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UNIVERSITY OF CALIFORNIA,
IRVINE

The Utopian Call:
Utopian Projects and the Struggle for the "Good" Anthropocene

DISSERTATION

submitted in partial satisfaction of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

in Comparative Literature

by

Nathaniel Murphy

Dissertation Committee:
Professor Susan C. Jarratt, Chair
Professor Rajagopalan Radhakrishnan
Professor Jonathan Alexander

2019

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DEDICATION

To Tracy

who has been with me every step of the way
and whose presence has made every one of those steps
utopian in the best possible sense of the word.

And to Ryan, Michael, John, and Finn

who kindly shared their father with this project over its lifetime.

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CURRICULUM VITAE

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ABSTRACT OF THE DISSERTATION

The Utopian Call:
Utopian Projects and the Struggle for the "Good" Anthropocene

By Nathaniel Murphy

Doctor of Philosophy in Comparative Literature

University of California, Irvine 2019

Professor Susan C. Jarratt, Chair

Some of the principle questions that my dissertation addresses are: How can literature be used to think about broad social and political change? How can fiction be used to dramatize and illustrate different types of relationships between people and the nonhuman world? What role does fiction play in debates on the effects of climate change and what people should do about it? In order to address these questions, my dissertation develops a concept that I termed the "Utopian Call" as a way to theorize how utopian ideals can manifest in a society and compel people to work toward a coherent vision of society. In order to develop the concept of the Utopian Call, I analyze Ernst Bloch's concept of the "Not-Yet" from his *Principle of Hope*, as well as some further theoretical work on utopia by authors such as Ruth Levitas, Tom Moylan, and Darko Suvin. I also argue that the utopian aspects of literary texts as well as those of social and political movements function in a similar way to an ideology as put forth by Louis Althusser.

I analyze how the Utopian Call manifests in select works of science fiction authors Octavia E. Butler and Kim Stanley Robinson, because both authors are exemplary for using some of the ill effects of the Anthropocene as the background for their stories as well as offering strategies in their texts for how to move forward towards a better Anthropocene. Some of the key concepts

that I use in my analysis are the nature of human agency in the face of climatic and geologic change, the relationship between utopian visions and the movement of history, humanity versus posthumanity, John Holloway's critique of work and power, the relationship between education and utopian visions, and the role of the Commons in the twenty-first century and beyond.

Introduction:

The Utopian Call and the “Good” Anthropocene

Enter the Anthropocene

Naomi Klein famously said of climate change that “this changes everything.” She argues that, “we are left with a stark choice: allow climate disruption to change everything about our world, or change pretty much everything about our economy to avoid that fate” (22). However, this does not seem like much of a choice, and not because the answer is obvious. It's simply not much of a choice because both are likely to happen over the course of the next few decades. Extreme (and disruptive) weather events will become even more of the norm and capitalism as we know it will come to an end, or at least evolve into something far different from the neoliberal world system of the past four decades or so.

Economic sociologist Wolfgang Streeck argues that capitalism is coming to an end because of “an already far advanced decline of the capacity of capitalism as an economic regime to underwrite a stable society.” However, Streeck's arguments are based on the internal contradictions of capital itself, which, contrary to Marxist orthodoxy, have yet to spell the demise of capitalism (but perhaps this time...). Streeck does seem correct in much of his analyses, but what is missing is the terribly important fact that the “internal” contradictions of capital are far less important to its “impending” demise than what is deemed “exterior” to capitalism, yet underlies its entire system: i.e. the world.

Likewise, journalist Paul Mason argues that we are already entering a postcapitalist world, due in large part to automation reducing the need for work and advances in information technology. Similar to Streeck, Mason argues that the internal contradictions will bring about the end of capitalism, even if he does believe that they will be accelerated by “external shocks.” Yet, he seems to believe that the consequences of global climate change are problems to be solved in a postcapitalist economy and not something that will *fundamentally shape* whatever world system (or systems) emerge in the coming

decades.

On the other hand, environmental historian Jason W. Moore argues that what the present crisis is exposing is not the internal contradictions of capitalism as such but capitalism's relationship to its outside. That is, what are being exposed are the contradictions associated with the "end of cheap nature," which are comprised of what he calls the "four cheaps," or things that are radically undervalued by capitalism: food, labor, energy, and raw materials ("End" 289). Basically, Moore argues that "historical capitalism has been able to resolve its recurrent crises because territorialist and capitalist agencies have been able to extend the zone of appropriation faster than the zone of exploitation" ("End" 291). But of course, territorial expansion can only extend so far on the surface of a globe before the majority of the territory has entered the "zone of exploitation," which presents its own geopolitical problems, but the externalized costs of all that cheap energy that are driving anthropogenic climate change – and as the bill is coming due it is more and more obvious that all that energy in the form of fossil fuels was not so cheap after all.

In "A Critical Review of Global Decarbonization Scenarios," the authors note that, "a variety of recent studies conclude that avoiding *extreme* climate change outcomes may require near-total decarbonization of the world's energy system during this century, with 50-90% reduction in energy-related CO2 emissions required by 2050" (Loftus et al. 93, emphasis added). And where the economic costs of this conversion "are projected, they range from $350 billion to several trillion *per year*, based on a wide range of assumptions" (107, emphasis added). As they note, one of the assumptions shared by all of the scenarios analyzed was, "historically unprecedented improvements in energy intensity of the global economy" (108), and furthermore "these studies present comparatively little detail on strategies to decarbonize the industrial and transportation sectors" (109). If Moore is correct that capitalism *relies* on the exploitation of cheap energy, among other things such as the raw materials that would be needed to actually build this alternative energy infrastructure, then how can a *capitalist* world

economy possibly reach these benchmarks without its "internal contradictions" bringing it to its knees?

The question above leads back to Klein's statement that "this changes everything," and in this statement we must recognize that everything means *everything*. In 2000, chemist Paul J. Crutzen and marine scientist Eugene F. Stoermer proposed that the Earth has entered a new geologic age, and based on the "major and still growing impacts of human activities on earth and atmosphere, and at all, including global, scales, it seems to us more than appropriate to emphasize the central role of mankind in geology and ecology by proposing to use the term 'anthropocene' for our current geologic epoch" (7). Whether or not the "Anthropocene" becomes the officially recognized term for a new geologic epoch, the term has certainly become nearly ubiquitous in the public sphere, with hundreds of academic and popular articles as well as books being published in the past two decades that make use of the term. There is even a peer-reviewed interdisciplinary journal named *The Anthropocene Review*, which in an editorial for its first issue states that the impetus behind its creation is "to communicate clearly, across a wide range of disciplines and interests, the causes, history, nature and implications of a world in which human activities are integral to the functioning of the Earth System" (Oldfield et al. 5). Yet despite the fact that, "the term 'Anthropocene' has generated lively interest across a wide range of institutions and an impressive diversity of individual scholars and writers" (3), the term itself is not without controversy.

For example, Moore argues in the introduction to an anthology titled *Anthropocene or Capitalocene?* that, "the Anthropocene sounds the alarm – and what an alarm it is! But it cannot explain how the alarming changes came about" ("Introduction" 5). And Steve Mentz noted that his "current incomplete count sits at twenty-four 'cenes" in his book *Break Up the Anthropocene*, published in 2019. Some of these "'cenes" are meant to be serious and some are more tongue-in-cheek, however one of the contenders, the "Capitalocene," is taken seriously by those who prefer it, including Moore, who states that, "the Capitalocene signifies capitalism as a way of organizing nature – as a

multispecies, situated, capitalist world ecology" ("Introduction" 6). On the other hand, historian Dipesh Chakrabarty argues that focusing solely on capitalism does not tell the whole story of humanity's effects on the global scale; we must also "put global histories of capital in conversation with the species history of humans" (212). In order to better understand the full consequences of the Anthropocene, we must pay special attention to as much of human (and nonhuman) history as possible, because radical climate change threatens the "very conditions, both biological and geological, on which the survival of human life as developed in the Holocene period depends" (213).

Even though the histories of capitalism are not enough to fully comprehend the Anthropocene, Moore is correct in his assertion that the term "Anthropocene" does elide the method by which humans have altered the planet on geologic and climatic scales, and more importantly elides the historical injustices such as enclosures, genocides, enslavements, imperial wars, and avoidable famines that are the hallmarks of the capitalist world system. As such, I am sympathetic to Moore's and others' attempts to neologize around the concept of the Anthropocene in order to more accurately name our present moment. That is, I believe that Steve Mentz's call to "pluralize the Anthropocene" is generally correct. However, I also believe that Moore's conviction to *replace* the term "Anthropocene" with "Capitalocene" or any other term is mistaken for one important reason: the Anthropocene (the era, not the term) is not going away any time soon, the same cannot be said of capitalism. Chakrabarty's insistence on thinking the histories of capitalism with other human and nonhuman histories similarly makes the point that both the concept and the era of the Anthropocene exceed capitalism. So I will use the term "Capitalocene" in a targeted way: because right now the version of the Anthropocene that we are living in *is* the Capitalocene, I will use the term in my analysis when I want to bring attention to capitalism's role in creating the Anthropocene, or when I want to contrast the "good" Anthropocene with what will likely happen if we do not address the problems of the Capitalocene and collectively allow it to develop unabated. Science fiction author Kim Stanley Robinson argues that because human

beings have wrought such global changes on the planet as the result of the unintended consequences of making a very small minority of human beings wealthy beyond anything imaginable in human history, what we need now is to make a "good" Anthropocene where the changes that human beings effect on the world become far more just for humanity as well as for the rest of the nonhuman parts of this planet ("Terraforming Earth").

The greatest danger that the term "Anthropocene" carries with it is not that it glosses over the question of who the "we" are that have initiated all of these changes. This "we" will be harder and harder to keep in the shadows as the world's economic and political elites continue to prioritize profits for the few over even moderate attempts at mitigating climate catastrophe. It is safer to assume that more and more people will take up the call against the capitalist world system as the decades progress and the annual barrage of climate related catastrophes is consistently met with the line that economic health is the final arbiter in all human (and nonhuman) affairs. That is to say, this development is safer to assume so long as those on the global left keep up the chorus that the "we" of the *early* Anthropocene are global economic and political elites – the capitalists and their cronies. But we also need to change the makeup and the priorities of the "we" that has the greatest effects on the Anthropocene if we want to find our way towards a "good" Anthropocene.

No, the greatest danger in the term is that it encourages us to view this age uncritically as the "age of man;" that our domination of nature is now complete; that our hubris is now simply established fact, and that we can techno-fix and geoengineer our way out of any problem that the Earth is audacious enough to throw our way.[1] What the term marks is that humanity has entered into a new relationship with the Earth (or with the various Earth systems), but contrary to what the name may lead us to believe, we are not the dominant actors in this relationship, and in fact we are fairly far from even being an equal party. At this historical moment, we are as children playing with live grenades, with no

1 This point is made in no uncertain terms by Eileen Crist in her contribution to *Anthropocene or Capitalocene?* titled, "On the Poverty of Our Nomenclature."

adults around us for miles to come and put us in check.

We need is to recognize that in this relationship, human beings are not the only agents. Bruno Latour argued as such, that we must recognize the agency of the Earth as well as the various nonhuman actors that we share the Earth with. Latour argued that, "for all agents, acting means having their existence, their subsistence, come *from the future to the present*; they act as long as they run the risk of bridging the gap of existence – or else they disappear altogether" (12, emphasis in original). Furthermore, as all the various agents at work on this planet attempt to bring their futures into their presents, none of the nonhuman agents could be made to care the smallest wit about the quarterly profits of any corporation whatsoever, neither could they be made to care about patents or property rights or any other economic "law."

If postmodernism marks the death of faith in Master Narratives (Lyotard), then the Anthropocene marks the death of faith in Narratives of Mastery. Chakrabarty also argued that one of the problems posed by the Anthropocene is that human beings are simply incapable of truly understanding our role as geological agents because of the insurmountable differences in magnitude between human and geologic time, "and without that knowledge that defies historical understanding there is *no making sense* of the current crisis that affects us all" (221, emphasis added). In response to this claim Alexa Weik von Mossner argues that both fictional and nonfictional storytelling "can help us to *imaginatively experience* the impact of that geological force that is human" (84, emphasis in original), and not only can we understand ourselves as geologic agents, we can also make sense of the problems associated with climate change and the Anthropocene. Just as we do not need to know all of the bio-chemical reactions taking place in our bodies to understand when we are hungry, neither do we need to know all of the particular details of what human beings have done qua geologic agents to understand the crisis that affects us today and will continue to affect human beings and the rest of the planet for generations to come. Von Mossner is correct that "speculative modes of literature and film"

have always been telling stories that embed the narratives of individuals within larger processes (83) that help the audience to imaginatively experience the roles that humans play in those processes, as well as the effects that those larger processes have on individuals and communities. Furthermore, we fortunately do not need to rely on a single story to help us in this endeavor, because just as the Anthropocene does not rely on a single agent – even a single species as agent – neither do we rely on a single narrative to tell the story of the Anthropocene.

Literary critic Rebecca Evans claims that, “'Anthropocene' as a term seems particularly calculated for narrative effect. It narrates the contemporary period as a story of rapid ecological transformation and disruption of familiar assumptions about the stability and separateness of the nonhuman realm, with the central narrative conflict triggered by disastrous human overreach and overconsumption” (“Nomenclature” 489). This story is hardly a narrative of mastery, at least not human mastery, and is more in line with Latour's conceptualization of human agency as one set of agencies in a vast set of agential networks. Evans argues that the term “Anthropocene” does not merely narrativize but is also *science fictional* in that it creates an experience of cognitive estrangement, because “such names do not simply prompt critical thinking; they call up novel *narratives* predicated specifically on the embedding of an estranging novum into a storyworld that diverges significantly from the known world” (“Nomenclature” 485, emphasis in original). Evans goes on to argue that what is interesting about different -cenes such as the Capitalocene is that they rely on different nova than the term “Anthropocene” does, and so produce different estrangement effects (495), and that different estrangement effects also occur with different efforts to periodize the beginnings of the Anthropocene (493).

Evans also points out that all these “multiple variations are intrinsically political” (496), and indeed which -cene one focuses on is likely to point towards different conceptions of what a good Anthropocene might look like. Thus pluralizing the Anthropocene is useful for proliferating

alternatives to capitalism, including, it is hoped, some that are not built on injustices or exploitation, either of human beings or of other nonhuman aspects of the world. It is the narratives that are prompted not only by the Anthropocene, but the desire to build a *good* Anthropocene that I am interested in. I want to explore how narratives of the Anthropocene can help us understand our capacities as well as our limits as geologic agents. I also want to explore how these insights into our collective agency (and our embeddedness in processes and systems that far exceed our agency) can help to direct our collective energies into building a good Anthropocene, focusing on those narratives that attempt to imagine some of the many relationships between human beings and the nonhuman world in way that is radically divorced from the those that govern the Capitalocene. While I believe that Evans's argument that the Anthropocene is fundamentally science fictional in nature is largely correct, the concept of the "cognitive effects" that her argument relies on can be problematic, imposing stifling and unnecessary limits on the types of stories that can help us to best understand the Anthropocene and our places in it.

Alterity Effects, Novum, Arcanum

In addressing the generic distinction between science fiction (sf) and fantasy based on sf having a "cognition effect" which fantasy lacks, sf/fantasy author China Miéville argues that what they both generically share are "specific articulations of alterity" ("Limits" 244). Here Miéville is taking issue with sf theorist Dark Suvin's claim that "SF is distinguished by the narrative dominance or hegemony of a fictional 'novum' (novelty, innovation) validated by *cognitive logic*" *(Hollow* 67, emphasis added), as well as with fellow theorist, Carl Freedman's, reconceptualization of this phenomenon as sf's "cognition effect." According to Freedman, "the crucial issue for generic discrimination is not any epistemological judgment external to the text itself on the rationality or irrationality of the latter's imaginings, but rather...the attitude *of the text itself* to the kind of estrangements being performed" (*Critical Theory* 18, emphasis in original). Miéville is making this critique largely because this generic definition of sf is meant to both distinguish it from as well as to elevate it over the fantasy genre. This

intellectual move is made to counter what is seen as the ideological conservatism or even "proto-Fascist" aspects of fantasy ("Afterword" 231).

Rhys Williams argues that while Miéville brings up some good points, namely problems with the logical inconsistencies in how cognition is used in sf criticism, and also Suvin's presenting idiosyncratic aesthetic views of fantasy as something that is inherent to the genre, it would also be mistaken to discard Suvin's paradigm outright (618). I agree that the "cognition" of the estrangement effects of sf (as well as of fantasy) ought to be re-theorized as Williams does or discarded as Miéville does, but it is also important to better theorize what the estrangement effects of these genres are, how they overlap, and ultimately what their socio-political potentialities are.

For example, Simon Spiegel argues that in sf there are two levels of estrangement, formally and at the level of the story, and that what Suvin is referring to is more akin to the latter, which Spiegel calls "diegetic estrangement." Spiegel argues that in order for diegetic estrangement to be successful, then first instead of estrangement, "the novum must be naturalized." That is, the alien or radically new thing must be made familiar at the level of the story as something that is "compatible with our world; then, an estranging effect can only follow when the viewer becomes aware of some recontextualization" (376).

I submit that the most significant kinds of estrangement effects that both sf and fantasy exhibit are the naturalization of otherness found in the texts that then have the potential of staying with the reader as they view with fresh eyes the contemporary world, most importantly in how human beings relate to other human beings as well as to the nonhuman aspects of their world. The "alterity effects" that such estrangements produce can help us to come to different understandings of humanity's role in the world in two senses: first, they can help us to understand that the types of roles that we thought that humanity played have been different all along, for example leading to different ways of periodizing the Anthropocene, and secondly, they help us to glimpse the types of roles that are emerging in the present

or that may emerge in the future as the Anthropocene unfolds. Furthermore, I submit that these two different types of alterity effects produced by sf and fantasy – one directed toward a different understanding of the past and one directed towards the new (or the future) – rely on two separate but related phenomena, and following Suvin, we might say that sf relies more heavily on the novum for its effect, for example a new bit of technology, but essentially is something that is *introduced* into the world of the text. On the other hand, fantasy might be said to be dominated by an arcanum, or something that is *inherent* to the world of the text, such as magic or an invented race of sentient beings.

According to Suvin, "a novum or cognitive innovation is a totalizing phenomenon or relationship deviating from the author's and implied reader's norm of reality" *(Hollow* 68). But as the name implies it is something *temporally* new that does not exist in the now but exists in the temporality of the narrative. The arcanum, on the other hand, functions in a similar way but is not an innovation; rather it is something that was already foundational to the world but hidden from the author's and implied reader's understanding of the world. Regardless of whether the world of the text is "our" Earth such as in the Harry Potter stories or a totally fictional world such as Middle Earth, the arcanum is a *fundamental property* of that world, and as such is not innovated into being, but instead is a truth uncovered in the text.

As many texts exhibit both a novum and an arcanum (what else could a fictional alien be? or the reworking of the laws of physics to allow faster than light travel?), their co-appearance can help to explain the generic slippage between sf and fantasy of so many texts, but at the same time helps readers distinguish between texts that are more highly dominated by one or the other. This approach also helps to rescue the cognitive effect from some of its logical inconsistencies (Miéville "Afterword" 235), so that we can say that both sf and fantasy have some type of cognition effect, but that the cognition effect is a function of how well the narrative inclusion of either or both the novum and the arcanum are naturalized and thus can produce an alterity effect. Miéville argues that, "the cognition effect is a

*persuasion...*The reader surrenders to the cognition effect to the extent that he or she surrenders to the authority of the text and its author function" ("Afterword" 238, emphasis in original). As such, the cognition and alterity effects are concerned with how people relate to human others as well as to nonhuman others, and how well they can naturalize those relations in the text in order to make our "normal" or "natural" ways of living those relationships seem strange or arbitrary.

