ subjection to the industry-agribusiness complex),” including care (Puig de la Bellacasa, 2017, p. 184). Ecomodernists emphasize quantitatively measurable crop yields, for example, and promote the efficiency of GMOs and monocrops. The livelihoods and desires of small-scale farmers or Indigenous peoples reclaiming traditional cultivating practices are not respectable alternatives according to the BTI, but instead are representative of people left behind by modernization (Nordhaus, 2019). Technoscience innovation is good, their argument goes, because it makes possible agricultural amplification and maximized resource extraction (Nordhaus & Shellenberger, 2009). The simplistic conclusion they draw is that if there was just more food than less people would be hungry; however, this way of thinking assumes an equal distribution that has never happened.

The BTI relies on specious characterizations of environmentalism that are dangerous because their organization is so influential. This includes one of their more egregious claims:

Nonetheless, it has become an article of faith among many greens that the global poor are happier with less and must be shielded from the horrors of overconsumption and economic development—never mind the realities of infant mortality, treatable disease, short life expectancies, and grinding agrarian poverty. (para. 23)

The ecomodernist solution to poverty is more modernization, which relies on a productionist logic. Any alternative way of life is dismissed and ridiculed. Furthermore, I do not think that ignoring the unequal distribution of life chances is what many environmentalists are doing. Nor are so-called modernized economies free of poverty or infant and maternal mortality for example

(Verstraeten et al., 2015; Villarosa, 2018). This rhetoric also perpetuates the historical devaluation of care labours that are not quantifiable—such as childcare. In these ways, ecomodernism and the logic of productionism “not only reduces what counts as care...but also inhibits the possibility of developing other relations of care that fall out of its constricted targets” (Puig de la Bellacasa, 2017, p. 186). The ability to imagine an outside of this targeted constriction, however, is another quality of the speculative.

As taken up by ecomodernists, the circulation of care through the figure of the child in “Love Your Monsters” becomes a means to suture technological development to productionism. Instead of racing full force ahead with Latour’s “innovating, inventing, creating, and intervening,” however, perhaps it is best to consider Benjamin’s (2019) advice, perfectly suitable for the Anthropocene moment:

It starts with questioning breathless claims of techno-utopianism, rethinking what counts as innovation, remaining alert to the ways that race and other hierarchies of difference get embedded in the creation of new designs, and ultimately refashioning the relationship between technology and society by prioritizing justice and equity. (p. 11)

Furthermore, in noting the impossibility of non-innocent caring, Puig de la Bellacasa (2017) supposes that an ethics of care resides in the entanglement of critical and speculative becomings. The critical side of care is comprised of questions like Benjamin’s and also includes concerns about who cares, who receives care, and “what forms of care are prioritized at the expenses of others” (p. 204). The speculative dimension of care marks a “commitment to seek what other worlds could be in the making through caring while staying with the trouble of our own complicities and implications” (p. 204). Speculative care has deep connections with speculative fiction. “Such fictions are not meant to convince others of *what is*,” Benjamin accedes, “but to

expand our own visions of what is *possible*” (para. 20). Speculative care in Puig de la Bellacasa’s (2017) theorizing also extends to more-than-human relations, which would include the cyborg. The final sections of this chapter bring cyborgs back into the racialized, technoscience fold to consider how forms of care justice in the Anthropocene might be devised.

### **Care for Regenerative Cyborgs**

The most famous cyborg in the scholarly world is Donna Haraway’s creation. This cyborg is a mix of machine and organism that hyphenates—instead of slashes (/)—constructed dualisms like reality-fiction, life-death, flesh-matter, human-animal, technoscience-science fiction (Haraway, 2004, p. 8). The connective dash acts as a contact zone, which is a non-innocent relational spacing that foregrounds the friction-ness of entanglement (Tsing, 2004). I also attempt to work lines of friction in thinking-with child-monster, monster-human, speculative-real, and life-nonlife relations in this dissertation. In Haraway’s cyborg manifesto, like in my own writing, not all contact zones are given equal analytical weight. Ziyad (2017a) reads Haraway’s cyborg as an important feminist intervention in thinking beyond the human, but that by not engaging anti-blackness directly her worlding ultimately falls short of its liberatory potential. Ziyad does not entirely discount the cyborg figure and appreciates the Black rebel cyborg as “a truer challenge to the human and its essential violence against blackness under whiteness” (p. 157). This is to suggest that the futurity Haraway’s cyborg puts into motion is not necessarily commensurable with Black lives, although they are not always mutually exclusive either. The speculative figures of Aiyana and her cyborg-kin carry the scars not just of regeneration but of anti-Black racism. They are doubly birthed and doubly monstrous: they are attached to blackness in divisions of humanness that make them monsters anyway (Maynard, 2018), and they wear regenerated parts in their re-and co-composition as hybrid beings.

An area where these cyborg worldings come together is in a move away from bionormative birth towards regeneration. With the cyborg, Haraway (1991) interrupts how political imaginaries depend on metaphors of birth, growth, and natural development, which is akin to my argument in Chapter 2. Haraway writes that “unlike the hopes of Frankenstein’s monster, the cyborg does not expect its father to save it through a restoration of the garden” (p. 151). This is particularly interesting in light of Benjamin’s and Latour’s texts. Although Haraway’s cyborg does not have “an origin story in the Western sense,” they are “the illegitimate offspring of militarism and patriarchal capitalism, not to mention state socialism” (p. 151). Aiyana’s cyborg emergence is tied to similar structures, and, with perhaps less of a socialist bend, the rebranding of *Frankenstein* fits this template also. I see the coming together of Black rebel cyborgs at the end of “Ferguson is the Future” as hinting towards resistance and rebellion—I imagine this as “illegitimate offspring” becoming “exceedingly unfaithful to their origins” (p. 151). This is the gesture emboldened by Eric’s closing question. Dr. Frankenstein’s monster, on the other hand, builds himself a funeral pyre upon which to float out to sea and die alone, which is an act almost too faithful to the wishes of his father-figure.

The Out of the Woods Collective proposes the figure of the “regenerative cyborg” as a provocation for grappling with the Anthropocene problematic (Collective, 2015b). Against dominant discourses of reproductive futurism that think climate futures through invocations of the innocent child, the Collective argues that reproduction is too tethered to “heteronormative and survival-based notions of human life” (para. 18). The Collective reads the figure of the child in climate discourse as a tactic to disguise conservative, neoliberal, and settler colonial practices through “upholding the naturalness and desirability of birthing and reproduction as a beacon” of hope amidst ecological destruction (Collective, 2015b, para. 4). A politics of regeneration, on the

other hand, marks out an effort “to go beyond the political limits, both of centering reproduction, and of thinking futurity through reproduction” (para. 12). Regenerative cyborgs do not disavow reproduction in ways that are anti-child or anti-natal but refigure it to include “the general conditions of social life” within “a complex network composed of machines and organisms, an entanglement of the living and the non-living, a cyborg Earth” (para. 16). A regenerative politics must act in solidarity with reproductive justice movements, such as SisterSong and the Native Youth Sexual Health Network, which are two organization mentioned in previous chapters. In her own critique of reproductive futurism, Jasbir Puar (2007) argues that what is at stake in the political present is “not the ability to reproduce, but the capacity to regenerate, the terms of which are found in all sorts of registers beyond heteronormative reproduction” (p. 211).

The Collective (2015b) calls for “regeneration of the material, social infrastructures of care” that refuse to perpetuate the unequal distribution of harm caused by racialized, catastrophic climate change (para. 18). I see these regenerative infrastructures of care embodied by Indigenous scholars and communities in their “everyday acts of resurgence” to rebuild post-apocalyptic worlds (Corntassel, 2012, p. 80). Acts of regenerative resurgence include food cultivation, invasive species removal, traditional economies, and ceremony (Bryce, 2018; Corntassel, 2012). They further comprise of “regenerating our languages, our oral cultures, our traditions of governance and everything else residential schools attacked and attempted to obliterate” (Simpson, 2011, p. 22). Cherokee scholar Jeff Corntassel (2012) makes the strong statement that “to be Indigenous today means struggling to reclaim and regenerate one’s relational, place-based existence by challenging the ongoing, destructive forces of colonization” (p. 88). He notes that the state promotion of “economic development” represents a limited idea of what the world can be and is an “illusion of inclusion” for Indigenous peoples (p. 88). Instead,

as Kanyen'kehà:ka scholar Taiaiake Alfred (2005) points out, “resurgence and regeneration constitute a way to power-surge against the empire with integrity” (p. 24). Additionally, a major component of regeneration for Nishnaabeg scholar and artist Leanne Simpson (2008) is the practice of “visioning resurgence” (p. 79). This is a speculative and embodied practice that makes a “move beyond the ordinary and re-visions the world we currently live in” (Simpson, 2011, p. 148). I see connections between Indigenous practices of regenerative caretaking for more-than-human relations that are dying and damaged (e.g. Simpson & Klein, 2013) and Klein’s (2014a) “kinship of the infertile” wherein care relations are not un beholden to divisions of life from nonlife.

### **Klein’s “Kinship of the Infertile”**

Near the conclusion of Klein’s (2014a) bestseller is a chapter titled “The Right to Regenerate.” In it, Klein parallels her difficulty conceiving a child with the damage being done to the earth and other more-than-human creatures. “If the Earth is indeed our mother,” Klein expresses, “then she is a mother facing a great many fertility challenges of her own” (p. 424). To tease out the analogy Klein takes readers back in time to the deck of a chartered boat where she and some colleagues witnessed and documented evidence of the 2010 Deepwater Horizon oil spill off the coast of Louisiana. Their boat guide explained that what troubled him most “was not what we were all seeing—fish jumping in fouled water, Roseau cane coated in oil—but something much harder to detect without a microscope and sample jars” (p. 426). He was referring to the tiny zooplankton attempting to attach to “the marsh grass [that] acts as an aquatic incubator, providing nutrients and protection from predators” (p. 426). The grass was coated in oil which meant that the newly hatched shrimp, oysters, and crabs who normally merge with the plankton in their first days of life for protection would die, if they had not already. Remember

Aiyana's words when confronting the monumentalization of her death: "Why, in fact, did we need to *see* to believe?" (Benjamin, 2016a, p. 12). Human eyes cannot see the minutiae of life (and its loss) described by the boat captain without technological assistance and local knowledge. Unbeknownst to Klein at the time, her body was in the early stages of a miscarriage—her third in five years. When she finds out, and despite what the doctors told her about their non-relation, she cannot help wondering if the contaminated water she waded in or the toxic air she inhaled contributed to her ectopic pregnancy. Remembering rocking on the deck of the boat, Klein renders a haunting image of being suspended "not in water but amniotic fluid, immersed in a massive multi-species miscarriage" which turned out to be her "miscarriage inside a miscarriage" (p. 427). Amidst this doubling of double death (Rose, 2004), Klein (2014a) "began to feel what [she] can only describe as a kinship of the infertile" (p. 427).

This provocation for an Anthropocene ethical and political praxis of care does not get much follow-up in Klein's text, nor in the academic literature and popular press that follows it. I think part of the fear of taking-up something like a kinship of the infertile is that it can be swallowed up by a logic of extinction that has been heightened by the Anthropocene. To be clear, my promotion of a kinship of the infertile is not as a form of #NotBabies—recall from the introduction Haraway's #MakeKinNotBabies—and I would argue that such a characterization distracts from the major issues at hand. My suggestion is to keep #MakeKin and adjoin kinship of the infertile in a call to enact a regenerative-cyborg praxis which might just "offer us a chance amidst the ruins" (Collective, 2015b, para. 20). I think a hashtag for this way of thinking might be #RegenerationNotReproduction, however, the Collective (2015a) works hard not to set up regeneration as innately critical or better than reproduction. Regeneration has been used in ways that feel familiar to reparations in Benjamin's story, for example, as a discursive technology to

vouchsafe capitalistic-paternalistic-neoliberal environmental ideologies. Consider these imaginaries of regeneration: gentrification and “razing public housing under the guise of ‘urban renewal’” and “UN-led ‘carbon offset’ forests...where indigenous people are driven from their homes so that industrial activity elsewhere can be counted as sustainable” (Collective, 2015a, para. 21). That is why the *praxis* in a cyborg regenerative ethics and politics is so important—imagination alone will not do, but we cannot do without it either. A kinship of the infertile invites a “solidarity with non-reproductive lifeforms” (Collective, 2015a, para. 20) that requires acts of imagination to bring it into being.

Part of the reason for the dangling kinship provocation is that Klein’s story moves on to the happy birth of her son—again, not something I am faulting her for by any means. I do however wonder if perhaps a kinship of the infertile is the sort of trouble we should stay with (Haraway, 2016). The Collective (2015a) agrees and offers an excellent book review of *This Changes Everything* by juxtaposing figures of “Major Klein” and “minor Klein,” wherein each figure has their powerful moments. For the Collective (2015a), the minor Klein is most inspiring at moments like a kinship of the infertile, and when she spotlights the work of Indigenous activists and how their acts of resistance are “fighting...for the reproductive rights of the planet as a whole” (Klein, 2014a, p. 443). The Collective points out that minor Klein is crystal clear about how the most privileged do a “very poor job of protecting, valuing, or even noticing fertility—not just among humans but across life’s spectrum” (Collective, 2015a, para. 19). To the Collective’s disappointment, however, Major Klein ends up winning out. Major Klein “leaves the private form of the family largely unquestioned, the essentialism of the term Mother Earth almost unscathed, and the primacy of fertility intact” (para. 20). Klein ultimately upholds reproductive futurism in the sense of “a myopic focus on producing (proper) children and thus a

(proper) future for humanity” (para. 19), despite wavering on a potential otherwise for a regenerative kind of Anthropocene ethical and political praxis. I agree with the Collective that a regenerative cyborg care is needed for these times. The question then becomes about the conditions required to capacitate such a praxis. I believe one requisite is speculative fiction, in order “to expand our own visions of what is *possible*” (Benjamin, 2018, para. 8).

Key ideas in this chapter carry over to the remaining chapters: care, cyborgs, monsters, and the speculative rematerialize throughout this dissertation. In the next chapter, the ideas of “Love Your Monsters” reappear in the context of parental love in order to further grapple with the possibility that non-abandonment might not be enough in the Anthropocene. Furthermore, intimate and planetary relations are brought together in supportive and divergent ways in order to think through how care for the planet and care for the child are linked through a fear of the infertile. The racial politics of care and complicity are also given more page space in Chapter 5. This inquiry leads into the subsequent chapter by engaging what might happen if the child-figures are not interested in the kind of patriarchal-technologized love Dr. Frankenstein is chided for not providing—even in Latour’s refiguration—but instead enact James’s (2013) idea of “blackness-as-resistance” (p. 67). The cyborg child-figures in Chapter 6 raise critical questions including: Who and what counts as monster? What might care look like on a broken earth? How might cyborg-kinships regenerate otherwise worlds?

## Chapter 5: Parental Stewardship: Bionormative Care as Environmental Surrogate

It is not unusual for a post-apocalyptic text to end with a child-figure as ultimate survivor. Their weathered, cherub face fills the screen as the fade out begins, the music surges, and the credits roll. Or there is an epilogue of sorts which does not quite manage to tie up all the loose ends, but in a few extra lines of print sets up the child-figure to experience a #brightfuture. Instead of attributing the child-figure's survival to a bildungsromanish move of innocence to experience, I wonder if it is because they have proven themselves capable of loving our monsters. But have the adults of Anthropocene-related speculative stories loved their creations? How have they cared for their worlds? As outlined in the last chapter, Bruno Latour (2011) demands that we "care for our technologies as we do our children," and, through parabolizing *Frankenstein*, introduces abandonment and attachment into the discussion as well (p. 19). The primary parental figures in Cormac McCarthy's (2006) *The Road* and Hulu's television adaptation of Margaret Atwood's *The Handmaid's Tale* (Miller, 2017) refuse to abandon their offspring and this insistence comes at a price. The parents make all else secondary. It may seem that this kind of intense parental love is a refusal of Rebekah Sheldon's (2016) swing from the child in need of saving to the one who does the protecting, but, while these texts put this relation in tension, I do not think they void the movement. In *The Road* and *The Handmaid's Tale*, the endurance of the child-figures becomes a metonym for species survival and parental love becomes analogue to "planetary stewardship" (Steffen et al., 2011). What happens to care when planetary stewardship takes the form of what I am calling parental stewardship? How does a "heteronormative family romance" demarcate post-apocalyptic stories of the end of the world (Sturgeon, 2010, p. 126)? In this chapter I analyze some "profound drawbacks to reading parental love as the antithesis and antidote to environmental destruction" (Johns-Putra, 2016, p.

521). Additionally, I consider the ethical tensions of endorsing forms of survival that come without a chance at flourishing. How are survival, protection, care, and abandonment racialized in the post-apocalyptic through the familiar-familial? How does survival of the child become surrogate for the “anxieties surrounding the demise of white supremacy” at the end of the world (Joo, 2018, p. 4)? These are the guiding questions I grapple with in this chapter.

McCarthy’s *The Road* is a post-apocalyptic tale of a father and son journeying southwards across a deadened America after an unnamed extinction event years before. This is a barren world, a grey landscape, and a lifeless nature. Adapted from Atwood’s (1986) novel of the same name, *The Handmaid’s Tale* television series stories the dystopic world of a small group of fertile women called Handmaids who are forced into reproductive servitude by the totalitarian, puritanical, patriarchal, and theocratic government of Gilead. The world of *The Handmaid’s Tale* also experiences an unknown environmental catastrophe whose effects have made lands and bodies toxic. With post-apocalyptic ecologies like these as background, Alexis Lothian (2018) traces how the end of the world stands as a conventional plot device that can be overcome “through the resolution of a heterosexual family plot” where “children, and the possibility of children, allow a future for humanity in its *current form* to be salvaged from the world’s end” (p. 182; emphasis added). Where I depart slightly from Lothian (2018), and align with Claire Colebrook (2017a, 2017b, 2017c), is that I do not believe it is humanity in its present form that is the object of redemption but humanity as it “should be”. Introduced in the Chapter 3, this “should be” is an eco-attuned humanity not “guilty of the Anthropocene scar” (Colebrook, 2017e, p. 84). Reproductive futurism has taught me that I am not supposed to shudder when I hear the likes of, “Children. What else is there to live for?”, but I do now, especially when it is the Commander speaking at June after a state-sanctioned monthly rape ceremony (Fortenberry &

Barker, 2017). While my example is perhaps too opaque, my point is that it is not humanity *as is* that merits saving. Instead, it is in the possibility of a shudder that a kind of responsiveness emboldened by Anthropocene-related imaginaries of the end of the world surfaces. In this shudder, I find an opening to explore the provocations posed above.

## **Anthropocene Stewardship**

### **Planetary Stewardship**

As explored in earlier chapters, Will Steffen et al. (2007) sort the Anthropocene into three stages: the Industrial Era (1800–1945) evidenced by fossil fuel expansion; the Great Acceleration (1945–2015) marked by economic globalization; and “Stewards of the Earth System?” (2015-onwards), a speculative period differentiated from the others both by human’s awareness of their destructive impact on the environment and that the end date is unknown. The scientists point out that people today are the “first generation with the knowledge of how our activities influence the Earth System, and thus the first generation with the power and the responsibility to change our relationship with the planet” (Steffen et al., 2011, p. 748). There are a multitude of ways that change might take place, but most proposals centre on “improved technology,” for example, mitigating practices of biofuels or geo-engineering feats of atmospheric aerosol injections (Steffen et al., 2007, p. 619). However, these scientists also recognize that technology, no matter how inventive, will “not be enough on its own....Changes in societal values and individual behaviour will likely be necessary” (p. 619). In short, they argue that humans need to become planetary stewards and fast.

Steffen et al. (2011) confirm that “the need to achieve effective planetary stewardship is urgent....we risk driving the Earth System onto a trajectory toward more hostile states from which we cannot easily return” (p. 739). I see this perspective as a counterpoint to the ecomodernists’ growth and development vision of the last chapter (Asafu-Adjaye et al., 2015;

Shellenberger & Nordhaus, 2011). For these Earth system scientists, planetary stewardship is the necessary relation humans must have to the earth and to the future. Without such caretaking, “the Anthropocene threatens to become for humanity a one-way trip to an uncertain future,” and this journey is all but certain to be increasingly “hostile” (Steffen et al., 2011, p. 739). These promoters of planetary stewardship do not always appear to be tuned in to the antagonisms already waged against lives made disposable in the here and now, let alone the past or future. Their worry is for an “effective Earth System stewardship to maintain a global environment within which humanity can *continue* to develop in a *humane* and *respectful* fashion” (p. 756; emphasis added). My added italics might be all the critique needed for now. That said, within this work there is some attention given to how global consumption practices—the primary driver of anthropogenic climate change—differ radically in relation to economic and geopolitical positionings.<sup>44</sup> My concern is if there is room for incommensurability in planetary stewardship? Is there an awareness of the differences between responsibility and response-ability?

Another widely-cited expression of planetary stewardship comes from the Ecological Society of America (ESA). They forward “planetary stewardship as a framework for science and society to rapidly reduce anthropogenic damage to the biosphere” (Power & Chapin, 2009, p. 399).<sup>45</sup> Interdisciplinary collaboration between natural and social scientists as well as “practitioners, resource harvesters, land managers, decision makers, and other concerned citizens” is needed “to explore solutions” to anthropogenic harm (Power & Chapin, 2009, p.

<sup>44</sup> Steffen et al. (2007) do caution about uncritically backing geo-engineering dreams and schemes. They state: “The cure could be worse than the disease” (p. 620). In a follow-up article, Steffen et al. (2011) also note that geo-engineering is a “symptom treatment” that leaves major causes and contributors of anthropogenic climate change unacknowledged and unaltered (p. 752). For example, aerosol injections into the atmosphere or carbon sequestration in underground reservoirs do nothing to stop emissions and might have dire, unintended, and deadly consequences (pp. 619-620). These are speculative technologies; they have not been invented or tested out yet. This argument connects back to the discussion of the precautionary principle in Chapter 4.

<sup>45</sup> In recent years “earth stewardship” has replaced “planetary stewardship” in ESA’s work though their focus areas of engagement are unchanged (ESA, 2019).

399). Outwardly, at least, the ESA formulation is an inclusive organization, and one where scientists are not necessarily atop the stewardship hierarchy. For the ESA, planetary stewardship entails understanding how “local actions and reactions to change could feed back to influence the trajectory of planetary change” (p. 399). While the ESA speaks of the planetary, their focus is on regeneration projects at the local level with a variety of partners (Power & Chapin, 2010). In their case study of the Taruk Tribe’s use of controlled burning to reduce wildfire spread, the ESA makes an obvious effort to highlight Traditional Ecological Knowledge (TEK) and honour an Indigenous praxis of multi-species renewal. ESA explains their goal is to “unify principles of ecological restoration with tribal community needs,” however, this relationship is presented as straight-forward and conflict free (pp. 147-149). Nevertheless, at minimum, the ESA acknowledges that there are other ways of knowing and caring for the world, which is not typically the case in the stricter Earth system and ecomodernist literatures. ESA’s attention to local-global scaling, situated knowledges, and everyday technologies adds importantly to Steffen and colleagues work.

My main hesitation with the concept of planetary stewardship is its apparent human exceptionalism. As summarized thus far planetary stewardship is primarily a matter of care, concern, and agency for humans. Stewardship originates in the individual and directs outwards from there. For example, Steffen et al. (2011) write: “Responsible stewardship entails *emulating* nature in terms of resource use and waste transformation and recycling” (p. 756; emphasis added). I interpret this as a call for humans to copy nature or at least match it in hopes of returning to a Holocene-like equilibrium. Emulate also has more antagonistic connotations, especially when considered in the context of other statements to the effect of, in the Anthropocene, “human activities now *rival* global geophysical processes” (Steffen et al., 2011,

p. 739; emphasis added). It is hard not to read this figuration of planetary stewardship as divisive. Such sentiments “unwittingly rehearse the division of cultural and natural worlds, not their inseparability” (Taylor, 2017, p. 1453).

Affrica Taylor (2017) notes that what often happens in the field of environmental education is that the interdependence of social, political, and environmental systems is mentioned before moving on to a reconfirmation of “humanist understandings of agency” that “position learners as potential environmental stewards” (p. 1449). In addition to environmental education, Taylor’s noticing is visible in Steffen and colleagues work. The scientists evoke the planetary to get at the interactivity of “social–ecological systems,” but ultimately make planetary stewardship a human endeavour alone (Steffen et al., 2011, p. 740). Who can be a planetary steward? For Steffen et al. (2007) this falls in part to those humans whose “individual behaviours” will have to change (p. 619). Moreover, the real human power to be planetary agents comes via technoscience development and human “creative invention through discovery” (Steffen et al., 2011, p. 755). Planetary stewardship, despite what might be its proponents’ best multi-system intentions, “reiterates human-exceptionalism through its renewed emphasis upon the transformative powers of collective (and individual) human agency” and ingenuity (Taylor, 2017, p. 1451).

There is an important difference between the “human inclusive Earth System” of Earth system scientists and the multi-species “collective ecology” that Taylor spotlights in her challenge to the anthropocentrism of stewardship pedagogies. The first type “assumes that humans need to band together to take collective action on behalf of the environment” (Taylor, 2017, p. 1451), whereas the second, which Taylor attributes to childhood ethnographer Karen Malone, is an ongoing ethical praxis of human and non-human relational encounter and

entanglement. This is “collective action” *with* the environment rather than solely “on behalf” of it (p. 1451). Collective ecologies strive to build “common worlds,” which include grappling with environmental, settler colonial, multi-species, and anti-Black inheritances on a damaged planet (Common Worlds Research Collective, n.d.; Nxumalo, 2019; Taylor & Pacini-Ketchabaw, 2018). Common worlds are neither innocent nor conflict free in this framework and are deeply engaged in supporting ethical relations with more-than-human existents. Part of my argument in this chapter is that the “humanist stewardship pedagogy” that Taylor challenges with her reconstructive model of common worlds finds form in the idealized parental figure of the next section (p. 1453). Both figures of the planetary and parental steward operate “from the premise that humans have exceptional capacities, not only to alter, damage or destroy, but also to manage, protect and save” (p. 1453), whether it be saving the child and/or saving the planet.

### **Parental Stewardship**

The challenge of planetary stewardship, as described mainly by Steffen et al. (2011), is for “humanity to become active stewards of our own life support system” (p. 748). I want to propose that what counts as a “life support system” in speculative texts are intimacies of parental care that come to stand in for humanity facing ecological peril. The texts storying the end of the world in this chapter connect to a love for monsters in the last through multi-layered questions of care: “whether we have cared enough, not just about and for each other and the planet but about and for the future” (Johns-Putra, 2016, p. 520). The Anthropocene provides one answer—humans have not cared nearly enough, or, at least, the kind of care provided has been fundamentally of the wrong sort. An important figure that emerges in care discussions, both in planetary and familial ones, is the child. This is at least partly because of the twinning of the child-figure with/as/to the future (Edelman, 2004), and how the child has long been in

metonymic relation with the planet. As Haraway (1997) expresses, the planet and child are “sibling seed worlds” that “concentrate the elixir of life as a complex system” (p. 174). Within this relation, the child’s “figuration...stands in the place of the complex systems at work in ecological materiality” (Sheldon, 2016, p. 5). In this way, the child-figure is “a kind of torsion” between planetary systems and intimate relations (p. 5).