Williams argues that "the depth of the estrangement (and cognition, correctly understood) for Suvin is directly relative to the text's ability to reveal the historical specificity of contemporary human relations – to penetrate the fantastic surface...and allow the cognition of affairs that is otherwise obscured" (623). It is often the interaction between the novum and the arcanum in texts that produce the alterity effect that allows the generic families associated with sf and fantasy to be so productive in imagining an emancipatory way forward in the developing Anthropocene. That is, by focusing on the alterity effects of sf/fantasy works we can collectively imagine paths to a "good Anthropocene." As Evans notes, "the science fictionality of the Anthropocene reminds us that it is as important to attend to the reimagination of history as to the imagination of possible futures" ("Nomenclature" 497). Attending to the interaction between the novum and arcanum helps us to understand the Anthropocene as the backdrop of our current historical moment, not only extending forward but also extending backward, and this attention can help us in turn to better understand the problems that we face so that our solutions our not just stopgaps but are building towards a good Anthropocene.

Evans also notes that the novum of the Anthropocene "is a *new kind of novum*: it is not the introduction of an imaginary novelty but instead the novel recognition of a deviation between received history and history as told from the perspective of the Anthropocene" ("Nomenclature" 491, emphasis added). This "new kind of novum" is, I suggest, an arcanum. That is, history as told from the perspective of the Anthropocene might look at the introduction of new types of technology as nova, such as the steam engine or the internal combustion engine which each had profound effects of human

sociality as well as the physical landscape of the world. Yet at the same time, these nova rely on a previous arcanum associated with a carbon cycle that took CO2 out of an atmosphere that was much warmer than our own and sequestered the carbon in the ground hundreds of millions of years ago. The Anthropocene narrates the interaction between this arcanum and these nova, telling the story of how the temperate climates of the Holocene will change to become more like the world in which the arcanum was formed. Although this arcanum does have a history, it was formed well before humanity even had a prologue and as such has always inhered to "our" world.

There is a similar interaction between the novum and the arcanum in Isaac Asimov's *The Gods Themselves* based on the use of a particular energy source and technology and the danger the use this energy system poses to the entire world. In the novel the arcanum is based on an entirely different world from own, in this case an alternate universe (the "Para-universe) where the strong nuclear interaction is "perhaps a hundred times stronger" than in our own universe, which "means that the protons are more easily held together against their own electrostatic attraction and that a nucleus requires fewer neutrons to produce stability" (17). A novum emerges when a method to exchange matter between the two universes is discovered, sending isotopes that are stable in one universe into the other where they are not stable, and vice versa with the subsequent decay to reach a stable isotope supply energy to the receiving world with the only byproduct seemingly being the addition of some electrons in our universe and some positrons in the other. The novum is the "Electron Pump" which is the technology associated with this process. However, the interaction between the novum (the pump) and the arcanum (the difference in fundamental laws) is that some of the fundamental laws bleed into the opposing universe during the process of using the Pump – that is the strong nuclear force gets weaker in the other universe while it gets stronger in our own, reaching an eventual equilibrium some time in the distant future. A problem arises because far before equilibrium would be reached there would still be profound effects in both universes, namely the rate of nuclear fusion that happens in stars

would change, essentially causing the Para-universe's star to cool down and our own sun to grow hotter and eventually explode.

So, in *The Gods Themselves* there is a new technology that fundamentally reshapes the world by providing cheap energy; but the way this energy is produced (the novum) gets its potential from a world that is not our own (the arcanum); and eventually the process of creating this cheap energy will make our world more like the world that supplies the potential (the interaction between arcanum and novum), which in turn will bring destruction to the civilization that it helped to create. From the perspective of the Anthropocene this narrative functions as a kind of parable of its own history, and also sheds some light on some of what makes the present the Capitalocene: when a researcher is trying to convince a senator to help him stop the Pump for the above reasons, the senator tells him, “It is a mistake...to suppose that the public wants the environment protected or their lives saved and that they will be grateful to any idealist who will fight for such ends. What the public wants is their own individual comfort” (50). Whether or not the public truly values comfort over continued existence, the perception that it is what the public wants certainly seems to drive much of the political debate concerning climate change in the here and now.

Consequently, further questions remain as to how alterity effects produced by literary texts, or by the Anthropocene itself, will motivate people to work towards building a “good” Anthropocene, even when their own individual comfort is at stake. Williams argues that fundamentally for Suvin, “cognition is that insight within a text that brings us a step closer to the collective utopian horizon of communism” (623). Thus the cognitive effects of the text, which are based on the text's alterity effects, form the foundation of the utopian function, not just in the text but in society as well. That is, sf and fantasy texts help readers to imaginatively put themselves into different relationships to the world as it is; utopian dimensions of text help readers to think about how the world could be better and the dystopian dimension of a text help readers to identify negative aspects of our world that might be taken

for granted as normal or natural. Just as the interaction between the novum and the arcanum can produce alterity effects in the reader, the interaction between utopian and dystopian aspects of a text lend a political dimension to the alterity effects.

Similar to Suvin, my concern is how fictional texts can help to motivate people to move towards a utopian horizon, whether we want to call this horizon communism, socialism, radical democracy, or universal dignity, or some other term that denotes a society where the social and political institutions actually match up with the rhetoric of human equality and worth. However, in the context of the Anthropocene this horizon needs to go further than just *human* equality and dignity, and thus is more of a socialism of the entire biosphere, humans and nonhumans alike – wherein the dictum "from each according to their abilities, to each according to their needs" takes on ecological as well as (post)human dimensions. As such, I will analyze various sf texts to tease out some of their utopian elements that contain suggestions for how to move toward a good Anthropocene, using these suggestions to address the issues raised by the dystopian aspects of the texts, which in turn represent the problems of the Capitalocene. I maintain that in this context utopia does not function *merely* as representations of a good society in these texts, but that utopia also has activist political aspects to it, the *logic* of which translates seamlessly between the literary texts and the social world. I term that logic the "Utopian Call."

The Utopian Call

Rather than any sort of ideal place, "Utopia" is far more of a process. Utopian theorist Ruth Levitas argues that the concept of utopia often relies on three different aspects: content, form, and function, but that ultimately what defines utopia is "desire for a better way of being and living" (*Concept* 7). Likewise, Tom Moylan argues that what is significant about utopian fictions are the expressions of the "utopian impulse" or "utopian imagination" as expressions of the desire for a better world (*Demand* 27), and Lyman Tower Sargent defines "the broad, general phenomenon as social dreaming" (3).

Defining utopia by expressions of desire, imagination, impulses, and social dreaming all point to utopia being a process rather than simply the object of the desire, the imagination, or the dream.

However, the object of desire is still an essential ingredient in the utopian process. Sargent argues that "some vision of where we want to go is probably necessary for any attempt to change social relations, but it is clearly essential for great social movements" (27). I suggest that the "vision" that motivates social movements is very much like an ideology in the sense that Louis Althusser presents in the essay, "Ideology and Ideological State Apparatuses." Many theorists have previously attempted to analyze utopia and ideology in relation to each other. For example, sociologist Karl Mannheim opposed ideology and utopia as two social configurations that transcend reality through their incongruence with the given reality, differing in that "ideologies are antiquated modes of belief, products of an earlier, surpassed reality, whilst utopias are in advance of the current reality" (Geoghegan "Ideology" 124). Philosopher Paul Ricoeur similarly employed the tension between ideology and utopia to argue that their dialectical relationship created a cultural or social imagination which is in turn constitutive of social reality (3). Marxist theorist Ernst Bloch, on the other hand, argued that "the utopian is a golden thread running through the historical succession of ideologies" (Geoghegan "Ideology" 128). That is, for Bloch utopia is something that all ideologies have to a greater or lesser degree and makes up the glimmers of a world beyond alienation that all ideologies incorporate and subsequently suppress.

Of these three, I believe that Bloch's framing is the most fruitful and becomes all the more so when coupled with Althusser's definition of ideology. Analyzing these two theorists together can help to illuminate how utopia can function as an ideology in certain respects, but will also show the limits of this approach so that we can get to the place where we can move from the "is" (ideology, status quo, the "Capitalocene") to an "ought" (utopia, a just society, the "good" Anthropocene). Althusser first defines an ideology as such: "Ideology represents the imaginary relationship of individuals to their real conditions of existence." (36) What distinguishes utopia from this definition of ideology is that utopia

represents an imaginary relationship to the *possible or potential* conditions of a good (or at least better) future existence that has the real possibility of coming into being, but otherwise Althusser's definition of ideology is rather suggestive for theorizing utopia.

The nature of the reality of the future, which is essential for any conceptualization of utopia as process, can be discerned from Ernst Bloch's notion of the “Not-Yet.” In *The Concept of Utopia*, Levitas states that, “The designation of utopia as 'anticipatory consciousness', which is the subtitle of part two of *The Principle of Hope*, depends upon Bloch's central concept, the Not Yet. It has two aspects, the Not-Yet-Conscious and the Not-Yet-Become – its ideological and material, or subjective and objective aspects” (86). Both of these terms are part of what Bloch refers to as the “utopian function,” which is the link between an individual's musings on the future and the shape that the future can actually take.[2] Bloch states that, “the thus determined imagination of the utopian function is distinguished from mere fantasizing precisely by the fact that only the former has in its favor a Not-Yet-Being of an expectable kind, i.e. does not play around and get lost in an Empty-Possible, but psychologically anticipates a Real Possible” (144). Perhaps, though, Bloch located the utopian function still too much at the level of the individual, thus stating that the anticipation is psychological. Rather, I submit that the utopian function does indeed anticipate a Real-Possible, so to speak, but does so socially or politically. However, Levitas argues that, “What prevents the Not-Yet-Conscious from being a purely psychoanalytic or ontological category is that it is the subjective correlate of the Not-Yet-Become, a category which applies to material reality” *(Concept* 87). A reality that is shared, and the future of the Not-Yet-Become is shaped by many hands. Furthermore, in an analysis of Bloch's utopianism, Freedman states that, “utopian hope and longing...possesses an inherently collective character and at bottom has nothing in common with individualist impulses like greed” (“SF & Utopia” 74). According to Freedman, Bloch's focus on the psychological aspects of utopianism shows how

2 See Levitas *Concept* (100-102).

individual musings are in many respects a longing for (unalienated) collectivity. (76)

Elsewhere, Levitas argues that utopia is the proper method for sociology through what she calls the "Imaginary Reconstitution of Society, or IROS" (*Method* xi). She elaborates IROS as having three modes, the first is the archaeological, which pieces "together the images of the good society that are embedded in political programmes and social and economic policies" (*Method* 153); these pieces represent various arcana and nova along with other more quotidian aspects of our world, and when pieced together form a social mosaic that is radically different from the status quo – different, but also presumably better. These archaeological pieces are some of the "real conditions of existence" that Althusser referred to, but they are assembled in novel ways within another mode of the utopian method, the architectural, which consists of "the imagination of potential alternative scenarios for the future," where these alternative futures are comprised of elements taken from the vast human past and present and combined with desires and hopes for a better world in order to form a potential future that can be realized through the utopian struggle.

Levitas states that, "utopia as architecture is its culturally most familiar mode: imagining a reconstructed world and describing its social institutions. This is the terrain of utopian fiction" (Levitas *Method* 197). Yet even a work of utopian fiction does not express the utopian wishes of a single individual – if it did so how could it possibly "speak" to the hopes and desires of its audience? When an author does research into various past or existing social structures, even those found only in other fictional texts, to see how they could fit into a possible utopian society, are they not employing the archaeological utopian mode, synthesizing the hopes and desires of untold others as they are expressed in those institutions?

Bloch states that, "the forward glance becomes all the stronger, the more lucidly it makes itself conscious. The Not-Yet-Conscious itself must become *conscious* in its act, *known* in its content, as the process of dawning on the one hand, as what is dawning on the other" (144, emphasis in original). I

submit that the act expressing consciousness or knowing the Not-Yet-Conscious in or through its content is fairly impotent on an individual level because “the merely self-interested wish always amounts to a desire that the status quo of the present should remain essentially unaltered while one's own personal lot within it is improved” (Freedman “SF & Utopia” 74), for example wishing for individual wealth (e.g. by winning the lottery) which would make life easier for the individual but would do nothing to alleviate poverty as such because systems of wealth inequality remain unaddressed. Yet what is dawning in the Not-Yet-Conscious as a function of the imaginary reconstitution of society are of necessity social institutions, and the process of dawning is the process of creating and refining those social institutions so as to move the world in a better direction. Ze'ev Levy notes that Bloch's use of the metaphor of “dawn” shows how utopian longings of the Not-Yet-Conscious illuminate what is really possible even if “the singular characteristics are not yet bright because the sun which radiates its light on everything has not yet risen; it is dawn, but no longer dark” (177).

The third mode of Levitas's method is the ontological, “which addresses the question of what kind of *people* particular societies develop and encourage” (*Method* 153, emphasis in the original). Althusser argues that ideologies constitute subjects as well as being constituted by them, so the types of people that utopia constitutes would be utopian subjects. Althusser also argues that the ways subjects are constituted within a society is through a process of interpellation: “all ideology hails or interpellates concrete individuals as concrete subjects, by the functioning of the category of the subject” (47). Utopian subjects are likewise formed through interpellation – a particular type of interpellation that may come either in pieces through the archaeological mode, or more or less fully articulated as in the architectural mode: a type of interpellation that addresses the subject's hopes and desires and focuses those desires into a coherent ideology that functions for the utopian subject as a model for how the world could and should be. This process of interpellation is what I refer to as the “Utopian Call.”

In writing about the relationship between what is expressed in the Not-Yet-Conscious and youth, Bloch states that young people feel "called to something that is going on inside [them], that is moving in [their] own freshness and overhauling what has previously become, the adult world" (117). The "adult world" is nothing else but the status quo – it is the world as it is which each young person must figure out a way to fit into – and yet some feel called to a world that is different, and often radically so, from what has "previously become." While this "call" does seem to describe the feelings that a great many individuals feel during their youth, before they are forced to "grow up" and accept the adult world, it also describes the optimism of social movements in *their* youth, which is to say that the utopian impulse is the essence of revolutionary fervor.[3] Thus while Bloch's analysis in the section of *The Principle of Hope* called "Not-Yet-Conscious in Youth, Time of Change, Productivity" is explicitly concerned with actual young people, "youth" as an analytic category in this section may work better to be understood as anyone who feels deep within themselves that "the adult world" is irredeemably flawed and needs to be radically overhauled.

Bloch argues that, "the voice which calls for things to be different, to be better, to be more beautiful, is as loud in these years as it is unspoilt, life means 'tomorrow,' the world 'room for us'" (117). The voice is the Utopian Call, attempting through social movements, utopian literatures, political polemics, spontaneous forms of mutual aid, etc. to articulate the Not-Yet-Conscious, to articulate visions of a better, more beautiful world. Bloch also states that, "all times of change are thus filled with Not-Yet-Conscious, even over-filled; a Not-Yet-Conscious which is carried by a rising class" (119). This rising class is comprised of the "young" utopians who heed the Call, people who are consciously aware that the kinds of people that the "adult world", or status quo, develop and encourage are not the kinds of people that they wish themselves or anyone else to be. This point should be fairly easy to understand when considering how many people have acute anxiety and depression in capitalist

3 Cf. Moylan *Demand* (28).

societies;[4] or when considering the effects of the rise of far right nationalist parties throughout the world that often flirt openly with new forms of fascism.

However, the form of the Utopian Call is not completely equivalent with that of ideological interpellation in Althusser's analysis. The most significant distinction between the Utopian Call and ideological interpellation is the capital-S "Subject" that does the hailing in Althusser's formulation. He writes that, "the interpellation of individuals as subjects presupposes the 'existence' of a Unique and central Other Subject, in whose name the religious ideology interpellates all individuals as subjects" (52-3). Althusser is using the Christian religion to illustrate the process so his reader might also understand how ideology functions in relation to the State. Althusser argues that "the Absolute Subject occupies the unique place of the centre," from which interpellation emanates from in its process of subject formation. (54) Although Althusser is arguing that "all ideology is *centered*," what he presents is merely the bird's eye-view of a pyramidal hierarchy, which perfectly describes the structures of monotheistic religions and the modern bureaucratic nation-state, but does not quite capture the formal structure of the Utopian Call, which does not emanate from a center outward toward its subjects, but rather it is directed inward, emanating from a horizon towards its subjects.

In order to illustrate utopia's movement from a horizon toward a center it is worthwhile to analyze some of the spatial aspects of utopia: the "no-place" of utopia does not necessarily mean its non-existence, but rather the fact that its existence always resides elsewhere. This elsewhere is always on the horizon, a future state of affairs that does not recede as we move towards it but is simply the name of those possible futures that would be realized in different combinations of collective hopes and desires for a better world. In an analysis of some of the spatial aspects of Bloch's concept of utopia, Darko Suvin states that, "They are: (a) the place of the agent who is moving, his *locus*; (b) the *horizon* toward which that agent is moving; and (c) the *orientation*, a vector that conjoins locus and horizon. It

4 See for instance, Seth J. Prins et al. "Anxious? Depressed? You Might Be Suffering From Capitalism: Contradictory Class Locations and the Prevalence of Anxiety and Depression in the USA."

is characteristic of horizon that it moves with the location of the moving agent; but it is, obversely, characteristic of orientation that it can through all the changes of locus remain a constant vector of desire and cognition" ("Locus" 131, emphasis in original). We will see shortly who the "agent" at the locus of the Call is, but for now we can see that although the horizon moves as the agent moves, there is an orientation that keeps them fixed on a certain point on the horizon. It is the Utopian Call that binds together Suvin's three terms, locus, orientation, and horizon. Throughout my analysis of different texts, I will illustrate the process by which utopian subjects orient themselves towards a specific point on a utopian horizon, as well as showing that as they develop as utopian subjects that point on the horizon continues to orient them even as the changes in material conditions within the text force the utopian horizons to shift accordingly.

Suvin maintains that an "open utopia" results when the horizon dominates the locus, meaning that as the person moves forward, temporally here rather than spatially, the utopian horizon remains *on the horizon.* The horizon's dominance is precisely how the Utopian Call functions, as we shall see particularly in the first two chapters. However, as the utopian horizon recedes as the utopian subject moves towards it; what is on the horizon does not remain static either, but does not become something wholly different. The movement of the horizon is fixed to the movement of the utopian subject, so as the subject becomes more utopian, i.e. internalizes more and more aspects of the Call as integral parts of who they are as a person, the utopian horizon becomes more refined and more clearly articulated. Bloch argued that the reason different utopian aspects do not occur to specific people is not due to psychological blocks on their part but to a social one, due in general to either historical or socio-economic circumstances (130), and as these blocks are removed from the Not-Yet-Conscious we would expect to see further aspects of a given utopian horizon to be more fully articulated.

Furthermore, because the content of the horizon is not uniform in all directions, (as opposed to an Absolute Center such as constitutes the State), utopian horizons (1) are always plural, (2) are

comprised of combinations of extant or past conditions of existence with non-existent ones expressing collective hopes and desires that are likely based on the lacunae in the extant conditions, and because of these first two, (3) are always in conflict with each other *as well as* with the status quo. Some utopian horizons are more commensurable with others, with more or less overlapping constituent parts, but at the end of the day all utopian horizons are *mutually exclusive* and will inevitably diverge from each other on some significant points. The Utopian Call is what happens when *one* such horizon interpellates an individual or group at the exclusion of all other horizons.

The “jealousy” that different parts of the utopian horizon exhibit towards one another, despite how much they share, is illustrated by how the term “utopian” has been used in the history of the international struggle for socialism. Vincent Geoghegan's book *Utopianism & Marxism* shows how the appellation of “utopian” was used as a pejorative to police the lines of the socialist agenda by members of the Second International, who used the term “like a club both against ideological foes and against each other” (35). And of course Marx and Engels themselves were often at pains to distinguish their form of socialism from that of their “utopian” forebears such as Owen, Saint-Simon, and Fourier, not so much on theoretical grounds (although those did exist), but on political grounds. For example, “the clear objective of the section on the utopian socialists in the *Manifesto* is to make this tradition unattractive to potential recruits” (29).