Thinking-with the child-figure in the Anthropocene means that in addition to the normal unknowns of childhood a host of hyperobject concerns are added to the mix (e.g. climate change, geological temporality, deep time). In other words, the child-figure “can be a flashpoint of what are otherwise more abstract, and deferrable, concerns” (Clark, 2017, p. 4). Earth system functioning is described as complex while the child is assumed as something simpler. By distilling intricacies of planetary change into a smaller, manageable, and more familiar entity, “the figure of the child embodies climate-change concerns” (Johns-Putra, 2016, p. 523). As such, the child-figure captures “contemporary anxieties about whether we are doing enough to protect, shelter, and safeguard that for which we are responsible” (Johns-Petra, 2016, p. 520). I think that in the space of “that for which we are responsible” is the back-and-forth slippage of the figures of the child and planetary. What does it do to implicate childhood “in the geological formations and dynamics of our planet” and the future (Clark, 2017, p. 4)? A particular performance of this happens often in politics. Flipping through the television channels, I caught a moment of the June 27, 2019, Democratic Party primary debate. Candidate Jay Inslee was speaking to the importance of climate action by evoking his grandchildren: “on my last day on earth I wanted to look them in the eye and tell them I did everything humanly possible to protect them from the ravages of the climate crisis.” This is far from an isolated political tactic. The ASA presidents cited in the last section also make a similar move: “Stewardship on a planetary scale requires that

humans profoundly reorient their endeavours...and foster a personal commitment to the landscapes and ecosystems we wish our grandchildren to inherit” (Power & Chapin, 2010, p. 144). Performed in such statements is a form of Lee Edelman’s (2004) reproductive futurism with a new climate change face—even as it remains the “baby’s face” (p. 75).

The affective resonances of climate change are one reason for the growing popularity of cli-fi and other post-apocalyptic speculative genres (Colebrook, 2018b). Hee-Jung Joo (2018) reads blockbuster disaster films of this type as disclosing a race-futurity bind that mirrors the problematics of much wider Anthropocene discourse. These overlays find shared form in an anxiety and concern for the future of humanity, which are made more accessible and affectable through cinematic plot lines of the bionormative family. After an ecological disaster threatens mass extinction—films like *The Day After Tomorrow* and *2012* are but two examples—the absent fathers-scientists-patriarchs heroically redeem themselves and protect the planet by saving their sons and re-romancing their wives. A trope of many disaster films is that “the unpredictability of climate change” is averted by recomposing “the white, biological, nuclear family” (Joo, 2018, p. 4). Nuclear families are not observed intact in the present-day timelines of the two texts featured in this chapter, but the desire for the heteronormative family structure is an active absent-presence. Its loss is felt, mourned, and motivating in such a pronounced way that alternative kin assemblages are what is leftover rather than what might be a valued formation of care relations. In these texts, regaining the heteronormative bio-family is the potential means of rendering stable an ecologically insecure future.

Often in speculative post-apocalyptic texts, the failure to care for the planetary is exceptionally performed through the displacement of the heteronormative bio-family. Planetary precarity takes shape as a failure to maintain the hegemonic family form and is rectified by a

fierce commitment to bio-kin survival. In the texts of this chapter, the parental bond—focused on care from the adult towards the child—acts as a concentrated unit to think climate change. Care for the planet and care for the future are performed by way of care for the child. Familial relations serve as “a psychological and emotional touchstone” where planetary stewardship is reframed “as a question of one’s responsibility for one’s children” (Johns-Putra, 2016, p. 524). This cherished relationship allows for a more familiar and “manageable sphere in which to contemplate the uncontemplatable”—the end of the world (p. 525). *The Road* and *The Handmaid’s Tale* lend themselves to a reading where if the bio-bond is strong enough, care-full (full of care) enough, ardent enough, and durable enough then just maybe there is a possibility of survival amongst the Anthropocene-induced ruins of climate catastrophe. There might even be some form of hope possible through the heteronormative promise of a new generation and thus a sustained human species (Sheldon, 2016). My argument is that when care for the child becomes a proxy for care for the environment then planetary stewardship becomes a form of paternal stewardship. This raises important questions: what might be the “profound drawbacks to reading parental love as the antithesis and antidote to environmental destruction” (p. 521)? What is the relation of parental love to ecological care? What if care in one domain means destruction for the other? What if abandoning one means saving the other?

In a reframing of the planetary, Noël Sturgeon (2010) refigures reproduction as “a materialist and a planetary issue—that is, all reproduction comes with consequences for the global environment, economies, and social practices” (p. 108). As such, a multi-layered sort of environmental reproductive justice can otherwise be understood as “planetary reproduction” (p. 118). In fleshing out this concept, Sturgeon draws on the foundational work of Black feminists from the United States and Global South and puts their ideas of reproductive justice into

conversation with anthropogenic climate change. Sturgeon wonders: “What happens if we refuse to separate human fertility and the fertility of the earth by examining the reciprocal relationship between the reproductive capacities of humans and what gets called ‘the environment’ (i.e., animals, plants, nature)?” (p. 108). After Chapter 4, I would add the possibility of also thinking and acting with care for the infertile in kinship relations (Klein, 2014a; *Out of the Woods*, 2015b). Thinking back to Klein rocking on the boat deck, how can we care for infertile kin—human and earthly—in intimate and regenerative ways?

To construct the concept of planetary reproduction, Sturgeon (2009) turns to pop culture tales of environmentalism written for children (p. 104). Texts studied include *The Lorax*, *Captain Planet*, *March of the Penguins*, and *The Lion King* amongst others. Within this genre is a prominent association of “homosexuality, evil, and environmental destruction, coupled with an anxiety about the successful reproduction of white middle-class families” behind a surface-level promotion of “liberal racial equality” (p. 104). The nuclear, white, suburban, middle-class family is presented as “natural, normal, and the best for the planet” (p. 104). Insufficient attention is given to the links between this family form and consumptive complicity. When this family structure is presented as a guarantor of species and planetary survival, instead of a contributor to its destruction, a scenario results “in which we are promoting environmental damage by naturalizing heteronormative patriarchy, preventing us from imagining and putting in place alternative ways of living more lightly on the earth” (Sturgeon, 2010, p. 107). Kin-making and stewardship in these environmental tales is narrowed to a “heteronormative family romance” (p. 126). In framing environmental matters of care and concern with reliance on a white, bio-defined, heteronormative family, these texts “can be read as participating in the framing and narrating of ecological demise through a distinct racial lens. They are, in fact, racializing the

Anthropocene by depicting the end of the white world as the end of the world” (Joo, 2018, p. 4).

The racialized interconnectivities of the heteronormative family, bio-care, preservation of the human species, and the threat of a dying earth must be studied together.

### **Re-Reading *The Handmaid’s Tale* in the Anthropocene**

My fascination with Hulu’s adaptation of *The Handmaid’s Tale* relates mainly to the coexistence of repressive reproductive politics with progressive policies of climate action. It terrifies me that the televised world of Gilead appears to be less polluted, less racist, and less consumptive than this one. In this section, I want to grapple with how care and desire for the child-figure smooths over the coming together of violent governance with environmental stewardship. *The Handmaid’s Tale* largely accomplishes this connexion by elevating the child-figure to a position of indisputable good. To paraphrase Edelman (2004) once more, what would it mean not to fight for children—is there even another side? What if both sides think they are protecting children? Everyone and everything in Gilead turns on the child, even the resistance movement. In an interview with *Time* magazine, showrunner Bruce Miller characterizes Gilead in this manner: “in a world where birth rates have fallen so precipitously, fertility would trump everything” (Dockterman, 2017b, para. 14). In a world dominated by a fertility crisis, where one in four babies are born with serious birth defects as a direct consequence of environmental toxins, how could the healthy child not be precious, protected, and desired? What does privileging the figure of the child in this way do? What gets displaced? Sheldon (2013) offers a complex provocation:

Although never foregrounded in the novel, the conjunction of toxic pollution, infertility, and mutation suggests that Gilead’s militarized reproductive futurism responds as much to the uncontainable liveliness of biological and ecological forces—including those extra-diegetic reproductive technologies whose absence the novel so conspicuously

underscores—as to the threatening break up of hetero-patriarchy in pre-coup America.

(para. 17)

How does the “uncontainable liveliness” of ecology get embedded in and embodied by the child-figure? How does the child provide justification for what Sheldon calls “militarized reproductive futurism”? It is also within these complexities that *The Handmaid’s Tale* is able to smuggle in a compassionate, conservative sanctioning of naturalized parenthood, specifically bionormative motherhood. While not fronted in the television adaptation either, which post-dates Sheldon’s (2013) observations of the novel, there are a few pivotal scenes that allow for a grappling with the intersections of ecological toxicity, post-racial futurism, and bionormative care.

Atwood wrote *The Handmaid’s Tale* the midst of the 1980s pro-choice/pro-life abortion debates in the United States and before the fall of the Berlin Wall. The Hulu adaption began airing in 2017 in the midst of renewed political efforts to restrict abortion rights, the global rise of right-wing populism, and just before the nightmare election of Trump and the child border separation polices that the series so aptly foreshadows.<sup>46</sup> The speculative world of Gilead occupies a large part of the eastern United States, and its temporality is presented as a near dystopic future. Given the political context of both the novel’s and television series’ emergence, the world of Gilead does not feel especially futuristic or fictitious. As a popular hashtag captures: #MakeMargaretAtwoodFictionAgain. The television series largely follows Atwood’s plotline for its first season, but currently in post-production for its fourth season, the series has moved well beyond its source material.

<sup>46</sup> Several mentions are made in this chapter to the ongoing child separation policy of political asylum seekers entering the United States from South America. Child-parent separation has long been a technology of settler colonialism on Turtle Island. Métis artist Christi Belcourt (2018) shares, “One Indigenous newborn a day is apprehended from the arms of their mothers in Winnipeg hospitals by the province of Manitoba.” A tweet by ndnviewpoint (2018) cites a documentary called “Stolen Childhoods,” which points out, “by the 1960s, about 1 in 4 Native children in the US were living apart from their families.” Any condemning of American policy without also considering what is happening in Indigenous communities is akin to a “settler move to innocence” (Tuck & Yang, 2012).

*The Handmaid's Tale* is a work of speculative fiction, described as such by Atwood (2012) in an article in *The Guardian*:

I made a rule for myself: I would not include anything that human beings had not already done in some other place or time, or for which the technology did not already exist. I did not wish to be accused of dark, twisted inventions, or of misrepresenting the human potential for deplorable behaviour. The group-activated hangings, the tearing apart of human beings, the clothing specific to castes and classes, the forced childbearing and the appropriation of the results, the children stolen by regimes and placed for upbringing with high-ranking officials, the forbidding of literacy, the denial of property rights: all had precedents, and many were to be found not in other cultures and religions, but within western society, and within the “Christian” tradition, itself. (para. 11)

Speculative fiction makes commentary on the present by worlding a future, and this future all too often repeats the violences of the past. Atwood has also repeatedly distanced herself from the genre of science fiction, including an on-stage debate with Ursula Le Guin, but it is a distinction I am not so bothered by. “Science fiction has monsters and spaceships; speculative fiction could really happen,” is the gist of Atwood’s dismissal (cited in Potts, 2003, para. 2). A fair response might be that *The Handmaid's Tale* has its fair share of monsters—mutant bodies and evildoers—just not monsters of the extra-terrestrial sort.

I am particularly interested in Atwood’s take on speculative fiction because of its connections with Latour’s (2011) and Benjamin’s (2016a, 2019) thoughts on technology explored in Chapter 4. Atwood has been taken up as a call to produce fiction that “imagines a future that could conceivably happen *without* any advances in technology from the present” (Armstrong, 2018, para. 3; emphasis added). However, technology does not sit still. To this,

Benjamin's work on "race as a technology" seems to offer a rejoinder. Race as a technology captures how technology modifies its form to shapeshift social divisions into the future; race is a technology "designed to separate, stratify, and sanctify the many forms of...social injustice in the architecture of everyday life" (p. 26). As a technology, race is "innovative and future-oriented," so speculative fiction has an essential function to play in "anticipat[ing] and interven[ing] in new racial formations" (Benjamin, 2016b, p. 1). If it can be imagined then maybe it can be prevented, or, in other cases, created. Unlike Benjamin's (2016b) "Ferguson is the Future," *The Handmaid's Tale* uses science and technology very sparingly. It is not only that there are no new technological inventions, it is that there is almost no technology at all. Both the novel and the television show build a world where technology is one of society's most corruptive sins. In Gilead it is not about innovating and developing new technologies, as Latour (2011) suggests, but about getting rid of old ones.

Gilead's technophobia is evident in how its representatives explain the fertility crises. The Handmaid's custodial-figure at the re-education Red Center, Aunt Lydia, lectures in an indoctrination class: "They filled the air with chemicals and radiation and poison, so God whipped up a special plague: the plague of infertility....As birthrates fell, they made things worse—birth control pills, morning after pills...their Tinder" (Miller & Morano, 2017, 16:25). While the referent of the "they" bounces between women and all humans, technology also seems a fair substitute—in this case, technologies of reproductive health, sexuality, and environmental destruction. In other words, fossil fuels and Plan B are simultaneously culpable. Additionally, despite Gilead's fertility crises, all assisted reproductive technologies are banned. There is no in-vitro fertilisation, cryopreservation, or intracytoplasmic sperm injections. The only baby-making allowed is a forced heterosexual transaction between man and Handmaid. Television, computers,

money, smartphones, and books all seem to be banned too. Exiled from Gilead to the Colonies, Unwomen work with broken spades to dig up polluted earth. Trucks and machines that could do the work more efficiently (but with more environmental pollution) are nowhere to be found. The Handmaids have even been stripped of their names, which is a different sort of technology. For example, June, who is never named as such the novel, is known only as Offred (i.e., Of Fred) to mark her as property to her master Commander Fred Waterford.

According to Gilead doctrine, in the world before the crises—this world—technologies were loved too much. They promoted immorality and contributed to the environmental disaster. The only kind of love allowed in Gilead is for the child and God—almost interchangeable entities. “Think of yourselves as seeds,” Aunt Lydia eerily tells the Handmaids, “the future is in your hands” (Atwood, 1986, p. 19). “It is not her hands,” Sheldon (2013) retorts, “that bear the future” (para. 14). A lone technology still cherished in Gilead therefore is the fertile women’s womb. Handmaids are “two-legged wombs, that’s all: sacred vessels *ambulatory chalices*” (Atwood, 1986, p. 176). Handmaids are a technology of childbirth. After one of the Handmaids, Janine, has her eye gouged out as a punishment for disobedience, June’s best friend Moira reflects: “We’re breeding stock, you don’t need eyes for that” (Miller & Morano, 2017, 22:10). *The Handmaid’s Tale* is Lauren Berlant’s (1997) infantile citizenship to an nth degree: the foetus trumps the Handmaid—the child trumps everything else.

### **Born Pre-Polluted<sup>47</sup>**

As mentioned above, the world of Gilead experiences an unspecified ecological catastrophe which induces a fertility crisis. The crisis provides the pretext for a puritanical, elitist

<sup>47</sup> I first encountered the phrase “born pre-polluted” in a WRISK project guest blog post by Norah MacKendrick and Kate Cairns (2019) entitled, “Born pre-polluted: Mothers and environmental risk,” in which they hyperlink to a report by Suzanne Reuben (2010) for the US President’s Cancer Panel which used the phrase at an earlier point. A Canadian report by the Environmental Defence (2013) organization also uses the phrase in their title.

male covenant to usurp governmental power. Women's rights are quickly curtailed, and women's bodies are strictly governed, monitored, used, and regulated by the state. Gilead stands as a totalitarian-theocratic regime maintained by threat, surveillance, indoctrination, and violence. Fertile women are rounded up, re-educated, and re-distributed to high-ranking men and their wives to reproduce. A monthly procreation ceremony is held in the family house—the ritualized theatrics of which would be comical if they did not centre on rape. The Handmaids have the opportunity to reproduce with three different families before they are exiled to the toxic wastelands of the Colonies. Given this, Heather Latimer (2009) reads the novel as “a picture of what the world might look like if a woman's only reproductive ‘choice’ is pregnancy or death” (p. 213). While this has much truth to it, Sheldon (2013) extends a third possibility “that splits open the opposition of pregnancy and death” (para. 16). This possibility is the “unbabies and the mutagens responsible for their deformities” (para. 16). Unbabies, or Sheddies as they are also called, are babies born with severe birth deformities and a small chance at survival. Atwood (1986) gives the background information needed to contextualize Sheldon's proposal:

The chances are one in four....The air got too full, once, of chemicals, rays, radiation, the water swarmed with toxic molecules, all of that takes years to clean up, and meanwhile they creep into your body, camp out in your fatty cells. Who knows, your very flesh may be polluted, dirty as an oily beach, sure death to shore birds and unborn babies. (p. 112)

In her work on natality, Arendt (1958) notes that the “the force of life is fertility” (p. 108). Sheldon (2013) performs an Anthropocene twist on natality to consider how radiation, chemical spills, toxic soils, and other mutagens make it so “biological reproduction is hardly the only source of liveliness” anymore (para. 18). Perhaps Arendt (1958) gestures towards such an awareness with her idea of the “surplus” of life in “its potential multiplication” (p. 108), but, for

the most part, natality remains within a biopolitical frame. However, in the Anthropocene, the “force of life” is not only or mainly fertility but toxic liveliness. Gilead’s babies are born pre-polluted (MacKendrick & Cairns, 2019), and so are babies in this world. How does mutational liveliness challenge a concept of reproductive futurism that relies on an idealized and bionormative figure of the child (Edelman, 2004)? What futurity does a toxic-child figure forth?

I am most drawn to speculative texts of climate catastrophe that put the promise and premise of bionormative reproductive futurism under pressure. The challenge these texts must engage entails how “to consolidate the explosion of other-than-human liveliness under the figure of the child at the same time that it suggests an accelerating horizon of unrecuperable vitality” (Sheldon, 2013, para. 18). In other words, the “other-than-human-liveliness” in *The Handmaid’s Tale* consists of all the toxic pollutants and toxic bodies linked to the environmental disaster but for which each new child offers a chance at overcoming and therefore shifting the course of the future. However, what each Unbaby does is reconfirm an inability to fully contain and control toxicity, or, as Sheldon (2013) names it above, the “horizon of unrecuperable vitality.”

The Unbabies and the Unwomen of the Colonies—those who do not die even though their liveliness and lifetimes are severely reduced—are a form of existence as toxic ongoingness. Toxicity in Gilead is not distributed equally nor entirely controllable, and its unrestrained appearance interrupts the purity narrative of the totalitarian regime. With the figure of the Shredder baby, “*The Handmaid’s Tale* shows us the reproductive future behind the sacred child of reproductive futurism” (para. 19). Unlike Edelman’s (2004) conceptualization, the reproductive futures of #AnthropoceneChild are pre-polluted in both their symbolic and material existences. As pointed out by Sheldon (2013), the only baby born in the space of Atwood’s novel is an Unbaby, and, as such, represents a failure of “militarized reproductive futurism” and

“hetero-patriarchy” to control the environment (para. 17). Related to the last chapter, the Unbabies of Gilead could have been a lesson in “loving our monsters” or a “kinship of the infertile,” yet, in the revisioning of *The Handmaid’s Tale* for television, the Shredder-child is not for a visualized world. The novel’s baby is reborn onscreen as a healthy, white, perfectly able-bodied baby. And the maternal relation—the baby and her mother Janine—leads into a pivotal scene from which to consider the idolizing of bionormative care, but first a closer look at the text’s primary maternal protagonist Offred/June.

### **Bionormative Motherhood**

In the novel, Offred is a passive protagonist. As the book’s narrator, readers are privy to her inner thoughts and they are not those of a rebel feminist hero. Nevertheless, we are given enough insight to develop some empathy. In the pre-Gilead world of the novel, Offred has trouble accepting her mother’s feminist activism, hesitates to embrace her best friend’s queer sexuality, and only notices the world changing when it is too late. As a captive Handmaid, she never really desires to join the resistance and seems to give up and accept her position in the latter half of the novel. The book ends with Offred pregnant and presented with a possible escape. When a black van arrives to transport her, readers are not sure if an ally has arranged her getaway or if she is being arrested. As the star of a television series, this ambiguousness and passiveness will not do. Audiences are much less-likely to rally behind a woman who does not stand up against Gilead and fight. Television series need heroes; patriarchal worlds need feminist de(con)structors. I desire June, not Offred.

Compassion for television’s June is immediately built as the audience bears witness to the monthly rape ritual in the first episode (and in the second episode and again and again after that). Support is fully secured with a flashback of her family’s failed escape attempt to Canada.

Turned away at the border, June and her daughter, Hannah, separate from her husband and run through the woods. A mother gripping her child tight and running, hiding, stumbling, and falling before having her child ripped from her arms by ICE lookalikes plays out like a *Law & Order* ripped from the headlines' episode. Despite the trauma of having her child stolen away, June is witty, smart, and always plotting her escape. Escape, though, might not be the right word because the moment June is assured safe passage to Canada late in season two, she turns it down, turns around, and heads back to Gilead. Why? Hannah is still there. June's goal is reunion not escape (or reunion AND escape). June's entire motivation is to get her child back, and any thoughts of ending Gilead's oppressive policies and practices are secondary. Especially in the second season of Hulu's adaptation, *The Handmaid's Tale* plays into the post-apocalyptic trope that puts "the reunification of the heteronormative white family at the center of the drama" (Fojas, 2017, p. 11). The identification of white here does not quite fit, as June's daughter and husband are identified as Black. However, as will be examined, the bionormative whiteness of the hegemonic maternal bond persists nonetheless.

*The Handmaid's Tale* television series has been a huge critical and popular success. Women dressed in the Handmaid's crimson robes and white bonnets fill state legislature buildings to protest against laws that will further discipline their bodies; tattoos of "Nolite te bastardes carborundorum" [Don't let the bastards grind you down] imprint on bodies and get lots of likes on Instagram; countless posts warning #HandmaidsTaleIsNotAnInstructionManual follow each episode and/or problematic government policy announcement. Amidst this popularity, Jennifer Maher (2018) troubles "how the series mobilizes its cultural outrage" (p. 209), and I would like to extend her provocation to consider how it affectively shifts planetary stewardship towards parental stewardship. Maher asks:

In order to most effectively “warn” us against repressive reproductive futurity, does *The Handmaid’s Tale* marshal its own kind of neoliberal reproductive fantasies of the substance (if not the sanctity) of the nuclear family, with its roots in romantic love and melodramatic maternity? According the narrative’s emotional logic, Gilead is the *most* horrifying of places not only for its cruel gender tyranny but for its distortion of the most “primary” of human relationships: heterosexual love that produces biological children. (p. 209)

I would add, as Maher entertains later in her article, that the main relationship *The Handmaid’s Tale* uplifts is not the heterosexual couple but the maternal bond. The emotional horror of June and Hannah’s separation happens not once but multiple times. On one occasion, Commander Waterford’s wife, Serena Joy, arranges for her and June to go on a long drive outside the city. After a few hours, Serena gets out of the car, locks June inside, and knocks on the front door of a house. Hannah emerges and Serena puts her arm around the child as they engage in a brief conversation. June is left screaming and trashing around in the car. This glimpse of her child is not given out of kindness but as an assertion of Serena’s control and a threat to June to stay in line. Serena knows the power of the bio-bond is more effective than any physical punishment she could inflict. Another important moment involves the wife of Commander Warren Putman who tells a story to Serena about how Janine aggressively tried to bite her hand when she prematurely removed the feeding infant from her breast. Maher reframes the moment as implying: “Look Out Gilead...Natural Motherhood is Feral and it is Not To Be Fucked With” (p. 210). Moments like these are “analogous examples of the same fundamental horror—the disruption of heteronormative biological motherhood, the veritable *sina-qua-non* of moral depravity” (p. 210). It is not ultimately the sexual violence or killing but the separation of mother and child that hits

home most affectively in *The Handmaid's Tale*. A powerful example of this involves Janine and her newborn baby in an episode called "The Bridge" (Tuchman, & Dennis, 2017).

Handmaids typically remain in their Commander's household for a few months after the birth of their child to breastfeed. After their babies are weaned, they are relocated to another home so they can get to work reproducing again. Janine was moved earlier than usual, and viewers find out the reason why before "The Bridge" concludes. In the pivotal scene, June is awakened by a panicked Serena who tells her Janine is threatening to jump off a bridge with her baby. Earlier that night, Janine had abducted her baby from the Putman's house. When June arrives at the blocked-off bridge there are guards, guns, Aunt Lydia, and the Waterford and Putman families. Commander Putman attempts to talk Janine off the ledge which prompts her to scream out details of their illegal sexual affair and his broken promises for them to form their own happy nuclear family. The Putman wife tries to appease Janine by inviting her back into the household, but Janine does not believe her. As Janine gets closer to the edge, June comes forward to appeal to her maternal side: does she really want to hurt her baby? Is this how to best protect and care for her innocent child? June convinces Janine to hand her the baby, and, as soon as she does, Janine leaps off the bridge before the guards can reach her. Janine's rebellion ends with her in a coma from which she later physically recovers enough to be banished to the Colonies. Maher writes about how she watched with bated breath as Janine crept closer to the edge, and that she was relieved when Janine handed her baby over before she jumped. But then Maher catches herself and offers a description that equally captures my reaction:

I was relieved *when it was just her*. The emotional stakes of *The Handmaid's Tale* are amped up to such an extreme degree that the attempted suicide of an innocent woman who has already had her eye gouged out for disobedience elicits relief from its (feminist)

audience because *at least the baby didn't die*...in siding ourselves against Gilead, we can also find ourselves, albeit unconsciously, emotionally complicit with it....It wasn't so long ago that feminism insisted on a deconstruction of biological essentialism in the face of such calls via a rigorous analysis of the repression inherent in heterosexist assumptions of the meaning of mothers, fathers, romantic love, and family. (p. 210)

It is important to be clear that this is not about criticizing those who live and love within this family form, but about the heterosexism implicit in prioritizing a naturalized form of sacrificial love to be waged at the “shrine of the sacred Child” (Edelman, 2004, p. 24). Maher's concern, one that I share, is if *The Handmaid Tale's* “dramatization of woman-as-womb might reinforce a neoliberal version of the very same claim” (p. 210). Remember June's transition from the passive Offred of the book (who never saw her child again after their initial separation) to the brave resister whose primary motivation is to get Hannah back. The figure of “June will rebel not because she has been forced *into* maternity but because it has been *denied* her” (p. 210).

The undertones of sacrificial love and bionormative motherhood are important to flesh out. *The Handmaid Tale* promotes a maternal form of sacrificial love which justifies rather than juxtaposes violence and survival as moral values. Povinelli (2009) asks how “discourses of sacrifice and sacrificial love coordinate violence and redemption in such a way that suffering and dying, the mortification of bodies, are read from the perspective of the redeemed end of a horizontal time” (p. 77). Janine has one functioning eye, long-term psychological damage from abuse pre- and current Gilead, has her child ripped from her arms, and is condemned to die a slow death in the Colonies—but at least her child is “safe.” Safe to be raised by the leaders of a repressive regime? Safe to be subservient? Safe to never learn to read or write or think for herself? Safe to grow up in a privileged household before being forced to become a Handmaid

herself? Furthermore, Janine's redemption passes in a moment—it begins at the same time as it ends—when she hands June her baby and jumps. Through June, though, the potential for redemption is kept alive. June has transformed from passive (Offred) to active (June), victim to hero, ignorant to knowing, and so she will be rewarded by getting Hannah back. All the violence June suffers will ultimately be worth it, or so the typical story goes; violent oppression does not deter her from her goal but makes her stronger and more focused, a dangerous lesson in real life. I feel confident wagering almost anything that June and Hannah will be together again before the series ends. That is what happens when you act the hero and when bionormative motherhood is the superpower. And it is not only the speculative world of Gilead that is supporting a narrowed valuation of what counts as maternal care.