Althusser suggests “that ideology 'acts' or 'functions' in such a way that it 'recruits' subjects among the individuals (it recruits them all), or 'transforms' the individuals into subjects (it transforms them all) by that very precise operation which I have called interpellation or hailing” (48). I want to suggest that this is precisely the same logic of the Utopian Call – it recruits and transforms individuals into utopian subjects, and because the utopian horizon that is interpellating the subjects is concerned with the radical reconstitution of society, utopian subjects are *compelled* to struggle towards that horizon. In fact, I would say that if the individual did not feel compelled to make real the called-for

utopian horizon, then the interpellation would have failed and that individual was not actually a "utopian subject." Ultimately, it is this compulsion that makes utopia a political category and not merely an aesthetic one.

The utopian struggle is the process by which utopian subjects struggle towards the utopian horizon that marks the Utopian Call, compelled to bring about what they perceive as not only *a* good society (which could be any such segment of the utopian horizon that shares enough essential features with the Utopian Call), but *the* good society, and in this process they will be transformed. I will show that this transformation only takes place within an individual to a very limited extent, but on the other hand, within the utopian community comprised of those who have heeded the same Call, this transformation will be extremely dramatic as the generations progress. In fact, this transformation will be so dramatic that I suggest it will render later generations monstrous to their forebears who had originally heeded the Call (and even more so to those outside of the utopian community), and in fact the two sets of texts that I analyze in the first two chapters, Octavia E. Butler's *Xenogenesis* trilogy and Kim Stanley Robinson's *Mars* trilogy respectively, illustrate the process of subsequent generations becoming progressively more "monstrous" in their own ways.

Consequently, as the utopian struggle progresses the transformations of the utopian subjects will become more radical in relation to the first generation of adherents, while at the same time the Utopian Call will also be transformed. It will be honed and sharpened as the desires and hopes that are expressed at the outset become better articulated as they become embodied in various institutions more or less successfully. Susan McManus argues that following Bloch, utopia's dynamism is a function of the relationship between its critical, or "disruptive," and creative, or "institutional," aspects (3). McManus argues that "the institutional moment is the closure of politics" (18) and thus ought to be avoided in favor of the creative aspects of utopia. This formulation is a bit simplistic because the institutionalization of different aspects of the Utopian Call move the horizon in presumably better

directions, whereas the critical function of utopia, which Levitas defines as "the expression of what is missing, of the experience of lack in any given society or culture" ("For Utopia" 26), helps to define the path of the struggle so as to give a more "utopian" shape to these institutions. Utopia is dynamic but it is not formless, once again Levitas notes, "Content, not just process, remains essential" ("For Utopia" 40).

Finally, Althusser states that, "the individual is interpellated as a (free) subject in order that he shall submit freely to the commandments of the Subject, i.e. in order that he shall (freely) accept his subjection" (56). Our formulation will only require a few slight adjustments: there is not an Absolute Subject central to the Utopian Call, but instead there is an architectonics of hopes and desires blended with socio-political institutions. Consequently, there are no commandments as such, but there is a *compulsion* to realize these architectures, just as much as if by beacons in the distance guiding one's path as blueprints to be followed.[5] Furthermore, the Utopian Call does not compel utopian subjects to accept their subjection, but rather *to appropriate the utopian struggle as their own*, "making kin," in the words of Donna Haraway ("Making Kin" 161), with all others who have done likewise, whether their parts in the struggle were in the distant past, in the present, or in the hoped for future.

Cli-Fi, Anthropocene Literatures, and Visionary Fiction

The question of what the Utopian Call is that can bring us toward a good Anthropocene is one of the most significant socio-political questions of the twenty-first century. I submit that a privileged site for finding an answer to this question is in science fictional and fantastic literatures, wherein we can find pieces of this Utopian Call as in Levitas's archaeological mode, and using the architectural mode we can assemble pieces gleaned from various texts into plans that when translated into certain projects can in fact move us toward a good Anthropocene. As such, the types of texts that are most amenable to this kind of analysis will be those texts that take the Anthropocene as their starting point. In the past decade

5 Cf. Suvin's formulation of the "open utopia" as that which has the horizon dominating the locus.

the new "genre" of climate change fiction, or cli-fi, has garnered some critical attention: in 2013, there was an article in *The Guardian* with the title, "Global Warning: the Rise of Cli-Fi," and interestingly had the subheading of "Unlike most science fiction, novels about climate change focus on an immediate and intense threat rather than discovery." Also in 2013, *Dissent* magazine published an article titled, "Cli-Fi: Birth of a Genre," where the author, Rebecca Tuhus-Dubrow, noted that cli-fi authors "seek, at least in part, to warn, translating graphs and scientific jargon into experience and emotion" (59). Because we are at the beginning of the climatic effects of the Anthropocene, any inclusion of climate change as an integral part of a story is more likely than not to be extrapolative, and indeed Rebecca Evans notes that, "cli-fi is typically defined as the literature of *extrapolation,* or the realistic projection of plausible futures from the present" ("Futures" 99), and as such is meant to give readers a better understanding of human beings as geologic agents in Chakrabarty's sense.

However, Evans argues that defining cli-fi in such a way is far too limiting because "the rejection of nonextrapolative, nonrealistic genres underestimates the range of cli-fi," particularly in fantastic genres such as sf and fantasy because of "the ways in which fantastical genres contribute to understandings of environmental futurity" ("Futures" 99). This point is certainly true, considering for example the relationship between radical climate change and the rise of far right nationalism as best exemplified by N. K. Jemisin's fantasy "Broken Earth Trilogy," set in a world that is completely incommensurable with our own. There is no extrapolation from our world to the world of the text, yet it would be hard not to see the resonances between the advent of the apocalyptic "fifth season" and the ensuing hyper-hobbesian state of nature that exists over concerns about extreme resource scarcity and our all-too-likely possible wars over food, potable water, and of course oil in the coming decades.

Furthermore, the Earth and various earth systems are significant agents in the story, and while we may not be able to communicate with the Earth "face to face" to hear its demands for making right the damage inflected on the planet by humans, we can imaginatively put ourselves in the planet's place

and view humanity through that lens. Thus when we try to imagine and re-imagine new relationships with all the various earth systems, we should "remember, too, that the Earth does not fully understand us. It looks upon human beings and sees short-lived, fragile creatures, puzzlingly detached in substance and awareness from the planet on which their lives depend, who do not understand the harm they tried to do – perhaps *because* they are so short-lived and fragile and detached" (*Stone* 341, emphasis in original).

However, beyond the problem of excluding exemplary climate change texts, I propose another reason why defining cli-fi as mere extrapolation is problematic: if cli-fi is meant only, or principally, to warn about possible future climate scenarios (inevitably catastrophic), then the genre is little more than virtual voyeurism of our descendants' collective suffering and as such is far more "escapist" in its anti-utopianism than the fantastical genres that some critics attempt to differentiate it from. Certainly extrapolation is important; imaginative constructions of possible climate disasters are important – but they are not enough. So, while it is important to "warn readers of possible environmental nightmares to come" (Glass), politically efficacious climate change literature needs to do what Tom Moylan claims critical dystopias do, and that is to "linger in the terrors of the present [and near future] even as *they exemplify what is needed to transform them*" (*Scraps* 199). That is, if cli-fi is *just* the literary expression of *inevitable* disasters then it would be a fundamentally escapist genre because it would remove the audience from the imaginative place in the utopian struggle, which can only prove to discourage people from imagining themselves (and thus prompting them to actually join) in the real utopian struggle that lays before all of us in the oncoming rush into the future. Furthermore, it is unlikely that climate change deniers are the target audience for cli-fi, so that once again cli-fi as *merely* a warning cry would be rather politically impotent.

Literary critic Adam Trexler has gone further, putting together the "warning" of cli-fi with the fact that these warnings have failed to produce results in his analysis of climate change fiction. He

claims that, “to date, nearly all Anthropocene fiction addresses tension between the existence of catastrophic global warming and the failed obligation to act. Under these conditions, fiction offered a medium to explain, predict, *implore,* and lament” (9, emphasis added). I suggest that focusing on the predictions and lamentation of Anthropocene literature is fundamentally anti-utopian, but on the other hand, using the predictions as a background from which the reader is implored to radically change their world is not only far more politically and aesthetically interesting, but is the actual focus of much of the recent climate change fiction.

In the introduction to an anthology of cli-fi short stories, *I'm with the Bears*, environmental activist Bill McKibben remarks that, “to shift, of course, the human heart requires not just fear but hope. And so one task, perhaps, of our letters in this emergency is to help provide that sense of what life might be like in the world past fossil fuel. Not just in a bleak sense, but a bright one; a glimpse of what a future might look like where community begins to replace consumption” (4). Cli-fi takes the Anthropocene as a given – there will be climate catastrophes, there will be major shocks that will be felt locally and globally, but there are also multiple utopian horizons that are being illuminated by fictional texts, as well as ongoing struggles for social and ecological justice in the real world.

So perhaps cli-fi is too narrow a genre, or as Evans suggests, is not a genre at all but “rather a literary preoccupation with climate futures that draws from a wide range of popular genres” (“Futures” 95). “Anthropocene fiction/literature” may be a more apt category (genre perhaps?) since the Anthropocene names more than just climate change but also radical changes to humanity's internal relationships as well as to our relationships with all aspects of the nonhuman world, and not just the climate. But, on the other hand, as Trexler notes, “the Anthropocene has arrived, and *all* contemporary fiction could be said to reflect a condemned 'greenhouse culture'” (27). However, this formulation extends the definition of the genre too far. Trexler's point was merely to de-exoticize cli-fi (i.e. remove it from *too close* an association with sf and fantasy), and not that every novel *should* be treated as

Anthropocene, only that we should not decide in advance which texts are based on a text's marketed genre. Evans makes a similar move "to deessentialize the political charge of these genres – to point instead toward a more expansive mode of defining and defending the genres that articulate environmental futurity" ("Futures" 106), but with aim to include more fantastic genres rather than mainstream "literary" realistic fictional texts.

The issue remains that we do not just want texts about the Anthropocene but those that also express utopian impulses; we want texts that will help us to theorize how we can get to a good Anthropocene. In the introduction to *Octavia's Brood,* an anthology of "Science Fiction Stories from Social Justice Movements" inspired by the works and life of science fiction author Octavia E. Butler, Walidah Imarisha writes, "'Visionary fiction' is a term we developed to distinguish science fiction that has relevance toward building new, freer worlds from the mainstream strain of science fiction, which most often reinforces dominant narratives of power. Visionary fiction encompasses all of the fantastic, with the arc always bending toward justice" (4). So, here is what we are looking for: *visionary Anthropocene fiction,* or works that have as their milieu a changing world where Utopian Calls are clearly expressed, wherein human social relations are called to change to be more just, along with humanity's various relationships with the nonhuman world.

The visionary Anthropocene fiction that I will take as my objects of analysis will be some of the works of Butler as well as those of Kim Stanley Robinson. I chose these two authors because the nonhuman parts of our world, and humanity's relationships to them, are integral to both authors' works. Rebecca J. Holden and Nisi Shawl bring to the forefront the "strange matings" "between humans and a large variety of other beings" in Butler's works. They argue that:

> What is most significant about all of the matings in Butler's work, however, is not their strangeness, but what such matings produce or lead to – and the necessity of those matings. For Butler's characters, the inevitable crossing and blurring of boundaries such

> matings entail often bring with them physical and emotional pain. Still, Butler shows us that these matings are key to her characters' survival, both for the individual and for the group. (1)

The openness to new forms of relationality is perhaps the most important aspect of visionary Anthropocene literature because as we renegotiate humanity's relationships with the larger world there will be pains, catastrophes, and traumas of all kinds, but literary representations of these new relationships can also aid humanity in its struggle for survival by providing examples of the utopian imagination. And hopefully with enough people imaginatively engaged with building a more survivable world there will also be produced visions wherein humanity and the rest of the planet can flourish as well.

In the same volume, Steven Shaviro argues that, "Butler's novels are simultaneously affective (oriented toward feeling) and cognitive (oriented toward knowledge and comprehension)," and the interplay between affect and cognition in "Butler's fictions, through their emotional intensities, both suggest the need (and the possibility) for metamorphosis (and the hope that comes through this possibility), and suggest that trauma and social antagonism are uneliminable and not subject to rational adjudication" (230). An important thing to remember, one that Butler consistently calls to our attention, is that human (and nonhuman) trauma and social antagonisms were not invented with the Anthropocene, and so focusing on climate change as *the end of the world* rather than just *this* particular trauma can only get us so far. Humans have dealt with collective trauma before, often not totally successfully (due in large part to those ongoing social antagonisms). But there is always hope – we will deal with this trauma, too, and perhaps this time we will be able to definitively move toward justice.

In the words of Donna Haraway, Butler "stays with the trouble" ("Staying" 34), and through the trouble is able to produce visionary fiction that points in a utopian direction, albeit muddily so. On the other hand, Robinson is "one of the very few serial offenders, you might say, at least in modern times"

("Remarks" 6) of writing ostensibly utopian novels. While Robinson's utopias are full of social conflicts and political struggles, they tend not to "stay with the trouble" to the same extent as Butler's work does. But rather than the overarching concerns of their work conflicting, they are far more complementary, as we will see, especially in their commitment to creating visionary Anthropocene literature, and expressing desires and aspirations for a better world without despairing that the world will never be "perfect."

The Utopian Call in Visionary Anthropocene Fiction

Because the Utopian Call is one of the prime motors of history, and I believe is the general form of what has animated every struggle for a better world, it will be the focus of my analysis of Butler's and Robinson's work. Each chapter will focus on a specific series by one of the two, except for the final chapter which analyzes three of Robinson's more recent stand alone novels, but each of these are close enough in their vision of a good Anthropocene that it made sense to organize the chapters in this way. The principle reason why I chose to organize the analysis around series rather than stand alone novels is that the Utopian Call is dynamic and much of its logic is only discernible when viewed through a multigenerational lens. As such, I deemed it best to focus on narratives that are multigenerational in scope, especially for the texts chosen for the first two chapters. The first two chapters will be broadly theoretical in nature, fleshing out the various contours and mechanisms of the Utopian Call both in its relation to the utopian subjects that heed the Call and in its relation to the struggle in history to bring about a better world.

In the first chapter, I analyze Butler's *Xenogenesis* trilogy (*Dawn, Adulthood Rites,* and *Imago*). The analysis here will help to further theorize the Utopian Call in a somewhat "pure" form. That is, because the narrative takes place after the end of history due to a nuclear holocaust, and the Call comes from a completely ahistorical source, the extraterrestrial Oankali, the Utopian Call is somewhat divorced from the utopian struggle in history. But only somewhat: while history may have ended prior

to the beginning of the narrative, the characters are still full of their own personal histories shaped by the pre-disaster world, and as such react to the Utopian Call in various, usually contentious, ways.

Consequently, the multigenerational story told in the trilogy is well suited for analyzing the Utopian Call as it becomes more refined and evolves in a particular community over the course of several generations. This refinement is dramatized by the characters' bodies; as each generation's utopian subjectivity becomes more pronounced the individuals become more alien and indeed monstrous to those who initially heard and responded to the Call.

In the second chapter, I analyze Robinson's *Mars* trilogy (*Red Mars, Green Mars,* and *Blue Mars*), touching on similar aspects of the Utopian Call but from a slightly different perspective, namely with a focus on the Utopian Call's relationship to history. Similar to *Xenogenesis,* the *Mars* trilogy is multigenerational in scope, and also similarly, both trilogies present a different novum that allows some members of the initial utopian community to live inhumanly long lives, so that they can see the effects of the Utopian Call as it becomes more refined and pervasive in a society. In this chapter, I will highlight the tension between the utopian struggle and the "inertia of history," which is the tendency for those in power to maintain their institutionalized dominance by fighting on the "wrong" side of the utopian struggle.

The final two chapters will be far more prescriptive, focusing on the "visionary" aspects of these two authors by analyzing how best to heed the Call now at the beginning of the Anthropocene as so many nations of the Earth are either still enthralled by neoliberalism's dictate that "there is no alternative" and as such are actively anti-utopian or are adopting far-right "blood and soil" politics that co-opt and incorporate select utopian ideals and distort them into genocidal dreams that any reasonable person could only think of as dystopian.

In the third chapter, I analyze Butler's *Parable of the Sower* and *Parable of the Talents* in order to show how she uses the "Earthseed Destiny" – interstellar travel and eventual colonization – as a

“mother project” to focus its adherents' energies in a utopian direction. I argue that the best way to engage in the utopian struggle in the Anthropocene is not to rely on the model of revolution to take state power, but rather to build institutions of dual power by the use of a “mother project” that can then organize people into smaller projects based on their own interests and initiative. A mother project is meant to be multigenerational, and while the end-goal (in this case interstellar travel and colonization of distant worlds) is far off in the future, many of the smaller projects that fall under the umbrella of the mother project would confer real material benefits for the world along the way; so although the final project would not be completed for many generations, the act of working towards it should hopefully help to move the world closer to the utopian horizon as the process unfolds.

In the fourth and final chapter, I analyze three of Robinson's recent stand alone novels, *Aurora, 2312,* and *New York 2140*. I will use them to argue that Butler's notion of interstellar travel is not the optimal mother project for the Anthropocene but that our (utopian) energies ought to be focused on revitalizing the Earth because it humanity's one true home. Even though I am rejecting the ultimate program in the *Parables*, Butler's use of a mother project to instantiate the Utopian Call and to focus the utopian subjects in advancing the utopian struggle while also conferring an untold number of material benefits for the world at large along the way is, I believe, the best way forward in our contemporary struggle to move beyond the Capitalocene. Ultimately, I will argue that *the* mother project for the Anthropocene is to rehabilitate the world's ecosystems that have been wrecked by capitalist exploitation, and that land rehabilitation needs to be coupled with the creation of a new set of global commons.

The three novels that I analyze in the final chapter each illustrate projects of making new sets of commons and as such “prefigure a mode of production, no longer built on a competitive principle, but on the principle of collective solidarity” (Caffentzis and Federici i101). Furthermore, the principle of solidarity expressed in these texts extends to the nonhuman world as well because “Commons must

guarantee the reproduction of our lives" (Caffentzis and Federici i101), and in order to do so the disparate ecosystems of the world must be healthy in their own rights. As such, each of these texts contains at least one project based on "commoning" such as beach restoration on drowned coastlines or the "assisted migration" of endangered species to parts of the world that are more hospitable to them with regards to the changing climate.

The next few decades may very well decide what kind of Anthropocene future generations will inherit – visionary Anthropocene fiction helps us to theorize what direction we should direct our energies in for our own contemporary utopian struggle as the Anthropocene begins to unfold, throwing our already damaged world into turmoil and possibly chaos. Producers of this literature "stay with the trouble," but they do not harp on it, refusing to allow the trouble to swallow all hope or to overshadow the visions for far more just and utopian societies. The first book of the Broken Earth trilogy, *The Fifth Season,* begins with: "Let's start with the end of the world, why don't we? Get it over with and move on to more interesting things." It is this sentiment that separates cli-fi as a genre merely of extrapolation and warning from truly *visionary* Anthropocene literature.

Chapter 1

Traitors, Traders, and Monstrous Children: Becoming Utopian Subjects in the *Xenogenesis* Trilogy

The Anthropocene, Critical Dystopias, and the Utopian Struggle

Kim Stanley Robinson has remarked that science fiction is the realism of our times, but unfortunately at this moment, the early Anthropocene or the Capitalocene, the realism of our time is not just science fictional but dystopian. Darko Suvin states that, "We live morally in an almost complete dystopia – dystopia because anti-utopian – and materially (economically) on the razor's edge of collapse, distributive and collective" ("Theses" 187). While this is certainly true, focusing only on the moral vacuity and economic precarity of the neoliberal world system seems almost quaint once we factor in climatic and ecological instabilities.

Media critic MacKenzie Wark argues that the Anthropocene is a collection of metabolic rifts, a term borrowed from Karl Marx to denote how capitalist forms of production and distribution lead to various deficiencies or excesses in the substances that make up local ecologies. The most notable example of this today is the addition of vast amounts of carbon dioxide in the atmosphere, which is certainly taking its toll on local as well as global ecologies. Wark claims that the only truly "successful" liberation movement of the nineteenth and twentieth centuries is the "Carbon Liberation Front," which "seeks out all past life that took the form of fossilized carbon, unearths it and burns it to release its energy" (xv), and of course once the carbon is "liberated" as carbon dioxide it starts to have profound effects on the global climate. Yet, the Anthropocene is not just a series of metabolic rifts but is also the planet's attempt for all the various ecologies thrown out of whack in the Capitalocene to reach new states of equilibrium – and here it should be stressed that these are *new* states of equilibrium, that

human beings, as well as all the rest of the organisms that we share the planet with, are not adapted to.