Stepping outside speculative texts for a moment, I turn to Kate Cairns, Josée Johnston, and Norah MacKendrick's (2013) work on the organic child and how this idealized figure embodies "expectations about childhood and maternal social and environmental responsibility by emphasizing mothers' individual responsibility for securing children's futures" (p. 97). Behind the figure of the organic child lies a hegemonic understanding of motherhood delimited by care and protection narrowly and traditionally defined. How does this link with *The Handmaid's Tale*? These care-efforts are lived out at an emotional level that can be both empowering and guilt producing. Taking care of the organic child entails "practices and ideals [that] rest upon maternal values of love, care, and responsibility" that are intensified in and by the toxic potential of the Anthropocene (p. 113). This is a form planetary stewardship individually enacted by buying and feeding the right foods from the right places to the right kind of child from the right sort of mother. Planetary stewardship slips into parental stewardship as the primary maternal responsibility becomes "producing a healthy child and a healthy planet" (p. 98), as if they are

one and the same. The figure of the organic child updates the trope of the child as the “promise of the future” (p. 98). To have a future—to save the future—to be the future—the organic child must be a “pure child,” kept away from “harmful impurities of an industrialized food system” (p. 98).

*The Handmaid’s Tale* makes clear that impurities are not limited to agriculture and/or consumerism but are cumulative and co-occurring over many infrastructures. To make a bad pass at a cliché: purity is not only food deep. What Gilead promises is religious purity, sexual purity, racial purity, and environmental purity. While Cairns and colleagues critically link the organic child to neoliberalized, individualized consumption practices, this same kind of connection is not exactly transferable to the speculative economies of Gilead. In Gilead there is no money and all food are organic. Where this world and Gilead do overlap, however, is in several themes the co-writers identify as representative of a mother’s care for the organic child: (1) protecting purity, (2) feeding the future, and (3) gendered labour/emotional labour (p. 103). Gilead rationalizes its fundamentalist theocratic practices via recourse to the child: “Traditional values are at the core of everything we do here,” Commander Waterford exhorts, which includes so-called natural childbirth, natural foods, and natural gender roles (Hauser & Sigismondi, 2017, 14:43). Traditional also includes the gendered and emotional sacrificial love the Handmaid’s have for their bio-children. In the next section, I look at how organic food is mandated for the Handmaids, especially expectant mothers, in order to safely feed the child/future. My guiding matter of care and concern is how *The Handmaid’s Tale* performs the environmentalization of care.

### **The Environmentalization of Care**

The environmental aspects of *The Handmaid’s Tale* have not received much attention in scholarly or popular circles. Most critical work has focused on a feminist critique of gendered

violence. Such work is important, and my intent is not to diminish it, but to suggest that a feminist plus ecological lens might add something significant to the discussion. The most detailed depiction of Gilead's environmental stewardship occurs in an episode midway through season one titled "A Women's Place" (Hauser & Sigismondi, 2017). In this episode a Mexican trade delegation visits Gilead and the proverbial red carpet is rolled out including a formal banquet. Up until this point, by reading between the lines, viewers assume that chemical pollution and radioactive waste are at least partial causes of the fertility crises. We learn in this episode that Gilead's corrective environmental measures have resulted in fertility rates for its Handmaids well above the global average. For their part, Mexico has not had baby born alive in more than six years.

In the world of Gilead, environmental stewardship is a key component of what Serena, once a successful "domestic feminist" activist and author herself, calls a "healthy and moral way to life" (15:10). In a flashback reveal, we learn that it was Serena who first suggested the doctrine of "fertility as a national resource, reproduction as a moral imperative" (18:30). Stewardship tactics of reducing carbon emissions, restoring healthy soils, limiting fossil fuel usage, and making sure the Handmaids only eat organic foods are all steps towards achieving this goal. In this way, a clean environment goes hand-in-hand with what counts as morality in Gilead, and it is a by-all-means-necessary kind of go(o)dliness. "Gilead's leaders would have people believe that it's the marriage of moral righteousness and a clean environment," Corey Plante (2017) points out, "that inspires fertility in its Handmaids....By their logic, God blesses Handmaids with fertility because of their green initiatives" (para. 3). It is this equivocation I want to dig into more.

Some key moments of dialogue in the episode are worth repeating. “We’ve transitioned to a completely organic agricultural model,” Commander Waterford tells the Mexican Ambassador (13:40). Serena follows-up later with a statement that Gilead has “reduced its carbon emissions by seventy-eight percent in three years” (15:45). Overhead in passing is how the citrus orchards are progressing “really well,” even enduring the “new weather patterns” (14:03). At the evening banquet, Serena brags of Gilead’s “great strides cleaning the environment and restoring a healthy and moral way of life” (34:30). Again, the environment, morality, and fertility are interwoven. Serena insists that oranges feature in the banquet presentation, but the true highlight of the evening festivities is the parade of healthy young children born to the Handmaids. The episode makes clear that fertility has replaced money as the world’s most marketable resource (Plante, 2017), and, as it turns out, it is the Handmaids that are up for trade with the Mexican government. Demonstrating naiveté more expected of the novel’s Offred, June assumes the delegation is after oranges. “Gilead only has one thing that anyone wants,” another Handmaid whispers in a corrective fashion to June at the dinner (37:25). The next morning, June summons her courage and dangerously steals away a private moment of time with the Ambassador. June tells her of the horrors for women in Gilead, but the potential ally turns her back—the procreation potential is too much. “What are you gonna trade us for? Fucking chocolate? We’re human beings,” June angrily pleads (50:12). It turns out “the threat of extinction inspires more than just the United States to throw morality out the window” (Plante, 2017, para. 10).

Outside the urban centre of Gilead are the Colonies, which are vast radioactive wastelands. This is where those who break with Gilead’s rigid theocratic code are expelled. They are wastelands because the soils are full of chemical pollutants but also because this is where

disposable bodies are sent to labour and die. The inhabitants are mainly Unwomen—women who are too old, too infertile, too rebellious, and too queer. The scenery of the Colonies resembles the landscape of *The Road* explored in the next section: dark, dusty, and dangerous. In a season two episode called “Unwomen” (Miller & Barker, 2018), viewers are transported to the Colonies for the first time. All previous mentions were verbal hints only. Unwomen are shown toiling all day in the fields where they shovel toxic soil into bags for removal to who knows where. Their nails fall out along with their teeth; their skin is raw and broken; their bones protrude from lack of food. The Aunts that guard the workers have breathing masks, but these are more of a status reminder than any real protection from the radioactivity. In Atwood’s (1986) novel, Moira gives the only detailed description of the Colonies:

In the Colonies, they spend their time cleaning up. They’re very cleanminded these days. Sometimes it’s just bodies, after a battle. The ones in city ghettos are the worst, they’re left around longer, they get rottener. This bunch doesn’t like dead bodies lying around, they’re afraid of a plague or something. So the women in the Colonies there do the burning. The other Colonies are worse, though, the toxic dumps and the radiation spills. They figure you’ve got three years maximum, at those, before your nose falls off and your skin pulls away like rubber gloves. They don’t bother to feed you much, or give you protective clothing or anything, it’s cheaper not to. Anyway they’re mostly people they want to get rid of. They say there’s other Colonies, not so bad, where they do agriculture: cotton and tomatoes and all that....I’d say it’s about a quarter men in the Colonies, too.

Not all of those Gender Traitors end up on the Wall. (p. 248)

The Wall refers to a space of public hangings, an element repeated in the television series.

Differences between screen and page pertain to men being present in the Colonies and to the

multi-level arrangements (i.e., different places for body disposal, toxic removal, agriculture), neither of which are evident in the adaptation. On television there is only one form of Colonies—deadly—and it is for the Unwomen alone.

Despite the dreariness and deathliness of the Colonies, what comes through the darkness of this episode is the Unwomen caring for each other. They are shown practicing love for each other's monstrous degradations. The Unwomen find moments of kindness, friendship, and love within the monotony of enforced labour and gradual poisoning. They bandage each other's cracking hands; exchange gentle looks, words, and touches; share what little medicine has been smuggled in; and brew mint tea for one another. In the episode, there is even a low-key commitment ceremony. The Unwomen form a "kinship of the infertile" on multiple scales (Klein, 2014a). Reproductively, they are infertile; agriculturally, they labour in toxic fields; futuristically, they die a gendered, slow violence together. I am not trying to romanticize their queer-kin care: this care is an ephemeral means of survival against the backdrop of inevitable death. Nevertheless, there is a sort of inarticulable beauty in their refusal to abandon one another and practice a toxic common worlding.

On the one hand, Gilead's extreme misogynistic reproductive policies are violent and should be condemned. FULL STOP. On the other, their environmental policies and practices appear to be quite advanced—progressive even—though not many details are ever revealed. But can Gilead's regenerative stewardship practices, such as organic farming and the curtailing of emissions, be recognized as some form of environmental justice? Can environmental stewardship be separated out from the political, physical, and religious violence of the regime? I argue that it cannot, or, at least, I desire that such a separation is not possible. I also think that this concurrence (evil political regime plus good environmental policy) is where speculative texts are

especially valuable. I mean this in the sense that Benjamin (2016b) refers to as speculative stories providing anticipatory assistance for imagining and intervening in futures. What political programs will be introduced as this world becomes warmer and more toxic?

My refusal to unlink violent practices from environmental stewardship in *The Handmaid's Tale* connects to what Anna Reser and Leila McNeill (2017) have named the text's "logic of cultivation" (para. 1). This logic revolves around the primacy of reproduction and its intra-affectivity with the sacredness of the child. For example, Reser and McNeil summarize Gilead's governmental rationale as:

A clean environment promotes health and decreases infant mortality. Organic farming reduces concentrations of pesticides that are believed to be a contributing factor in the fertility crisis. Gilead's economy is centered around reproduction instead of the functioning of a capitalist free market, and its natural resources have been replaced with fertile women. (para. 3)

The common devotional refrain amongst members of Gilead is "Blessed be the fruit." This reminds the Handmaids of the child-bodies they must bear, the organic food they must eat, and also that their bodies are a valuable commodity to be traded like produce. In this way, "the Handmaids are transformed into the image of nature itself, the ultimate erasure of their humanity" (para. 7). In work on planetary stewardship outlined earlier, Steffen et al. (2011) approach the Anthropocene as a call "to fundamentally alter our relationship with the planet we inhabit" (p. 739). Despite the organic food, reduced CO2 emissions, and regenerated soils, *The Handmaid's Tale* is definitely not the kind of alteration needed. A conversation between June and Commander Waterford catches some of this dilemma: "We only wanted to make the world better," says the Commander. "Better?" June questions. He continues, "Better never means better

for everyone. It always means worse for some” (Barker & Fortenberry, 2017, 34:08). This is a massive impasse that planetary stewardship must grapple with. Another is how planetary and parental stewardship can perpetuate racialized oppressions.

### **Post-Racial Parenthood**

*The Handmaid's Tale* provides a serious problematizing of misogynistic totalitarianism and religious fundamentalism, but how this censure is achieved matters. Does critique lose some of its force when racialization is not taken into account? Ben Merriman (2009) points out that Atwood's novel offers “an archetypal account of female exploitation, but the stand-in for this universal experience is Offred, a White, college-educated American” (p. 43). I do not know the statistics but I wager this same demographic makes up the largest share of the show's viewing audience. In this way, the novel's affective horror is “basically a nightmare vision in which white, college-educated women like Atwood [and June] are forced to undergo the experiences of women of color” (Berlastsky, 2015, para. 4). Noah Berlastsky (2017) notices that fiction developed in, by, and for the Global North has a horrible habit of framing “dystopic stories” as a thought-experiment about “what if this atrocity had happened to white people instead?” (para. 1). It is hard not to read Atwood's novel in this light, especially with the recognition that one of the “terrible things about being a handmaid is that you cease to be white” (para. 6). By this Berlastsky is referring to the privileges granted by whiteness—freedom of movement, freedom to read, freedom to work, freedom to leisure, freedom to travel, freedom to not conceive—that blur lines between the institutional and the personal and the fictional and the real. As a middle-class, educated, attractive, employed, white-settler married woman, June is a figure of the least-likely victim given the way power is typically distributed in this world. More generously, perhaps this is Atwood's point: it could happen to anyone; your privilege will not protect you

forever; pay attention. It is a perspective repeated in much Anthropocene scholarship, for example, in the figuration of lifeboat ethics looked at in Chapter 3 (Chakrabarty, 2009). Where *The Handmaid's Tale* hits a big limit is that there is little indication that oppression is intersectional, particularly when fertility is threatened.

Rather than engage how violence works across social categories, Atwood's (1986) novel worlds an all-white world. So, while Gilead is both sexist, homophobic, and racist, Atwood spends no time explicitly acknowledging their connection. In the novel, Gilead is "only interested in white babies, and therefore only interested in enslaving white women" (Berlastsky, 2017, para. 7). White Handmaids are forced to breed for elite white men in what can reasonably be assumed as a technique not only to propagate the human species but the white race. Everyone else, including those who identify as queer, are exiled to the Colonies. In *Wayward Reproductions*, Alys Eve Weinbaum (2004) proposes a "race/reproduction bind" to capture the "inextricability of the connection...the fact that these phenomena ought not to be thought of as distinct" (p. 5). Sheldon (2013) follows up: "Rightly raised and rightly raced," the children of Gilead are "the 'stock' of the nation," the future of a racialist and fundamentalist state (para. 2). As noted, the novelized Gilead is an all-white enclave. Black people are erased in just two lines, cloaked in an Old Testament euphemism: "Resettlement of the Children of Ham is continuing on schedule...Three thousand have arrived this week in National Homeland One, with another two thousand in transit" (Atwood, 1986, p. 83). The point I am getting at is that the oppression depicted in *The Handmaid's Tale* is most recognizable to audiences as that inflicted on Black women during slavery and its afterlives (Hartman, 2007).<sup>48</sup> With a quick act of literary

<sup>48</sup> While perhaps most familiar to the history of American slavery, racialized practices of stolen children, enforced labour, banned literacy, restricted movement, constant surveillance, rape, and family refiguration are also dominant practices of settler colonialism. The lack of identifiable Indigenous characters in the television show and the absence of

banishment, however, Atwood “didn’t have to interact with characters of color while capitalizing from implementing systems of oppression that about were first used in the U.S. on enslaved Africans” (Abraham, 2017, para. 6). “Gilead obligingly moves black people away so the novel can present black people’s experiences without black characters,” Berlastsky (2017) argues, “Atwood critiques the regime, but also collaborates with it to push black people aside” (para. 7). Angelica Jade Bastién (2017) finds that the expulsion “feels like the mark of a writer unable to reckon with how race would compound the horrors of a hyper-Evangelical-ruled culture” (para. 5). In the novel, readers never learn what happens in National Homeland One let alone in Homeland Two or Three or Ten.

Recall Atwood’s speculative fiction mantra cited earlier that she does not put anything in her stories that has not happened somewhere at some time before. This deserves a second look because of the important critiques raised about *The Handmaid’s Tale’s* treatment of blackness. Much of this critical scholarship is produced on blogs, social media, and magazine websites rather than academic journals, including the sources cited above (e.g., Abraham, 2017; Berlastsky, 2017; Bastién 2017; Phoenix, 2018; Priya, 2017). Atwood, along with many who study her in more traditional scholarly circles, have traced many historical precedents for Gilead’s oppressive regime.<sup>49</sup> However, I join with the pop culture critics in arguing that anti-Black slavery is the strongest historical context for the story’s horrors. The list is long: stolen children, enforced labour, banned literacy, master’s names, involuntary procreation, people as property, public hangings, restricted movement, and constant surveillance. Atwood (1986) even names the escape

any mention of Indigenous peoples in the novel suggests the “elimination of the Native” has been accomplished in the post-apocalyptic landscape of Gilead (Wolfe, 2006). Gilead and the Colonies still exist on stolen land.

<sup>49</sup> There are many historical sources for the violent practices and ideologies of *The Handmaid’s Tale*. For example, for the Biblical practice of sexual surrogates and the Nazi’s Lebensborn eugenic program to reproduce blonde, blue eyed children. Atwood has also noted that the “National Homelands” find their correlate in the apartheid practices of South Africa’s white governments (Dodson, 1997). For a detailed look at some of these antecedents, minus an emphasis on racialized slavery, see Evans (1994).

route to Canada the “Underground Femaleroad” (pp. 303, 309), an all too obvious referent.

While not necessarily intentional, Atwood may have relied heavily on these historical practices “in order to bring realism to her portrayal and elicit her readers’ sympathy for the suffering of her white protagonists. The suffering of the Black people in her world is, however, rendered invisible” (Phoenix, 2018, p. 206). Atwood has admitted, when pressed hard about her reliance on tropes of anti-Black slavery, that “it’s not just African Americans; it’s slavery in general. Or, say, oppression in general” (Dodson, 1997, p. 101). Priya’s (2017) critique, however, drives the point home: “By taking the specific oppression of enslaved Black women and applying them uncritically to white women, *The Handmaid’s Tale* ignores the historical realities of an American dystopia founded on anti-Black violence” (para. 2). As such, *The Handmaid’s Tale* “remains silent on the central feature of American history: anti-Blackness” (para. 2).

For Berlatsky (2017), “appropriating the experiences of women of color to create a hell for white women raises uncomfortable questions” (para. 3). The novel and Hulu’s television adaptation handle these concerns differently, however, both narratives “are ultimately unable to get beyond the initial assumption that their dystopias are wrenching because of exactly who’s suffering,” which means June (para. 3). Fast forward thirty-years from the novel publication and Hulu showrunner Miller flips the script on racial exclusion for a racially diverse cast. Miller positions Black actors in the major supporting roles of June’s best friend, husband, and child. Nothing in my discussion is meant to discount the talent of these actors—particularly the brilliant Samira Wiley who plays Moira—or to repudiate the good intentions behind Miller’s wish to diversify Gilead. I am in agreement with much of what Miller says, as I also have no interest in watching an all-white world when there is so much great, smart, funny and racially shrewd

programming out there (Dockterman, 2017b). In an interview, Miller mentions long conversations he has had with Atwood about the differently racialized Gilead:

That was a very big discussion with Margaret about what the difference was between reading the words, “There are no people of color in this world” and seeing an all-white world on your television, which has a very different impact....What’s the difference between making a TV show about racists and making a racist TV show where you don’t hire any actors of color? (para. 11).

What *is* the difference? This is a really important question Miller asks. I am not sure exactly how to respond. At first, Atwood was hesitant about the multicultural update. Miller recalls her saying, “Well that would change everything” (para. 12). Thinking of Klein’s (2014a) work in the last chapter: what is the *everything* that is changed? Did adding actors of color actually alter anything? In a charitable take on Miller’s revisioning, Berlastsky (2017) notes:

In some ways, the use of Black actors effectively addresses the narrative’s debt to African-American history. In the opening episode, Gilead troops take Hannah from June; the reference to enslaved black children being sold is more powerful, and more honest, because Hannah is Black herself. When Luke makes his way across the Canadian border, it resonates with Canada’s long, honorable history as a refuge for escaped slaves. When Moira is forced into prostitution by the Gilead regime, it illustrates how slaves were raped, then hypersexualized, as if they were to blame for the violence done to them. (para. 9)

But then Berlastsky notes that the problem is not so much that the show reproduces Black suffering—although many Black feminist academics have pointed out this exact problem with similar texts (e.g., Hartman, 1997; James, 2003; Sharpe, 2010, 2013)—but that the story is

“unable to acknowledge that those experiences are familiar rather than novel” (para. 10). What is happening to the people of Gilead is not new, as Atwood herself confirms in many interviews, but because it is happening to a white, middle-class, educated, affluent, working-mother June, there remains an air of natalistic invention.

This is all to say that the inclusion of Black actors in key roles does not mean *The Handmaid's Tale* has moved beyond its source text's racial shortcomings. Instead, it has transitioned from expurgation to multiculturalism. The result of Miller's update is “unfortunately, an ambiguous colorblindness that ultimately supports white erasure” of the violence experienced by Black, Indigenous, and other people of colour (Abraham, 2017, para. 8). Both the novel and series, in my opinion, are still valuable given the political present, including that both versions allow for serious questions about fetishizing the child, governing women's bodies, unjust family separation practices, nationalistic pride and populism (e.g., Make American Great Again could be a Gilead slogan), and, even, environmental destruction. Like this world, however, “Gilead is a white supremacist society” (para. 8), and even in June's moments of resistance and in her fierce colour-blind maternal love it is still that. *The Handmaid's Tale* misses a “valuable opportunity to challenge the very discourses that are being propagated in the rise of populism and white supremacy,” and, I would add, planetary stewardship, which are the same dangers the story warns us about (Phoenix, 2018, p. 207). In an awful, regrettable, needs-to-be-changed-now kind of way, Atwood's worlding is almost more believable than Miller's world where racialized difference no longer matters. Soraya Nadia McDonald (2017) caricatures my point and brings an Anthropocene-related concept of extinction into play: “So Gilead is post-racial because the human race is facing extinction, and that prompted Americans to get over several hundred years' worth of racist education and social conditioning that depicted Black

people as inferior and less than human?” (para. 19). In the next section, I turn to an examination of *The Road*, which also overlaps post-raciality and extinction. At first it seems as if *The Road* does not have to deal with race because there are so few people left, but tropes such as “good guys” and “bad guys” make sure racialized imaginaries are not so far removed.

### **Re-Reading *The Road* in the Anthropocene**

*The Road* is famous for its intimate portrayal of a father-son relationship at the end of the world. Dusty, dark, dead, and dangerous: the novel insinuates that what is destroyed in an environmental apocalypse is not only the natural world but also the humane one. By centering the parental relationship, *The Road*, much like *The Handmaid’s Tale*, “ensures that the contrast between past humanity and present inhumanity pivots on the question of care” (Johns-Putra, 2016, p. 521). What the terms of this care-pivot allow is for *The Road* to be read as a parable of political ecology—remember Latour’s (2011) framing of *Frankenstein*—or, perhaps in my own way of thinking-as-punning, of parental ecology. The contrast between humanity-inhumanity builds its strength from the following interpellation:

By placing parental care in proximity with—and in contrast to—virtually wholesale biospheric devastation, inviting an easy correlation of uncaring with ecocide and an equally easy identification of uncaring as one of the most dire losses that humans will suffer if we continue with ecocide. (Johns-Putra, 2016, p. 531).

It is because of the assumed easiness of the overlap of ecocide and parental uncaring that I want to interject a shudder. Johns-Putra finds that those who read on the surface of *The Road* take from it an allied caution about not caring enough for the planet and for the children. “By aligning the death of the nonhuman world with the rise of inhuman humans,” she argues, “the novel enables—though it never says as much—an alignment of environmental disaster with the loss of (parental) care” (p. 531). This reading, however, fails to take into account the

“anthropocentrism that underpins its account of environmental destruction—the novel mourns the loss of human rather than nonhuman nature” (p. 521). The novel presses on love for the child largely without much care or concern for the planet. The earth is dying but this is a problem for the father mainly because of the difficulty it causes him to meet his son’s basic needs, for example, shelter and food are harder to come by. However, it is not fresh fruit, healthy crops, and full forests that are mourned as the novel progresses, instead the father reminisces about phonebooks and canned “chili, corn, stew, soup, spaghetti sauce. The richness of a vanished world” (McCarthy, 2006, p. 147), which connects back to the discussion of Colebrook’s (2017b) “rich in world” and the can of Coke in Chapter 3. Most of all, though, the father laments the loss of the “good guys” and the rise of the “bad guys,” and he tries to teach his son to do the same. The dominant moral formulae calculated in *The Road* is not as much parental care equals planetary care as it is that no parental care gives way to inhuman humans.

*The Road* is not as concerned with the nonhuman world as might be assumed by its stark descriptions of landscapes and by its many favorable critical reviews, such as its framing as the “Anthropocene ur-text” (Macfarlane, 2016, para. 26) and “arguably the environmental era’s preeminent literary expression” (Clark, 2017, p. 2). Instead, *The Road* demands a “relentless anthropocentrism for its logic: this is, after all, about what makes us human” (Johns-Putra, 2016, p. 531). And what makes us properly human is attached to a bio-bond of parental love. This logic finds its affective foothold in its primary conflict “between the human and inhuman (not a contrast, one notes, between the human and nonhuman),” which “means that the love between father and son, and the corresponding fear of the disappearance of that love, is where its imaginative power lies” (p. 531). As mentioned, this parental care takes form as a relentless push for survival, but survival of a specific type—survival for the “good guys.” When the father

mutters, “On this road there are no godspoke men. They are gone and I am left and they have taken with them the world” (McCarthy, 2006, p. 32), he temporalizes morality as beholden to a lost world. What has elapsed at the end of the world is the will to be humane—to love and care for each other. There are still people wandering around, so it is not about the end of all human life, at least not yet.

### **The Eyes of the Father**

Through the eyes of the father, what is left of the world is a waking nightmare. As one stark example, the world is “populated by men who would eat your children in front of your eyes” (McCarthy, 2006, p. 181). In *The Road*, cannibalism is a trope repeated to show the absolute depravity of humans at the end of the world. It is rare that the father-son duo come upon actual cannibals, “yet these few encounters stand in for everything that motivates them on their journey” (Sheldon, 2016, p. 100). Cannibals become the constitutive exclusion for the “good guys,” which is the much-repeated refrain of the father-son pair (e.g., pp. 77, 92, 103, 128, 129, 137, 140, 184, 245, 283). The cannibalism trope has long been associated with so-called civilized societies on the one hand and racialized, tribalized populations on the other (Estes, 2017). However, as the novel progresses the references to “good guys” turn from a statement of fact to an uncertainty, at least, from the perspective of the Boy.

One of the novel’s most horrific scenes provides a telling example of the rising ambiguity. The pair come across a grand old white house on a former plantation. McCarthy (2006) sets up the scene: “Chattel slaves had once trod those boards bearing food and drink on silver trays” (p. 106). Entering the house, the pair locate a locked cellar filled with Muselmänner-figures—naked and starving men and women reduced to various states of bare life (Agamben, 1998). Many are half eaten but still able to reach and whisper for help. At first sight, the father

and son turn in fear and run away in horror, but not before closing the hatch behind them. In a sickening twist, the enslaved no longer carry the food but are the food themselves. McCarthy's use of chattel makes an ellipsis between racialized humans treated as less-than-human in the past and those held in captivity on the same plantation in the post-apocalypse—only slavery is a post-racial enterprise now. Race does not matter much to cannibals; they will eat anyone of any colour. The Boy, however, is much bothered by what they witness. Once a safe distance away, he asks his father:

[Boy:] We wouldn't ever eat anybody, would we?

[Father:] No. We wouldn't.

[Boy:] No matter what.

[Father:] No. No matter what.

[Boy:] Because we're the good guys.

[Father:] Yes. (pp. 128-129)

Scenes and dialogue such as this contribute to “the narrative's most important contrast—the juxtaposition of what lies without (a world of environmental devastation and human cruelty) with what lies within (the bond between man and boy, a sanctuary of care)” (Johns-Putra, 2016, p. 528). Other plot events support this distinction.

Two other scenes in particular detail the singularity of paternal care and thus support Johns-Putra's (2016) penchant that there may be serious limits to thinking the bio-bond as an “antidote to environmental destruction” (p. 521). The first scene happens when the duo hears a band of travelers approaching on the road. They hide in the bush but are spotted by a single man when he separates from his group to relieve himself. In a quick series of events the father points his gun, the man grabs the Boy, the man brandishes a knife, and the father shoots him in the

head. The father and son take off running before returning the next day to search for their things. The father notices boiled innards on the ground—the group ate the dead man for dinner. Any lingering doubts about the goodness of the dead man and the righteousness of the father’s actions are erased. The men were “bad guys”—they ate their own, which means the father was justified in killing. However, the night after the murder (or self-defence—depending how you read it) contains a brief moment of reservation on behalf of the Boy. The father says to the Boy after hours of silence: “My job is to take care of you. I was appointed to do that by God. I will kill anyone who touches you. Do you understand?” (McCarthy, 2006, p. 77). After another pause, the Boy asks: “Are we still the good guys?” Without hesitation the father responds: “Yes, We’re still the good guys. And we always will be” (p. 77).

Later in the story, after having finally reached the coast, the father and son take a moment to explore the beach and even play around in the waves. They leave their things unattended on the beach and when they return their possessions are gone—save for the pistol tucked into the father’s belt. They spot tracks in the sand and set off to reclaim their belongings. Having caught up to the lone thief, however, the father is not satisfied with just the return of their things. He doubly strips down the man at gunpoint by verbally assaulting him and making him remove his clothes and shoes. The father angrily spits out: “I’m going to leave you the way you left us” (p. 256). The father’s fury and the thief’s pleading result in the Boy turning his back, covering his ears, and sobbing. Eventually the pair leave the man “standing there raw and naked, filthy, starving. Covering himself with his hand. He was already shivering” (p. 257). The Boy’s crying does not let up and eventually he convinces his father to go back and return the man’s clothes. They spend some effort calling out for the thief to come collect his things but he never answers. Readers cannot be sure if he is hiding nearby or if he has already moved on. The father and son

end up leaving the clothes and boots on the road and set off again. The Boy is distressed and refuses to speak to his father, which seems to be his most affective mode of resistance. The father tries to reassure the son that he was never going to kill the thief, by which he means shoot him with the pistol. The Boy quietly answers, “But we did kill him” (p. 260).

The father rationalizes his actions with an eye-for-an-eye moral code, but his thinking is hypocritical (Zibrak, 2012). Firstly, the father does not leave the thief in a similar state to the duo but much worse. Stripping off his clothes and shoes, the thief will die of exposure in the post-apocalyptic climate. Secondly, their belongings were in essence abandoned on the beach, or, at least, this is the scene the thief would have encountered. Have not the father and son been doing the same thing when they take food from what they assume to be deserted houses and stores? This line of questioning is strengthened by the Boy asking his father on multiple occasions before he eats the found food something akin to, “Is it okay for us to take it?” to which the father responds, “Yes it is. They would want us to. Just like we would want them to” (McCarthy, 2006, p. 139). Perhaps out of guilt at his actions or frustration with the Boy’s silent scolding, later that evening the father says: “You’re not the one who has to worry about everything,” to which the child responds, “Yes I am....I am the one” (p. 259). This is a point to which I will return shortly. For now, I suggest that if the father’s possessive devotion is what presents as a solution for the Anthropocene then the world is still in trouble.

Following what Donovan Gwinner describes as “survivalist insularity,” Johns-Putra (2016) discusses the father’s brand of parental care as a form of unfettered protection of what is most sacred—the genealogical bio-bond. The father alone must protect his son at all costs (and all the patriarchal, pastoral connotations this brings with). Protecting the Boy requires doing harm and violence to anyone who encroaches upon them. Adding to the insularity is a kind of

survival blindness whereby the father does not think there are any “good guys” left besides him and his son. The Boy, however, extends an assumption of goodness to everyone they meet. *The Road* was an Oprah Book Club selection—recall the round stickers on a book’s cover that all but guarantees its best seller status. One of the special features of Oprah Books is an added Reader’s Guide for book clubs to follow. Arielle Zibrak (2012) recounts how the Guide’s thematic section for *The Road* opened with the question: “how far would you go to protect your child’s life?” (p. 105). Zibrak provides the following deconstruction of the larger sentiment contained in the quietly inflammatory rhetoric:

It is a question meant to move the reader through the sympathetic celebration of paternal love—yet it is also a threat. How far *would* you go? What would you do—and to whom? *The Road* is not a simple parable of a man’s love for his son but an alarming and complicated portrait of an American climate of fear and aggression wherein punishment—not love—is the guiding virtue. (p. 105)

In the two scenes recounted above the punishment for threatening or appearing to threaten the Boy is death. The first is a kill shot and the other is death by abandonment to the harsh elements. The version of goodness that *The Road* conveys according to the father is captured as follows: “Humanity becomes divided between those who would do anything to protect their children—‘I will kill anyone who touches you’—and everyone else—‘men who would eat your children in front of your eyes’” (p. 106). Whose side are you on (Edelman, 2004)? The bio-bond wins every time these are the options. But if we look towards the figure of the Boy as an ethical guide perhaps a different kind of care becomes possible, even at the end of the world.

### **The Eyes of the Son**

Through the eyes of the Boy, in contrast to his father, a different ethical inquiry of and at

the end of the world becomes possible. As noted earlier, the Boy constantly checks in with his father for reassurance of their “good guy” status. This is not an expression of childhood innocence or ignorance, but a sustained practice of reflective doubt on the way to refusal of a strict binary moral code. After the roadside encounter with the thief the Boy states, “I am the one,” a funny turn of phrase with its Christ-like allusions, but in line with the Boy’s efforts at extending compassion to all strangers he meets. Early in the story when the duo pass by a solitary traveler injured by a lightning strike, the Boy pleads to help as his father insists on carrying onwards to nowhere faster. Later they meet an old man who goes by the name Ely, and only after persistent pleading by the Boy does the father agree to stop, share food, and spend an evening with the stranger. On another occasion when his father offers him a can of Coke, perhaps the last one in the world, the Boy insists on sharing. As a last example, the Boy notices that the father pours himself hot water instead of his share of hot chocolate and responds: “You promised not to do that...I have to watch you all the time” (McCarthy, 2006, p. 34). In a book where nothing much actually happens, these examples are plentiful. The Boy demonstrates care and kindness for others as he desires to share what little he has—his ideas of care go beyond survival for survival’s sake.

The Boy is the bearer and creator of his own ethic of care even though his father is the only example he has ever known. With “I am the one” and similar statements, the Boy names himself a figure of the “knowing child” (Higonnet, 1998). He is a protector of not only his father and what remains of the world but of a possible more care-full world to come. The “curious absolutism of the phrase “the one” construes the boy’s capacity to care not as equally valid as the man’s but as valid in a way that the man’s is not” (Johns-Putra, 2016, p. 532). The differences in moral comportment from father to son resonate with Sheldon’s (2016) Anthropocene-provoked

slide of the child saved to the child who saves. Nameless at the end of the world, the Boy is a stand in for all children everywhere (Clark, 2017). As a figure of #AnthropoceneChild, the Boy demonstrates “that care can originate from that half of the bond too easily constructed as the passive recipient of care,” and that care can be extended outwards to others “hence breaking out of the confines of that bond” (Johns-Putra, 2016, p. 532). The Boy gestures at ways of making kin not beholden to biology.

This potential disruption of the bio-bond is necessary to set-up the novel’s final encounter. In a generous reading, the ending suggests “a mode of survivalism that is more enlarged than the father’s...code of fiercely guarded filial protection” (Johns-Putra, 2016, p. 533). This is also where I suggest some of the radical potentiality for the figure of the Boy to interrupt reproductive futurism falls short. At the end of *The Road* the father dies. The Boy mourns by his side for three days before restarting his journey down the road. Soon after departing the Boy meets a male army veteran who asks him to join with his companions. While what happens next could represent a form of Anthropocene alter-kin making—a non-biological becoming-family—that is not my final take. The Boy meets his new family: a father-figure, a mother-figure, a brother-figure, a companion species dog (in the film), and a non-bio girl. Of course, there is a girl, and, of course, she is not related—how else can both his father’s legacy and the human species prevail? In this way, *The Road* moves from being a story about the end of the world to the possibility of generational and species continuance (Sheldon, 2016). While the majority of *The Road* enacts what Nigel Clark (2017) calls the Anthropocene-induced “crisis of natality: a waning of that resurgent hope attending the coming into the world of new life” (p. 4), the meeting of Boy and Girl seem to put this threat to rest. *The Road* ultimately asks its audience to wilfully suspend the disbelief of surviving long-term on a dead earth for the hope embodied in

the potentiality of new human life via a new “heteronormative family romance” (Sturgeon, 2010, p. 126). Recall from Chapter 3 that for Sheldon (2016), “*The Road* grounds its notion of human futurity firmly in the colonial civilizing project,” whereby white fragility needs restoring by the white child and the potentiality of the white offspring as the future (p. 155). *The Road* is a world where environmental destruction “is far more than tendentiously related to the lost protections of whiteness” (p. 155), much like *The Handmaid’s Tale*, the possibility of a white heteronormative bio-family is a specific brand of Anthropocene hope.

Revisiting earlier analyses, *The Road* is “squarely anthropocentric, arguing that since humanity is the only source (and interpreter) of meaning, ethics and beauty, human survival takes precedence over all else” (Graulund, 2010, p. 74). The father practices a form of human-exceptional stewardship that Taylor (2017) warns about. But an argument can also be made that “without nature, without a biosphere, there can be no humanity either, hence that for ‘goodness’ to take seed and grow, rich and fertile soil is an absolute prerequisite” (Graulund, 2010, p. 75). In other words, *The Road* suggests that without nature there can be no humanity as in humane humans. Transferring the metaphor of soil to *The Handmaid’s Tale*, the soil of Gilead has been revived, but the “bad guys” nevertheless remain in charge, even with the resolve of a mother’s love for her child. To flip interpretive lines yet again, Clark (2017) argues that a reverberation of reproductive futurism is not the only ethical gesture speculative texts of the end of the world can make. For Clark (2017), *The Road* provokes the following consideration:

The precariousness of futurity itself is taken as an incitement to approach those inhuman “differences and rhythms” that rumble at the thresholds of the human sensorium. It is as if, at the very limit of life there is still something of a choice for those who still live—to

turn inwards and turn upon themselves or to turn outwards—in the direction of that which exceeds the human, the living, the organism. (p. 13)

Where the father's care is insular, the Boy desires a form of care that is “an unbounded opening to others” (p. 23). Despite the Boy's “own exposure and vulnerability,” he embodies an “exorbitant generosity that refuses the biopolitical imperative to prioritize one's own life and the lives with which we believe ourselves to be blood-bound” (p. 23). Clark argues that this non-bio-bonded communal care offers a way out of the anthropocentrism of the novel. The figure of the Boy suggests an ethics that desires “decentring or de-dramatization of the human” (p. 23). I am not so convinced. What I am more assured of is that a rugged, individualistic and bionormative form of parental care that *The Road* intimates is not the relation of collective care needed in the Anthropocene.

I have made similar deductions about the dominant kind of parental care available in *The Handmaid's Tale*. When thoughts of extinction are foregrounded—including in academic and popular expressions of the Anthropocene beyond the texts of this chapter—a fierce and filial protection of children is presented as a reasonable response. While June's and the father's form of care might seem logical, perhaps the Boy's uncertainties about abandonment, survival, and sacrifice invite another option. For Johns-Putra (2016), “*The Road* suggests an alternative ethos in which doing the best by our children...requires more than simply caring about and for them alone. It requires a reaching out to others—to other children and, indeed, other humans” (p. 534). I would like to extend this invitation to other forms of existence beyond the human. I think this more-than-human extension of care is what Clark (2017) is pushing *The Road* towards when he invokes inhuman excesses beyond human life.

For Clark, the Boy gestures toward a form of care in which a multi-species extension

might just create a common world of humans and those more creaturely and monstrous. In such a speculative common world, the child-cyborgs of Benjamin's (2016b) "Ferguson is the Future" can join with the figure of the Shredder-child from *The Handmaid's Tale* in ways that reconsider the environmental a/effects of being in non-bionormative relations on a broken earth. How do planetary stewardship and parental stewardship offer care for some forms of existence (i.e., human) while outcasting and abandoning others (i.e., shredders)? Unbabies are not the kind of life that warrants care in Gilead—that world requires organic existence (Sheldon, 2016). Nevertheless, the Shredder-child challenges the habit of seeing birth, growth, and survival as holding the promise of futurity for bionormative babies alone. Cyborgs and Unbabies can be figures of Clark's (2017) inhuman excess for whom this world has not yet cared-for well. The next chapter follows two more inhuman child-figures around—a mutagen zombie-child and an earthly geos-child—to see what worlds might be possible when parental stewardship and bionormative care are not the privileged ethos at the end of the world. Additionally, I revisit the question introduced in this chapter about what it means to implicate childhood "in the geological formations and dynamics of our planet?" (p. 4).

## Chapter 6: Child-Monsters and the End of the (White) World

In a review of key feminist, poststructural, and queer theory texts that make use of the child-future join, Veronica Barnsley (2010) asks: “what happens if the child-image fails to suggest a future?” (p. 328). What happens if the “figurative burden” of carrying the future is too much (p. 323)? Rather than attempt a pre-emptory response, I want to add a follow-up question. My addendum: what if the future fails to suggest a child-figure? This question is just as difficult to answer because it seems not to suggest any difference at all. Nevertheless, it does call the imbrication of the child and the future to account differently, in that, at minimum, the order of reliance is reversed. In other words, instead of the child-figure failing to suggest a future, the Anthropocene makes thinkable that there is no future for the child-figure to carry. So, in a bit of a twist, what if the appeal is not for the future or even for the child but for the end of the world? What happens when the child as dual figure of generational (familial) and species (human) survival encounters inhuman planetary limits (Sheldon, 2016)? This is the potential (end of the) world of the child-figures in this chapter: Melanie, a zombie child called a “hungrie” in the novel and film *The Girl with All the Gifts* (hereafter *Gifts*) (Carey, 2014; McCarthy & Carey, 2016); and the orogene child-figures in N. K. Jemisin’s (2015, 2016, 2017) Broken Earth trilogy, primarily Nassun. All the child-figures in this dissertation inhabit and inherit a broken earth in one way or another, and, in this chapter, my focus is on how the end of the world plays out in ways that interrupt bionormative childhoods while gesturing towards geos-futurities.

### **Bionormative Life**

As mentioned in Chapter 1, my touchstone for an understanding of bionormative childhoods is a rich body of work from childhood studies and reconceptualist early childhood education that problematizes an image of the child as developmental subject (e.g., Burman,

2017; Canella, 1997; Fendler, 2001; Pacini-Ketchabaw, 2011). This child-figure is rendered knowable by deficit-based scientific theories and constructed as an incomplete and disempowered becoming who is acted upon by adults.<sup>50</sup> Also contained within the bionormative frame is a narrow conception of family based on a heterosexist parental regime of shared genetic code (Baker, 2008; TallBear, 2018). While a bionormative imaginary has long structured work in child related disciplines—for example, in the “key question for childhood researchers: how do the biological and the social mix to shape the growing child?” (Lee & Motzkau, 2011, p. 8)—the Anthropocene moment invites an extension. In the specific terms of this chapter, the bio-social mixing is supplemented by the geos which also includes viral ways of being in relation.

It is not only children, childhoods, and families that have been governed by bionormative knowledges and practices but the wider political sphere as well. The paradigmatic reference is Michel Foucault’s (1997, 2003) biopolitics, which I will explore more later. Furthermore, Elizabeth Povinelli (2016) proposes a formula of geontological governance that is currently unravelling: *Life (Life {birth, growth, reproduction} v. Death) v. Nonlife* (p. 9). In this expression, the bionormative child is perhaps the superlative embodiment of the first polynomial expression. Each bracketed term of Life—birth, growth, and reproduction—is foundational to the child’s developmental constitution and also to how power operates in late liberalism. Lee Edelman argues that the figure of the Child is the symbolic-referent around which the entire political enterprise turns. “The Child,” Edelman (2004) writes, “has come to embody for us the telos of the social order and came to be seen as the one for whom that order is held in perpetual

<sup>50</sup> I want to be careful to not gather all sciences under the same rubric. I was struck by Puig de la Bellacasa’s (2012) description of the varied meanings biology takes across Haraway’s thinking, for example as “a knot of relationships between living matters and social modes of existence, crafts, practices and love stories; a range of situated ‘epistemological, semiotic, technical, political and material’ connections; an omnipresent discourse... a metaphor too, but also much ‘more than a metaphor’” (p. 199). This is to say that when I write of the figure of the bionormative child, the layered referents of Haraway’s work are not my criterion, but instead the narrow and reductive conceptualizations of positivistic child developmentalism that maintain a large influence on early childhood education today.

trust” (p. 11). With imaginaries of the end of the world, however, this perpetualness is interrupted.

Nevertheless, there is no shortage of critical and popular work that upholds the child as the epitome of Life. The child-figure is when, where, and whom “the appeal of life – in it’s newness, it’s potentiality, it’s vulnerability—is at its most intense” (Clark, 2017, p. 4). Nigel Clark (2017) posits that precisely because of this intensity is a potential to “begin thinking beyond biological life” (p. 4), which entails thinking beyond human exceptionalism as well. Challenging bionormative childhoods calls into question “our present culture’s purely biological definition of what it is to *be*, and therefore of what it is *like* to be, human” (Wynter, 2000, p. 180). A disarticulation of bios from the human might open up to forms of otherwise existence (Povinelli, 2016). How might child-figures of inhuman geos-monstrosities interrupt bio-centric formulations of childhood? What possibilities might emerge from speculative geos-fabulations? Importantly, Melanie in *Gifts* problematizes allocations of humanness that hinge on racialized distributions of “human, not-quite humans, and never been human” (Weheliye, 2014, p. 4). This line of thought carries over to the Broken Earth series. For example, in *The Fifth Season*, the treatment of the orogenes is critiqued: “that we’re not human is just the lie they tell themselves so they don’t have to feel bad about how they treat us” (Jemisin, 2015, p. 31). What counts as human is not taken-for-granted in these texts but is up for geos-refiguration. In a question almost too perfect given the *geos-powers* of child-orogenes, Clark (2017) asks: “What does it mean...to implicate natality in the geological formations and dynamics of our planet?” (p. 4).<sup>51</sup> This can be

<sup>51</sup> My understanding of geos-power is indebted to three feminist teachers: (1) Grosz’s geopower is “the force, the forces, of the earth itself” that humans have tried to know and control from a hierarchical position but have never fully succeeded (Grosz et al., 2017, p. 135); (2) Povinelli’s (2016) geontopower captures the tactics, strategies, knowledges, and practices that maintain the division of life (bios) and nonlife (geos) in late liberal economies of difference; (3) Yusoff (2018) brings together both Grosz and Povinelli to figure geopower as “both the inhuman context in which biopolitical life is organized and as a concept that opens thinking towards cosmic forces” (p. 205). Geos-powers then

read into Kathryn Yusoff's (2013) figuring of the Anthropocene "as a provocation to begin to understand ourselves as geologic subjects, not only capable of geomorphic acts, but as beings who have something in common with...geologic forces" (p. 781). The child-figures in this chapter embody and enact this provocation in ways that have anticipatory significance for this world (Benjamin, 2016a).

As will be explored further, the main characters in Jemisin's *Broken Earth* are orogenes. Orogeny is a concept from geology that refers to how mountains are made overtime by seismic displacements—a kind of slow upward folding of the earth's crust. In Jemisin's worlding orogenes have geos-powers derived from and shared with the earth. As one example of their abilities, orogenes can quell and/or cause earthquakes. In *Gifts*, Melanie also subverts the bionormative construction of a child: she is a hybrid-child, infected by a fungal mutation that has made zombies of the rest of humankind. Unlike the typical zombie, however, hungry-children are conscious, feeling, and verbally communicative. Toxic bodies and geos-powers, these child-figures are #AnthropoceneChild. Bionormative lines between life and nonlife and human and monster are put into tension by the child-hungries and the child-orogenes just as they were by the Unbabies and Black rebel cyborgs in earlier chapters. My discussion in this chapter proceeds by way of first engaging each child-figure and text separately before bringing them together in the final section. Thinking-with each child-figure, I theorize the monster-monstrous as a productive inhuman excess rather than derogatory association. This is followed by an exploration of how each child-figure demands the end of the (white) world. Finally, Povinelli's (2016) geontologies and Yusoff's (2016) anthropogenesis are engaged together in order to imagine geos-futurities for #AnthropoceneChild.

signifies a multiplicitous becoming-with more-than-human relations, whether that be the power to raise mountains, the viral symbiosis of contagion, or an analytic to recompose the human within inhuman worlds.

### Child-Figures Who End the World: Part I—Hungries

Post-apocalyptic speculative fiction is full of inhuman monsters of various sorts. There are abundant examples of cyborgs, zombies, vampires, robots, and anthropomorphic animals that fill books and screens. Often in such stories another key inhuman figure is a feral nature set as adversary, for example viruses, tsunamis, and earthquakes. The inhuman can also signify human cruelty and violence, as in the inhumanity of humans that was mapped out in Chapter 5. On the *Cultures of Energy* podcast, Yusoff (2019) outlines two figurations of the inhuman in her recent work that add depth to my argument: first, the inhuman as matter—the earthly substances that geology takes as its object, for example, rocks and minerals; second, the inhuman as in the making of racial categories and persons, particularly those subjected to the violences of slavery and settler colonialism. In other words, the inhuman as a technology of “unhumaning” (Sharpe, 2018, p. 172).

Yusoff (2019) explains that there is a material economy that travels across these compositions—this inhuman double life composes the extractive logics of the Anthropocene. For me, this brings to mind the Gold Coast, which was the colonial British name for what is now Ghana. The Gold Coast was rich in gold, petroleum, and other minerals; it was also rich in bodies—Black bodies for enslaved labour. Years ago, I visited the coastal city of Elmina where there is an old fortress with rooms carved out of dark stone. In the room closest to the water’s edge is a small plaque above a doorway reading: *Door of No Return*. This is where many Africans were forced onto slave ships travelling to the Americas. Yusoff (2018) reads the Anthropocene as an inhuman assemblage where inhuman substances (e.g., gold, diamonds) and inhuman bodies (e.g., slaves, miners) are entangled. What is mined from the earth cannot be thought apart from the human labour that extracts it and the geographical territories from which it is taken. Contemporary examples are also plentiful, including the De Beers diamond mines and

Keystone pipelines running through Indigenous territories in what is now Canada. Often the lines of difference between the various senses of inhuman are important to untangle, but, in this chapter, I look at how they are remade in relation.

Returning to my first example, the inhuman creatures that I listed as monsters are not necessarily how some critical theorists define the monstrous. In an interview, Yusoff asks Povinelli if she considers the Anthropocene a “monstrous geography,” meaning “a kind of suicidal exhausting of earth materials” (Povinelli et al., paras. 20-21). Povinelli responds that she reserves “the idea of the monster for that which decisively disrupts the current organization of the actual—the current distribution of sense,” and given the current state of the Anthropocene discussion that something paradigmatically otherwise has not yet emerged (para. 21). If the Anthropocene is to be monstrous, Povinelli suggests, it will be because it “forces us to experience the threshold of a coming impossibility—namely, the impossibility of distinguishing arrangements of life from arrangements of nonlife” (para. 22). I argue that the child-figures in this chapter take up Povinelli’s challenge. These child-figures at the end of speculative worlds both uphold and call into question arrangements of life and nonlife. They “intensify the contrasting components of nonlife (*geos*) and being (*ontology*) currently at play” in the wider Anthropocene discussion in ways that interrupt bionormative childhoods and suggest otherwise worlds (Povinelli, 2016, p. 4). By way of entering into these complexities, I return again to some inhuman figures that come foremost to mind when monster is mentioned.

### **Vampire Figures: Terrorizing Kinship**

Drawing on Franz Fanon’s work, Samira Kawash (1999) complicates the monster-figure as quintessential abject subject. Picking up on the figure of the vampire that haunts one of Fanon’s (1963) clinical patients in *The Wretched of the Earth*, Kawash rewrites decolonization as

a form of terrorism—the vampire as terrorist—as “the face of decolonization from the perspective of the interests and entities that decolonization threatens” (p. 238). As a contemporary example, what is more threatening to the current order of things than #BlackLivesMatter or #stopTMX? Kawash rejects a simplified substitution of the vampire for the colonizer who consumes the abject in an excising of otherness. The contagion of colonialism might be threatened by the vampire’s bite, “such that to be bitten by a vampire is to become a vampire, [but] the colonized does not unequivocally take up the position of the vampire” (p. 238). Instead, “the vampire is simultaneously the force that threatens to drain the life from the colonized, and the condition of the colonized as living dead” (p. 249). From this perspective, the vampire figures a spectral quality of (de)colonization rather than an identifiable subject position. It is spectral because the vampire, like decolonization, is always moving—fragile yet powerful, earthly yet ethereal, and never settled once and for (Tuck & Ree, 2013). In Kawash’s worlding, the “vampire marks the ‘not-all’ of colonial reality” (p. 250). The vampire is in-between and in-excess of the opposition between the living (the colonizer as vampire nourished by native blood) and dead (colonized bodies emptied of liveliness) in ways that connect with Povinelli’s (2016) monstrous geontologies. In figuring the vampire as terrorist, Kawash forwards a sense of “the world-shattering violence of decolonization” (p. 235). As such, the vampire is capable of destroying “both colonizer and colonized; in its wake, something altogether different and unknown, a new humanity will rise up” (p. 235). This is the end of a world and the potential decolonized becoming of another.

In “Universal Donors in a Vampire Culture,” Donna Haraway (1997) adds to her work on the “promises of monsters” with the figure of the vampire. Haraway names three dominant ways of thinking “race” that have in common a biological, blood-based model of kin-making: (1)

eugenics, which is an intentional, categorical, and hierarchical reproduction of race on a scale ranging from primitive to civilized; (2) population, which remakes race as nation state, and proffers inclusion, diversity, and universal humanism as politically correct translations; and (3) genetics, in which race-as-genome emerges as a scientific real through technologies of coding.<sup>52</sup> Earlier the bionormative was mentioned as doing racializing work elsewhere than childhoods and this is another such performance. The figure of the vampire troubles naturalized bio-processes by “polluting” normative categories of race, life, family, human, and reproduction (p. 60). The vampire reproduces by non-traditional means. The vampire kills and regenerates the dead—an already born subject dies and is born again. This is reproduction without women, womb, sex, or familial bloodline. Vampires therefore represent a troubling of the traditional family form: “What kinds of crossings and offspring count as legitimate and illegitimate, to whom and at what cost? Who are my familiars, my siblings, and what kind of liveable world are we trying to build?” (p. 52). While the vampire “insists on the nightmare of racial violence behind the fantasy of purity in the rituals of kinship” (p. 214), care needs to be taken not to mistake the fantasy for a dream. The historic violence of miscegenation, racist one-drop rules, and other blood quantum calculations levelled on Black and Indigenous peoples cannot be wished away by the promise of alter-kin. Haraway does not deny this: “Race kills, liberally and unequally; and race privileges, unspeakably and abundantly” (p. 213). So, while the vampire might help free relations of bio-kinship, the figure’s historical alignment with maleness, whiteness, cosmopolitanness, and absence of consent cannot be forgotten. Nevertheless, for Haraway, the vampire does “not rest

<sup>52</sup> I do not include quotation marks around “race” going forward even though I appreciate why many writers use the punctuation marks to highlight its constructedness—a principle I agree with. My use of race is not intended to naturalize a “biological or cultural classification,” but convey “a set of sociopolitical processes of differentiation [racialization], and hierarchization [racism] which are projected onto the putatively biological human body” (Weheliye, 2014, p. 55). Accumulating in everyday activities, race thus emerges as “an arrangement of relations that produces commonsensical racial identities” (p. 143).

easy (or easily) in the boxes labelled good and bad” (p. 215), and that is why she positions herself “on the side of the vampires, or at least some of them” (p. 265). With all these complexities, Haraway maintains that the promise of the vampire is to make kin based on affection and affinity rather than genetic substance.