One truth about ecological instability is that it provokes existential insecurity for all those (species) who must live through it. This is part of the dystopia of the present, one of the other parts is hit on by Suvin. It is dystopian because it is anti-utopian: we *know* we must change collective (this does not of course mean *universal*) human behavior, particularly transitioning from fossil-fuel fueled capitalism to a world system that is far more just to humans as well as to the nonhuman world. But despite this knowledge we do not change...because one of the rhetorical justifications for neoliberal capitalism is that "There Is No Alternative" (TINA), and the political and economic elites of the world treat it as an immutable law of nature.

But just because the Anthropocene is dystopian does not mean that TINA is true – that capitalism is here to stay and the world is going to be destroyed just so we can keep the economy "healthy." No, our dystopia is not *1984* where the utopian possibilities are merely flytraps created and manipulated by those in power. Nor is it a *Brave New World* where the only escapes are micro-reservations or an island of "free-thinkers." We are dystopian, to be sure, but critically so. Utopian theorist Tom Moylan noted how some sf authors in the 1980s and 90s began to rework dystopian themes: "Although they reached back into its classical and science fictional roots, they did not simply revive dystopia but rather reworked it in the context of the economic, political, and cultural conditions of the decade" (*Scraps* 186). It should also be noted that the authors that Moylan analyzed, namely Octavia Butler, Kim Stanley Robinson, and Marge Piercy, all focused on environmental concerns in their work as well. They clearly saw that the emerging Capitalocene was dystopian, but just as importantly that it was not totalizing. Moylan remarks that, "Stepping inside the ambient zone of anti-utopian pessimism with new textual tricks, they expose the horror of the present moment. Yet in the midst of their pessimistic forays, *they refuse to allow the utopian tendency to be overshadowed by its anti-utopian nemesis*. They therefore adopt a militant stance that is informed and empowered by a

utopian horizon that appears in the text – or at least shimmers just beyond its pages." (*Scraps* 196). The characters in their books were not just informed and empowered by the utopian horizon; they were *transformed* into utopian subjects when the horizon interpellated them as the Utopian Call.

This chapter will focus on one such set of texts, Butler's *Xenogenesis*[6] trilogy, comprising *Dawn, Adulthood Rites,* and *Imago,* in order to theorize in more detail the workings of the Utopian Call. *Dawn* begins when the protagonist, Lilith Ayapo, awakes from a hibernation induced by her alien captors/rescuers, the Oankali, two and a half centuries after a world-wide nuclear holocaust. After some time adjusting, Lilith helps the Oankali awaken more of the remnants of humanity from hibernation and prepare them for life on a transformed Earth – with new plants and animals, due either from radiation-induced mutation or Oankali intervention and manipulation. As one of Lilith's alien interlocutors put it, "Your Earth is still your Earth, but between the efforts of your people to destroy it and ours to restore it, it has changed" (*LB* 34). This sentiment may sum up the utopian struggle in the Anthropocene: the biggest question over the coming decades is who will win out? The forces who put all their efforts in destroying the planet or those who are trying to "restore" it (to health rather than to a lost state)?

Dawn tells the story of Lilith and her human compatriots' struggles with the Oankali and ends after the humans revolt, resulting in the death of Lilith's human lover and wounding her Oankali "ooloi"[7] mate, Nikanj. Lilith chose to save Nikanj and was further ostracized from the humans, who were subsequently sent down to Earth without her. Lilith also found out that she was pregnant with a human-Oankali "construct" child. The second and third books each pick up the narrative from the point of view of one of Lilith's (many) construct children. *Adulthood Rites* follows her son, Akin, as he tries to make a place in the world for the "Resister" humans on Earth and *Imago* follows her ooloi child,

6 I will be referring to the trilogy of *Dawn, Adulthood Rites,* and *Imago* under the older title of *Xenogenesis* because it refers to the creation of something strange and other, which will be my focus, rather than the newer title of *Lilith's Brood*, which draws attention more to the human side of the trilogy, particularly to Lilith and her role in creating the next generations of humanity, whether through her role in birthing the hybrid "construct" children or in her role of "parenting" the first groups of awakened Humans.

7 The Oankali third gender.

Jodahs, as it begins a higher synthesis between the human and the Oankali.

The principle novum in the trilogy is the gene manipulation by the ooloi, both in terms of their conscious gene selection during reproduction as well as their epigenetic manipulations that allow humans such as Lilith to live longer, heal faster, have more physical strength and endurance, and obtain an eiditic memory. *Xenogenesis* presents a clear example of the interaction between the novum and the arcanum, because while the novum is provided by a new "technology" introduced by the Oankali, the Oankali themselves are the arcanum in the text. That is, they are revealed as something that is inherent to the world of the text, claiming that "there was no life at all on your Earth when our ancestors left our original homeworld" (*LB* 55), thus it just took the time for them to make it to Earth for the arcanum to be revealed. It is the arcanum in this case that provides the utopian horizon in the trilogy, and thus is outside of history – as arcanum it was present prior to all of human history and was not revealed until after the end of history (the end of the world).

Some critics have noted that, despite Butler's rejection of utopias and utopian thinking, her writing is clearly utopian. For example, both Hoda Zaki and Jim Miller argue that Butler is best read as part of the feminist utopian tradition, with Zaki reading Butler's political vision as "a peculiar mix of utopianism, anti-utopianism, and ideology. Expressing as they do many utopian hopes and desires, her works contain a muted critique of the current political order. Yet in denying the possibility of change through political and collective human action, she softens her critique and situates her utopia beyond human reach" (247). Miller also views Butler's utopianism as muted but sees the visions in Butler's work not as putting utopia beyond human reach but rather, "Butler's hope is a post-utopian one, tempered by the lessons of the past. Perhaps, though, this makes her vision more tangible and enduring in an era of diminished expectations" (357). Yet Miller ends his essay on a slightly stronger note that, "Her portrayal, in all of her work, of the persistence of yearning in the midst of dystopia is the face of hope in our post-utopian moment" (358).

As already noted, Tom Moylan argues that Butler helps to inaugurate the trend of critical dystopian literature. Moylan argues that the critical dystopias that began to appear in the late 1980's and early 1990's (including Butler's) "burrow within the dystopian tradition in order to bring utopian and dystopian tendencies to bear on their exposés of the present moment and their explorations of new forms of oppositional agency. Considered in terms of the continuum of utopian and anti-utopian pessimism, they tend to express an emancipatory, militant, critical utopian position...Albeit generally, and stubbornly, utopian, they do not go easily toward that better world. Rather, they linger in the terrors of the present even as they exemplify what is needed to transform it" (*Scraps* 198-9). That is, Butler, among others, "stays with the trouble." Donna Haraway argues that Butler produces "survival fiction more than salvation history. Catastrophe, survival, and metamorphosis are Butler's constant themes" *(Primate Visions* 378).

Because Butler's utopian impulses are formed against the dystopian aspects of her texts, it is essential to pay close attention to the ways that these dystopian aspects are situated in her novels in order to see exactly how she stays with the trouble. While the dystopias that she presents are bad enough in themselves, one important feature they all share is that they could get, and are close to getting to be, quite a bit worse. That is, her dystopian societies are on the verge of total collapse – in *Patternmaster* the 'pattern' of psychics is in danger of being taken over by a ruthless dictator (rather than the benevolent dictator who does win out); in the *Parables* one of the characters describes the social breakdown as an installment plan World War III, and all of the characters live in variously precarious situations in constant danger of being killed or enslaved; and the *Xenogenesis* trilogy begins after a nuclear holocaust had nearly wiped out all of human life on Earth, which only becomes habitable again after two and a half centuries of radical intervention by an alien species who happened to find the last human survivors just in time. The point here is that the societies that give birth to Butler's utopian yearnings are not *merely* dystopian; these worlds are dystopian on the edge of total

collapse.

Likewise, in “Remarks on Utopia in the Age of Climate Change,” Kim Stanley Robinson argues that humanity is at a moment in history where we must collectively choose either utopia or catastrophe, with no middle ground. That is, it is not just a particular society or civilization that faces its demise, but the planet itself – the one absolutely necessary condition of possibility for *any* society or civilization – has reached a point of profound existential crisis, and that a point has been reached where without deeply focused and concerted intervention an existential catastrophe is eminent. However for Butler, at least in the world of *Xenogenesis,* there is no future point of equilibrium that would mark the goal of the utopian struggle, either for humanity or for the planet, but especially for the planet, because as we learn in *Adulthood Rites* the trade villages are in fact new Oankali ships that are being grown on the surface of the earth, and once they reach maturity in the next few centuries they will separate from the Earth and depart from our solar system, leaving the Earth a deformed and lifeless rock.

In arguing that we are at a historic juncture where we must choose between either utopia or catastrophe, Robinson argues that there are multiple paths that lead to different utopian horizons. And in fact, once the idea of utopia as a perfect society is rejected – either because it is logically incoherent or because it is unattainable, which are both true, the latter because of the former – and instead is understood as a good society then it follows fairly easily that there are many versions of a good society. Each of these possible good societies is a utopian horizon, and from the perspective of the present a utopian horizon is a version or vision of a good society that is not only conceivable in the present moment, but also possible (i.e. not reliant on some sort of hypothetical but as yet unreachable technology), because the utopian horizons are fundamentally concerned with different kinds of relationships between people as well as the nonhuman world. Thus there are multiple utopian (and dystopian) horizons for any given present, whether it be our present (the Anthropocene) or the present of a fictional text.

Xenogenesis is a prime example of a text that has a utopian vision that forcefully interpellates itself on a population; those who hear the Call must either live and embody that vision or be left behind by the new social and political reality. Even before the initial catastrophe before the narrative, the characters in the trilogy are given a choice between joining and breeding with an alien race or enduring a forced sterilization and thus having a minimal effect on the future generations as they watch what was left of Humanity slowly whither away. The aliens, or Oankali, represent a utopian horizon in the novels, thus the choice for each individual is to join in the utopian struggle or to become existentially irrelevant. In the rest of this chapter I will demonstrate how the Oankali represent a Utopian Call that attempts to forge a way out of a dystopian present. I will also analyze the various reactions that the Call produces, as well as explore how the Call deals with competing utopian horizons. But first I will look at how Butler frames the dystopian elements of the novels' present – what forms their basis as well as their institutional tenacity.

Defining Dystopia: The Human Contradiction

While environmental concerns are highly significant in the text, with the eco-critical aspects made most explicit in *Adulthood Rites* when the young Akin accompanied the “Resisters” on a salvage mission of pre-war artifacts, the dystopian aspects in the text are almost completely social. The positive ecological aspects of the Utopian Call are presented in how the Oankali relate to their ship and their settlements which were simply immature ships. The Oankali ships are seen as members of the community and have agency of their own that is respected by every Oankali: there is “a strong, symbiotic relationship. We serve the Ship's needs and it serves ours” (*LB* 35). The relationship between the Oankali and their ships is like that of a universal commons – a symbiotic relationship that could serve as the foundation for one version of a “good” Anthropocene.

The Utopian Call presented in the trilogy is clearly responding to humanity's collective relationship to the larger environment, and that relationship can viewed in light of the social dystopian

elements that the Call is in response to. It is reiterated time and again in the trilogy that human "essence" is the "Human Contradiction" – that as a result of evolutionary history humans are genetically encoded for intelligence as well as hierarchical behavior. The reason that this is seen as a contradiction, or conflict, for the Oankali is that either trait is useful as an adaptive strategy, but that both of them together is a lethal combination. That is, intelligence is too often put in the service of hierarchical behavior rather than any other consideration such as justice, fairness, or respect for difference, whether in the dynamics of fairly small groups through such things as pecking orders, or when intelligence is applied to hierarchical behavior on a society-wide level through the institutionalization of power relations rather than intelligence being put in the service of building institutions that would benefit everyone. According to the Oankali, the only way to resolve this contradiction is to breed hierarchical behavior out of humanity, either through direct genetic engineering (which is the only way that the Oankali believe would be truly effective) or through social engineering – that is, producing a society that will select for cooperative rather than hierarchical behavior (which the Oankali view as unlikely to succeed).

Some critics have taken issue with the stark way that Butler has presented the Contradiction, that it is too biologically determined and leaves no real room for political agency.[8] But even if we don't want to go as far as the Oankali and say that humans are genetically determined for hierarchical behavior, it would not be a stretch to say that humans have a strong tendency towards such behavior. Put another way, the essence of *contemporary dominant society* is largely hierarchical and that hierarchical behavior is strongly selected for to such an extent that for individuals to be "successful" they ought to adopt hierarchical behavior as an adaptive strategy. Thus even if we want to eschew the biological essentialism and determinism that is the basis of humanity in the *Xenogenesis* trilogy, we could still say that at this moment in history hierarchical behavior is in fact human essence.[9] That is,

8 See for instance Michaels (655) and Zaki (242).
9 Cf. Tucker (181); Peppers (52).

while Butler presents a model of human essence in *Xenogenesis* that is totally determined by genetics and evolutionary history, the logic that this essence adheres to is the same if we simply assume that human essence is a historical and contingent fact, that it is a political reality rather than a biological one. Another way to state this might be to say that hierarchical behavior is an expression of certain biological tendencies that rely on a variety of environmental factors, including political and social institutions, and that it is not solely determined by human genetics. I don't believe that framing the Human Contradiction in this way in any way attenuates the socio-political critique of hierarchical behavior presented in *Xenogenesis,* and if anything makes it more pertinent because it is something that can be addressed and not just lamented.

The Oankali stand in the narrative as the contrast to humans – especially as defined against the Human Contradiction, which as a function of human evolutionary history is something that the Oankali stand completely outside of. In a conversation between a human, Yori, and one of the Oankali-Human constructs, Akin, Akin gives Yori the basic Oankali position:

> [Akin:] "Because I say you should have one more chance to breed yourselves out of your genetic Contradiction."
>
> "And what do the Oankali say?"
>
> "That you can't grow out of it, can't resolve it in favor of intelligence. That hierarchical behavior selects for hierarchical behavior, whether it should or not. That not even Mars will be enough of a challenge to change you." He paused. "That to give you a new world and let you procreate again would... would be like breeding intelligent beings for the sole purpose of having them kill one another."
>
> "That wouldn't be our purpose," she protested.
>
> He thought about that for a moment, wondered what he should say. The truth or nothing. The truth. "Yori, Human purpose isn't what you say it is or what I

say it is. It's what your biology says it is – what your genes say it is." (*LB* 501)

Purpose here is being used in two senses, the first of which is something like a reason for doing something – that is, human civilization would have no actual aims that could be achieved because they would kill themselves off before any other purpose could be realized. Akin's second statement though blends this first meaning with a second meaning, namely purpose as the motivation for behavior. It is this second understanding of purpose as what motivates behavior (as in purposeful action) that is the more significant for understanding the Human Contradiction, which is formulated throughout the trilogy as a conflict between intelligence and hierarchical behavior.

While intelligence is also a motivating factor for behavior, especially in formulating purposes in the first sense, intelligence is often used in service of hierarchical behavior instead of as a means to overcome natural and unnatural hierarchies – hence its formulation as either a conflict or a contradiction. Or as Jdahya, Lilith's first Oankali contact, put it, "You are hierarchical. That's the older and more entrenched characteristic. We saw it in your closest animal relatives and in your most distant ones. It's a terrestrial characteristic. *When human intelligence served it instead of guiding it*, when human intelligence did not even acknowledge it as a problem, but took pride in it or did not notice it at all...That was like ignoring cancer. I think your people did not realize what a dangerous thing they were doing" (*LB* 39, emphasis added). The big question, of course, is how intelligence could guide hierarchical behavior, or perhaps a better question is what intelligence should be put in the service of? The answer to the former question would seem to simply be the practical application of the answer to the latter, and the answer to this should serve as some of the first sketches of the Utopian Call.

The Oankali also have intelligence, but it is coupled with cooperative rather than hierarchical behavior.[10] Other species qualities of the Oankali that separate them off from humans, which I will analyze in turn, are truthfulness, eiditic memory, and a symbiotic relationship with the rest of their

10 Cf. Walker: "Butler's trilogy traces an earth subsumed by its own hierarchical structures to one that begins profoundly differently, and through its difference disables such hierarchical underpinnings altogether" (117).

world. But before analyzing the first items on the list I want to take a close look at Oankali "acquisitiveness," because it is acquisitiveness and not cooperation per se that is the fundamental (evolutionary) basis of the Oankali that makes them radically different from Humans. Jdahya also told Lilith that, "We're not hierarchical, you see. We never were. But we are powerfully acquisitive. We acquire new life – seek it, investigate it, manipulate it, sort it, use it. We carry the drive to do this in a minuscule cell within a cell – a tiny organelle within every cell of our bodies" (*LB* 41).

In the trilogy, the Oankali represent the Other to humanity (painted in broad strokes) but not simply because they are a different species; they are also radically different in terms of their political, social, and cultural institutions. One of the principle reasons why they are radically different is actually because of their relationship or attitude to radical difference as such. Walter Benn Michaels reads this embrace of difference as an erasure of ideological difference in favor of "differences between those bodies, between identities, between races or cultures, between aliens and humans. But while [Samuel] Huntington imagines that such differences make identitarian conflict inevitable, Butler's goal is to make it impossible. So in *Xenogenesis* it is not difference itself but one's attitude toward difference that is the source of conflict" (657). Michaels sees Butler's critique of identity following along the same lines as Samuel Huntington's in "The Clash of Civilizations?" wherein ideological differences become less important than cultural differences. This is an odd reading for a variety of reasons but most significantly because many of the principle differences between the Oankali and Humans in the novels are precisely ideological and political, centered around the idea that Humans are inherently hierarchical while the Oankali are strongly horizontalist. And while I agree that Butler's point is that a significant source of conflict is one's attitude toward difference, I do not see how this approach is cultural rather than ideological, especially when viewed from an institutional level. In *Xenogenesis*, Butler casts this attitude as a biologically-seated result of human evolutionary history, which can be seen for example when Nikanj explained to Joseph why he feels repulsed by Nikanj: "Different *is* threatening to most

species...Different is dangerous. It might kill you. That was true to your animal ancestors and your nearest animal relatives. And it's true for you" (*LB* 186).

However, Cathy Peppers and J. Adam Johns both show that Butler's use of sociobiology as an origin story for explaining human behavior (especially as embodied in social institutions) is not as simple as saying that X genes code for Y behavior. Johns states that Butler's "project is not to criticize sociobiology as liberal humanism, but to strip optimistic liberal humanism from sociobiology" (398). Peppers argues that "the cyborg narrative of human identity might find its origin in sociobiological determinism. But rather than reinforcing the story of the 'pure, bounded individual' who 'evolves' through a competitive 'survival of the fittest,' it finds our origins in genetic 'miscegenations' – mutations, symbiosis. Perhaps we are 'biologically determined' ('our fate is in our genes'), but not in the ways we usually think" (52). This idea is articulated well in a conversation between Nikanj and another Oankali: "One Oankali organism within each cell, dividing with each cell, extending life, and resisting disease. Even before we arrived, they had bacteria living in their intestines and protecting them from other bacteria that would hurt or kill them. They could not exist without symbiotic relationships with other creatures. Yet such relationships frighten them" (*LB* 427). And so while Nikanj's explanation to Joseph rings true about the potential threat of what is different, Nikanj's later explanation to another Oankali also rings true – that what is different may also be the thing that makes one's continued existence possible, and yet the result is the same: fear of the other. Peppers's reading is correct in that the biological determinism presented in *Xenogenesis* undercuts individualism as such, and thus also undercuts the basis for Michaels's argument as well. If the "pure bounded individual" is the basis for identity then this identity is itself ideological, even if it is also cultural.