While I am not overly interested in vampires in this chapter, I am interested in the questions the figure provokes. What happens when Haraway’s vampire meets Fanon’s vampire (via Kawash)? Is Haraway’s liveable world commensurable with Fanon’s decolonized one? Can I be on the side of both vampire-figures? Would Fanon’s vampire of spectral-non-being be a terrorist to Haraway’s vampire of non-familial affinity and vice versa? Given the vampire’s genealogy are there other monster-figures that might better speak to the assortment of contemporary troubles captured by the Anthropocene? How about a hungrie or an orogene? A hungrie, as a subtype of zombie, joins the vampire in a larger grouping of undead monsters, or, in other words, as figures of the living dead (Timofeeva, 2018). According to *The BFI Companion to Horror*, “the zombies, presented without even a whisper of eroticism, is far more than the vampire, the monster figure of the apocalypse” (Newman, 1996, p. 351). In addition to the vampire’s sexualization, another important difference between zombies and vampires is their historical emergence: vampires derive from European gothic literary traditions while zombies originate in West African and Haitian contexts (Davis, 1988). In some ways then the zombie swaps eroticism for exoticism in its translation into pop culture zeitgeist. I will detail some zombie history below as it speaks to the racialized inheritance and decolonial potential embodied by Melanie in *Gifts*. What the vampire and zombie have in common is that these creaturely existents blur the lines between life and death, life and nonlife, and human and monster. Another point of connection, with regards to the child-figures in this chapter, is that the vampire figures a

“threat of the end of this world, a destruction necessary to clear the way for a new birth”

(Kawash, 1999, p. 238). Melanie and Nassun, in their own ways, enact cascades of world-ending events and world-making beginnings.

### **Zombie Herstory: Melanie’s Inheritance**

Unlike the vampire or Dr. Frankenstein’s monster, the zombie does not materialize from European literary traditions. The zombie can be traced to West Africa before developing more fully in Afro-Caribbean communities, most specifically Haiti (Davis, 1988). In Haiti in the 17th century, known then as Saint-Domingue under colonial French rule, enslaved Africans were trafficked to perform gruelling physical labour on sugar plantations (Mariani, 2015). The original zombie was not the familiar Hollywood figure who eats human brains, bodies, and flesh, but a person robbed of their language, family, community, culture, and continent. In early incarnations, the walking dead were a zombified form of the working dead. Therefore, the zombie’s genealogy is undeniably racialized, structured as it is by slavery. It was only in death that the enslaved thought they might obtain some semblance of freedom (Cohen, 1972). For many stolen away from their homelands, death meant a spiritual return to Africa, “a passage to a second life of the soul...finally being set free” (Timofeeva, 2018, para. 3). This is why Wade Davis (1988) emphasizes that “the fear in Haiti is not *of* zombies, but rather of *becoming* a zombie,” in that enslavement was considered “a fate worse than death” (p. 9).

Achille Mbembe (2003) writes of necropolitics as a globalized form of power that governs bodies and minds by subjecting people and populations “to conditions of life conferring upon them the status of living dead” (p. 40). The original zombie was a real live physical human reduced to conditions of the living dead; this zombie-figure is no metaphor (Tuck & Yang, 2012). Drawing from Mbembe’s work, the zombie is born of a racialized “space of death and is

inextricable from the culture of terror of the plantation,” and this “culture of terror” emerges from the nexus of colonialism, capitalism, and racism. Pointing to its original context and development, Elizabeth McAlister (2012) observes, in ways related to Kawash’s refiguration of the vampire, that “the zombie represents, responds to, and mystifies fear of slavery, collusion with it, and rebellion against it” (p. 461).

Zombie popularity has not diminished and perhaps even increased in recent years, for example, the continued success of *The Walking Dead* franchise of comic books, video games, and an AMC television show and spin-offs. In the long move from Haiti to Hollywood, however, the racialized roots of the zombie have become invisibilized and/or “whitewashed” (Mariani, 2015). In Hollywood, zombies shift from being racialized monsters and minions of Vodou practitioners in the first films of the 1930s to majority white, mindless stand-ins for the sins of a consumerist and militaristic America in the films of the late 1960s up until today (Luckhurst, 2015). This transition is evident in the acclaimed work of writer and director George Romero. For example, with *Dawn of the Dead*, Romero (1978) weaves a sardonic critique of American capitalism with campy yet graphic gore and violence and just a touch of reproductive futurism to round out the end. In the classic film, a small group of survivors take shelter from the zombie apocalypse in a shopping mall and for a while everything goes great—they lock the mall down, kill the few zombies already inside, and get along splendidly as they relish in the consumer wonderland. Eventually supplies run low and the mall is infiltrated by a zombie horde wherein everyone dies except for a white pregnant woman and a Black policeman who escape by rooftop helicopter. Characteristic of the genre as a whole, the filmic zombie moves from a “geohistorically and racially produced figure” to one representing the global alienation of capitalistic modernity (Timofeeva, 2018, para. 8). What gets lost in the metaphorization of

zombie capitalism is “the history of colonialism...from a culturally contingent practice into one of a culturally produced imagination” (para. 8). Nevertheless, what remains important about zombie films with a critical bend such as Romero’s is that “antagonism and horror are not pushed out of society (*to* the monster) but are rather located within society (*qua* the monster)” (Larsen, 2010, p. 4). Such films ask: what counts as monstrous and who are the real monsters?

### **Fungal Pathogens: Infecting Whiteness**

For the most part *Gifts* plots along like any other post-apocalyptic zombie film, that is, until the very end. The setting is a world much like this one, London specifically, in the near future. A mysterious fungus has infected nearly everyone on earth turning them into mindless, flesh-eating zombies who rely on their sense of smell to locate food. The few remaining humans—mostly female scientists and military men—have gathered on an armoured base where the scientists among them search for a cure. Everyone who comes into direct contact with the pathogen becomes infected, except for a mysterious group of children who were born to hungrie-mothers. Melanie and these other “second gen” hungries have retained the ability to think and feel. They attend school and are learning to read, compute sums, recite historical facts, and write imaginative stories. However, they are also locked in cells at night and have their heads, arms, and legs strapped to chairs when outside solitary confinement. If these child-hungries smell or touch humans they transform into ravenous, instinctual zombies just like the others (there is a “blocker” ointment that humans smother on their skin to prevent this transformation). Nevertheless, why I argue this story matters is that one particular child-hungrie sets off the end of the world. Before this happens though the number of child-hungries on the base gets fewer and fewer. Their biology—their bodies—holds the possibility of a vaccine. The research process entails dissecting the child-bodies in ways in which they cannot survive. The day Melanie is

taken for experimentation, a large horde of hungries attack the base allowing her to break free from the operating table. Dr. Caroline Cadwell, Miss Justineau, the Sergeant and a handful of soldiers manage to escape with Melanie in tow.

The debate about whether or not the child-hungries are human or monster continues throughout the duration of both the novel and film. Never is it considered, like what Kawash (1999) does with the vampire-figure, that there are possibilities of existence outside these dualistic oppositions. Perhaps debate might be too strong a descriptor as everyone but Justineau conceives of the child-hungries as inhuman monsters. If there is any lingering doubt about the child-hungries' species-status it is because they outwardly resemble any other ten-year-old child most of the time. In spite of their appearance, however, the Sergeant is keen to remind his colleagues that “not everyone who looks human is human” (Carey, 2014, p. 29). The publicity posters for the movie feature Melanie wearing a full-faced, clear muzzle type of mask, which the survivors insist she wear for their protection once they flee the invaded base. This mask serves as a persistent reminder of her monstrosity. As such, Melanie’s “form remains identifiably human, but recognizably monstrous” which is a tactic of “making-killable” in contemporary culture (Gergen et al., 2018, p. 11).<sup>53</sup>

Cadwell, on the other hand, takes a hard-line approach to making-killable but disguises it behind the neutrality of science. Cadwell’s view is that “the moment of death”—meaning zombification in this context and not metabolic death—“is the moment when the pathogen crosses the blood–brain barrier. What’s left, though its heart may beat, and though it speaks...it

<sup>53</sup> In refiguring “Thou shalt not kill” as “Thou shalt not make killable,” Haraway (2008) captures the impossibility of entirely removing oneself from killing or claiming a space of innocence (p. 106). Haraway’s argument is formed around food and eating practices which connects in perhaps unexpected ways to the zombie genre. The horror of zombies is not that they kill in order to eat—it is what they eat that produces the horror. Cannibalism is a certain way to make monsters. This recalls the discussion of the “bad guys” in *The Road* in Chapter 5.

is not the host” (Carey, 2014, p. 63). The species battle line is thus drawn between human and fungus, despite their coexistence in the child-hungries. In a rare moment of quasi-kindness, Cadwell teaches Melanie about the fungus. She explains that the difference between the first and second gen hungries is that their bodies have formed a symbiotic relationship with the pathogen—the fungus and the child-body collaborate to survive. Melanie and the fungus have found ways to work together, not always in equal or non-violent ways, but not always in conflictual ones either. Child and fungus are a practice of “becoming with” (Haraway, 2008) that designates the child-hungries as a figure of #AnthropoceneChild.

The child-hungries most dedicated defender and favourite teacher is Justineau, a military-trained psychologist who keeps anecdotal behavioral records of the students. Justineau and Caldwell constantly battle about the humanity of the child-hungries. An example of their attitudes can be gleaned from this dialogue:

[Cadwell:] The subjects aren’t human; they’re hungries. High-functioning hungries. The fact that they can talk may make them easier to empathise with, but it also makes them much more dangerous than the animalistic variety we usually encounter...

[Justineau:] It’s got to be said. There’s no way around it. You carved up two children, Caroline. And you did it without anaesthetic.

[Cadwell:] They don’t respond to anaesthetic. Their brain cells have a lipid fraction so small that alveolar concentrations never cross the action threshold....Which in itself ought to tell you that the subjects’ ontological status is to some extent in doubt. (Carey, 2014, p. 80)

What counts as human for Cadwell is an ability to feel pain, which connects to discussions about sentience in the making of the human in earlier chapters. The links between sentience, blackness,

and childhood in this story will become clearer as the chapter progresses. For now, I note that it is Melanie's kindness and loyalty to the humans who think her disposable that causes the soldiers and scientists to eventually waiver on what counts as ontologically human. This calls back to the description of the "postbellum black cyborg" in Chapter 4, as a figure who forgives and loves despite the circumstances of never gaining full entrance into the category human (Vargas & James, 2013, p. 195). On this note, the last conversation Melanie has with Cadwell is telling. Melanie asks, "We're alive?" and Cadwell responds, "Yes. You're alive" (McCarthy & Carey, 2016, 1:36:05). Even the admission of aliveness from Caldwell does not mean that she thinks the child-hungries should be exempt from the scientific experiments that end their lives. One can be alive—can be life—without being human, which is why sentience is important to keep in mind. In *Gifts*, the child-hungries bio-exceptionalism does not translate into a worthiness for survival. In this case, their exceptionality means that they are too far removed from the bionormatively (or bio-ontologically) human, which, as mentioned above, makes them killable.

In the transition from page to screen a few characters in *Gifts* "racebend," meaning the characters' race changes as the medium does (Racebending.com, 2011). Included in this are the two principle characters of Melanie and Justineau. Their race is reversed in the film: Melanie (played by Sennia Nanua) is Black and Justineau (Gemma Arterton) is white. The concept of racebending was popularized as a term of protest against the casting of white characters in the live-action film adaptation of *Avatar: The Last Airbender*, although it is a longstanding Hollywood practice (Racebending.com, 2011). Nowadays it mostly involves casting decisions that have a "discriminatory impact on an underrepresented cultural community and actors from that community" (para. 2). I write *mostly* because, at least in the case of Melanie, the change makes *Gifts* something more than a traditional zombie story. As a small point of personal

sharing, I do not actually like zombie movies—the blood, gore, and violence are not something I count amongst my preferred leisurely or scholarly activities. Without this casting change I doubt I would have given *Gifts* a second thought and I certainly would not be writing about it here. Novel and screenplay writer Carey has said in interviews that the casting choices were race-neutral, meaning that the parts went to the best actors for the job (Weisberger, 2017). In an explanation that mirrors comments from *The Handmaid Tale*'s Bruce Miller cited in Chapter 5, Carey rationalizes that “the story is set in the UK, and even after a societal meltdown you’d expect to see the same racial diversity there is now” (Reddit AMA & Carey, 2016, para. 3).

Carey insists that race is not consequential to the book so it should not matter in the movie either. I disagree. In the first chapter of the novel are multiple racialized descriptions of the two protagonists. On the first page, Melanie is described as “ten years old, and she has skin like a princess in a fairy tale; skin as white as snow. So she knows that when she grows up she’ll be beautiful” (Carey, 2014, p. 10). This phrase is so loaded with racialized tropes that I think matter a great deal. I sincerely doubt the child-hungries are afforded the movie-going privileges of Disney consumption on the military base, yet white-princess-power still somehow becomes a point of self and societal worth in a zombie story. A few pages later is a description of Justineau from Melanie’s point of view:

Miss Justineau’s face stands out anyway because it’s such a wonderful, wonderful colour. It’s dark brown, like the wood of the trees in Melanie’s rainforest picture whose seeds only grow out of the ashes of a bushfire, or like the coffee that Miss Justineau pours out of her flask into her cup at break time. Except it’s darker and richer than either of those things, with lots of other colours mixed in, so there isn’t anything you can really compare it to. All you can say is that it’s as dark as Melanie’s skin is light. (p. 23)

This description is how Carey alerts the reader to Justineau's blackness without ever having to write out any racially explicit terms. While it is a welcome reprieve from many pop culture productions in that the novel equates blackness with beauty, nevertheless, the up-front textual position of both these racialized descriptions—whether positive or negative—conveys to me at least some significance. My stance is that race and racebending are pivotal to the story's overall impact.

After the military base is attacked and the survivors escape, they must rely on Melanie to guide them undetected through the hordes of hungries in the city. While out collecting food for her captors, Melanie makes two important discoveries. The first is that fungal seed pods have grown to cover one of London's highest and most phallic shaped buildings. The second discovery is a group of feral child-hungries much like her, only they have not yet learned to speak. Returning to the temporary shelter Melanie learns from Caldwell that if the seed pods were to open then the pathogen would become airborne and infect all remaining humans. After some careful thought Melanie decides that she does not want or need to die to save a few remaining humans who have treated her as inhuman-instrumental other. To cite a particularly powerful moment, Melanie says to Cadwell: "Why should it be us who die for you?" (McCarthy & Carey, 2016, 1:36:10). Next Melanie leaves the lab and sets ablaze the fungal tower of spores. The fire opens the seed pods thus effectively ending the world, or, more carefully stated, ending *a world* (Colebrook, 2017a). As the pods burn, Melanie has one last conversation with the Sergeant who had been injured nearby. The Sergeant wails, "It's over. It's all over." Melanie responds, "It's not over. It's just not yours anymore" (McCarthy & Carey, 2016, 1:41:05).

Melanie chooses to destroy the world instead of scarifying herself to it. In doing so, she brings possibilities for a new world into existence. Hari Ziyad (2017b) shares their surprise and delight at the ending:

Because I am so used to humanity being granted a sanctity it does not deserve, I fully expected Melanie...to sacrifice herself for her human captors...When juxtaposed with the argument put forth by some Afro-pessimists that humanity is reliant upon the subjection and enslavement of Black people, Melanie's refusal of humanity is in clear contrast to what we are taught about Black people's possibilities. We, the living dead in America (for what else but death is a life that doesn't #matter?) are told that we can only try (and always fail) to become more human or sacrifice ourselves and our communities for the continuation of human society. (para. 9)

Instead of a limited form of inclusion in a white-supremacist-militaristic-human-bio-centric society, Melanie sets in motion a more "liveable world" by "fac[ing] up to the outrage of human exceptionalism" and delivering a deadly blow (Haraway, 2008, p. 106). The liveable world for the child-hungries has to be the end of the human-exceptional world, otherwise they will remain hunted specimens for a potential human cure. If the humans were to find an antidote, all indications suggest that the child-hungries would be eliminated once and for all. They would be of no more use. The co-existence of humans and hungries is never entertained as an option.

"*Gifts* dares to imagine a happy ending for its monsters, and that is simply amazing," journalist Sherronda Brown (2017) excites (para. 6). A story in which whiteness "becomes dismantled through the intentional action of a Black child enhances the theme of decolonization that is already present in the zombie narrative" given its African and Haitian origins outlined earlier (para. 6). Returning to Kawash's work, Melanie is a terrorist from the perspective of

human exceptionalism as/and whiteness. For the likes of Cadwell, the Sergeant, and the institutions they represent, Melanie embodies “the face of decolonization from the perspective of the interests and entities that decolonization threatens” (p. 238). Tiffany Lethabo King (2019) writes about “grammars of suffering” that violently and perpetually unmake Black and Indigenous lives in the making and sustaining of the human. Melanie is able to refuse this grammar and flip it—suffering is not her end story. *Gifts* ends up potentiating a world that does not require Black death in order to exist (King, 2019). *Gifts* puts in motion an end of the world as an end to “humanity as whiteness,” as Ziyad (2017a) phrases it, meaning that the end of the world for Melanie is the end of the systems of oppression that did her violence and that elevated the bionormative child above all other forms of existence (p. 143). The end of the world is not the end of life in *Gifts* but its refiguration—it is a regenerative reworlding. It is the possibility of a world in a different genre of the human to evoke Wynter again.

Blackness, since at least the Middle Passage, has overlapped with ideas of monstrosity (Bey, 2016). Recently, however, “the figure of the monster has been reclaimed by Black subjects and...articulated with the difference of positivity-in-perversity” (p. 51). In a similar vein, Joy James (2013) offers the Black rebel cyborg as an inhuman figure that, drawing on Fanon, “sets out to change the order of the world” (p. 65). As was outlined in Chapter 4, to be a Black rebel cyborg means to no longer seek inclusion in a white supremacist state. The Black rebel cyborg “relinquishes the unachievable goal: striving for a socially recognized humanity” (Vargas & James, 2013, p. 200). This was one of the lessons Melanie learns. For much of the film, she longs to be accepted by her captors—to be counted as human just like them. But in ultimately refusing to sacrifice herself (and her hungrie-kin) she comes to understand the humans as a figure of “Settler/Master(Human)” that is never going to be otherwise (Wilderson, 2010). More than just a

refusal of whiteness, however, Melanie comes to “refuse blackness-as-victimization and reconstitute blackness-as-resistance” (James, 2013, p. 68). This adds a layer to Sheldon’s (2016) proposal about the slide of the child-figure from protected to protector in the Anthropocene. Rather than saving the world, Melanie generates another option: she refuses, resists, and destroys.

I am not promoting *Gifts* as some sort of manual for revolution. I share it as a thought-experiment. I am not advocating for the genocide of humans—any humans. I do not know if such a statement is necessary, but, just in case, there it is. For me, *Gifts* is not about there being no humans in this world, but it is about humans as an exceptional species and about the structures and institutions of systematic oppression that keep whiteness at the top by way of rendering others inhuman, less-than-human, not-quite-human, or any other arrangement that maintains white supremacy as the hierarchical referent. Another articulation I am leaning on to make this argument comes from the Combahee River Collective (1983[1977]) and their classic “A Black Feminist Statement,” which reads in small part: “If Black women were free, it would mean that everyone else would have to be free since our freedom would necessitate the destruction of all the systems of oppression” (p. 215). I think about this in line with the vision proposed by the Black Lives Matter Global Network: “We fight for our collective liberation because we are clear that until Black people are free, no one is free” (BLM, 2016, para. 11). This is, of course, much different than #AllLivesMatter or some similar white fragility reaction, yet nevertheless points to how flourishing is a collective undertaking. Melanie rearranges the world in ways in which Man is no longer omnipotent: she is free and so are her fellow child-hungries. In ending the world not only does Melanie achieve freedom from incarceration and experimentation but so to do her kin-kind (and some other more-than-humans too).

For true (decolonial) dramatic effect, I wish that the film's last scene was the fungal seed tower set ablaze and Melanie saying to Sergeant that the world is "just not yours anymore."

"These few words tumbling out from the lips of a Black girl child," Brown (2017) writes, "would strike fear into the heart of any white supremacist, because they point directly to their most deep-seated anxiety: the end of whiteness" (para. 3). There is however one additional scene. It is a few days later and Melanie has returned to the military base to free her hungry-classmates that were left locked inside cells during the zombie attack. She has gathered them together with the feral child-hungries on the grass in front of a mobile military lab, which looks like a high-tech solar-powered airstream camper. Inside the lab is Justineau—the sole human survivor—locked in the sealed container as long as the pathogen is airborne, potentially forever. Justineau has a whiteboard and microphone and is teaching all the child-hungries together. Does this detract from the argument I am making about Melanie putting an end to "humanity as whiteness"? I do not necessarily think so. Ziyad (2017b) suggests that the perpetual confinement of a white woman might entice feelings of sympathy from the film's largely white audience. Quickly though, they reverse their position. "Fuck that," Ziyad corrects, "It is time a Black girl destroyed the world, destroyed humanity, destroyed society to save itself. And it is time we cheered them on when they try and succeed" (paras. 18-19). As mentioned above, Melanie is free and so are the hungries; they are a multiaged, multiracial, multispecies squad. They are not the sort of companion species that humans showed themselves capable of living-with (Haraway, 2008); they are a form of "incompanionate" species, meaning "forms of life with whom interspecies relating may not be so obvious or comfortable" (Livingston & Puar, 2011, p. 4). The world Melanie insists upon is also one where another incompanionate species—the orogenes—might not only survive, but, along with the child-hungries, come to thrive. "You may be a monster," the

narrator of the Broken Earth surmises, “but you are also great” (Jemisin, 2015, p. 232).

### **Child-Figures Who End the World: Part II - Orogenes**

In the world of Jemisin’s Broken Earth multiple temporalities and perspectives are simultaneously at play. The epic fantasy moves between deep planetary time and human lifespans. The temporal juxtaposition of human life and earth life are remarked on by the narrator, a creaturely figure of inhuman timespaces themselves: “human beings, too, are ephemeral things in the planetary scale. The number of things that they do not notice are literally astronomical” (Jemisin, 2015, p. 150). What the Broken Earth novels do, attributable to Jemisin’s layered world-building, is make notice geos-spatiotemporal scales, and thereby begin to think of space, time, and earth as quasi-characters themselves. Jemisin’s trilogy totals nearly 1500 pages so summarizing the novels is bound to leave out important details. I will try to highlight components most relevant to the discussion underway in this chapter.

The background to the events of Broken Earth is that forty thousand years ago human beings tried to extract all the earth’s energy and ended up driving the Moon out of orbit. This is explained as:

Then people began to do horrible things to Father Earth. They poisoned waters beyond even his ability to cleanse, and killed much of the other life that lived on his surface.

They drilled through the crust of his skin, past the blood of his mantle, to get at the sweet marrow of his bones. (p. 379)

This connects to descriptions of the Anthropocene covered in Chapter 2 in that mass fossil fuel and mineral extraction have destroyed the relative stability of the Earth system. In Jemisin’s series the Moon is Father Earth’s child. Father Earth’s response to his child’s atmospheric expulsion is to implement the Seasons, which are apocalyptic climatic events like volcanic eruptions, floods, and earthquakes that end the world for a while but not for once and all.

Storying a planetary existence in paternal terms might seem very anthropomorphic and/or anthropocentric save for the fact that humans have never been the centre of this world so all qualities and relations cannot be attributed back to them. The world of Broken Earth is a supercontinent called the Stillness that has always homed inhuman bodies; the existents of this planet are acutely aware of their multispecies intra-dependence.

### **Geos-Worlding a Broken Earth**

The first novel is called *The Fifth Season* (Jemisin, 2015) and recounts the stories of three orogenes: Essun, a middle-aged woman; Damaya, a newly discovered child-orogene; and Syenite, a teenage student trained at the Fulcrum, which is a government school for orogenes that has more in common with the military base in *Gifts* than the infamous magic of Hogwarts. Before the main characters are introduced, the narrator tells of a great and powerful orogene so disgusted with how his kind have been used and abused that he fractures the Stillness along its most vulnerable fault line. What is suggested is that this could be the start of how “the world ends. For the last time” (p. 14). Essun feels the shockwaves of the earth being ripped apart, so she runs home to her children, who also happen to be orogenes, not that anyone in their “comm” (i.e., community) is aware that they have been living amongst these feared beings. In an excruciating scene Essun discovers the dead body of her toddler son, killed at the hands of her husband, and quickly realizes her daughter, Nassun, has been kidnapped, also by her husband. Essun’s search for Nassun is the narrative thread that carries forward throughout the three novels. However, there is much more than a straight temporality at work. Near the end of the first novel, the three figures of Essun, Damaya, and Syenite are revealed to be the same person at different stages of their life.

In the second and third books, narrative attention redirects towards Nassun. Nassun is eight years old when the story begins. She has untapped geos-abilities of enormous potency. Upon discovering Nassun's orogeny, her father insists that they find a cure and they travel to a place rumoured to know of an antidote. This search is the focus of the second book called *The Obelisk Gate* (Jemisin, 2016). Once they find this promised land, however, Nassun learns to accept her orogeny as a gift rather than a "disease" or a "poison" (p. 114), much like Melanie in this regard. Nassun's control and refinement of her geos-powers grow quickly under the watchful eye of a Guardian—who, unbeknownst to her, is the same being who almost 40 years ago found Damaya and brought her to the Fulcrum. Guardians are members of the ruling class who are tasked to "track, protect, protect against and guide orogenes" (Jemisin, 2015, p. 409). Guardians are particularly cruel figures in that they speak of love while exercising authoritarian control over the young, oftentimes resorting to violence. As Nassun battles within herself about her orogeny she also grapples with the implications of broken bio-bonds on a broken earth. In this way,

Nassun's story is particularly affecting, as she struggles to understand the adults who are supposed to take care of her: a mother [Essun] who trains her to survive but who can't seem to express love, a father whose affection is contingent on her becoming something she can't be, and a Guardian who gives her the comfort her parents are unable to. One of the most moving things about the trilogy is the way Jemisin explores the impact of structural oppression on parents and children—how the pressure to keep her children alive in a world hostile to their existence drives Essun, and how Nassun experiences that pressure as a child. (Oler, 2018, para. 8)

Jemisin has repeatedly said in interviews that her formulation of oppression is influenced by anti-Black racism and settler colonialism. The trauma Essun experiences at the Fulcrum has

intergeneration effects on Nassun in ways that reflect what happens in this world, particularly in the context of residential school survivors. I return to this point later.

The third book, *The Stone Sky* (Jemisin, 2017), ventures way back in geological time to trace how the Seasons unfolded and how the oppression of orogenes was normalized over the centuries. In this way, the colonization of the orogenes is intertwined with that of the earth in a Mobius strip-like relation. This harkens back to Yusoff's (2018) argument for the co-constitution of the inhuman wherein both earthly materials and subaltern bodies are formed in relations of negation to what counts as proper humanity. Nevertheless, unable to be fully controlled, both orogenes and earth contain "within them the same potential to shatter the control that has been so painstakingly, and brutally, constructed by the [human] majority" (Oler, 2018, para. 7). *Slate* reviewer Tammy Oler (2018) writes: "The storytelling of the novels themselves begins to feel almost geological: Jemisin slowly peels back the layers of structural oppression in the Stillness, revealing how deep it goes" (para. 9). The climax of the trilogy occurs when Nassun and Essun finally reunite. However, they meet on opposing sides. Should the world end once and for all and with it the systems of governance that have kept orogenes enslaved, as Nassun desires? Or should orogeny be used to return the Moon to the Earth's orbit and end the Seasons once and for all, as Essun wishes? Like Melanie, Nassun is not a child-figure in need of saving: she can either protect the world as is or become its destroyer.