Literary critic Jennifer Burwell argues that Butler's protagonists do not inhabit just one social identity but many, for example Lilith is both black and female, and that each of the multiple subject positions have their own form of alienation to specific forms of ideological domination such as white

supremacy or patriarchy (90-1). Because in a complex society ideologies as well as cultures are always plural, Michaels's reduction of a person's many political identities into a single personal identity that is cultural rather than ideological (or political) fails in interpreting the complex play of identity and power in Butler's work. Burwell argues that in order to survive, Butler's (especially) female protagonists must learn to deftly navigate multiple subject positions, so even if these different subject positions were merely "cultural," Butler shows that their navigation is a highly political act. As such, the "attitude" towards difference that one has who must survive in this way is fundamentally political, no matter what other cultural or psychological aspects it might have.

Furthermore, the Oankali embrace radical difference to such a degree that they actually need it: "We *must* do it. It renews us, enables us to survive as an evolving species instead of specializing ourselves into extinction or stagnation" (*LB* 39). It is also noteworthy that the Oankali would consider (evolutionary) stagnation just as bad as extinction.[11] The Oankali exhibit the same kind of dynamism as the Utopian Call. Their "essence" does not change, i.e. their fundamental principles such as embrace of difference or cooperation remain the same even as their bodies undergo profound intergenerational change, but how these essential traits manifest in the world necessarily changes because the world itself is dynamic. Joan Slonczewski notes that, "Paradoxically, because the Oankali are such successful genetic engineers, they tend to engineer themselves into an evolutionary dead end; losing all genetic diversity, they lose the ability to adapt to change. The only way they can recover genetic diversity is to interbreed with an entirely new species, which contributes new genetic strengths – and weaknesses" (1).

Thus, one of the points that Butler is trying to make is that hierarchical behavior on the one hand and the embrace of difference on the other are both adaptive strategies that allow species as a

11 The Oankali's characterization of evolution is reminiscent of Butler's characterization of utopia as a perfect society rather than as a good society. If we keep in mind that perfection is just a type of completion we can see in this passage the Oankali expressing the same aversion to perfection. Instead of social completion they are averse to species completion.

whole to survive in certain types of environments, and that the logical conclusion of hierarchical behavior, with intelligence at its service, is that it leads to eventual species extinction. This point is made especially strong through the metaphor of the Contradiction as cancer, or more specifically that not recognizing hierarchical behavior as a problem, or worse yet taking pride in or not even noticing the hierarchies that permeate our societies, is like ignoring cancer (*LB* 39). This point is also significant given the role that cancer plays for the Oankali – from giving Nikanj the ability to essentially re-attach an almost completely severed "sensory arm" at the close of *Dawn* to allowing the ooloi to regrow lost limbs for others in *Adulthood Rites* to finally giving the construct ooloi in *Imago* the ability to shape shift – all of this because the potential that cancer had for unmitigated growth being put to use by the Oankali's genetic engineers.[12] That is, the growth of new cells can be a good thing, but out-of-control growth such as in cancer is clearly not a good thing; the tendency towards growth needs to be controlled by some sort of conscious effort (or technology) in order to make it good because the way that it appears in nature is just plain destructive. The metaphor of the Contradiction as cancer illustrates that the principle danger of the Human Contradiction is that intelligence is put in service of hierarchies rather than overcoming and undoing them: we let our social cancers fester untended to our own detriment.[13]

Thus when hierarchical behavior is given precedence then intelligence becomes ruthlessness in the name of making sure that there are winners and losers within a society or between different societies. That is, within a given society hierarchical behavior manifests as oppression and repression, which can be horrendous for the individuals within that society. There are no shortage of historical examples that illustrate this point, and Butler's *Kindred* does an excellent job of showing that every person who came into contact with the institutions of American chattel slavery was negatively affected.

12 Cf. Peppers. Slonczewski also mentions that actual human researchers are already investigating some of the potentially beneficial aspects of cancer.

13 This metaphor is also consistent with a critique of capitalism, which has as its main tenet unmitigated growth, in revenues, profits, GDP, etc.

But we can also see this damage in the fictional world of *Xenogenesis,* as the humans who resist and flee from Oankali control make settlements that have as some of their main industries the kidnapping and trade of Oankali-Human construct children as well as the sex slave trade in human women from other settlements. Even the "good" Resister village, Phoenix, that Akin lived in during his time in captivity had a lot of "extra" women because they had enough wealth to trade for them as well as being quite happy recipients of kidnapped children. As bad as hierarchies manifesting *within* a given society is, when hierarchical behavior exists between rival political entities (such as nation-states), the stakes get even higher because of the potential and actuality of war. The premise of the trilogy itself dramatizes this danger in that the Oankali were just in time to rescue the survivors of nuclear war between the USA and USSR.

Oankali Traits: Species Agency

Nation-states are but one example of entities that have a collective agency, yet no matter how much power to change the physical world around them that they possess, they are, according to Chakrabarty's problematic, still not enough of a bridge to help people understand humans as geological agents. The Oankali, on the other hand, do understand themselves as geological agents because they have a keen sense of their species agency. Their species agency comes from a combination of different aspects: their acquisitiveness which provides them a conscious relationality to other aspects of their environments; their mutual trustfulness which allows for a politics of consensus; their eiditic memories which allow them to understand themselves (and each other) as agents of history; and their symbiotic relationship with their environments which promotes an ethic of stewardship rather than ownership of or mastery over the land.

To begin with, the Oankali embrace of difference is clearly not non-interventionist, nor does it promote any type of pluralism. In fact, the entire narrative of the trilogy is premised on the fact that the Oankali radically intervene in the lives of others and then radically alter the very essence of those

others in the service of their own need to acquire difference. For example, when Akin was held captive by the Resisters, he and Gabe went foraging in the woods: “What he [Akin] and Gabe did was what the Oankali always did – collect life, travel and collect and integrate new life into their ships, their already vast collection of living things, and themselves” (*LB* 410). The Oankali are fundamentally assimilationist, but even this assimilationism is a complicated form, because it is not predicated on the Oankali forcing others to become *like* them in some static way. That is, the Oankali have no essence outside of their acquisitiveness, or their constant evolution resulting from their radical embrace of difference: “One of the meanings of Oankali is gene trader. Another is that organelle – *the essence of ourselves*, the origin of ourselves. Because of that organelle, the ooloi can perceive DNA and manipulate it precisely” (*LB* 41, emphasis added). Thus while the Oankali radically alter those with whom they (forcibly) trade genetic materials, they are likewise altered as well – except for their capacity and need for the embrace of difference.

It should also be kept in mind that the Oankali embrace of difference is just an iteration of a larger respect for life as such: “[The Akjai] pointed out that the Human-born among them had had to learn the Oankali understanding of life itself as a thing of inexpressible value. A thing beyond trade. Life could be changed, changed utterly. But not destroyed. The Human species could cease to exist independently, blending itself into the Oankali” (*LB* 470). And certainly in the context of the trade the Human species will cease to exist in any recognizable form, yet humanity would not be *consumed* but *subsumed* in the trade, with the subsequent generations of utopian subjects becoming less and less like the humanity of the status quo.

Before analyzing the trade in more detail, though, I will briefly analyze three other politically salient features of the Oankali that serve as part of Butler's critique of the dystopian elements of the present. The first such key feature of the Oankali is their unwavering honesty. Fairly early on in *Dawn*, Lilith sought in vain to catch her early Oankali informants lying, but “the closest she came to catching

the Oankali lying was to catch them in half-truths – though they were honest even about this. They freely admitted that they would tell her only part of what she wanted to know. Beyond this, the Oankali seemed to tell the truth as they perceived it" (*LB* 59). But because honesty is a personal (i.e. individual) quality, there is a clear conceptual danger in focusing too much on honesty which would lead to the lament that if everyone were only just more honest then we wouldn't have so many problems. There are two major problems with this lament in the first place. Universal honesty by itself is a fairly impotent political strategy at its best, and at worst "I'm just being honest" or "I'm just telling it like it is" is a common excuse to justify fairly vile rhetoric and actions. But this does not mean that honesty should be set aside, or even worse that dishonesty should be encouraged as a political strategy. Rather the limits of universal honesty simply highlight the problem of using personal traits to formulate political programs.

Yet there is another lesson that can be gleaned from the unwavering honesty of the Oankali – and that is *trust* as a political principle. Anthropologist David Graeber argues that in order to ensure the success of institutions that seek to make decisions based on some form of consensus it is necessary to have a principle of mutual trust:

> while it is perfectly legitimate to doubt the wisdom of another's words or deeds during a meeting, or even to express outrage at their words or deeds, one must always give them the benefit of the doubt for honesty and good intentions. This can often be extremely difficult to do. Often one might have every reason to suspect that one's interlocutors are not behaving honestly and do not have good intentions. One might even suspect they're an undercover cop. But one could be wrong. And just as the surest way to guarantee people will act like children is to treat them like children, the surest way to guarantee people will start behaving irresponsibly during a meeting is to treat them as if they already are. (*Democracy* 218-9)

The Oankali offer something of a negative proof for this idea. First their view of humanity is rather stark: "Humans, on the other hand, lied easily and often. They could not trust one another. They could not trust one of their own who seemed too close to aliens" (*LB* 238). This characterization may be a bit hyperbolic if we think about everyday interactions, but when thinking about political decision making, self-interest is seen as the standard for behavior rather than honesty or care for the public good (good intentions), which means that telling the truth or lying is secondary to its effects, or in other words if lying serves your (political) interests then one is expected to lie. As such, in assuming honesty in political situations Graeber points out how difficult it is, especially as the stakes get higher – that person might be an undercover cop! Lilith is in league with the aliens! Lilith *is* an alien!

Along with the benefit of the doubt, we see in Graeber's assessment honesty tied to responsibility and maturity, and certainly the Oankali did not appear to hold humans in very high esteem in either regard. For example, when Lilith and her family were heading into exile in the jungle so that Jodahs would not have to endure exile on the ship, Nikanj was telling all of the children how to protect themselves if confronted by Resisters, but it stopped just before telling Lilith to take care. Jodahs remarked to itself that, "I had seen Oankali make the mistake of treating Humans like children. It was an easy mistake to make. Most Humans were more vulnerable than their half-grown children. The Oankali tried to take care of them. The Humans reacted with anger, resentment, and withdrawal" (*LB* 566). There are also various allusions to humanity needing to grow out of the Contradiction,[14] and the chapter titles in *Dawn* also point to the idea that humanity needs to go through some sort of maturation process and that this essentially means to become less human-like and more Oankali-like. The chapter titles in order are: Womb, Family, Nursery, and The Training Floor. Likewise, the next two books in the trilogy, *Adulthood Rites* and *Imago*, which refers to the adult stage of certain insects,[15]

14 There are also many references to humanity needing to mature – that we are either in a state of infancy or adolescence – in the *Parable* Series.

15 Cf. Peppers: "That Butler chose to title the ultimate volume of her trilogy *Imago* – which means the 'perfect stage' of an animal at the end of its evolution – suggests that she is indeed telling a story of evolution in which the 'most fit' will

enact this movement, which will be analyzed in greater detail in a later section.

Another important quality of the Oankali is their eiditic memory, but memory is even less politically significant than honesty when considered as an individual quality. It would not be much of a political program to assert that people should have eiditic memories, and once again would sound more like a lament that people did not. But if we take a closer look at how eiditic memory functions in the text, the political and social import of this quality becomes much more apparent. Individual Oankali certainly have perfect recall, but this memory is also just a manifestation of a perfect *species* memory, which the Oankali use to look back into the development of the species so that they can radically alter their appearance prior to awakening any humans so that they would be less alien-looking. The Oankali do naturally what Chakrabarty claims is needed in order to understand the full consequences of the Anthropocene: "The task of placing, historically, the crisis of climate change thus requires us to bring together intellectual formations that are somewhat in tension with each other: the planetary and the global; *deep and recorded histories*; species thinking and critiques of capital" (213, emphasis added). That is, the perfect species memory of the Oankali allows them to thoroughly and critically evaluate a situation and then respond to it *consciously* and *deliberately* in a way that is optimal for themselves and the world around them. In other words, the past is never dead for the Oankali; no matter how far removed from the present, the Oankali can call on their past and bring it into the living present. For example, when Lilith's son Akin visited an Akjai[16] ooloi, there is a brief explanation of how this species memory works: "It [the Akjai ooloi] was what the Oankali had been, one trade before they found Earth, one trade before they used their long memories and their vast store of genetic material to construct speaking, hearing, bipedal children. Children they hoped would seem more acceptable to Human

survive. But there is an irony to this title, and to its teleological implications as well. This evolutionary use of the term 'imago' was coined in Linnaeus' taxonomy for insects to name the final and perfect form after metamorphosis. In terms of the trilogy as a whole, what metamorphosis will humanity, and the paleoanthropological origin story, undergo before reaching 'perfection'?" (56)

16 An Oankali individual who is a member of a group that does not take part in the present gene-trade.

tastes" (*LB* 453).

The Oankali's species memory does not just help them in social and political situations, though; it also aids in how they interact with their larger environment. Critics such as Peppers and Andrew Plisner have argued that one of Butler's greatest concerns is to recognize and further develop symbiotic relationships, which is certainly the case for the characters in her stories, most explicitly in the example of the vampiric "Ina" and their human "symbionts" in *Fledgling,* but symbiotic relationships between the human and Oankali are also extremely important in *Xenogenesis.* In fact, the family units made up of ooloi and male and female Oankali and Human mates plus their construct children are built more on a model of symbiosis than anything like romantic love. Lilith hints at this family model when telling Jodahs's potential mate about life with the Oankali: "There's closeness here that I didn't have with the family I was born into or with my husband and son" (LB671).

Plisner points out, though, that, "In reading Butler's cultural critique, it is important to understand the context of the environment that to some degree imbued her constructed narrative with the necessary resources to create *Dawn*...Butler's 'return to nature' refutes the Western cultural narrative in favor of a symbiotic state, supporting mutualist relationships and threatening competitive ones" (147). There is no starker example of the symbiotic relationship with the environment in the novels than that of the Oankali and their ships: "There is an affinity, but it's biological – a strong, symbiotic relationship. We serve the ship's needs and it serves ours. It would die without us and we would be planetbound without it. For us, that would eventually mean death" (35). And again:

> "They began as we began," Dichaan continued. He touched Akin with a few long-stretched head tentacles, and Akin moved closer again to receive an impression of Oankali in one of their earliest forms, limited to their home world and the life that had originated there. From their own genes and those of many other animals, they fashioned the ancestors of the ships. Their intelligence, when it was needed, was still Oankali.

There were no ooloi ships, so their seed was always mixed in Oankali ooloi. (442)

The towns that the Oankali and Humans lived in together on Earth are just immature ships that will eventually grow to maturity and leave Earth. But even beyond the ship itself, the plants and animals on the ship are also constructed to live in symbiotic relationships with the Oankali *(LB* 446).

Even the life on Earth that is not part of the inchoate ships was remade by the Oankali. Plisner states that, "The Oankali revive the skeletal surface of the planet, reproducing its ancient lush environments so that it may become inhabitable for returning humans. They transform it into a natural, wild environment, shifting its shape from a decaying industrial topography to one of exotic flora and fauna. *In addition, the Oankali transform the utility of organisms once recognizable to humans, increasing the organisms' immunity to humans' exploitative efforts*" (149, emphasis added). This latter point is illustrated well in an episode just before Akin was abducted by raiders, in which he is investigating a large, poisonous caterpillar which had been engineered by the Oankali. It had not been intended as food for anything; but was useful because of the food that it ate helped to give the trees in which they lived a better chance to reach maturity (*LB* 306-7). The engineered caterpillar that has no direct usefulness for humanity perfectly illustrates one important aspect of a good Anthropocene. Some of the interventions that people will need to make will not produce any direct material benefits for human beings, but these interventions must be made in the interest of the health of an ecosystem as a whole.

Oankali Traits: Trade vs. "Trade"

One of the ways that mark the Oankali as non-hierarchical, at least from their perspective, is how they approach trade. And the fact that Butler frames what the Oankali do as trade is significant in itself, especially in relation to what we normally think of as trade, particularly "free trade" as one of tenets of neoliberalism. Although neoliberal partisans emphasize the "free" part of this term, trade under capitalism is always highly mediated by the mechanisms of the market, which are of course anything

but a realm of freedom. But specifically trade is mediated through things like money, stocks, hedge funds, third party retailers, brokers, etc. The reason that mediation is central for capitalist trade is that it is impersonal which leads to everything being fungible. That is, any single individual is theoretically replaceable, thus capitalism is "fair" because each person's money functions in exactly the same way, whether it is through investing in stocks or purchasing a consumable good through a third party seller. The merit of this system is that it allows seemingly infinite variations in separation between investors, producers, sellers, and consumers, which in turn allow for an exponential growth in what can be produced. And it is this fact that supplies the ultimate justification for defenders of capitalism – that without capitalism you wouldn't have your iphone or your Tesla, etc., because it is through the mechanism of the market that these things become possible, especially on a large scale, and the market is only possible through the separation over time and space between all of the parts of the processes of investment, production, and consumption.

Fair enough, but the fact that all of these processes are not only separated but are mediated through radically impersonal means[17] also allows for all of the abuses of capitalism from the exploitation of workers and the ruthless destruction of the environment to the defrauding of investors and the economic predation of consumers.[18] Thus capitalism's greatest strength is the very same aspect that not only makes possible, but seemingly necessitates, the overproduction of human misery and the ever increasing likelihood of planetary ecological collapse. Ironically, it is this mediated separation, or alienation, that was the condition for the collective (geological) agency that created the Capitalocene.

In light of this, Molly Wallace argues that, "Despite their seemingly environmentally sustainable technology and their seeming appreciation of life in all its forms, then, the Oankali ultimately look less

17 The impersonal nature of capitalism is undercut by things such as enclosure, inheritance laws, cronyism, etc.; so, we might say that for most of the people on the planet, capitalism is in fact mediated through impersonal mechanisms such as money, work hours, etc., but for those at the top who help to write the rules of capitalism these same processes become quite personal in some significant ways.

18 E.g. through various forms of debt, or through shoddy and even dangerous products.

like stewards of the environment and more like stewards of their own system – their goal less egalitarian trade across the universe and more the imposition of 'trade' as a dominant economy in which other species are forcibly compelled to participate" (110-11). Much of Wallace's argument for this interpretation hinges on comparing the rhetoric used by defenders of neoliberalism with the rhetoric of the Oankali and showing how the Oankali are really just neoliberals with slightly more tentacles. But her reading comes off as a confusion over the use of the word "trade," which even Wallace had to put into scare quotes because what the Oankali do bares little to no resemblance to capitalist trade (or even to systems of barter for that matter). Wallace is correct to point out the violence and coercion that the Oankali use in order to impose trade upon their partners, yet it still seems mistaken to cast what the Oankali are doing as establishing a dominant economy in any familiar sense of term "economy."

Wallace goes on to argue that, "Butler's Oankali nicely represent this 'semiotic logic.' The Oankali organelle both codes for the desire to trade and is the object of trade. Thus the organelle is both 'alien' and 'alienable,' at once the Oankali essence and that which they exchange on the intergalactic market" (112). While this organelle is what codes for the Oankali's acquisitiveness, it is not necessarily the object of trade, even if it is involved with the trade. The problem with Wallace's analysis here is that there is no *economic* exchange going on in the Oankali gene trade, and even though Wallace makes the case that the gene trade in the trilogy has resonances with capitalist genetic engineering industries (hence the "semiotic logic" that the Oankali represent for her). Her argument is not very convincing for the simple fact that in a capitalist system genes and/or genetic code have value as private property defined by patent and copyright laws and there is simply no analog for these in what the Oankali are doing. Because there are neither commodities nor currencies involved in the Oankali gene trade, the only objects of the "trade" are the next generation and biodiversity as such for the environment. And so while Wallace's larger argument that the Oankali are allegorical neoliberals is ultimately unconvincing, her point about the imperial aspects of Oankali trade do deserve a closer look,

to which we will return in the next section.

In contrast to Wallace, Joan Slonczewski reads the Oankali not as capitalists but as consumers: "In fact, the closer one looks, the Oankali are not our opposites, but rather an extension of some of humanity's most extreme tendencies. Humans disturb and pollute our ecosystem; the Oankali will literally consume every organic molecule of it" (4). Linking the Oankali with hyper-consumerism, especially with the (American) mentality of disregarding any and all consequences of that consumerism, seems to be a more apt analogy, yet it still has its limits. What the Oankali are doing is not quite consuming everything on the planet; it would even be a stretch to say that they are simply using everything on the planet since what they are doing is building new ecosystems that incorporate the terran flora and fauna along with their own, even if those ecosystems (the ships) will eventually leave the planet. Just as the Oankali are not (neoliberal) capitalists because they have neither private property not profits and thus no profit motive, neither are they hyper-consumers because they do not actually consume things (despite Akin arguing that Humanity will eventually just be something that the Oankali have consumed). Rather they *change* things as self-conscious geologic agents.

The first human that Lilith had contact with after she was beginning to be integrated into Oankali society was a man named Titus, who tried to convince Lilith to stay with him on the ship: "They don't teach for free! They didn't save us out of kindness! It's all trade with them. You know what you'll have to pay down there!...The price...[to stay up on the ship]...is just the same. When they're finished with us there won't be any real human beings left. Not here. Not on the ground. What the bombs started, they'll finish" (*LB* 92). On an individual level the price is mating with aliens, with your conquerors, willingly or under duress. The larger price to pay is your way of life as a way of life for the subsequent generations. That is, the largest price that Lilith would have to pay is who she is on the most fundamental level: that what she takes for her humanity will not continue past her, that humanity as she knows it will not longer continue, and that if she wants to take part in contributing to the next

generation in any way then she must help to end everything she had ever known. Even what good remains of humanity would most likely be unrecognizable. The Oankali tell Akin to look within himself to see what part of him is human, but would "pure" humans be able to discern the pieces of humanity lost to a new species? Most likely not, but as Haraway argues, Butler's "fiction, especially in Xenogenesis, is about the monstrous fear and hope that the child will not, after all, be like the parent" *(Primate Visions* 378).

As we look at Oankali trade, we must keep in mind that the object of Oankali trade is not the acquisition of resources but the *creation* of the next generation and thus the nature or fate or shape of the species (or society) itself. We can see this, for example, when Akin's male Oankali parent was explaining to Akin that the Oankali are

> "A people, growing, changing. You're an important part of that change. You're a danger we might not survive."
>
> "I'm not going to hurt anyone."
>
> "Do you think the Humans deliberately destroyed their civilization?"
>
> "What do you think I will destroy?"
>
> "Nothing. Not you personally, but human-born males in general. Yet we must have you. You're a part of the trade. No trade has ever been without danger." (444)

What is clear from this passage is that there is no externalization of risks. Their trade is concerned with their children and their children's children, specifically with what kinds of people they will be. And because the object of the trade is the next generation, there are no real safeguards in case of failure – there are no fictional corporate bodies to absorb the losses, no consumers to pass on the costs to, no separate public to bail out the Oankali if the trade fails. The only insurance policy is a segment of the population who does not take part and thus suffers no loss from the trade, but neither do they receive

any of the benefits.[19] That is, there is no class of people who benefit off the trade who do not also assume one hundred percent of the risks, and of course failure does not have the consequences of bankruptcy or destitution but the death of society and an entire people because the object of the trade is collective as are all of the consequences, both good and ill.

The Call of the Posthuman

Looking at the coercive nature of the Oankali trade, rather looming questions arise as to just how the Oankali function in the novels. Are they colonizers and conquerors of humanity or are they saviors coming to redeem a decadent and dying humanity? We will see that they are neither, though they do share certain qualities with both. Rather, the Oankali represent the Utopian Call in the trilogy – a new, radically different (alien) way of being human that will "save" humanity by forcing it to become posthuman. Rosi Braidotti argues that, "the quest for positive social and cultural representations of hybrid, monstrous, abject and alien others in such a way as to subvert the construction and consumption of pejorative differences, makes the science fiction genre an ideal breeding ground to explore what Haraway describes affectionately as the 'promise of monsters'" (203). And of course, *Xenogenesis* was one of the exemplary texts that Haraway used to make this point. Furthermore, we should expect the Utopian Call to make "posthuman monsters," when we recall that interpellation *transforms* individuals into subjects, and in this case utopian subjects. The principle critical function of utopia can easily be formulated as critiquing the dominant way of being human,[20] so just as the Utopian Call calls individuals toward a good society, it simultaneously calls them away from being "human" and towards being posthuman.

Some critics such as Wallace, John Rieder, and Sandra M. Grayson read the Oankali as imperialists. For example, Rieder sees *Xenogenesis* as an example of novels that "explore conquest not as a simple matter of being overpowered and constrained but rather in the equivocal process of

19 Cf. Tucker (174).

20 Think here of Levitas's ontological mode of utopia as method.

subjection to an alien system of identities, values, and desires" (387). Rieder also argues that the fact that the Oankali claim that the Human Contradiction is genetically determined is "suspiciously convenient for a race that has its own designs premised on the status of human genetic structure as a kind of exploitable, and extremely valuable, natural resource" (388). While Rieder makes a good point that the fact that hierarchical behavior as determined by genetics comes from the Oankali, certainly the facts that humans are both intelligent and hierarchical can be verified empirically without recourse to genetics. Furthermore, the Contradiction acts as a pretext for forced sterilization rather than the trade itself, which from all appearances the Oankali were going to carry out regardless (which of course does not mitigate the reading of the Oankali as imperialists in the least).

As Sandra M. Grayson puts it, "Although they do not perceive themselves as such, the Oankali are oppressors who force other life forms to exchange genes with them" (49). Grayson also argues that, "The actions of the Oankali are similar to those of European colonizers of the past – to colonize the minds and the land of their captives" (46). However, it is the Humans in the trilogy that are the political and cultural heirs of the European colonizers. Stacy Magedanz points out that the resisters are both "members of contemporary industrial society" as well as comprising a "primitive social group" in the text, and that this juxtaposition calls into question the West's claim of civilizational maturity (51). Yet Magedanz still sees the Oankali as oppressors: "Thus it becomes clear that the resisters are, in fact, a marginalized culture, fighting (however misguidedly) for the survival of their way of life against an outside oppressor" (52). Still, Magedanz does not view them as unambiguously oppressive, noting how both the Oankali and resisters in *Adulthood Rites* can reasonably seen to be working toward the benefit of humanity despite each group mistreating individual human beings in their own ways (56).

The Oankali could have used the DNA of the humans that they had saved from the wreckage of the Earth in order to make their hybrid offspring without having to deal with the (inevitable) violence of those who resist. But the Oankali also wanted to preserve something of human culture, or at least to

let human culture act as one of the influences on what the Oankali would become after they incorporated humanity into their gene pool. For example, Nikanj told Joseph and Lilith: “A partner must be biologically interesting, attractive to us, and you are fascinating. You are horror and beauty in rare combination. In a very real way, you've captured us, and we can't escape. But you're more than only the composition and the workings of your bodies. You are your personalities, your cultures. We're interested in those too. That's why we saved as many of you as we could” (*LB* 153-4).

But even taking the Oankali as redeemers of mankind, or as an allegorical vanguard that will lead humanity over the utopian horizon and into the promised land, we do not have to point out the ambiguous nature of the Oankali as both colonizer and redeemer to see some of the problems with the logic of salvation. One of the most significant aspects of the logic of the salvation offered by the Oankali is that each and every person saved by the Oankali would have died without their intervention. And so while this salvation, and the resistance to it, has an individual character, the logic of the Oankali as redeemers becomes clearer when we take a step back and notice that what the Oankali have done is to step in and save a dying civilization – a civilization that was beyond any hope of saving itself. Michelle Erica Green also notes that, “Because of the Contradiction, the Oankali never feel remorse about their complete colonization of an independent species; it is for the salvation of the human race as well as for their own purposes that they interfere” (186). That is, the society (or rather societies) that the Oankali saved was so sick and so broken that the only thing that could save it had to come from outside of that society. Or as Jdahya tells Lilith at their first meeting, “As for how many humans are here: all of you who survived your war. We collected as many of you as we could. The ones we didn't find in time died of injury, disease, hunger, radiation, cold...We found them later” (15). This is a key point for understanding the logic of vanguardism. Even though the members of the vanguard are for the most part also members of the society they are attempting to transform, they are essentially outside of the official institutions that govern that society, and the vanguard is *the* only thing that can save the

people who are not already too far gone.

There is a profound and unwavering elitism to the logic of salvation or vanguardism, which was illustrated when Nikanj explained to Lilith why they aren't trying to stop the first resisters on the training floor: “We won't try to stop it. Let them row their boats to the walls and back. *There's no way out for them except the way we offer*: to learn to feed and shelter themselves in this environment – to become self-sustaining. When they've done that, we'll take them to Earth and let them go” (LB 200). That is, humans will not be allowed to be social agents until they at least begin to become more like the Oankali. From the perspective of the Oankali, the only answers for how humans will live must come from the Oankali. But even later on, once Humans have become self-sufficient in the new Earth environment (even though they do not necessarily flourish in this environment), Humans have no collective agency to decide their own fates. Those decisions must ultimately come from the Oankali, which is why the Oankali had allowed Akin to remain with the Resisters for as long as they did following his kidnapping: “He was intended to decide the fate of the resisters. He was intended to make the decision the Dinso and the Toaht could not make. He was intended to see what must be done and convince others” (*LB* 474).

We notice that when the Oankali go about “saving” humanity, no actual human being has any say in how they will be saved. The Oankali go about remaking almost every social institution, and the people are forced to conform to the new Oankali institutions – at first with threats of being put back into the stasis that they had been in for the two and a half centuries prior to being awoken by the Oankali, and later with continued sterility for those who do not make a choice approved of by the Oankali. And so while eventually the Resisters have the choice to live with the Oankali or to go to Mars with their fertility restored, the options are created by the Oankali and the input for what these options will be can only come from an Oankali and not from a Human, not even Lilith.

The Oankali clearly feature qualities of both colonizers and a vanguard, but I do not believe that

they clearly fit into either category. As Jdahya explained to Lilith early on in *Dawn*:

> "You'll begin again. We'll put you in areas that are clean of radioactivity and history. You will become something other than you were."
>
> "And you think destroying what was left of our cultures will make us better?"
>
> "No. Only different." She realized suddenly that she was facing him, grasping his arm in a grip that should have been painful to him. It was painful to her. (34)

That is, the Oankali represent a radical break in history or total social reorganization as well as representing entirely new ways of being Human. The Oankali represent something that is beyond the Human that forces humanity to radically change its essence, or the essential ways of being human. In arguing against a reductively essentialist reading of *Xenogenesis,* Jeffrey A. Tucker argues that

> Butler locates the human contradiction not at the level of the biological, of genetic 'programming', but, rather, as 'principle', at the level of culture and convention; this same principle structures and enables racism, sexism, and homophobia, as well as the condescending and/or dismissive attitudes toward SF that the genre continues to endure. In a series that encourages readers to 'embrace difference', it is not those differences, or whether they are constructed or essences, that occupies Butler's concerns or interests; rather, it is the tendency to arrange groups vertically, to ascribe value to those at the top and to deny the value of those at the bottom that worries her. This is not to say that, after all, the question of identity and/as essentialism is irrelevant to Butler, but that racial and gender identities are not necessarily essences for her. (181)

Tucker is largely arguing against critics such as Walter Benn Michaels and Hoda M. Zaki who take essentialism as "identifying an individual, group, or oneself as belonging to an identity category 'on the basis of transhistorical, eternal, immutable essences'" (167).[21] Frankly it is odd to read Butler as

21 Tucker is quoting Diana Fuss, *Essentially Speaking:Feminism, Nature & Difference* (xi) for this definition.

endorsing any transhistorical or immutable essences. This is especially obvious when looking at *The Parable of the Sower* and *The Parable of the Talents* wherein Butler creates a new religion, Earthseed, that deifies Change[22] but is no less obvious when looking at the basic premises of the two sets of people in *Xenogenesis.* The "essence" of the Oankali is change, which is why they view (evolutionary) stagnation in the same light as extinction.[23] Whereas the Human Contradiction is cast in terms of the evolutionary history of human beings: an origin story, as Peppers argues, that Butler complicates and that certainly undermines the individualistic evolutionary narrative of humanity (50-1). Of greater significance though, is how the Human evolutionary story is situated in the text: the Oankali mention that when the original ships left their home world it was so long ago that there was not even life on Earth yet (*LB* 55), and they had been evolving every time they happened upon a new species. In light of this past, humanity is certainly not at the pinnacle of their evolutionary history when they are rescued by the Oankali, but are merely at one point in an unfathomably long process. As such, talk of human essence or human nature would simply be shorthand for what humans are like *right now*, what tendencies dominate at *this* stage. There is nothing immutable or transhistorical about human essence, at least as it is presented in *Xenogenesis*: rather it is a contingent and quite historical fact, one in which the Oankali plan to get beyond: "We are as committed to the trade as your body is to breathing. We were overdue for it when we found you. Now it will be done – to the rebirth of your people and mine" (*LB* 43).

The fact that the Oankali take it as a matter of course that their people need and will have a rebirth implies that they do not view themselves as having a transhistorical essence, at least one worth preserving.[24] Likewise, the fact that the gene trade will also be the rebirth of the Human species implies

22 The Earthseed religion and its attitude towards Change will be analyzed in greater detail in a later chapter.
23 "Even the human definition of s*pecies* falls short when attempting to describe the Oankali since they are not descended from an evolutionary chain, but instead evolve by blending various species together, like fascicular roots bursting forth and multiplying" (Walker 112).
24 Cf. Jacobs (101).

that they view the essence of humanity also as historic and mutable. When Lilith asked Jdahya "what will you make of us?" Jdahya responded only that the next generations will be "Different, as I said. Not quite like you. A little like us" (42). Later Nikanj told Lilith that, "'Our children will be better than either of us,' it continued. 'We will moderate your hierarchical problems and you will lessen our physical limitations. Our children won't destroy themselves in war, and if they need to regrow a limb or to change themselves in some other way they'll be able to do it. And there will be other benefits'" (247-8). Green also points out that, "It is a mistake to interpret Xenogenesis as a serious discussion of essential flaws in human genetics. The novels scarcely seem interested in proving whether or not humans actually suffer from the Contradiction; rather, *they illustrate how human agency can triumph over prejudice, violence, and essentialism*" (187, emphasis added).

In my reading the Oankali are not a colonizing force and are not beings that dominate humanity in order to enforce a new hierarchy with them at the top, as could also be said of many vanguards even if their stated goals are socialist and democratic. Rather the Oankali are the personification of a radically different way of being human – a way that is so different as to appear disgustingly and discomfitingly inhuman – that challenges the social and political "essence" of the Capitalocene. Aparajita Nanda argues that the genetically modified Lilith and her construct children usher "in a dawn of the posthuman other," and that these transformations are "essential to both Oankali and human survival" (119). That is, the Oankali are the utopian horizon that forcibly interpellates itself on the status quo, literally saving humanity from the wreckage wrought when hierarchical behavior (and especially the clash between competing hierarchies for dominance) is brought to its logical and political conclusion. Naomi Jacobs makes a similar point: "the Oankali represent a state of being that matches point by point many utopian fantasies of a better human future, an improved human type. And yet, because to merge with the Oankali would bring the disappearance of the human type and the diffusion of the humanist subject, such metamorphosis is regarded with horror by the human beings to whom it is

offered" (100). Becoming "posthuman" is an extremely violent process in the text, and not only because of clashes with counterrevolutionary forces as represented by the Resisters, but even for those who adopt the utopian struggle and have their humanity exposed and mutilated in the name of giving their children a new utopian world. ("'You [Jodahs and Aaor] are dangerous,' several people [Oankali] signaled. 'There's no safe way to begin a new species'" (*LB* 743).) And indeed, their children are so far removed from the humanity of the status quo that the newer generations appear as monsters even to their parents. Interpellation *transforms* people into utopian subjects. J. Adam Johns argues that the posthumanity in the trilogy is in a literal biological sense, a utopian transformation that marks "the end of the human and the troubled birth of a new species" (395).

It is not only in the birth pangs of posthumanity that children act as the crux for the motivation for social change in the text.[25] Children are also the focus of the conservatism of the Resisters: "Resisters were Humans who had decided to live without the Oankali – and thus without children" (*LB* 268). The Resisters' childlessness was a problem on a personal level (maternal and/or paternal instincts being thwarted, etc.), but far more significantly the Resisters had no hope to influence the next generations. Thus they not only had no hope for the future, they had no part in shaping it at all; they had effectively been cut off from the future by the Utopian Call. The conservatism of the Resisters is based on a commitment to a humanity (and thus its perpetuation) that the Call had deemed not only obsolete but fundamentally and irrevocably self-destructive and so dangerous to the future of society that the Oankali had rendered the Resisters infertile. Forced infertility is a rather dramatic way of making the point that nostalgic attachments, and not necessarily to particular political or social institutions but attachments to certain ways of being Human, are such impediments to creating a good society that those who are committed to those ways of being human must be totally blocked from contributing to the future of society in any way out of fear of corruption. That is, from the perspective

25 cf. Haraway *Primate Visions* (380-1).

of the Call, those who are committed to regressive political, social, and ethical principles cannot be given a chance to let those principles or institutions corrupt the ongoing dynamic refinement of the Call. Johns argues that for the Oankali humanity's hierarchical tendencies are a collective death drive (392), and because hierarchical behavior is cast as a genetic trait or tendency, those exhibiting these tendencies too strongly must not be allowed to pass those genes on to the next generation.

Clearly from the perspective of the Utopian Call the Resisters' way of being human is unacceptable, but only because certain tendencies such as hierarchical behavior were too dominant. On an ontological level, the Utopian Call is a call to posthumanity; to go beyond the human but not to erase it. In a conversation between Lilith and her human mate, Tino, in *Adulthood Rites*, she told him that

> "They change us and we change them," Lilith said. "the whole next generation is made up of genetically engineered people, Tino – constructs, whether they're born to Oankali or to Human mothers." She sighed. "I don't like that they're in this with us. When the ships leave, they're stuck here. And with their own biology driving them, they can't not blend with us. But some of what makes us Human will survive, just as something of what makes them Oankali will survive." (282)

Lilith is telling Tino that the Utopian Call (the Oankali) necessarily transforms utopian subjects ("they can't not blend with us"), but also that this transformation is a *blending* that takes what is deemed good in humans (e.g. empathy, cooperation, curiosity, etc.) and distills it down while in the same process attempting to get rid of negative aspects of humanity such as hierarchical behaviors and the tendencies toward domination and oppression that such behaviors engender. I suggest that the "blending together" of humanity with the Call is a process that strengthens with each subsequent generation because there are hopefully less "negative" aspects of humanity in the previous generation that raised them, and that each generation would thus embody the attributes of the Call more fully as the utopian struggle

continues. It is the embodiment of the Call that makes the process of becoming posthuman manifest: a process that is dramatically illustrated in the text of *Xenogenesis*.

Embodiment of the Call

It is not enough to hear the Call and not enough for a utopian horizon to be adopted by a group of people – it must embodied. That is, it must be adopted by a community and permeate the lives of the community's members fully. In interpellation, Althusser argued that the subject freely submits to its own subjection, whereas I argued that for utopian subjects the analogous effect of interpellation is for the individual to appropriate the utopian struggle as their own. This appropriation is done by building institutions based on the tenets of the Call as well as by breathing life into those institutions by embodying the Call as much as possible. That is, becoming a utopian subject is not the same as saying that a person *merely believes* that the utopian horizon is good because the utopian horizon is not a set of propositions but is a *state of affairs*, and the utopian subject *desires to be in that state of affairs*, and the only way to do that is to live out bodily that state of affairs as much as possible. Science fictional texts are useful for understanding this logic because they can illustrate the embodiment of ideals and social visions by means of literal physical changes in the body, and the more the ideals are lived out the starker the physical changes.