### **Geos-Powers in Inhumane Worlds**

As noted, Essun/Damaya/Syenite and Nassun are inhuman figures called orogenes or roggas in the derogatory slang of the Stillness (I leave it to you to determine the semantic allusion). Like its equivalent in this world, the use of the rogga "slur is deliberate. A dehumanizing word for someone who has been made into a thing" (Jemisin, 2015, p. 140).

Orogenes are able to gather energy from the earth and other lively matter: they can “manipulate thermal, kinetic, and related forms of energy” (p. 462). They have enormous power, for example, they can reach down to sediment underneath the ocean floor and raise it up into mountains. In short, they have the power to bring about the end of a world but mostly they stop the end from ever happening—orogenes quell much more than cause. Orogey has a biological base in that their ability relies on the sessapinae, which are “paired organs located at the base of the brain stem” (p. 343). This bio-embedment allows orogenes to “sess” the earth’s movement—think of this as a kind of ongoing earthly relational awareness. Additionally, orogenes can symbiotically draw upon the earth’s energetic forces—think of this as a sort of becoming-geos-with. Oroge abilities are innate, present from birth, and at first instinctual. “Any infant can move a mountain; that’s instinct,” a powerful orogene named Alabaster clarifies, “Only a trained Fulcrum orogene can deliberately, specifically, move a boulder” (p. 166). Because oroge can easily kill, orogenes become targets for being killed. Damaya is told by her Guardian that she is one of the lucky ones. Though locked in a barn as a child by her Still (i.e., human) family she was given just enough food and shelter to survive, and, unlike many other orogene children who are abandoned, she never accidentally kills anyone. Orogenes who survive early childhood are brought to the Fulcrum to be trained by Guardians. Through fear, indoctrination, and discipline—what Guardians count as care—orogene children are taught to control their powers. For example, Damaya “learns how to visualize and breathe, and to extend her awareness of the earth at will and not merely in reaction to its movements or her own agitation” (p. 197).

Jemisin says that she modelled the Fulcrum school system on the Stolen Generation of Indigenous children in Australia (Hanifin & Jemisin, 2015), but these schools were (are) a technology of genocide in most settler colonial states. Like with the Fulcrum, many Indigenous

children in Canada were (are) taken from their families, stripped of their language, given new names, and made to be ashamed of their culture's gifts. Not everything is transposable though. With echoes of *Handmaids*, some orogene children become breeders for the Fulcrum. Even though orogeny is not a guaranteed genetic inheritance the odds do increase when two orogenes reproduce. So, while orogenes are hated they are also desired, and this reproductive insistence splits orogene-children from equivocations of Indigenous children in settler states. The goal of settler colonialism is elimination, not reproduction (Simpson, 2016; Smith, 2010; Wolfe, 2006). The Fulcrum also hires out orogenes for assignments in which they move earth in productive ways, for example, clearing a harbour of coral so ships can enter and trade. Whatever the form of labour—reproductive or economic—the orogenes are made slaves and the Guardian/Fulcrum masters. This relates to critical questions of who and what counts as human in the novels. Alabaster tells an inquiring Syenite: “But each of us [orogenes] is just another weapon, to them. Just a useful monster” (Jemisin, 2015, p. 143). Later he tells her: “That we're not human is just the lie they tell themselves so they don't have to feel bad about how they treat us” (p. 354). Identifications of monster and human do not stay still but shift from abjected to admired and condemned to desired.

In press for the books, Jemisin relays that Essun/Syenite/Damaya and Nassun would be seen in this world as Black, and, as such, she purposefully wrote the series as a “Black female power fantasy” (Hurley & Jemisin, 2018, p. 470). Blackness is not mainly an exteriorized feature in the *Stillness*, which connects with Hartman's (1997) explanation of blackness as an aspect of “social relationality rather than identity... a contested figure at the very center of social struggle” (p. 57). Blackness is more than skin deep. Jemisin (2015) describes the orogene children of the Fulcrum as “all different: different ages, different colors, different shapes” (p. 193). Physical

features adapt to environmental conditions in the Stillness, and Jemisin developed markers along these lines. On her personal blog, Jemisin (n.d.) elaborates:

There's nothing visually distinct about orogenes; the thing that makes them unique is perceptual, behavioral. Yet race in our own world is a social construct, not anything related to actual biology, so it makes sense that a world which has such complicated feelings about orogenes would fission them off from the rest of humanity. (para. 6)

Orogenes are made recognizable as a racial group by other means (e.g., black uniforms), and they are a hated, feared, and violently oppressed one at that. While orogenes' symbiotic earth powers are not overly familiar to this world, the oppression that they face is entirely recognizable. In other words, while race in the Stillness may be colour-blind it is just as systemically real as racism in this world. The Stillness is structured by "racializing assemblages" that jive with contemporary governmentalities, including state policies, government schools, segregated comms, surveillance technologies, recorded histories, and micropolitical aggressions (Weheliye, 2014).

The oppression of orogenes has been naturalized over time and space in such ways that the very existence of the Stillness depends on the sacrifice of some orogene lives for the benefit of human lives. Orogenes—those not economically or reproductively valuable—are made disposable and in being made disposable maintain their usefulness. What I intend by this claim is rendered apparent in one of the trilogy's most affective scenes. Syenite, accompanied by Alabaster, has been sent on an assignment for the Fulcrum. Deep into their travels they feel the earth shake and they can tell its source is orogeny and not geology. The Fulcrum assigns unruly orogene children or those brought to school too late to be properly educated (i.e., controlled) to the position of node maintainer. Node maintainers are stationed at outposts across the Stillness

and their job is to quell any seismic activity that may arise in their vicinity in order to protect the nearby villages and villagers. Syenite had assumed that the node maintainers were just “poor fools assigned to tedious duty” (Jemisin, 2015, p. 119), but what she discovers imbalances her worldview:

The body in the node maintainer’s chair is small, and naked. Thin, its limbs atrophied. Hairless. There are things—tubes and pipes and things, she has no words for them—going into the stick—arms, down the goggle—throat, across the narrow crotch. There’s a flexible bag on the corpse’s belly, attached to its belly somehow, and it’s full of—ugh. The bag needs to be changed. (p. 139)

Because orogeny is instinctual, the Fulcrum keeps the child-body and discards the rest. These children are reduced to “nothing but that instinct, nothing but the ability to quell shakes” (Jemisin, 2015, p. 141).

This again makes me want to push the move Sheldon (2016) makes in theorizing a shift in the image of the child from protected to protector. This orogene-child did much saving of humans while strapped to a machine; however, this node maintainer also found a way to resist and caused a quake. In doing so he ended his suffering along with the lives of nearby humans that contributed to it or were complicit with the system of injustice that required it. He moved from saving the world to destroying it. What Jemisin offers, especially in scenes such as this, is a speculative and serious engagement with structures of oppression that mirror this world, arrangements that might be otherwise, and cautions about locating the potential for an otherwise in an abject subject (Povinelli, 2011, 2013c). Who are the node maintainers in this world? What is required of them? Is their resistance possible? Syenite resolves that “survival is not the same

thing as living” (Jemisin, 2015, p. 441), and this is a question the Anthropocene discussion has largely avoided engaging according to Colebrook (2014):

The post-apocalyptic is best read as a question posed: just as the human species starts to approach the real possibility of its actual non-existence...there is a barely perceived and half-articulated problem of how and whether humans ought to survive. What is it about humanity that one would want to accept? (p. 190)

The Broken Earth trilogy engages these provocations and more. The emergence of a new “modality of the human”—the orogene—is dangerous and violent (Weheliye, 2014, p. 8). It is monstrous (Povinelli et al., 2014).

### **The Ends of the World**

The first book of the Broken Earth series opens, “Let’s start with the end of the world, why don’t we?” (Jemisin, 2015, p. 1), whereas the third book begins, “Let’s end with the beginning of the world, shall we?” (Jemisin, 2017, p. 1). In an interview with *NPR* radio, Jemisin states that she wanted to trouble the singularity of the end of the world with her invention of the Seasons:

What I wanted to play with was the concept of “When do we consider an apocalypse to have begun and ended?” Because in a lot of cases, what’s considered an apocalypse for some people is what other people have been living every day. It’s not the apocalypse, it’s just, it’s an apocalypse for you. (Shapiro & Jemisin, 2018, para. 3)

This is not so much intended in a relative sense, but in a grounded and situated one. Every so often the Stillness experiences a Fifth Season, a particularly severe apocalypse where death overtakes life for a sustained duration. One of the lessons expressed in Broken Earth, however, is

that “the ending of one story is just the beginning of another....When we say ‘the world has ended,’ it’s usually a lie, because *the planet* is just fine” (Jemisin, 2015, p. 14).

This connects with *Gifts* in that as one world ends another begins, and also that the planet endures even when the human species may not. Planetary time is not the same scale as human time. I am reminded of Alan Weisman’s (2007) bestseller *The World Without Us*, a scientifically-based thought-experiment where once humans are no longer then grass will poke up through pavement, vines will cover skyscrapers, tunnels will flood, other-than-human species will regenerate, fungus will flourish, and forests will replenish. Every building will eventually have the highly sought-after rooftop garden. At the end of *Gifts*, wide-panned camera shots of a hungrie-filled London cityscape show greenery already taking back space in abandoned concrete structures. These images also happen to be actual drone footage of the “ghost town of Pripjat” near Chernobyl—a literalization of Weisman’s speculative non-fiction experiment (IMDb, 2016). While the Broken Earth does not imagine a world without humans, it is a world wherein human exceptionality is challenged. There are many inhuman figures in the series, such as obelisks and stone-eaters, whose introduction is beyond the scope of this chapter. However, given that the oppression derives from human-figures in the series, one of my takeaways is “how fortunate, then, that there are more people in this world than just humankind” (Jemisin, 2015, p. 151).

The tropes of apocalyptic save-the-world stories were outlined in Chapter 3. The typical storyline involves a white, cis-gendered male, able-bodied hero narrowly averting disaster. The apocalypse in such stories becomes an opportunity to build a new world, only the new world is usually the same world “centered on white male power fantasies in some way” (Hurley & Jemisin, 2018, p. 470). Jemisin presses on these tropes in ways that bring together perspectives

foregrounded by Indigenous and Black scholars in previous chapters. A point of connection is that apocalypse in *Broken Earth* is a recurrent phenomenon and not a one-off event. Jemisin says, “This is what the world is for some people. It is the apocalypse again and again and again” (p. 472). Jemisin continues:

And the only thing that makes [this Fifth Season] different in the case of the events detailed within the trilogy is, as Essun says toward the end, everybody is now suffering this particular apocalypse. We could’ve all had a good life, we could’ve all shared in the bounty of this world and survived well enough and cooperated and tried to make this world better, or we could’ve ended up with the society we have where some people are OK and other people are constantly suffering....That was how I was feeling in the moment of watching Ferguson and as I look at our society now...and I’m kind of like “well, welcome to what it feels like to be us.” (p. 472)

I cannot help but connect this to the Anthropocene discussion in the sense of “we could’ve been OK.” “We” could have stopped extracting, polluting, burning, consuming, flying, factory farming, and countless other actions that are known to be destructive. “We” could have stopped anti-Black racism, settler colonialism, and other racialized violences. Another point of thought the Anthropocene brings forward is a re-universalized “we” of shared precarity. But, as was pointed out in earlier chapters, some of “us” are in much more precarious positions than others; some people suffer now while others maintain a standard of life where climate discomforts are pushed off to a perpetual horizon. There may be some inconvenience, but for many affluent people climate change is not yet life threatening. I do not mean these comments lightly or disingenuously. I intend them in the context of what counts as the end of the world is put up for serious discussion in *Broken Earth* and *Gifts*.

Tucked in at the end of the block quotation above was Jemisin noting that the trilogy was a way for her to respond to Ferguson and the #BlackLivesMatter movement. For Jemisin, writing the series meant “processing the systemic racism that I live with, and see, and am trying to come to terms with” (Hanifin & Jemisin, 2015, para. 3). It is no accident that many of the oppressive tactics employed by the Fulcrum and the general fear and hatred of orogenes reflect anti-Black racism in the United States. What the series does though is provide speculative space for Jemisin to say enough is enough and then change things: “sometimes a revolution is necessary; sometimes you do have to burn it all down” (p. 473). But Jemisin does not leave it there, as *Gifts* does with the world set on fire. Because the trilogy begins with the end of the world, Jemisin never lets readers sit comfortably *in potentia* of a new world. Jemisin insists that we consider “what is at stake in defending a world built on cruelty and oppression— and what is at stake in ending it” (p. 469). Povinelli (2013c) insists that potentiation and extinguishment go hand-in-hand, so what gets extinguished if the orogenes become free? Broken Earth details what the end of the world might look and feel like. The Seasons, particularly the Fifth Season underway, show that “if you burn it all down, a whole lot of people get hurt...It’s a giant red rip across the center of the planet, millions of people dead, more people starving to death” (Hurley & Jemisin, 2018, p. 473). Its intra-active potentiation and extinguishment; it is also a speculative depiction of how “decolonization is always a violent phenomenon” (Fanon, 1963, p. 35).

When the end of the world happens again at the conclusion to *The Stone Sky* what happens next is not shared with readers. There is a chance for sustained orogene freedom, for less hate, for stronger comms, for a more stable climate, but this will not happen right away. The apocalypse does not just end overnight and survival will be difficult for a long while. Nassun’s final action is no a guarantee of a less cruel world. As Jemisin reflects:

What happens next is dependent on everyone in this world being willing or able to accept a new way—and whether that is possible, who the hell knows....This is a world that for millennia has lived with oppression and is built upon oppression. It's been burned down.

What will happen now, well, I don't know. (Hurley & Jemisin, 2018, p. 474).

Jemisin makes the end of the world a temporal, situated, and complicated event with no guarantees. Like Haraway's (1997) figure of the vampire, the apocalypse is not inherently good or bad. In many ways, "it depends on what you consider the end of the world" (Hurley & Jemisin, 2018, p. 477). Part of what Jemisin means by this statement is that the planet is likely to survive and "there's another species waiting to take our place," so apocalypse for whom (Hurley & Jemisin, 2018, p. 477)? Whose world ends? One existent's apocalypse might be another's regeneration. But the apocalypse can also threaten ways of life, murder many relations, and alter systems of local governance in traumatic intergeneration cycles, as work previously cited by Indigenous scholars outlines (e.g., Corntassel, 2012, Simpson, 2011, Whyte, 2018b). The end of the world is not a concept or occurrence I take lightly. More critical questions are "whether it's the kind of world that needs to go" (Hurley & Jemisin, 2018, p. 477), and who gets to decide? In connection with other texts and figures in this dissertation, the world that needs to go for Nassun, Melanie, Aiyana, and the Unbabies is not the same world, for example, that Dr. Frankenstein, June, and the Boy's father battle against. It is not the same world that provides me so many comforts, but it is also not the kind of humanity that I accept as either desirable or inevitable.

### **Child-Figures as Geos-Existents**

Yusoff (2016) argues that the dominant subject emerging from the Anthropocene discussion is "a mythic Anthropos as geologic world-maker/destroyer of worlds" (p. 5). In citing this same phrase in Chapter 2, I was drawn to Yusoff's succinct encapsulation of the human as wielding damaging yet generative force, and also how mythic alludes to the Anthropos as a genre

of Man rather than the human itself (Wynter, 2003). My generalized referent-figure for this articulation is male, white, colonial, capitalist, heterosexist, and techno-arrogant—a representative of “The God Species” (Lynas, 2011). The speculative child-figures of this dissertation however put a shudder into my singular condemnation. Moving from the scientific realm of Yusoff’s observation to post-apocalyptic speculative texts another vision emerges. The child-figures in this chapter both destroy their worlds and set about re-making them in ways in which human and planetary extinction do not parallel each other. Is it possible to create a world without racism, capitalism, sexism, ableism, militarism, and whiteness if this world is not first extinguished? How might the end of one world instigate the beginning of an otherwise world? Can the monstrous, the viral, and the geos gesture towards less extractive, less disposable, and less oppressive worldly relations? How might the inhuman monstrosity of the child-figures provide “potential exit strategies from the world of Man” (Weheliye, 2014, p. 28)? Rather than jettisoning the bio-centric human altogether, can it be refigured in ways that “emphasize the historicity and mutability of the ‘human’ itself, gesturing toward different, catachrestic, conceptualizations of this category” (Weheliye, 2002, p. 26)? The historicity would take account of how “humanity was borne as an exclusionary construct, coterminous with the enslavement of some humans and the genocide of others” (Yusoff, 2018, p. 56). The mutability would be thought with histories of fungible bodies that make certain humans commodifiable and experimental inhuman objects (Hartman, 1997; King, 2019; Wilderson, 2010). And, also to be considered, is how technologies of governing humans morph form while maintaining the same logic, for example, settler colonial strategies of residential schools to the Sixties Scoop to the contemporary child welfare system.

Yusoff (2016a) coins the term “anthropogenesis” to signify a new origin and ending story for the human ushered in by the Anthropocene. Despite the genesis in its composition, anthropogenesis can be read as a story about endings as much as beginnings. In one sense, the Anthropos-figure is the Holocene subject’s end. In another, the Anthropocene foreshadows the future event of species nonexistence—humans of all epochs will be gone. What can be born(e) in/of such endings? Another way to think of endings—or the end of the world in the specific figuration of this chapter—is as openings wherein difference is not derogatory, consumable, or commensurable. In *Broken Earth*, Jemisin probes possible responses to difference by storying how Stills and the Fulcrum treat orogenes. Her provocation is that there are many possible responses to living with difference: “you could accommodate that difference, you could find a way to wrap your society around that difference and make it healthier and safer for everybody instead of shoving some into a horrible place or genociding them” (Wei & Jemisin, 2016, para. 21). Her point is that living with difference does not have to result in oppression, fear, and discrimination. Jemisin asks, “why aren’t you more willing to accept these people’s difference?” (para. 21). While I would like to push beyond acceptance as inclusion, recognition, and accommodation I take Jemisin’s point. I have come to appreciate Melanie’s and Nassun’s difference as too much to subsume under current configurations of the bionormative child. Their “active potentiality” is too threatening to the current order of things (Povinelli, 2016, p. 173). The child-figures were familiar enough to be recognized (i.e., birth, growth, development), but strange enough in their viral and geos-powers to be excluded and killed. If Melanie is recognized as fully human then the scientists and soldiers could not have rationalized as efficiently the suffering they inflicted on her and the experimentation they attempted on her. If orogenes were accepted by the Stills then Essun’s and Nassun’s lives would not have been lived in fear and

shame. My gesture does not quite work—this is not about absorbing these child-figures into the dominant framework but about changing the arrangement, which is why I am so drawn to figurations of the end of the world. Inclusion is not the gift these child-figures ultimately desire. Melanie and the scientific-militaristic-Man complex were never going to coexist; Nassun and the orogenes were never going to be handed their freedom. They needed new worlds.

Anthropogenesis proffers “a rebirth in so much as definitions of being must now acknowledge an eternal but shifting mineralogical root” (Yusoff, 2016a, p. 9). This becoming-geos is different than what might be typically assumed by statements referring to the human as a geological force, a common refrain in Anthropocene literature mapped out in Chapter 2. The assumption seems to be that humans exert force on the earth in ways where they stay the main agent in charge. According to Yusoff, “anthropogenesis does not acknowledge the human power to *force* geologic forces,” rather it opens humans up to “geologic forces that far exceed any human capacity *per se*” (Yusoff, 2016, p. 13). In other words, this is not a force waged unidirectionally against the rocks by a solitary individual, but a collective becoming-with rocks in different “geosocial formations” with differential geos-sociomaterial effects (Clark & Yusoff, 2017). One of the reasons I am so drawn to Broken Earth is because the orogenes embody and enact this complex understanding. Orogenes are geologic forces but only *with* and *in relation* to the earth. Orogenes intra-act with the earth in ways in which neither existent is what they are outside the relation. To be an orogene is to become-with earth. Clark and Yusoff (2017) propose the term “geosocial formations” as a means of “thinking the becomings of earth and society together” (p. 6). Broken Earth depicts how humans, earth, and inhuman existents rearrange around each other to form and reform worlds.

The world of Broken Earth also challenges a binary of bios/geos understood as alive/inert. Rocks, steams, clouds, mountains, seafloors, and crystals all have lively energies in the Stillness. Dividing existents into life and nonlife does not make sense in this world. Allied to this line of thought is Yusoff's (2016) proposal of the figure of "humanity-as-strata" as capable of epistemologically and ontologically rupturing the humanism of a humanity that realizes itself solely in social, cultural, and biological terms. Transposed as an Anthropocene geos-subjectivity, the human-as-species and human-as-social are recognized as intimate with strata. As such, geos-subjectivities do not end at the skin, but they mark flesh and move with flesh into and with the earth (Yusoff, 2018). Orogenes are a speculative figure of what Yusoff's humanity-as-strata and Povinelli's geontology might look and feel like. In sharing seismic powers with the earth, Nassun, for example, makes problematic animacy hierarchies that rank order adult/child, nature/culture, biology/geology, and sentient/nonsentient as dominant and preferred ways of knowing and being (Chen, 2011). Another figure that exceeds a life or nonlife enclosure is the virus. The virus is both "natural and manufactured...alive but incapable of reproduction on their own" (Vint, 2013, p. 139). While the pathogen in *Gifts* is a fungal rather than viral, that detail is not impactful to the analytical import of my argument that follows.

Povinelli (2016) theorizes the virus as a figure of geontology that disrupts and confuses the antagonism of life versus nonlife. For Povinelli, the virus is not definable by either term because each uses the other to extend themselves. The preeminent pop culture formation of the virus is the zombie figure, which Povinelli summarizes as "Life turned to Nonlife and transformed into a new kind of species war—the aggressive rotting undead against the last redoubt of Life (p. 16). To this *Gifts* adds a complex layer as Melanie is not in a state of either existential or corporeal decomposition, but re-enlivened through an imaginary akin to what Ashleigh Wade

(2017) names as “viral blackness.” As referenced late in Chapter 1, Ashleigh Wade (2017) proposes a “theory of world making through viral blackness” that challenges associations of the virus solely with the spread of harmful pathogens. Instead, Wade figures virality as the transmission of “generative products, such as political movements” like #BlackLivesMatter (p. 34). In today’s anti-Black and settler colonial world, Wade points out, “containment is extremely important for maintaining control, but the viral cannot be contained” (p. 35). The viral moves, it spreads, and it mutates. Andrew Baldwin (2016) argues that “the guarantee of white supremacy lies in its capacity to contain the excess” (p. 84), and since viral blackness exists as something constantly shape-shifting it has “world-making capacities” that are in excess of repossession (Wade, 2017, p. 38). Despite militaristic efforts in both *Gifts* and *Broken Earth*, the child-figures cannot be fully controlled or dispossessed of their inhuman gifts.

For me, the pathogen in *Gifts* is especially intriguing as a figure of contagion because it interrupts the colonizing cycle of virality as something inherently malicious or oppressive. Melanie and the pathogen need each other—Nassun and the earth do as well—these are not relations set on conquest. Additionally, Wade importantly moves the figure of the virus from individualized bodies to collective ones. With Ferguson as her case study, Wade traces how viral blackness moved from online spaces to the streets and back and forth again and again. Viral blackness configured community in ways supportive of the viral as a “deterritorializing mode of subversion to white supremacist systems” (p. 36). I read this into Pricilla Wald’s (2008) work on contagion that reframes the virus as “not inherently about killing but rather about changing” (p. 139). This perspective understands the virus as an embodiment and enactment of “shared immunity and thus group belonging” (p. 139). Wade’s and Wald’s ideas of contagion as community are expanded upon in the conclusion to this dissertation.

## Strategic Geontopower

Sherryl Vint (2013) proposes that the zombie figure is currently undergoing a transformation from the “living dead to the infected living” (p. 135). This move foregrounds a heightened contemporary theoretical interest in life as something other than “bare life” (Agamben, 1998). Scholars such as Colebrook, Yusoff, Clark, and Povinelli have noted an increasing and increasingly intensive emphasis on life in scholarly discussions. For example, Colebrook (2012) writes of “a general tendency in all academic disciplines to return to questions of life” (p. 11), and a widespread disinclination to face up to the “anthropomorphic limits of our capacity to think life” (Colebrook, 2010, p. 56). Clark (2017) offers a caution that the “Anthropocene incitement to think with and through the geologic implies more than just imagining that inorganic matter or minerality may be more life-like than we assumed” (p. 160). This emphasis on life, especially understood as processes of birth, growth, and development (Povinelli, 2016), are pervasive in childhood studies. The emphasis on life overlaps with figure of the bionormative child in ways that mirror the recognition that “there is something unprecedented about our contemporary situation in which the prefix bio-proliferates” (Coole & Frost, 2010, p. 15).

For Vint (2013), the zombie phenomenon engages “the boundary between the living and the dead,” which is “precisely what is at issue politically and philosophically” in the current moment (p. 135). Since at least Foucault (1976), analyses of contemporary forms of governance tend to map a shift from sovereign power (i.e., “take life or let live”) to biopower (i.e., “make live and let die”) (p. 241). However, for Povinelli, whether taketh and giveth, life and death occupy the same side of the governmental equation—*Life (Life {birth, growth, reproduction} v. Death) v. Nonlife* (p. 9). Life and death are differences in degree, but not differences in kind.

Governance, including the response and relation to difference, is tied to life in ways that perform a “biontological enclosure of existence” (Povinelli et al., 2017, p. 171). This enclosure “has long depended on subtending geontopower—the difference between the lively and inert” (Povinelli, 2016, p. 5). Instead of Vint’s formulation of the border of living and dead, Povinelli marks the difference between the lively and inert, or, in other words, between life and nonlife as the predominant theoretical and political concern nowadays. What is being exposed by the Anthropocene discussion however is the “trembling architecture” of this division (p. 16). The child-hungries and child-orogenes are figures of this shudder.

Povinelli (2016) maps a “foundational division within western governance between that which supposedly arrives into existence inert and that which arrives with an active potentiality” (p. 173), for example the difference between a rock and a baby. When I hear the last clause of that quotation—active potentiality—I am again reminded of the figure of the child as the dominant imaginary of life. Recalling Arendt’s work on natality, what more than a child exudes potentiality? The life versus nonlife division has been used destructively and racializingly as an “attribution of an inability of various colonized people to differentiate the kinds of things that have agency, subjectivity, and intentionality” (Povinelli, 2016, p. 5). In terms of settler colonial techniques, an alternative ontological understanding of nonlife provides an ongoing rationale for casting Indigenous peoples within “a premodern mentality and a postrecognition difference” (p. 5). In other words, Indigenous difference can be acknowledged (as both *less than* and as *different than*) so long as their difference does not disrupt dominant arrangements of settler colonial governance (Povinelli, 2011). For example, Povinelli (1995) shares a story of a government official attending a speech by her Indigenous friends about a sacred Dreaming site nearby named Old Man Rock. At one point during the talk, a friend turns to Povinelli and asks: “He can’t

believe, eh, Beth?” (p. 505). Povinelli answers, in part, “He doesn’t think she is lying. He just can’t believe himself that Old Man Rock listens” (p. 505). The snippet provides an example of how the “cunning of recognition” operates in ways in which a belief of difference is acceptable but an analytics of truth is not (Povinelli, 2002). Nothing has to change if the official believes these women believe what they say, but if it were accepted as truth that Old Man Rock listens then the Dreaming could not be destroyed for mining or other extractive economies. That Indigenous peoples believe rocks can listen poses no real threat to the politician or to late liberal modes of settler colonial governance. Such recognition actually supports these modes in the sense that a multicultural space can be provide for the expression, and even celebration, of alternative beliefs (Povinelli, 1995, 2002). In the Anthropocene however this tactic of governance is weakening. How does this tie into the worlds of Melanie and Nassun? What does this mean for contemporary understandings of childhood?

For me, these child-figures invite a grappling with “otherwise forms of existence that do not rely on the reproduction of bio/geo binaries” (Nxumalo, 2017a, p. 564). Neither do these child-figures depend on state recognition of their difference. Melanie and Nassun are both bios and geos; they are engaged in “geontological world-making” (p. 563). If the Anthropocene can be a “provocation to begin to understand ourselves...as beings who have something *in common* with the geologic forces” (Yusoff, 2013, p. 781), then Melanie and Nassun offer an invitation to think-with them so we can better live-with the inhuman existents of this world. They allow me to imagine in a speculative form what might be otherwise on this broken earth. From the speculative to the enactive, the early childhood educators, researchers, and children working with Common Worlds’ pedagogies are researching these geos-possibilities with children and more-than-human existents in daily early childhood practices and encounters (Common Worlds, n.d.).

My hope is that my work enters into conversation with their research. For example, this chapter shares with Fikile Nxumalo's (2017a) work on "geotheorizing mountain-child relations" a desire that "geos might be a refusal of the child development perspectives that shape" understandings of children's worlds (p. 559). In storying children's relations with Burnaby mountain through the figure of child-mountain-rock, Nxumalo manages to "decentre children as the central actors in these relations by situating the mountain itself as a figure that reveals extractive settler colonial relations, yet also *exceeds* and *refuses* these relations" (p. 560; emphasis added). In the conclusion to this dissertation, I consider how speculative child-figures generate possibilities in excess of the bionormative human. I also mark out how I have slipped up at times and re-enclosed the child once again in a heroic, human-exceptional imaginary. An important question for me is if my thinking-with these child-figures can articulate geos-futurities in ways that "de-dramatize the human" (Povinelli et al., 2014, para. 22)?

## Chapter 7: Beyond Survival: Geos-Futurities for #AnthropoceneChild

Since beginning this project, I have practiced a morning routine of scrolling through news sites on my phone and taking screenshots of Anthropocene related stories. I have quickly accumulated quite an archive. Browsing through my collection, I log that most of the climate headlines are dark, dim, and foreboding. I also notice that the page grabs increasingly announce the imminent end of the world: “Doomsday Clock is Now 100 Seconds from Midnight” (Weisberger, 2020), “Climate Change: 12 Years to Save the Planet? Make that 18 Months” (McGrath, 2019), “What if We Stopped Pretending? The Climate Apocalypse is Coming” (Franzen, 2019), “Our House is on Fire” (Thunberg, 2019), and “Why Some People Think COVID-19 Heralds the End of the World” (McMaster, 2020). In the very first paragraph of this dissertation, I cited headlines from 2018 with the caveat that although it may seem bad form to date the opening of a dissertation so strictly that I did not think these sorts of catastrophic declarations would diminish anytime soon. So far, my prediction is accurate. Given the devastating fires in Australia, the COVID-19 pandemic, and the continuing rise of global temperatures, for example, it seems to me that these decrees will continue to increase.

I also outlined earlier a three-tier framework for thinking-with #AnthropoceneChild. My arrangement built on Sheldon’s (2016) noticing of a shift from the image of the child in need of protection to the child tasked with doing the protecting. Sheldon argues this transition co-emerges with scholarly articulation of the Anthropocene. I have added a third transit in that instead of being saved or saving, speculative child-figures might refuse the demand to love our monsters of environmental and racialized harm and instead destroy a world. Taken together, the my framework is as follows: first, child-figures exist in a world where a “too big to fail” mentality is cracking and the parental relationship is wielded as fix; second, child-figures protect

worlds in which they are rendered disposable; third, child-figures do not lament the end of the world but enact new formations of *not this* and *what if*. Different aspects of this assemblage are foregrounded in different chapters. For example, the Boy in *The Road* survives the end of a world, Aiyana in “Ferguson is the Future” protects her world, and Nassun in *Broken Earth* ends the world in order to begin a new one. The looseness of the arrangement allows for child-figures to move between positionalities, as was evidenced by the continuum of Black cyborgs in Chapter 4 (James, 2013; Vargas & James, 2013).

Without setting out to align them as such, the speculative child-figures I chose (and that chose me) overlap in many ways with Elizabeth Povinelli’s (2016) three figures of geontology: the Desert, the Animist, and the Virus. As a point of congruence, I can interpret the Virus as Melanie, Aiyana, and the Unbabies; the Desert as the affective anxiety of *The Road* and the Colonies in *The Handmaid’s Tale*; and the orogenes as Animist figures. What follows in this chapter is not about fitting child-figures into Povinelli’s prototype but seeing what is possible when potential connections are mapped out. This strategy also helps me to reflect on my desire to think-with child-figures while not wanting to re-elevate the human (i.e., child) as solitary exceptional hero, which I am aware I slip into at times. Through overlying Povinelli’s figures with my three-tiered arrangement, I revisit the Boy with Bones as a figure of the Desert (Miller, 2018), Hushpuppy from *Beast of the Southern Wild* as a figure of the Animist (Zeitlin, 2012), and introduce a multi-age, multi-Nation group of Indigenous child-figures in *The Marrow Thieves* as a figure of the Virus (Dimaline, 2017). Throughout this conclusion, I attempt to bring some theoretical threads from earlier chapter together.

### **Activating #GeontologicalChildhoods**

As outlined in Chapter 6, Povinelli’s (2016) geontology rewrites biopower to captures a mode of governance set on maintaining the division of life and nonlife, even though—or perhaps

because—this perceived rift is under pressure in the Anthropocene. This is to say that geontology, and its twin term geontopower, is not so much new as newly visible. And what is being witnessed is a form of late liberal settler “governance that is trembling” (p. 15). Povinelli’s three figures of geontology “represent the nodal points in contemporary struggles to make sense of a current destabilization of this foundation division” between life and nonlife (p. 16). The figures can be summarized as follows:

The Desert stands for discourses and strategies that re-stabilize the difference between life and nonlife by asking how we can stop the drift of life into the inert; the Animist discounts the difference between nonlife and life by claiming everything is alive with potentiality; and the Virus uses and ignores the division for the purpose of diverting its energies in order to extend itself. (p. 173)

The connections between figures can be examined by recalling Povinelli’s formula of governance introduced in the last chapter: *Life (Life{birth, growth, reproduction}v. Death) v. Nonlife* (p. 9). Applied to the figures, the Desert reaffirms the versus between life and nonlife, the Animist dissolves it, and the Virus jumps back and forth over it. Povinelli presses on the point that these figures are neither “exits” nor “escapes” from power, nor are they the “answer” to the anthropocentric climate change (p. 16). They are symptoms, not solutions; for example, the take-away is not to all become animists now. Importantly, these figures are also “not subjugated subjects waiting to be liberated” (p. 16). These existents already engage otherwise worlds even as they have to wade through the environmental, economic, social, political, racial, and colonial destruction of this one to endure (Povinelli, 2011).

Povinelli (2016) offers the geontological figures with two caveats. The first is that these figures are not seeking inclusion in dominant way of knowing and being (i.e., life), but are

“diagnostic and symptomatic of the present way in which late liberalism governs difference and markets” (p. 15). These figures displace and confuse divisions of life/death and bios/geos. They are “expressions” of a formation of power and “windows into its operation,” and “not a repressed truth of human existence” that if only widely known and accepted then things would automatically change (p. 15). Much has been invested in keeping life and nonlife epistemologically and ontologically separate. For Povinelli, to “care” about and for these figures is not to emplace them in the current order of things, but to understand them “as a way station for the emergence of something else” (p. 15). These figures are not entirely free from current governmental structures yet are not completely enclosed within them either. They indicate “a possible world beyond” late settler liberalism and biopolitical rule (p. 16). In an image I find challenging yet helpful, Povinelli suggests that “geontology and its three figures huddle just inside the door between given governance and its otherwhises, trying to block entrance and exit and to restrict the shape and expanse of its interior rooms” (p. 17). One figuration of the “interior rooms” are the *not yet* speculative worlds that Melanie and Nassun set into motion in Chapter 6. What kinds of resources, infrastructures, ethics, and education are needed so that these otherwise worlds can “survive the conditions of their birth” (p. 15)?

Povinelli’s second provision is that the Desert, Animist, and Virus “are tools, symptoms, figures, and diagnostics” of late liberal settler governmentalities that are not universally applicable or fixed. While Povinelli’s figures of geontology find resemblance and connection with the speculative child-figures I study, I am curious if texts and authors from other places and with other genealogies would imagine differently. Late liberal settler modes of governance rely on divisions of bios/geos but there are worlds in this world “in which these enclosures are no longer, or have never been, relevant, sensible, or practical” (p. 16). This has resonance with

Claire Colebrook's (2018b) suggestion brought up in Chapter 1 to rethink the Anthropocene's "concern with ends" by looking "to literary experiences of what it is like to be already without a world, to have already experienced social death" (p. 276). This alternative might generate something other than a narcissistic imperative of "we ought to be saved" because "the end of the world might offer them a chance for existence" (p. 277). Colebrook is careful to submit literary experiences as a source rather than literal ones, but she also extends outside the text to the "many peoples [who] have lived with the experience of near-extinction well before the vogue of the post-apocalyptic" (p. 277). As explored in Chapter 3, there are many unresolved ethical hesitations that arise in seeking the otherwise in this way.

I previously wrote that I do not intend a seamless correspondence of speculative child-figures with children in this world. This is not to deny connections, but to insist that some differences are incommensurable. For example, thinking-with the generativity of Unbabies and the Colonies is not the same thing as living-with Aamjiwnaang First Nation children who experience the everyday chemical exposures of survival in sacrifice zones (Wiebe, 2017). At times I have not articulated the lines of difference because it can be useful to think them together. However, it always matters where analytic cuts are made (Barad, 2007). I try to keep Povinelli's (2013c) cautionary words in mind when working with speculative child-figures: "Why don't we ever ask what it is to be this figure?" What is it to be a hybrid-child, a viral-child, or a toxic-child? In the Anthropocene, what is it to be "born pre-polluted" (MacKendrick & Cairns, 2019)? These inheritances are matters of care and concern that cross between speculative and real worlds (Puig de la Bellacasa, 2017). They lead me into another unresolved question: why do why theorists, myself included, keep turning to the child-figure to think through and with/in worlds under threat? This ethical tension is never far from the child-figures of this dissertation or the children

living in the Anthropocene. Amongst the many unanswered questions in this work is a concern about how to capacitate the kinds of conditions that make flourishing not only possible but sustainable for #AnthropoceneChild. “Survival will always be insufficient but it’s a good place to start,” Alexis Shotwell (2020) notes in a recent blog post (para. 1), and I carry this friction with me.

### **Playing Desert: The Boy with the Bones**

Povinelli’s (2016) figure of the Desert encapsulates the anxieties surrounding the end of the world. By this I mean the disappearance of life—not only or mainly in relation to death—into nonlife. An Anthropocene related term for the ultimate withdrawal of vitality is extinction. For Povinelli, the Desert “dramatizes the possibility that Life is always at threat from the creeping, desiccating sands of Nonlife” (p. 19). The figure of the Desert stands for life lost, life at risk of being lost, and also life that can be regained “with the correct deployment of technological expertise or proper stewardship” (Povinelli, 2016, p. 17). Nonlife awaits defeat in this figuration. In Povinelli’s description I hear echoes of the ecomodernist rhetoric challenged in Chapter 4. For the ecomodernists, deserts have not yet been brought to life because humans “have not yet found an economic use for them” (Asafu-Adjaye et al., 2015, p. 19). Additionally, the fears of the June and the father in Chapter 5 can be thought of as the encroachment of the Desert into the lives of their bionormative children. The Unbabies might belong in the Colonies, but the Boy and Hannah do not. In these scenarios, parental stewardship is a preventative measure against becoming-Desert. Povinelli makes a distinction between the desert as a barren landscape and the figure of the Desert as an affect that arouses a deep desire for vitality, but I think they overlap in ways often difficult to tease apart. An example of this would be the ongoing technoscience research and development seeking to colonize Mars and the speculative films that conquer any

anxiety of earthbound species extinction and imagine life lived on this formerly barren frontier (e.g., *The Martian*, *The Space Between Us*). Another example of the Desert from earlier in this dissertation is the Boy with the Bones, who is pictured alone against a barren landscape playing with the bones of his family's dead livestock after a prolonged drought.

Following from the introductory news headlines of this chapter, I find myself thinking again about the Boy with the Bones given how hard Warrumbungle Shire, New South Wales, was hit by fires in January 2020. More than five million hectares were destroyed in the region, including more than 2000 homes (BBC, 2020). A cycle of drought and fire is the temporality the Boy with the Bones inherits and inhabits. Furthermore, I am concerned about how drought and fire brought about the end of the world for livestock and other nonhuman existents on the farm. Who amongst them survived the drought only to have their world ended by the fires? What happened to the bones—did the Boy's toys burn? I am also thinking about what cannot die because they are never considered to have lived in the first place; in other words, the rocks, air, streams, and landscapes that have been altered by climatic events. I recognize the Boy with the Bones as a figure of the Desert because his world is where there was once much life but now that vitality is severely reduced. The Desert is also, for Povinelli, a place where life might again flourish given the right technoscience inventions. Within this context, the child-figure “signifies the future we (adults) threaten, the connection to nature we (adults) have corrupted and the human spirit whose ingenuity will overcome the (adult-made) disasters of the present” (Sheldon, 2016, p. 39). This is to ask the Boy with the Bones to “love our (adult) monsters” of ecological destruction and take-up premature death as plaything. I have my doubts about the likelihood of technoscience innovation to overcome anthropogenic climate change, but that does not mean that creativity and resourcefulness do not happen in smaller moments. In a way, the Boy with the

Bones appears to have retained joy in play amidst destruction. As a viewer of the photo, however, I wonder if my interpretation falls back upon an image of the innocent child and their intimacy with the natural world that has always been “raced white” (Bernstein, 2011, p. 8). Can my affective response recognize that “joy is not innocence; it is openness to caring” (Haraway & Tsing, 2019, p. 20)?

José Esteban Muñoz (2015) notes that “poor people of color, Indigenous people, and people in the global South are punished and pathologized for their improper engagement with nature/animals, namely, for survival and sustenance rather than recreation or companionship” (p. 211). Have I been reveling in thinking-with the Boy with the Bones within this formula? In another photo in the same series by Brook Mitchell (2018), the Boy with the Bones is shown against the same dark, dusty backdrop. However, this time he is standing tall and in front of his face he is holding up a full-faced horned skull of a sheep. In the caption, Mitchell explains that the Boy with the Bones calls this his “monster hat.”<sup>54</sup> Given my interest in monsters, I am quite taken by this photo of becoming-boy-becoming-animal-becoming-monster. I also am reminded of the muzzle that the soldiers and scientists make Melanie wear in *Gifts*, which I argued was a means of making her killable (Gergen et al., 2018; Haraway, 2008). I am uncomfortable with how the move to disposability applies to the Black girl-figure, the dead sheep, and not the white Boy with the Bones. I continue to grapple with these uncertainties by returning to another child-figure introduced in Chapter 1—Hushpuppy from *Beasts of the Southern Wild*.

<sup>54</sup> The photo and caption can be viewed at: <https://www.theguardian.com/environment/2018/jul/19/you-count-your-blessings-farm-families-battling-drought-photo-essay> and <https://www.dailytelegraph.com.au/news/nsw/central-west-farming-families-feel-the-pressure-as-water-wanes-feed-runs-low-and-debts-add-up/news-story/4cf0c90aa8ddf4a2b864c68597dc1449>

### **Saving the World: Burdens of *Beasts***

With the figure of the Desert, Povinelli (2016) captures “the drama of constant peril of Life in relation to Nonlife” (p. 15). A different drama is embodied by the Animist. The difference between life and nonlife is not relevant to the Animist “because all forms of existence have within them a vital animating, affecting force” (p. 15). There is no nonlife. A caricatured exclamation of the Animist is: “everything is alive and we are all related.” The foremost figure of the Animist is Indigenous peoples. However, Indigenous peoples’ relations with more-than-humans have been used as a rationale for discipline in late liberal settler governmentalities (Povinelli, 2016). The Animist’s recognition of inhuman “agency, subjectivity, and intentionality...has been the grounds of casting them into a premodern mentality and a postrecognition difference” (Povinelli, 2016, p. 5). This “postrecognition difference” is important because a key tactic of late liberal multiculturalism has been the celebration of difference so long as the normal distribution of sense stays as is, which will replay with Hushpuppy in the analysis that follows (Povinelli et al., 2014). A question I have about the Anthropocene is whether this is shifting. With anthropogenic climate change evincing destruction on the Earth system, Indigenous caretaking practices are now being sought out as harm-reductive ways of caretaking for the planet. Is this recognition, adaptation, assimilation, extractivism, honouring, or something else? The figure of the Animist is not locked to Indigenous peoples in Povinelli’s formulation either—New Age spiritual practitioners, new materialism/vitalism theorists, and individuals who are neurodiverse like Temple Grandin are other representatives of the Animist (p. 17). In sum, the Animist are “those who see an equivalence between all forms of life or who can see life where others would see the lack of life” (p. 18). Examples from Chapter 6 include the orogenes and their geos-powers and Povinelli’s (1995) friend’s account of how rocks listen. Introduced in

Chapter 1, Hushpuppy is a figure of the Animist who reminds me that racialization needs to be taken into account in posthuman suppositions.

Benh Zeitlin's (2012) *Beasts of the Southern Wild* (hereafter *Beasts*) is ecological fairy tale, magic realism, and a romanticization of survivalism made more severe by environmental, racial, and economic inheritances. The film opens with Hushpuppy (actor Quvenzhané Wallis) sculpting a sandcastle-like structure for a chick in the dirt. She holds the chick up against her cheek and hears the heartbeat of the whole world before softly lowering the tiny being onto its new abode. The camera pans out and the audience realizes that the play is happening inside a ramshackle structure—Hushpuppy's own dirt castle. There is not much difference between Hushpuppy's home and the scrap yard outside, nor with her father's tin-sheet shack that is located 100 feet away from her solitary encampment. Hushpuppy is six years old. This is a throwaway world (Yaeger, 2013). In a uniform of stained tank top, underwear, and rubber boots, Hushpuppy checks the vitals of the pigs, roosters, and dogs nearby. Without any fear of getting cinched, she presses a crab flat to her face in order to hear its muted pulse. Later, she will do the same for a leaf and her sick father. Hushpuppy is also the story's narrator, philosophizing off-screen about her actions on-screen, she tells us: "All the time, everywhere, everything's hearts are beating and squirting and talking to each other" (2:26). In Hushpuppy's world, everything is alive, and everything is connected. Hushpuppy is at one with animals and "at one in and with the dirt" (Sharpe, 2013, para. 5). "The whole universe depends on everything fitting together just right" is Hushpuppy's animist oath (21:30).

Hushpuppy's father, Wink, makes sporadic appearances. Wink's drunkenness and neglectfulness co-exist with his love of place and hyper-masculinist ambition for his daughter to "beast it." Wink also suffers from a terminal blood disorder that impacts his heart health. After

disappearing for days Wink returns just in time to pluck Hushpuppy from her shack that is ablaze. Terrified of her father's anger, Hushpuppy runs only to be caught and struck down by Wink's hand. Hushpuppy rises, closes her fist, and hits Wink in the chest. As Wink falls to the ground, Hushpuppy fanaticizes about the polar icecaps crashing into the ocean and a band of ancient aurochs awakening from extinction. Simultaneously thunder rumbles in the distance signifying an impending storm. Both the tempest and the beasts are moving towards her in ways in which mysticism and realism meld into one another. Hushpuppy seems to think that her punch set off this cascade of world ending events: "Sometimes you break something so bad that it can't get put back together" (33:25). Familial dysfunction and climate disaster are intertwined with the distribution and disposability of life in *The Bathtub*.

The *Bathtub* is an isolated bayou community literally sinking into the waters of a post-Katrina world. Everyone and everything share space here: dirt, animals, humans, ghosts, and the discarded possessions of the "dry world." The *Bathtub* is cut off from the mainland by a levee system. Only instead of keeping water out in a protective mode that failed in Katrina, these levees are keeping the water in. When the big storm hits there is nowhere for the water to go. The *Bathtub* is drowning. The *Bathtub* "is a society structured upon the desire to survive, and this politics of survival is fraught with contradiction, ambivalence, and uncertainty" (Joo, 2018, p. 7). However, much critical reception of the film ignores the complexity of precarity and praises the portrayal of a multi-racial, anti-capitalist community who just manage to make do. A multi-award winner on the festival circuit, *Beasts* is heralded as "sheer poetry on screen: an explosion of joy in the midst of startling squalor" (Lemire, 2013), "beautiful, funny, timely and tender" (Wise, 2012), and "a blast of sheer, improbable joy" (Scott, 2012). Conversely, all I can think about is a society with no sustained chance of much of anything let alone flourishing. The

Bathtub's inhabitants have to leave or die, and this inevitability stalks "the film's ambition to valorize feral human nature" (Nyong'o, 2015, p. 251).

There are scenes that distract from the effort, endurance, and exhaustion of survival and facilitate the audience and critic applause. For example, Hushpuppy tells us that The Bathtub has more holidays than anywhere else on earth. Their celebrations appear joyful—there are drinks, fireworks, music, laughter, and dancing in borderless fields. They often feast together on bottomless volumes of fresh seafood, unburdened as they are by formal dining etiquette that might otherwise insist on plates and cutlery. On the film's promotional poster, Hushpuppy runs through the grass with massive bursts of firelight pouring from the sprinklers in her hands. She seems magic. Children go to school when they want; they play together and with animals whenever they desire. Despite these moments, or maybe because I know it cannot last, I share with Tavia Nyong'o (2015) an overwhelming "anxiety about cinematic depictions of black (and other subaltern) people as primitives on a continuum with nonhuman animals" (p. 251).

This leads me to the reception of *Beasts* in scholarly circles, which can be gathered under two broad characterizations. First, much like the press reviews, scholars render a story of multi-racial climate change resilience and resistance—what Patricia Yaeger (2013) praises as "dirty ecology." Second, *Beasts* is received as a "romance of precarity" wherein any attention to racialization makes the triumphant aspects of point one impossible and irresponsible (Brown, 2013; Sharpe, 2013). In its most generative moments, *Beasts* asks viewers to re-examine humanity's relationship to the more-than-human world and how all existents are altered by climate change. *Beasts* "rejects a traditional environmentalism committed to humans over here saving or preserving nature out there" (Joo, 2018, p. 82). For better or worse, all existents in The Bathtub are in the dirt together. Perhaps though what I am most drawn to is the displacement of

biological kinship as the centre point of relationships. The Bathtub is “a mixed-race, multi-generational community that realizes humans are not at the top, or the center, of the world” (p. 79). However, there is little time and space for animacy hierarchy in a world so engrossed in everyday survival. This is why I hesitate to hold up The Bathtub as some sort of bastion of alter-kin making. The only parental figure present is Wink who is reduced to a racialized archetype of Black masculinity: absent, drunk, unaffectionate, neglectful, and violent (hooks, 2013). Hushpuppy tells a stranger, “I can count all the times I’ve been lifted on two fingers” (1:18:35). Valorizing non-bionormative kin-making in these circumstances overlooks the fact that Hushpuppy is abandoned multiple times by multiple people. In Chapter 5, I outlined how climate catastrophe is often resolved through the “the trope of the reunited (white) nuclear family,” and while *Beasts* is “thoroughly critical of the idea of the biological family as natural” (Joo, 2018, p. 80), its precarious patchworking of kin is not an antidote to biocentric idealizations.

A particularly intriguing assessment of *Beasts* comes from Patricia Yaeger (2013) in her conceptualization of “dirty ecology.” Yaeger begins her analysis by noting that *Beasts* serves as a figuration of “the nation’s baggage...a culture of racial neglect...[and] commitment to toxic inequality” (para. 2). Mentioning these racial politics, Yaeger quickly moves on to other things. In doing so Yaeger argues that *Beasts* “refuses the realism of social critique and advances instead into hubris land, into a new realm of myth making for the twenty-first century” (para. 3). For Yaeger, the kinds of critiques suggested in her opening lines, and which I detail next from Black feminists, are “eloquent” but “off the mark” (para. 9). For Yaeger, the mythic triumphs over the racial and political:

*Beasts* is not a slice of life or a realist screed; its business is mythological: it proffers a sacred narrative with overtones of awe and cosmic investigation. Querying the social order, it offers strange pedagogies about how we should live in a melting world. (para. 9)

On the one hand, the “strange pedagogies” Hushpuppy learns are self-taught lessons of self-reliance and self-sufficiency. They are about how to survive on a broken earth and endure the everyday slow violence of climate change. The Bathtub’s school teacher, Miss Bathsheba, instructs “Y’all better learn how to survive now” (9:32), and a big part of that message is a reconfigured relation to nonlife. I can get behind Yaeger’s critique of a pristine, beautiful nature and call to care for brutalized landscapes. However, I cannot fully back *Beasts*’ pedagogical implications in ways Yaeger celebrates. For example, at a rare “feed-up time” provided by Wink he tells Hushpuppy to “share with the dog” (2:50). Recall from Chapter 5 that this stands in direct contrast to the father in *The Road* who refuses to let the Boy share food with the few strangers they encounter. For Yaeger, this dinner scene in *Beasts* contradicts the main message of the Anthropocene that tells humanity to “see themselves as a geologic force preying on the planet,” and instead Wink teaches Hushpuppy “to know ourselves as a species dependent on other species” (para. 7). In that ephemeral moment of caretaking I can see Yaeger’s meaning, but I cannot forget another scene a few minutes later when after days of being left to fend for herself, Hushpuppy blows up her shack. The cause? Hushpuppy was heating herself a meal of tinned cat food to eat on her propane stove. So, while there may be much truth to another of Miss Bathsheba’s lessons that “Meat. Meat. Every animal is made out of meat. I’m meat. Y’all asses meat” (8:30), I am uncomfortable with the juxtaposition of food scenes and even more so with Hushpuppy’s repeated abandonment.

After the big storm, Hushpuppy and Wink float through a submerged Bathtub looking for signs of life. Most of the residents, although reluctant, left before the storm. There are only a few survivors now, human and nonhuman, and this number will lesson as the days go and the water cannot recede. As they float along in their derelict boat made from a truck bed and empty oil drums, Hushpuppy peers down at dead animals submerged beneath the water's surface: "They're all down below trying to breathe through the water. For animals that didn't have a Dad to put them in the boat, the end of the world already happened" (29:05). I think there is an argument that the end of the world is ongoing for Hushpuppy as well: her father is dying, her home is burnt, her community is drowning, her future seems determined. As the days go by more plants and animals die from the salinized waters, Wink also gets sicker, and the aurochs come closer. Yaeger interprets this differently than I do. She understands Hushpuppy as "an early avatar of who we need to become" in the Anthropocene (para. 18). In the slippage of the figural to the literal, I hope Hushpuppy's life is not the fate of my young kin. The question I hold onto is: "How does a little black girl child orphaned and abandoned become a vision for climate resistance for so many people who watched the film?" (Sharpe, 2013, para. 8). Unlike Lee Edelman's (2004) *Child who is a guarantor of reproductive futurism*, "children of color are not fetishized in the ways white children are in hopeful imaginations of the future" (Joo, 2018, p. 5).