The absolute necessity for the utopian horizon to be embodied in utopian subjects in order for the utopian struggle to continue is illustrated in *Imago.* The first two construct ooloi, Jodahs and its sibling Aaor, both have the problem that when they have no mates they begin to devolve into simpler life forms. During Aaor's second metamorphosis into adulthood, Nikanj tells its family, “'It keeps slipping away,' Nikanj said. 'I'd brought it almost back to normal, but it has no control left. The moment I release it, it drifts toward a less complex form'” (681). Sherryl Vint reads the ooloi's need for others in order to effect their own embodiment as illustrating the process of subject formation, particularly in a Foucauldian sense of the bodies being disciplined into something “normal” in response to its mates (or

the larger community). She writes, “The fact that the construct ooloi materialize in response to the desire of the other need not be read negatively; it simply suggests that the identities and social realities we produce are always community products” (76). This is a fair enough point but does not go far enough. It is not just that Jodahs and Aaor are formed in response to others; the ooloi are not regressing solely because they are not being properly formed by the community but are devolving because they themselves have no community to form: the Call needs somewhere to go. It must be embodied but it must also spread.[26] In Ruth Levitas's terms, utopia is about the reconstitution of *society,* and as such utopian subjects are not isolated individuals but are united by the interpellation of the Call. Braidotti argues that, “it is crucial to invent conceptual schemes that allow us to think the unity and interdependence of the human, the bodily and its historical 'others' at the very point in time when these others return to dislocate the foundations of the humanistic worldview” (203). The human-Oankali construct offspring are precisely this kind of posthuman conceptual scheme.

As the Call is accepted by the older generation, no matter how reluctantly or partially, the newer generations will be raised under the Call, and so some of the aspects of the utopian horizon that must be actively accepted by those who first adopt it will be second nature to the younger generation. Jdahya also told Lilith that, “Your children will know us, Lilith. You never will” (112). The reason the older generations cannot know the Call in the same way is because it is a reflexive knowledge of embodiment. Lilith and the other “pure” humans may know the Oankali intimately, especially as they lived along side them for decades, but it will always be knowledge of the other, of something alien and “not quite right” because it is so alien. The next generation will not have this problem because they would be enculturated into it as the normal state of affairs, and thus they will embody the Call to a degree that none of the original Human survivors ever could. Anarchist theorist Gustav Landauer makes a similar point, generalizing about any time of revolutionary upheaval: “Those who come after

26 The same idea is at the heart of the alien virus in Butler's *Clay's Ark,* straight down to the radical difference of the children born after the virus has spread.

us will know – in a very different way than us" (121), and I suggest that this knowledge becomes progressively more intimate, reflexive, and embodied with each new generation. Naomi Jacobs argues that, "Butler's trilogy works through a series of perspectives on posthumanity, with each volume's central consciousness being increasingly distanced from the human. In the first volume, we see the Oankali through the eyes of a human who regards metamorphosis with horror. But the second and third volumes are narrated from the perspectives of Human/Oankali hybrids or 'constructs,' who *embody the utopian possibilities of posthumanity*" (92, emphasis added). We will now take a closer look at the progression of the Utopian Call in the trilogy by looking at how it is embodied in the protagonists of each of the three books.

The protagonist of *Dawn*, Lilith, is and remains human, but is enhanced by her ooloi mate Nikanj so that she takes on some Oankali traits such as superhuman strength, immunity, and the ability to heal. Rachel Stein reads these changes as Lilith losing control over her body and thus as proof that the Oankali are colonizers and oppressors. Stein writes that, "Even within the parameters of the 'trade', the Oankali grant Lilith very little freedom, assuming that their superior understanding of sentient life allows them to make the best decisions for her, much in the manner of historical and contemporary human groups that advocate external control of women of color's sexuality and reproduction" (213-4). While this concern is valid and much of *Dawn* does support this reading. For example, Stein offers as proof for Oankali control over Lilith's sexuality that, "While Joseph and Lilith appear to freely choose each other as lovers, given the confines of their situation on the ship, Lilith later discovers that Nikanj, one of her Oankali partners, had selected Joseph as an appropriate mate for her and had made sure that he was among the candidates she would awaken" (214). I do not believe that setting people up on some version of a blind date constitutes control over their sexuality or reproduction. However other examples that Stein chooses do lend credence to her argument such as Nikanj coercing Joseph into their first mating and Nikanj impregnating Lilith without her consent after Joseph's death. Nikanj's justification

for its actions are that nothing but Lilith's and Joseph's “words” rejected Nikanj's actions (*LB* 248), which sounds like nothing else than a defense of rape. Despite the gravity of Stein's point, her critique really only pertains to *Dawn* and the point attenuates as one reads further into the trilogy.

In a reading contrary to Stein's, Andrew Plisner argues that, “Despite the allusions to colonial histories and in direct opposition to sadistic eugenic experiments, the Oankali do not experiment with Lilith's body, but rather re-educate it in learning how to heal by its own volition. Through this process, they *increase* her biological fitness and physiological self-ownership, a level of attainment that may have taken generations to achieve without genetic interference” (150, emphasis in original). That is, rather than merely having her body colonized and controlled by an oppressive other, after these improvements Lilith has far greater personal control over her own body. And while the Oankali's methods are creepy and invasive, the effects and narrative context of most of the interventions on Lilith's body lend more support to Plisner's rather than Stein's interpretation.

Beyond merely “physical” improvements, Lilith is also given an eiditic memory which helps her to learn the Oankali language and adapt more quickly to her environment (for example, by identifying edible plants in the forest). None of these enhancements were supplementary gifts though, because Nikanj did not *add* anything to Lilith, but only tapped her latent physical and biochemical potential. As Nikanj told Joseph, “I'm an ooloi bred to work with humans. I can help them do anything their bodies are capable of doing. I made biochemical changes that caused her regular exercises to be much more effective than they would have been otherwise. There is also a slight genetic change. I haven't added or subtracted anything, but I have brought out latent ability. She is as strong and as fast as her nearest animal ancestors” (156). In spite of the fact that the abilities were latent inside of Lilith, they were so deep inside that they were and still are inaccessible to human beings. Lilith thought of these enhancements as “her tools. And every one of them would make her seem less human” (120).

These enhancements led the first group of humans that Lilith awoke to view her as monstrous,

or not totally human. When the first Resisters were planning their escape into the forest (while unfortunately for them still aboard the ship and only in a simulated Amazonian rain forest), Gabe told Lilith that, “We're nervous. We don't know what's going to happen. We're scared. You shouldn't have to take the brunt of our feelings, but...but you're the different one. Nobody knows how different” (LB 214). For the Oankali difference is alluring, but for the humans in the text difference can only ever be a harbinger of danger; the fact that intelligence is at the service of hierarchy means that any difference between people must correspond to a difference in position in a hierarchy. That is, one must either dominate or be dominated based on the perceived difference. Consequently, it was the enhanced ability to heal – causing a wound to close up right before the others' eyes – that led to the death of Lilith's first mate, Joseph. When the leader of the first resisters, Curt, saw Joseph's wound healing rapidly in this manner, he had such an adverse reaction that he hacked Joseph's head nearly off with blows from a machete. When confronted by the Oankali Curt replied, “We didn't kill a human being...we killed one of your animals” (228)!

Despite the fact that Lilith heard the Call and was greatly influenced by the Call, she never really *identified* with the Call, and remained all too human even if she was just one of the Oankali's “animals.” However, Lilith's son, Akin, who was the protagonist of the second book, *Adulthood Rites*, was a human-Oankali hybrid or construct, and thus did embody the Call. As a construct child, Akin inherited both human and Oankali tendencies, and as a human-born male construct he was engineered by his ooloi parent, Nikanj, to get as close as genetically possible to the human contradiction as was deemed safe. Nanda argues that, “his dual allegiance leads to the personal struggles that Akin later faces as he tries to negotiate between the two species. As the posthuman other, he builds on this relatedness” (121), yet in spite of his human parentage and the fact that he was as close to the essence of humanity (from the perspective of the Oankali) as possible, Akin still ultimately identified as Oankali, i.e. as a utopian subject.

In a conversation with his male Oankali parent, Akin asserted that the generations of constructs that were in the process of making up the new species would simply be Oankali:

> "Then it will be an Oankali species," Akin said softly. "It will grow and divide as Oankali always have, and it will call itself Oankali."
>
> "It will be Oankali. Look within the cells of your own body. You are Oankali."
>
> "And the Humans will be extinct, just as they believe."
>
> "Look within your cells for them, too. Your cells in particular."
>
> "But we will be Oankali. They will only be...something we consumed." (443)

Genetically, Akin was the Oankali who up to that point came the closest to the essence of Humanity. He also looked almost completely Human as a child except for his large gray tongue until he went through his metamorphosis, after which he looked almost completely Oankali. In this way, we could say that Akin's maturation process mirrored his prophecy of how the new species would evolve: the Oankali part of him consumed the human part of him, at least in physical appearance. While some critics such as Magedanz and Jacobs hold out Akin to be a symbol of hybridity, it is a hybridity without any higher synthesis, a hybridity that remains confused and unable to reconcile disparate qualities. Indeed, Nanda states that, "Akin acknowledges the human and Oankali divide but inhabits the interim space, a Bhabhian 'third space'" (129). Akin was never able to synthesize the Call with his humanity except for awkward oscillations wherein the Call usually took precedence mixed in with superficial or guilt-induced displays of humanity. When Akin was an adolescent and approaching his time of metamorphosis into adulthood, he went out among the Resisters in order to drum up support for creating a human only colony on Mars. The reason why Akin felt compelled to make this journey so close to his metamorphosis was that he was concerned that many of his Resister contacts would no longer recognize him after his body changed. In his childhood Akin looked almost totally human, so despite being a construct he was passably human.

For the first part of his trek, Akin went to the resister community of Phoenix, where he had lived as an infant for almost two years with Tate, the first person whom Lilith had initially awoken, along with her husband, Gabe. When Akin lived in Phoenix it was a thriving, well-governed community which carried on trade in salvaged pre-war antiques and did not have any guns in the village prior to the infant Akin's arrival. But when Akin returned almost twenty years later it was in a state of decay resulting from the sense of purposelessness of the people who lived there stemming directly from the population-wide infertility.

Furthermore, Tate was dying of injuries caused by a fall that happened a couple of months prior to Akin's arrival, possibly resulting from symptoms of Huntington's disease, which could easily have been cured on a genetic level had she stayed with the Oankali. It was Akin's effort at healing Tate that ultimately triggered his metamorphosis. Each Oankali goes through a transition into adulthood, a process which lasts months[27] wherein the individual is largely dormant and only semi-conscious, although they "record" all that happens around them as information they can then access and process after the metamorphosis is complete. Prior to metamorphosis no Oankali has an actual gender, and it is in metamorphosis that they first begin to develop as male, female, or ooloi, largely depending on environmental (familial) factors, with paired siblings generally becoming male-female pairs. The process of acquiring a gender only after metamorphosis becomes important in *Imago* when both Jodahs and its paired sibling Aaor "accidentally" mature into ooloi before the Oankali had deemed the human-Oankali trade ready for construct ooloi. But besides obtaining an actual gender, mature Oankali and constructs also gain highly developed senses, including the ability to perceive more precisely the world around them, even on a molecular level.

Environmental factors do not only affect the individual going through metamorphosis in terms of gender, but also in physical appearance. For example, because Akin was around only humans and no

27 "Akin's metamorphosis dragged on. He was silent and motionless for months as his body reshaped itself inside and out" (*LB* 496).

Oankali or constructs, he took on the appearance of a “pure” Oankali. In *Imago,* Jodahs remarks that,

> One of my brothers was completely cut off from the family and from Oankali and construct companionship during his metamorphosis. He reacted to his unrelated, all-Human companions by losing all visible traces of his human heritage. He survived all right. The Humans had taken care of him as best they could. But after metamorphosis he had to accept people treating him as though he were an entirely different person. He was Human born, but our Human parents didn't recognize him at all when he came home. (546)

During metamorphosis Akin's body naturally reacted against being surrounded by so much humanity [he could hear “cursing, shouting, threats, fighting, but no resolution” (496)] and instinctively became more posthuman. After metamorphosis Akin's non-physical Oankali traits also become intensified; whereas before he had a sense of the tragic inevitability of the human contradiction, after going through metamorphosis he *knew* it (*LB* 502).

Upon reaching maturity Akin moves further away from humanity both in exterior form as well as internally. Stacy Magedanz reads Akin's appearance as an aspect of his hybridity; she asserts that, while his physical appearance becomes more Oankali, ironically “spiritually he is closer to the humans than any prior Oankali offspring” (55). But she also notes that despite Akin's time in captivity and deep sympathy for the Resisters, “He never adopts elements of their culture or beliefs – except their belief that they should be left to their own devices” (52). So, while Akin is in a sense spiritually closer to humanity, this closeness is more a function of his sympathy for and solidarity with the Resisters instead of any shared intellectual or cultural qualities. So Akin is simultaneously becoming a more thorough embodiment of the Call as well as, based on his pronounced sense of solidarity with the Resisters, becoming more committed to a colony on Mars as a viable *alternative* utopian project that would allow a transition away from hierarchical behavior, albeit at a much slower pace so that a sense of humanity

could be maintained by the Resisters even while their essence (the Human Contradiction) was slowly bred out of them.[28]

Lilith was still fully human and only embodied certain strategic aspects of the Call so that in the subsequent generations the utopian horizon become Call could become reality. Subsequently, Akin embodied both humanity and the Call, but in a way that was confused as to how to reconcile utopian subjecthood with a guilt induced by nostalgia for the humanity that was being left behind. Yet the protagonist of the third book, Jodahs, fully embodied the Call while simultaneously fully integrating its humanity so that it was neither quite Oankali nor human but was the next stage in evolution beyond both: “I would be the most extreme version of a construct – not just a mix of Human and Oankali characteristics, but able to use my body in ways that neither Human nor Oankali could. Synergy” (*LB* 549). Cathy Peppers took up Donna Haraway's assertion that *Xenogenesis* is a cyborg origin story, and argues that, “...with the creation of Jodahs, the trilogy has come to the 'perfection' of a new species which, while it may not be entirely 'safe', seems preferable to the notions of identity we hold now” (60), and Alison Tara Walker states that, “The Constructs' line of becoming strikes directly through the middle of what it means to be Human and Oankali, arriving at a perfect synergy that runs between both species” (117). Johns argues that this synergy is the literal death of human beings as a species: “To become something that may survive, [Butler] suggests, means the end of the human as we know it: *the posthuman has become the only possible continuation of the human*” (397, emphasis added).

Jodahs was the most alien of the all of the constructs up to that point because it was the first to become ooloi. It is noted repeatedly in the trilogy that the ooloi are the most alien or the furthest from humanity. Lilith told Jesusa, one of Jodahs's mates, “An ooloi is probably the strangest thing any Human will come into contact with. We need time alone with it to realize it's probably also the best thing” (671). As the most unhuman, the ooloi are the “purest” embodiment of the Call, because it is the

28 I will return to this point in a later section to give a more thorough analysis of the Mars colony as an alternative utopian horizon that is reluctantly sanctioned by the Oankali.

part of the Call that is furthest away from present day ways of being human. But as Lilith notes, familiarity does not breed contempt for the ooloi, but conversely the more familiar one becomes with them the more one becomes absolutely devoted to them. One of the original Resisters who had been an elder in the village that Tomás and Jesusa had been bred in, told Jodahs: “'I can't even hate you,' he whispered. 'My god, if there had been people like you around a hundred years ago, I couldn't have become a resister. I think there would be no resisters'” (740). That is, while utopia is still only on the horizon, its difference from the status quo is frightening simply because of its difference, but as the Call becomes more embodied and institutionalized and not merely “theoretical,” it becomes far more attractive, even to those who were originally violently opposed to it.

The most obvious and *seemingly* superficial reason that the ooloi are the most inhuman is that they are a third gender, neither male nor female, which is certainly a sticking point for many of the humans who want to see this third gender as some kind of combination of male and female. Some humans also see the ooloi gender as an alternative maleness, most likely stemming from the perceived head of household status, including their apparent sexual dominance.[29] However, the fact that the ooloi's third gender is what marks them as most alien is only *seemingly* superficial. While some Oankali can appear somewhat human, at least at a distance,[30] the ooloi cannot pass for human even at a distance simply because they have an extra pair of “sensory arms” so that their silhouette would always mark them off as physically other than human. This difference is even starker when looking at the Akjai ooloi that Akin visited aboard the ship, who looked like a giant armored caterpillar with six sensory arms.

Beyond their physical difference, the role that ooloi play in reproduction marks them as the “most” Oankali, namely because they do not add any genetic material to the next generation but merely

29 Cf. Tucker (176).

30 “Jdahya, was of an ordinary size. The placement of his sensory tentacles gave him an oddly Human look. They hung from his head like hair. They were placed on his face in a way that could be mistaken for Human eyes, ears, nose” (*LB* 740).

mix the genes of the male and female in order to get the optimal blend of their two or four mates.[31] Yet they do pass on to their offspring the organelle that the Oankali see as their true essence. Despite how radically they change in each of their gene trades, it is this organelle that remains constant to them and gives them their species identity. Furthermore, while the organelle grounds the Oankali identity it is also what impels them to seek out difference so that they can continue to evolve as a species. Jodahs described it as such: "The construction itself and a single Oankali organelle was the only ooloi contribution to my existence. The organelle had divided within each of my cells as the cells divided. It had become an essential part of my body. We were what we were because of that organelle. It made us collectors and traders of life, always learning, always changing in every way but one – that one organelle. Ooloi said we *were* that organelle" (544). Thus the organelle is the Oankali agent of change, and such is the ooloi reproductive contribution to the next generation.

There is one other thing that marks the ooloi as more alien, and that is their peculiar organ called a "yashi": "Yashi, between my hearts and protected now by a broad, flat slab of bone that no Human would have recognized as a sternum, did twist – or rather, it contracted like a long-empty Human stomach. Any perception of new living things attracted it and distracted me" (701). While the organelle is what impelled all Oankali to seek out different forms of life, the uniquely ooloi organ, yashi, is what allowed the ooloi to assimilate and use this life: "Yashi, the ooloi called their organ of genetic manipulation. Sometimes they talked about it as though it were another person. 'I'm going out to taste the river and the forest. Yashi is hungry and twisting for something new'" (544). The fact that the ooloi talked about their organ as if it were another person, coupled with the way that all of the Oankali talk about their organelle as if it were a separate entity lends credence to Plisner's assertion that Butler is concerned not only with hybridity but with symbiosis and relationality in particular (151). But

31 "Adult ooloi were more different than most Humans realized. Beyond their insertion of the Oankali organelle, they made no genetic contribution to their children. They left their birth families and mated with strangers so that they would not be confronted with too much familiarity" (*LB* 544).

it is not just that there is a symbiotic relationship between the ooloi and their yashi; it is yashi that allows the ooloi to deliberately engineer new symbiotic relationships with the various life forms they come in contact with:

> Genetic memories. Viable copies of cells that Nikanj had received from its own ooloi parent or that it had collected itself or accepted from its mates and children. It had duplicated everything it possessed and now it would pass the whole inheritance on to me...It was as though Nikanj were saying, “Here's your birthright, my final gift/duty/pleasure to you.”...All my senses turned inward as Nikanj used both sensory hands to inject a rush of individual cells, each one a plan by which a whole living entity could be constructed. The cells went straight into my newly mature yashi. The organ seemed to gulp and suckle the way I had once at my mother's breast. There was immense newness. Life in more varieties than I could possibly have imagined – unique units of life, most never seen on Earth. (*LB* 692-3)

Ultimately, it was one of these cells that Jodahs used to create the new town at the close of *Imago*: “I sorted through the vast genetic memory that Nikanj had given me. There was a single cell within that great store – a cell that could be 'awakened' from its stasis within yashi and stimulated to divide and grow into a kind of seed. This seed could become a town or a shuttle or a great ship like Chkahichdahk. In fact, my seed would begin as a town and eventually leave Earth as a great ship” (745). And unlike the other trade villages that were created by “pure” Oankali, the town that Jodahs planted drew the Resisters to it rather than drove them away. Naomi Jacobs sums up the ending: “Nevertheless, she concludes her trilogy with what is clearly meant to be a happy ending. Out of love rather than fear or capitulation, a group of Humans have agreed to mate with Jodahs and other constructs, and the Oankali collective has given its permission for the next stage of evolution to occur, the stage that will bring about the new species in its achieved form” (108). And so, just as the organelle is the Oankali agent of

change, which is the fundamental essence of the Oankali as a whole, the yashi is the agent of assimilation for the Oankali because it is what allows the ooloi, or the most non-human of the Oankali, to not simply exploit the different life forms that they find, but to enter into new and mutually beneficial symbiotic relationships with the world around them, which is the essence of a good Anthropocene.