As mentioned in Chapter 3, the central character in *Beasts* racebends. The film's source material is a play called *Juicy and Delicious* which features a white ten-year-old boy as lead and the setting is Georgia rather than the Louisiana bayou (Alibar, 2013). How does this revisioning of location and the presence of a Black girl-figure alter the optics of "survivalism, self-reliance, and cosmic caregiving?" (Maclear, 2018, p. 608). Several Black feminists argue powerfully that making the protagonist a young, precocious Black girl "is not at all accidental" (Nyong'o, 2015,

p. 262). Hushpuppy's blackness is necessary because "how else could...the violence of extreme poverty, flooding, the violence of a six-year old girl child living alone in her own ramshackle house with no mother or father, be inspiring and not tragic?" (Sharpe, 2013, para. 7). Blackness naturalizes precarity in ways that displace history. Audiences do not ask how or why Hushpuppy got in this situation because her poverty fits into pre-established racial narratives. Christina Sharpe (2013) explains that "at least part of the disaster on view here is everyday Black life lived in the wake of slavery and neither this film nor many of its viewers actually account for that life as disastrous" (para. 6). Familiar to the discussions in previous chapters about racial innocence and sentience, "this isn't the first case of black children being depicted as insensitive to pain, or of black suffering and survival being used to symbolize American democracy" (Brown, 2013, para. 2). This idea of "poverty freedom" as an expression of liberation is instead understood as a "romance of precarity" (para. 4). bell hooks (2013) situates Hushpuppy as yet another representation of "abused and abandoned black children, whose bodies become the playing fields where pornographies of violence are hidden behind romantic evocations of mythic union and reunion with nature" (para. 21). The film is grounded in a "Western fantasy of the primitive" that encourages audiences to celebrate Hushpuppy as a "brave survivalist" battling not only the elements, her father, and her imagination, but a mainstream societal order that would dictate how she should live and behave (Brown, 2013, para. 4). To see Hushpuppy as a redeemer figure, however, is to ignore the thousand things that should otherwise make us shudder. hooks argues, "it is truly a surreal imagination that can look past the traumatic abuse Hushpuppy endures and be mesmerized and entertained" (para. 19).

As a figure of Sheldon's (2016) Anthropocene related slide in the image of the child, Hushpuppy is protector of the wild as/and The Bathtub. Additionally, as a figure of the Animist,

Hushpuppy understands that everything and everywhere is connected. She has a canny ability to commune and communicate with animals. Two particular scenes illustrate this. Hushpuppy and her crew blow a hole in the levee so that water in The Bathtub can recede after the big storm. This “terrorism” alerts the mainland authorities to their presence. An armed evacuation ensues, and The Bathtub residents are taken to a temporary shelter on the mainland where medical care and daycare are provided. Hushpuppy hates the institutionalized, sterile, and starkly white setting, which she describes as “a fish tank with no water” (1:02:00). Looking at patients with IVs and heart monitors, she remarks, “when an animal gets sick here, they plug it into the wall.” Everyone is animal for this Animist. Eventually The Bathtub residents flee the shelter and return home in time to meet the arrival of the aurochs. Hushpuppy and the giant beasts come face-to-face and after sharing intense looks the aurochs bend a knee, lower their gaze, and leave the bayou. Hushpuppy says to the aurochs, “You’re my friend, kind of” but “I’ve gotta take care of mine” (1:22:05). In connecting with the beasts, Hushpuppy “claims responsibility for the devastation embodied by the aurochs and manifested in the land, and for her whole community’s future” (Cecire, 2015, p. 166). Innocence is not available for the Black child (Bernstein, 2011); she is responsible for her community’s survival. As figure of the Animist, Hushpuppy not only sees life in the most reduced circumstances but she’s able to communicate with a range of multispecies existents. The film closes with Hushpuppy’s narration: “I see that I am a little piece of a big, big universe, and that makes it right” (1:26:30).

Veronica Barnsley (2016) names Hushpuppy a figure of “postcolonial child” through which interrelations “amongst actual and mythological animals and between past, present, and future time-worlds” are understood as intertwined in an ecological web (p. 240). In Barnsley’s reading, the sense of connectivity “de-centres the contemporary notion of the human and the

tenets of development, progress, and mastery over nature that hold it in place” (p. 240). From my perspective, decentring from the human in these animist ways nevertheless assumes inclusion in the category human first. So, “despite the film’s eagerness to celebrate” a postcolonial, posthuman model, “it leaves unattended the category of race, leading to the film’s inability to rethink what it means to be human” (Joo, 2018, p. 81). Nyong’o (2015) finds problematic how the figure of a Black girl is “asked to perform the work of imagining the survival of a civilization that has abandoned her” (p. 251). Earlier I cited a line from Shotwell that spoke of survival as a necessary place to begin but not an adequate end. *Beasts* has nowhere to go on this point. In my attempts to think-with Hushpuppy I keep returning to the same matter of care and concern: what is it to be this figure (Povinelli, 2011b)? Why do theorists, and again I am complicit here, locate a potential otherwise in those most precarious? Why is suffering and struggling taken up as resistance and the bases for a new way of being in the world?

Natalia Cecire (2015) notes that *Beasts* “poses a nearly unthinkable, yet all too present, question: how does one prepare a small child for a future marked by imminent environmental collapse?” (p. 164). My desire is to facetiously respond, “Not like this!,” but the issues are too serious for such editorializing to suffice. Posing a related question, Kyo Maclear (2018) asks: “What does care look like in an unequal and warming world?” (p. 605). In a powerful essay titled, “In Defence of the Wastelands: A Survival Guide,” Nēhiyaw writer Erica Violet Lee (2016) begins contoured a pedagogical response:

To provide care in the wastelands is about gathering enough love to turn devastation into mourning and then, maybe, turn that mourning into hope.... Hope, then, is knowing there is more to living than surviving; believing that some worlds must exist for us beyond survival. Even when we must piece those worlds together from gathered scraps, slowly

building incandescent ceremonies out of nothing but our bodies, our words, and time....When we make a home in lands and bodies considered wastelands, we attest that these places are worthy of healing and that we are worthy of *life beyond survival*. (paras. 33-34; emphasis added)

It is not that The Bathtub or its residents are unworthy of care, but that there is no form of care made available that could “stand against neglect and socially and ecologically eroding acts of inattention” (Maclear, 2018, p. 609). In contrast, *The Marrow Thieves* provides a speculative imagining of care in the wastelands of post-apocalyptic Canada that gestures at *life beyond survival*. As a precursor to the novel’s discussion, I look briefly at the generative possibilities of figuring contagion as community.

### **Viral Contagion: Complicating Community**

The speculative texts in this dissertation consider climate change through the child-figure as a means of approaching “the almost incomprehensible scale of this global ecological crises” (Johns-Putra, 2014, p. 127). I have focused on singular child-figures even as I have tried to think-with them in relation-with other existents. For example, Nassun does not exhibit autonomous agency because she intra-acts with the earth. Together they are a geos-force. Melanie seems to commit a solitary act of heroism when she sets the seed pod tower ablaze even though each movement and thought depends on a symbiotic relation with the fungal pathogen. These child-figures help me appreciate “that no one stands or acts alone, that all human lives are inextricably enmeshed with others (human and more-than-human) and that all human actions are implicated with and have implication for others (including nonhuman others)” (Taylor, 2013, p. 117). However, my analytical unevenness leaves me concerned that I have not done enough to “refuse the centrism of the individual child and foreground the enmeshed and heterogeneous common

worlds that children inherit and inhabit” (p. 87). I think this is a trap of figures as methodology—of following the child around (Ahmed, 2012).

Hushpuppy is a geonotological figure of the Animist and also a figure for whom the inheritance of environmental racism is extreme. As suggested in Chapter 6, there are ethical concerns in assigning the “figurative burden” of “suggest[ing] a future” to child-figures (Barnsley, 2010, p. 328). The weight of the future will be too much for Hushpuppy in the long term, in part because she bears the heaviness alone, as was exemplified in her encounter with the aurochs. She alone confronts the beasts; she alone takes responsibility for her community. The final child-figure I think-with in this dissertation is not an individual child but a multi-age group of Indigenous children from different Nations that come together to build a common world. *The Marrow Thieves* is a multilayered, speculative, and decolonial story about “collaborative survival in precarious times” (Tsing, 2015, p. 2). Instead of the more expected bonding of Indigenous characters with the Animist, I associate this band of *survivants* with the figure of the Virus.<sup>55</sup>

Povinelli explains that the defining difference between the Desert and the Virus is the former’s inertness and the latter’s intentionality. In other words, the Desert awaits a technoscience fix from elsewhere while the Virus “is an active antagonistic agent” (p. 19). Furthermore, the Virus is distinguished from the Animist because it muddies the oppositions of life/death and bios/geos rather than assuming everything is alive as a starting point. According to the logic of the Virus, the world is not reducible to a juxtaposition of vitalism (e.g., everything’s alive) and inhumanism (e.g., socially dead, nonlife). The Virus “can use and ignore” the life and nonlife division “in order to extend itself,” and it does not settle once and for all. For Povinelli (2016), the Virus has as “its central imaginary...the Terrorist” (p. 19). The Virus is what the

<sup>55</sup> Anishinaabe author Gerald Vizenor (2008) offers the term *survivance*—a combination of survival and endurance—to capture the ongoingness and ongoing resistance of Indigenous peoples in settler colonial states.

Desert and Animist become if radicalized (p. 19). Figures of the Virus for Povinelli include Ebola, nuclear power, the zombie, and green activists/terrorists (p. 19). As a contemporary example, eighty-four members of Congress sent a letter to then Attorney General Jeff Sessions in October 2017 asking that the Dakota Access pipeline protesters, who are largely members of the Standing Rock Nation, face criminal prosecution as terrorists under the USA Patriot Act for disruptions such as “valve-turning” (i.e., turning off pipelines at pump stations).<sup>56</sup> In Canada, CSIS and the RCMP have gathered personal information and tracked activities of anti-petroleum protestors, including many Indigenous land defenders, beginning with #IdleNoMore in 2013 (Bronskill, 2019; Craig, 2016). In these examples, the figure of the Virus transgresses “the borderlands between activists and terrorists across state borders and interstate surveillance” (Povinelli, 2016, p. 19). The Virus is an *international* activist-terrorist, which takes on additional meanings in consideration of how Indigenous peoples navigate nation-to-nation relations amongst themselves and outside state enclosure and geopolitical. However, to be the Virus is to always be “under attack” (p. 19), which plays out speculatively in *The Marrow Thieves*.

A companion figuration of the Virus is contagion. The main focus of Patricia Wald’s (2008) work on contagion is unpacking the taken-for-granted literariness of the “outbreak narrative,” which includes attention to its rhetorical devices and storytelling strategies in both scientific press, news articles, and blockbuster films. Wald notes a dominant pattern whereby “conventions of horror and myth” reduce the complexities of pathogenic emergence to “an apocalyptic battle between heroic scientists and the hybrids who embody the threat” (p. 257). The outbreak narrative follows a predictable pattern which includes identifying the virus, naming the disease, outing its carriers, tracing its travel routes, developing prophylactics, and curing the

<sup>56</sup> A scanned copy of the letter can be viewed at [https://buck.house.gov/sites/buck.house.gov/files/wysiwyg\\_uploaded/Protecting%20Energy%20Infrastructure.pdf](https://buck.house.gov/sites/buck.house.gov/files/wysiwyg_uploaded/Protecting%20Energy%20Infrastructure.pdf)

disease and dis-ease. What starts as an “epidemiological horror stor[y]” of human versus pathogen ends as a “timeless and ritualized story of renewal in which Humanity is reaffirmed as it is redeemed by Science” (p. 260). Many of these tropes are shared with the wider category of post-apocalyptic film outlined in Chapter 3. Not all pandemics fit this narrative structure, however, especially epidemics that do not have a cure and/or cannot be easily contained. In these cases, for example SARS and HIV/AIDS, responsibility gets recirculated from “science to society” (Wald, 2008, p. 255).<sup>57</sup> The dramatic structure of the outbreak narrative is re-playing with COVID-19: Trump repeatedly calling it the China Virus, tales of the virus being produced and released from a Wuhan lab, the animalization of suspected consumers of bat soup, the global race for a marketable vaccine, increased anti-Asian racism, and disproportionate mortality rates in Black, Indigenous, and poor communities—this is a horror story in real time.

As documented in Chapter 6, *Gifts* has the lab, scientists, and hybridity of the outbreak template but also challenges many of the conventions outlined by Wald, especially the triumphalism of science. One of the big dangers of the fungal pathogen in *Gifts* is its hybridity, which offers a conceptual frame to think-with Melanie and her hungrie-kin as figures of the Virus through a terrorist imaginary. As Kawah (1999) explains, terrorists are “the face of decolonization from the perspective of the interests and entities that decolonization threatens” (p. 238). In these ways, Melanie is a terrorist from the standpoint of science, military, and bionormative “whiteness as humanness” (Wright, 2018, p. 5). Additionally, the scientific story of

<sup>57</sup> Without a cure or scientist hero, the outbreak narrative pulls on racialized and sexualized imaginaries not based on scientific fact. Wald (2008) gives an example from the early days of HIV/AIDS diagnosis when a persistent rumour circulated, with no scientific basis but big anti-Black racist appeal, that the species barrier was broken when Africans raped monkeys (p. 260). When scientific success is not forthcoming, the outbreak narrative names and shames particular figures as Patient Zeros or “superspreaders” (p. 4). The history of HIV/AIDS again provides a representative case. Gaëtan Dugas, a Canadian flight attendant, was wrongly assumed to be Patient Zero for many years. In the 1980s the Center for Disease Control (CDC) in California tracked the sexual partners of gay and bisexual men diagnosed with HIV. Along the way Dugas’s medical chart was misread—the letter-O for “Out-of-California” was mistaken for the number zero—Patient Zero was born.

the *Ophiocordyceps unilateralis* fungus provides a realistic, scientific frame from which the speculative horror story grounds itself. Known colloquially as the zombie-ant fungus, *Ophiocordyceps unilateralis* takes over the central nervous system of bullet ants in some tropical rainforests causing the ants to leave their colony, bite down in a “death grip” on a leaf which induces paralysis, and then sprout fungal stem-like spores from their exoskeleton (Scientific American, 2013). In *Gifts* this real fungus has found a way to jump the species-barrier, which makes it new yet still familiar. Melanie and her hungry-friends have similarly broken the species line: both fungus and child have mutated—are mutants. While the child-hungries are pathologized, they are also protected because they are necessary for a cure. My film-spectatorship training led me to assume that science would triumph, and humanity would defeat the zombie threat. I fully expected a vaccine to be forthcoming. Wald cites this form of anticipatory confidence as a means of “sanction[ing] the status quo” so that “social existence” does not have to be significantly rearranged (p. 268). Both the Anthropocene discussion and the outbreak narrative pull on “the promise and authority of science in the heroic service of a threatened ‘Humanity’” (p. 257). This is where *Gifts* makes another impact: the status quo is challenged, science fails to provide a solution, humanity does not survive, and a serious refiguration of global existence (and existents) is set in motion. *The Marrow Thieves* reinforces the resistant aspects of contagion illustrated in *Gifts*.

In charting tropes of contagion narratives, Wald reveals a history of racism, xenophobia, and cruelty directed to those figured as strangers. Coinciding with an increased alarm of outsiders is a search for something or someone to blame. This is palpable with COVID-19. Sandra Hyde voices that “in times of uncertainty is it common for people to place blame elsewhere, and to blame people who are different from them, or that they read as different”

(McDevitt, 2020, para. 6). Calling COVID-19 the China Virus is to misleadingly attribute blame to a place and people—it is not as if viruses know or are governed by borders. Secretary-General of the United Nations Antonio Guterres (2020) recently released a video on Twitter recognizing that “the pandemic continues to unleash a tsunami of hate and xenophobia, scapegoating and scare-mongering” of the Asian community and he pleads for governments to “act now to strengthen the immunity of our societies against the virus of hate.” Guterres flips the inflationary language of contagion for social justice purposes: racism is the disease and community is the cure. In response to the uprisings following the murder of George Floyd by police, Roxane Gay (2020) reflects: “Eventually, doctors will find a coronavirus vaccine, but black people will continue to wait, despite the futility of hope, for a cure for racism. We will live with the knowledge that a hashtag is not a vaccine for white supremacy” (para. 22). In another response piece, actor George Clooney calls anti-Black racism “our pandemic. It infects all of us, and in 400 years we’ve yet to find a vaccine” (para. 8). In a moment reminiscent of Ruha Benjamin’s (2016b) inspiration for “Ferguson is the Future,” I came across an unattributed photo on social media of a brick wall in Minnesota with the spray-painted phrase: “Cops=Virus. He wasn’t breathing.” I am sympathetic to these arguments and join these thinkers in struggling to make sense of this world, but I am nevertheless troubled by the equivocation. Does racism need euphemisms? Racism is not a virus you can catch if someone sneezes, or, in the cringe-worthy soundbite of Prime Minister Justin Trudeau, “speak moistly.” I also wonder if the dis-ableist imaginary of disease provide a cover of innocence? Can I be accountable for racism if I am sick with it?

With these concerns expressed, I am still not willing to completely shut out the generative possibilities of thinking-with the virus and contagion. In making apparent the

narrative organization of pandemic performances, Wald highlights shared links between communicable, communication, and community, which could be used to “evoke a profound sense of social inter-connection” (p. 12), instead of racialized and sexualized fears and stigmatisations that protect an idealized humanity. Neither disease, sickness, nor infection were the original associations of the term contagion. Wald points out that contagion literally means “to touch together” and it first “referred to the circulation of ideas and attitudes,” for example, “revolutionary ideas were contagious” (p. 12). This connects with Ashleigh Wade’s (2017) theorizing of “viral blackness” that moves between virtual spaces and physical places in the constitution of resistant community. There is a disruptive and transgressive potential inherent to the Virus: the virus needs other cells to endure and ultimately relies on the cells they parasitize for their existence. Contagion has similar qualities: transformative, fluid, hard to control, and disrespectful of boundaries. Contagion “narratives manifest an ontological tremor,” which I have elsewhere in this dissertation described as a shudder (p. 53). With contagion the insular individualism and exceptionalism of the human is challenged. For me, COVID isolation has fully and finally debunked any fantasy of self-reliance.

### **Beyond Survival: Care for Collective Flourishing**

Métis author Cherie Dimaline’s (2017) *The Marrow Thieves* is a post-apocalyptic speculative story set in Canada in the year 2050. An environmental apocalypse has destroyed all that is taken for granted about modern life, including the ability to dream.<sup>58</sup> In an imaginary that reminds me of N. K. Jemisin’s world building, Dimaline describes the situation as follows: “The earth was broken. Too much taking for too damn long, so she finally broke. But she went out like a wild horse, bucking off as much as she could before lying down” (p. 136). There were melting

<sup>58</sup> A point repeated throughout this dissertation is that the settler state of Canada is already a post-apocalypse for Indigenous peoples, or, in another framing, an ongoing apocalypse.

ice caps, tsunamis, tornados, earthquakes, and the pipelines “snapped like icicles and spewed bile over forests, into lakes, drowning whole reserves and towns” (p. 136). The population reduced by half and those remaining were on the move as “the shapes of countries were changed forever, whole coasts breaking off like crust” (p. 136). This speculative world is not wholly Desert but quickly becoming one. Still there are those who cling to a “miscalculation of infallibility in the face of a planet’s revolt” (p. 136), and if they cannot have electricity, wifi, and air conditioning then they will do their damndest to get dreams back. Apart from Indigenous peoples who have some sort of herd immunity, most of the settler population has lost the capacity to dream. Without dreams they are going mad—drugs can only haze away so much. The Canadian government—through recommendation, research, and development efforts of Science and Church—contends that Indigenous bone marrow holds the cure to their dreamless nightmare. The exact pathogen is unknown and unnamed, and, like Melanie and her kin in *Gifts*, those excluded from the category human hold the promise of a cure.

In an effort to acquire research subjects, the Canadian government first asked for Indigenous volunteers. Rightly suspicious of settler state politeness, the solicitation efforts failed to garner enough experimental subjects. So next “they turned to the prisons. The prisons were always full of [Indigenous] people” (p. 129). After running through the captive population, there still was no cure and the state needed more bodies so “they turned to history” for advice on how best to keep Indigenous peoples “warehoused, how to best position the culling” (p. 129). History had the solution in the re-implementation of residential schools. As the schools rematerialized there were rumours about a technoscience breakthrough—an instrument had been invented that could extract dreams from Indigenous peoples’ bones. The rationale behind the first rollout of residential schools was to “kill the Indian in the child,” but this reincarnation had no such

pretence.<sup>59</sup> To harvest the bone marrow was to literally kill the Indian *and* the child; Indigenous peoples were “little more than a crop” (p. 36). Settler history taught Indigenous peoples to be suspicious of state medicine and schools so those who were able took to the land and headed North. Their Indigenous history held the teachings necessary for survival. However, their escape was made more difficult by a new police force called Recruiters who were tasked with tracking and capturing them for dissection. Indigenous peoples became “the hunted trying to hunt” (p. 58).

The main action kicks off when a Métis teenager named Frenchie has to flee an urban centre after Recruiters capture his brother, mother, and, assumedly, his father. Exhausted after days on the run, Frenchie passes out in the forest to be found by Miigwans, the adult member of a mismatched, thrown-together band of seven Indigenous children and an elder named Minerva. The child-figures include Anishinaabe, Métis, and nêhiyawak belongings and they range from 7-17 years old. Each character is introduced in a separate chapter through a “coming-to” story.<sup>60</sup> They have all experienced trauma, loss, abandonment, and pain, but suffering will not be the main story of their lives. They heal through regenerative relations of collective care and thus the coming-to signifies a new strength and resilience in community, even at the end of the world. Throughout the text are words in nêhiyawêwin, as Minerva is a fluent speaker who shares with the child-figures story, song, ceremony, and teachings inherent in the language itself. For the children who do not know the language, like Frenchie, they desire it more than any other comfort of a lost world. Importantly though while they long for language and “the old-timey,” *The*

<sup>59</sup> While this phrase is often attributed to Duncan Campbell Scott, and aptly captures the rationale of the assimilative schools while he was in command, it was actually spoken by an American militantly officer (Abley, 2013, para. 2). Additionally, Dr. Peter Bryce’s censored reports documented the maltreatment and alarming death rates in residential schools as early as 1907.

<sup>60</sup> *The Marrow Thieves* can be read as a traditional coming of age story of Frenchie, but I think such a genre rigid approach does a great disservice to Dimaline’s collective world building by way of Indigenous kin-making.

*Marrow Thieves* does not dwell on some nostalgic idealization of a pristine past or romantic wilderness (p. 29). This crew are engaged in creating futurities. The child-figures learn to hunt and build camps. They listen to traditional stories, perform ceremony, strengthen plant and animal relations, and share their own histories and tragedies in ways that allow them to grow together. “We needed to remember Story,” shares Frenchie (p. 142). The heart of this speculative story is the development and caretaking of kin.

The common world the child-figures and their teachers create in the woods is not one of heteronormative family, patriarchal leadership, or generational segregation. Everyone is cared for. Physically, Minerva slows them down and often has to be carried, but she is a highly valued member of the group. Although her body is failing, Minerva’s spirit is strong, and the children never abandon her. The same goes for the youngest group member whose size prevents her from making the same contributions as the teenagers. Nevertheless, she is not disposable. Cherokee scholar Daniel Heath Justice (2018) writes in *Why Indigenous Literatures Matter* (2018) about the importance of being in good relation. He shares:

*relationship* is the driving impetus behind the vast majority of texts by Indigenous writers—relationship to the land, to human community, to self, to the other-than-human world, to the ancestors and our descendants, to our histories and our futures, as well as to colonizers and their literal and ideological heirs—and that these literary works offer us insight and sometimes helpful pathways for maintaining, rebuilding, or even simply establishing these meaningful connections. (p. xix)

The end of the story brings about a direct clash with Recruiters and Minerva sacrifices herself so the others can escape. But instead of running away they regroup and plot a rescue. The attempt does not go according to plan and Minerva is shot by police. At this point, we learn that when the

scientists tried to harvest her dreams, she set the residential school on fire with her nêhiyawêwin songs. Over the course of the text, the child-figures come to recognize and respect the power of their language. They also learn what outlives bionormative bodies—a sense of geontological existence that cannot be killed—Minerva’s ongoingness is language and stories and ceremony and kin and land. Dreams are in all these relations and not like the settlers assume in bones. The anguish of Minerva’s death is tempered by the joy of an unexpected reunion. Miigwans reunites with his partner Isaac, who has escaped capture, and who is also a fluent speaker. Although Isaac does not yet have the worldly experience of an Elder like Minerva that is okay because “the key doesn’t have to be old, the language already is” (p. 227).

Unlike *Gifts*, *Broken Earth*, and *Beasts*, the child-figures in *The Marrow Thieves* do not walk alone. Nor is any single one of them made responsible for the ruined earth or for saving it. They are a figure of the Virus in that they may poses a bio-fix and are also under assault. They are also terrorists in the sense that they resist and refuse settler futurities. *The Marrow Thieves* is clear that climate change and settler colonialism go hand-in-hand and that to regenerate worlds requires renewed relations with land, language, more-than-humans, and each other. Language—and everything entangled with and embedded in it—was their immunity and their future. *The Marrow Thieves* encourages me to consider how the end of the world means otherwise: it can be the end of apocalypse, the end of settler colonialism, the end of anti-Black racism, the end of extractivism, and the flourishing of #AnthropoceneChild in common worlds. As a hybrid-figure instructs in *Broken Earth*: “Don’t lament when those worlds fall. Rage that they were built doomed in the first place” (Jemisin, 2017, p. 7).

As the COVID pandemic ebbs and flows there has been a heightened interest in speculative texts of the end of the world (Tennant, 2020; *The Conversation*, 2020; Weir, 2020).

In this context, Justice suggests: “Indigenous peoples know what it is to face the end of the world many, many times. And I think our stories give us a lot of guidance, and also speak to a life beyond the despair of the now....*Imagine otherwise*” (Tennant, 2020, paras. 9-10; emphasis added). To play on a refrain from Ashon Crawley (2015) cited in earlier chapters, the end of the world can be otherwise than apocalypse and otherwise than survival—worlds can be “otherwise than this.” Anishinaabe writer Waubgeshig Rice (2020) advises something similar:

Many communities around the world have already endured apocalypse and they’ve rebuilt. They’ve found ways to start over and I think it’s comforting as well, and maybe a little hopeful, to think about what is possible on the other side....So it is possible to rebuild. That’s why we need to look to Indigenous people and their stories about the end of the world. (paras. 21 & 27)

To rebuild is to move beyond survival. Survival is never enough; survival must be collaborative; “survival pending revolution” (Alkebulan, 2012). “Survival should be our starting point, always, but we deserve so much more,” offers Shotwell (2020, para. 9). I think that speculative fiction and speculative figures, particularly *The Marrow Thieves*, offer a glimpse of what otherwise might feel, look, and be like. To think-with Aiyana, Unbabies, the Boy, the Boy with the Bones, #BrightFutureChild, #NoBabies, Melanie, Nassun, and Frenchie is to be attuned to *what is* but also to imagine *not this*, *not yet*, and *what if*. It is to speculate on the otherwise.

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