Responses to the Call: Traitors and Resisters

Now we will shift our focus away from the Oankali themselves and on to the humans in the trilogy, which is important because the Utopian Call interpellates individuals, although not always successfully so. For instance, the Call can fail if the individual being interpellated does not view the Call as a *utopian* horizon in the first place. That is, not everyone thus interpellated will view the Call as an instance of a good society. Some are perhaps so committed to their version of humanity that they view any version of posthumanity as the worst possible fate. The first thing to note about the humans in the narrative is their demographic makeup. They come from all walks of life and nationalities, and while the focus is on the English speaking survivors, there is mention of human-Oankali communities (trade villages) and human resister settlements that are organized around other linguistic groups (434). But the most important aspect of the demographics of the human survivors is that there are no economic or political elites – that is, there are no class divisions. Neither are there political leaders; all of the survivors are 'the people' and nothing more. In fact, the Oankali mention early in *Dawn* that the military and political elites that were saved would never return to Earth but only helped the Oankali better to understand Humanity upon their arrival to Earth (16), which may help to explain the Oankali's myopia concerning hierarchical behavior as a major part of human "essence."

In the narrative, there are two basic attitudes of the humans toward the Oankali: the Traitors, who reluctantly accept the Oankali, and the Resisters, who actively resist the Oankali. The way that the characters in the novels categorize the humans in the terms of either traitors or resisters seem to assume

that the Oankali are merely colonizers, but the characterization of humans as either traitors or resisters could also resonate with the Oankali-as-vanguard interpretation, but with an element of irony as both are terms used by the counterrevolutionaries and reactionaries. However, the characterization of those who even reluctantly capitulate to the demands of the Call as traitors is perfectly apt in light of viewing the utopian subjects as fundamentally posthuman. Well after he had been living in a trade village for a few years, Tino (Lilith's human mate) explained to Dichaan (Lilith's male Oankali mate) why even after all his time in Lo he still felt like a Traitor: “I'm a traitor to my people. Everything I do here is an act of betrayal. Someday, my people won't exist at all, and I will have helped their destroyers. I've betrayed my parents... everyone” (424). And later in the same conversation: “The resisters haven't betrayed themselves or their Humanity. They haven't helped you do what you're doing. They may not be able to stop you, but they haven't helped you...I tell myself there's some justification for what I'm doing. Most of the time, I think I'm lying. I wanted kids. I wanted...the way Nikanj makes me feel. And to get what I wanted, I've betrayed everything I once was” (425). Tino expresses here quite succinctly the position of not only Resisters, but really any person's relationship to the Oankali as Cal. Anyone who works with the Oankali is actively betraying *Humanity,* and he lays it out with a few key pieces.

First, he is betraying his people and this betrayal will ultimately lead to their extinction but not in any genocidal sense; rather posthumanity is *subsuming* humanity and *eclipsing* it so fully as to generate a new species. Tino also notes that he is betraying everything he once was, which is just to say that who he is was formed in the culture and society that is being eclipsed. Thus the Resisters are absolutely correct in labeling anyone who joins with the Oankali as Traitors, and while the Resisters are impotent in their resistance, at least they did not aid in the destruction of their own Humanity.

There is one glaring problem with this analysis: it is ahistorical and thus takes Humanity to mean what people are like in the dominant society of late twentieth century Western capitalist societies. But it is not a general, universal, or transhistorical Humanity that is being betrayed. Rather, the

introduction of the posthuman constitutes the utter rejection of a certain way of life that is created by and helps to create and perpetuate specific types of social and political institutions. That is why *Xenogenesis* should not be read as an allegory for colonization and cultural (or any other) genocide. Instead it is part polemic against a decadent and corrupt society saturated with hierarchies of all stripes as well as part prescription for what types of institutions and people would contribute to a more just and egalitarian society. The fact that the trilogy does lend itself to such a reading though, as well as the fact that the Resisters' position is understandable, even if it is not quite entirely justifiable, suggests that perhaps the Oankali's method of bringing about radical social change may not be very strategically practical. That is, the purity of the Call and the total commitment to it in its purity may end up making the counterrevolutionaries seem reasonable and those who are actually working to make the world a more just and egalitarian place seem like monsters hellbent on destroying humanity. For a utopian horizon that is meant to be radically democratic this may not be a very attractive way to reach a critical mass of people that will embrace this vision and actually work towards its fulfillment.

By helping to create a radically new world, the traitors are not just creating some new institutions based on principles of justice and/or democracy, but are tearing down the entire world in order to make it anew, including creating a new generation of beings quite literally monstrous in relation to their parents. As Nikanj told to Lilith shortly after Akin was born: “Trade means change. Bodies change. Ways of living must change. Did you think your children would only *look* different” (260, emphasis in original)? The changes that are being brought about are also completely irreversible, which presents a very real and pressing danger. In the trilogy the ultimate outcome of this radical change will be the absolute destruction and abandonment of Earth as part of an interminable quest by the Oankali to find new worlds and begin the process anew.

As the first person awoken by the Oankali, Lilith was responsible for not only waking some of the other humans who would make up the core of the English speaking trade villages, but she was also

meant to set the tone for how human beings would relate to the Oankali. Of course the Oankali assumed that this process would take the form of Lilith teaching the other humans to accept and then ultimately embrace the Oankali-Human hybrid families that would form the nuclei of the gene trading needed by the Oankali. Instead, through Lilith the reader is exposed to both the traitor (trader) and resistor mentalities, as well as all the tensions that arise between these two positions, especially as they exist in one person:[32] "Akin knew that Lilith sometimes hated herself for working with the Oankali, for having children who were not fully Human. She loved her children, yet she felt guilt for having them" (360). Originally, Lilith's mentality was to feign compliance with the Oankali just enough to allow her and the rest of the people to be taken down to the surface of the Earth and then "run": "Better not to Awaken them at all until she had some idea how to help them, how not to betray them, how to get them to accept their captivity, accept the Oankali, accept anything until they were sent to Earth. Then to run like hell at the first opportunity" (117). Yet at the first real chance that the humans had to revolt against the Oankali, Lilith chose to save an Oankali, Nikanj, rather than join the rest of her fellow humans in their insurrection.

On the other hand, after Lilith had been living with the Oankali in the trade village Lo for enough years to have birthed a couple of generations of construct children, she would become moody and then wander off into the woods for days at a time. The fact that she essentially stopped doing this after the Mars colony was established suggests that her sojourns were caused by guilt associated with being a Traitor. Jodahs reports a similar phenomenon when meditating on its female mate's behavior: "Soon I would not be able to stand long separation from her. And she could hurt me by deliberately avoiding me. From what I knew of her, she would be willing to do this if she thought she had cause – even though she would inflict as much pain on herself as on me. Lilith had done that to Nikanj many times before the Mars colony was established" (679). Lilith is simultaneously repulsed by the Call due

32 Cf. Peppers (50).

to her nostalgic attachment to her former way of being human, and drawn to the Call and its posthuman way of being in the world.

In these responses – saving Nikanj instead of joining the Resister's uprising and her guilt at joining the Oankali – Lilith exhibits both tendencies – capitulation to the will of the Oankali as well as her desire to resist and run, demonstrating how complex and ambiguous these two positions are, and rightly so. These two positions represent not just different positions on how individuals will live their lives, but hold within them the fate of humanity: not only what social and political institutions are for the best and thus ought to be pursued, but also what humanity *is and will be* for the foreseeable future. The Oankali as the utopian horizon do not come to humanity as a set of ideals but as a real material force. They are the utopian horizon emptying into history and no matter which side one aligns with, the Traitors or the Resistors, the institutions that make up society will inevitably change, but so will the ways individuals relate to those institutions. That is, even those who resist cannot hold onto their institutions[33] and ways of being without changing them in ways that they may or may not have approved of prior to the interpellation of the Utopian Call.

> Joseph makes this point to Lilith just before the first group of Humans go to the training floor: "Peter was right," he said angrily.
>
> She frowned. "Peter? Right to try to kill? Right to die?"
>
> "He died human! And he almost managed to take one of them with him!"
>
> She looked at him. "So what? What's changed? On Earth we can change things. Not here." "Will we want to by then? What will we be, I wonder? Not human. Not anymore." (196)

One of the problems of any type of conservatism is that as the world changes, no matter how "progressive" or "regressive" the changes, the people who live in a society change as well, so that even

33 Cf. Peppers (49).

if a people can recreate the institutions that they are nostalgically attached to, their relationship to those institutions will also change because they have changed. As such, the nostalgic attachment of the Resisters causes them to repeat history as both tragedy and farce.

Tino originally left his Resister settlement because of the pathetic nature of the entire Resister program, telling Lilith during their first meeting that, "I was a kid when the war started. I still remember cars, TV, computers...I do remember. But those things aren't real to me anymore. My parents...All they want to do is go back to the prewar days. They know as well as I do that that's impossible, but it's what they talk about and dream about. I left them to find out what else there might be to do" (271). The logic of the nostalgic attachments compelling the Resisters to invest in a dead-end civilizational project is a similar logic to what Lauren Berlant analyzes in *Cruel Optimism*. The difference here is that instead of a focus on a future event guiding action, it is a past institution (or set of institutions), and that the consequences are not personal failure or frustration but instead a social and political impotence that often leads to oppressive policies or outright counter-revolutionary violence. Tino expands on this logic later when he is describing his village to the rest of Lo: "We worked hard, getting things as much like they used to be as possible. That's what kept everyone going. The idea that we could use our long lives to bring back civilization – get things ready for when they found a girl for me or discovered some way to get kids of their own. They believed it would happen" (279). Once again, we see the similarity with Berlant's cruel optimism, it is this attachment that keeps them going and guides their action, and it is clearly misguided as Tino remarks that the villagers knew the impossibility of their dream. Thus it was their nostalgic attachment to an irretrievable past that did not allow the Resisters to adapt. They should not be faulted for not joining the Oankali, but they could be faulted for not having a vision of their own as well as being committed to actively not finding one. Their only vision was of the past, of preserving it in fragments that no longer fit together in a whole,

yet they still hoped that someday it would all just come back together again.[34]

Lilith drives this point home when she is trying to convince Tate to come back with the Oankali at the end of Akin's rescue: "I used to think you resisters would find an answer. I hoped you would. But, Jesus, your only answer has been to steal kids from us. The same kids you're too good to have yourselves. What's the point" (417)? Tate also expresses to Akin years later the last hope of the Resisters:

> "Oankali drove us to become what we are. If they hadn't tampered with us, we'd have children of our own. We could live in our own ways, and they could live in theirs."
>
> "Some of you would attack them," Akin said softly. "I think some Humans would have to attack them." (399)

That is, separatism is the last hope because the Resisters *know* that their nostalgic attachment is to *lost* institutions; the Call has permeated society and *everything* around them has changed or is at least in the process of changing. And so the last hope is a kind of pluralism without contagion,[35] or a kind of nationalist separatism. Butler seems to reject separatism as a vision outright, especially given that in the trilogy there is an expiration date on the Earth, and this kind of separatism would doom the Resisters to eventual extinction even if they could procreate. This willful ignorance to the changes that already structured the world is equivalent to an unyielding commitment to capitalism and thus to the status quo of the Capitalocene, which may not mean literal planetary death, but mass extinction is not all that much better.

When Akin was a child living with the Resisters, he became increasingly bothered by the rather dismissive treatment of the Resisters by the Oankali: "Who among the Oankali was speaking for the interests of resister Humans? Who had seriously considered that it might not be enough to let Humans choose either union with the Oankali or sterile lives free of the Oankali" (404)? Yet the Resisters never

34 The Resister mentality represents a classic example of an ideology in Mannheim's formulation in *Ideology and Utopia.*
35 Cf. Paul Gilroy's "Revolutionary Conservatism" in his analysis of black nationalism in *Against Race* (214-225).

came up with an alternative of their own and ultimately it was Akin who provided the Resisters with an alternative vision – something that on first blush appears to be the hoped for radical separation even though it likewise has no chance to realize their dreams of restoring their lost society.

Mars as an Alternative Utopian Horizon

At first blush, the colony on Mars seems to be a bit of a narrative dead end for the trilogy, as it gets nothing more than a few passing remarks in the third installment. However there are two key functions it serves in the trilogy that are significant for the analysis of the utopian moments in *Xenogenesis*: *it* first functions as an alternative utopian horizon, which is important for the narrative arc of *Adulthood Rites*. Jacobs points out that, "the evocation of the Mars colony as a utopian alternative has become peripheral to the drive of the narrative and is mentioned only occasionally" in *Imago* (106). The second is that the colony acts as a pressure release valve which diverts the counterrevolutionary tension caused by the Resisters and thus shores up the larger utopian project. While the Mars project is only mentioned occasionally in *Imago* it does play a significant role in the story in this capacity.

The role of Mars as an alternative utopian horizon mirrors the way in which the Oankali planned for Akin (and the other human-born construct males) to develop. When Akin was on the ship he visited a young ooloi as a possible mate, and although this mating did not work out, the ooloi did impart some wisdom to Akin concerning his situation:

> "I've been told that I would wander," [Akin] said. "I wander now when I'm on Earth, but I always come home. I'm afraid that when I'm adult, I won't have a home."
>
> "Lo will be your home," Tiikuchahk said.
>
> "Not in the way it will be yours." It would almost certainly be female and become part of a family like the one he had been raised in. Or it would mate with a construct male like him or his Oankali-born brothers. Even then, it would have an ooloi and children to live with. But who would he live with? His parents' home would remain

> the only true home he knew.
>
> "When you're adult," Dehkiaht said, "you'll feel what you can do. You'll feel what you want to do. It will seem good to you."
>
> "How would you know!" Akin demanded bitterly.
>
> "You aren't flawed. I noticed even before I went to my parents that there was a wholeness to you – a strong wholeness. I don't know whether you'll be what your parents wanted you to be, but whatever you become, you'll be complete. You'll have within yourself everything you need to content yourself. Just follow what seems right to you." (465-6)

The trouble for Akin is that he does not see himself as fully belonging to the utopian society that is still in the process of formation. He sees its goodness and longs for it but is unable to fully integrate into that society even if he will still be a part of it. But as the ooloi tells him, Akin's path will also be good.

As mentioned earlier, the Call is just one among many possible utopian horizons emerging out of the same dystopian (or at least non-utopian) present. The Oankali's radical intervention into Human society and their abrupt and decisive change to the various social and political institutions represent the Utopian Call in the text because it is an intervention premised on remaking Human societies without hierarchies as the bedrock of all of those various institutions. Akin was raised under the light of this Call, even considering his time among the Resisters, and so he believes in the goodness of the Call and in the goodness of the institutions that are developing as the Call more and more permeates Human institutions. But even more than the belief in the goodness of these institutions, they are *normal* for Akin and so along with their goodness he also feels their *rightness.* Unfortunately, he feels alienated from them since he is doomed to wander, but at the same time he also feels the rightness of an alternative path. This alternative, ceaseless wandering, is not what he is meant to do but it establishes a separate space that also moves humanity away from hierarchy, albeit much more slowly and

precariously than the Call's horizon. While Akin was just beginning to emerge from his metamorphosis, there was a raid on Phoenix: "There was shooting. One man was killed. One woman was carried off" (496), and although Akin was going in and out of consciousness, he could not yet move and so contemplated the violence going on outside his windows:

> Akin wanted to slip back into the refuge of unconsciousness. They were not killing each other over the Mars decision, but they were killing each other. There always seemed to be reason for Humans to kill each other. He would give them a new world – a hard world that would demand cooperation and intelligence. Without either, it would surely kill them. Could even Mars distract them long enough for them to breed their way out of their Contradiction? (497)

The crucial point here is that the reason why the Oankali allowed Akin to try and establish a colony on Mars was because it would be such a difficult project that it would require intense cooperation rather than competition, and it would be so long-term that it would require this cooperation for many generations. The hope being that the project would last for enough generations to essentially breed out the hierarchical tendencies that go along with social competition, and as such would be in line with the spirit of the Call even if all of the particulars of this horizon were different.

The Human colony on Mars is seen in the context of *Xenogenesis* as an "Akjai" Human community. "Akjai" is a term for the group of Oankali that do not take part in the present trade in case there is some irrevocable damage caused by the trade. As another ooloi told Jodahs, "There's no safe way to begin a new species" (743). Furthermore, because of the Contradiction there seemed to be more danger than usual for the Oankali in their trade with Humans: "There was a time when that conflict or contradiction – it was called both – frightened some Oankali so badly that they withdrew from contact with Humans. They became Akjai – people who would eventually leave the vicinity of Earth without mixing with Humans" (678). When Akin was on the ship trying to get the Oankali to agree to establish

the Martian colony, Akin's main advocate among the Oankali was an Akjai from the previous trade, an ooloi who looked like a large armored caterpillar. As an Akjai it had no interaction with Humans, and so had no discernible reason it should care enough to argue on their behalf, especially considering it is a “purer” manifestation of the Call that had not mixed with humanity at all. However, “The Akjai spoke to the people for Akin. Akin had not realized it would do this – an Akjai ooloi telling other Oankali that there must be Akjai Humans” (469). When Akin asked it why it had done so, the Akjai said: “If I were Human...I would be a resister myself. All people who know what it is to end should be allowed to continue if they can continue” (471).

The reason why the human Akjai were permitted to exist was because of the chance that humans could breed out hierarchical behavior on their own in the extreme environmental pressures on Mars. Thus in terms of institutionalized hierarchical behavior as the problematic which must be taken into account in our present society, Mars represents an alternative utopian horizon. That is, the Mars colony represents another version of the “not-this” that could move humanity towards a society without hierarchies as the central organizing principle: “[Akin] would give them a new world – a hard world that would demand cooperation and intelligence. Without either, it would surely kill them. Could even Mars distract them long enough for them to breed their way out of their Contradiction” (497)? Johns points out that because the Mars alternative relies on evolutionary processes to breed out the contradiction, all (or at least a critical mass) of those individuals who strongly exhibit hierarchical tendencies need to die off so that those who are more altruistic or cooperative can live to breed. In other words, “In the best case, Akin is leading most people to their deaths; in the worst case, all of them” (391).

Likewise, according to the Oankali the Mars alternative is almost certainly doomed to fail: “The Oankali won't help, except to teach. They won't set foot on Mars once we've begun. They won't transport you...To them, what I'm doing is terrible. The only thing that would be more terrible would be

to murder you all with my own hands" (502). What the Oankali position shows is the power of ideological factionalism when it comes to the Call. As a utopian horizon collapses into a Call and as it gains adherents, it takes on the quality for the utopian subjects as not just *a* vision for *a* good society, but as *the* vision for *the* good society, at which point even though other horizons are admittedly better than the present from which they grow out of, they are not good enough to be pursued.

The debate around the Mars colony instigated by Akin also shows that strict adherence to an ideology is quite often counterproductive, especially in terms of strategy for radical and robust social and political change. If the goal is to set ourselves on the path toward a good society and not just to be "correct" about what that society would look like in detail, then there almost certainly needs to be a diversity of tactics to achieve that goal. Even if everyone could agree in principle to the various aspects of the Call's vision (which is itself highly unlikely) the vision in its totality may be too drastically different, too large, or too intense to be palatable to a great many people. In the world of the text there were no non-partisans: all humans were either traitors or resisters, and in such circumstances it would most likely be easier to admit alternative horizons that also deal with the problems of the present than to encourage the Resisters to be perpetual enemies of a good future.

Perhaps the most significant reason why the Oankali eventually did agree to help in establishing the Mars colony was that they prioritized which aspect of the utopian horizon was most essential, in this case, working toward creating institutions not organized around hierarchies and encouraging hierarchical behaviors. The fact that the alternative horizon shared this essential trait with the Call is the *reason* why the Mars colony is palatable to the utopian subjects, even if they do not necessarily believe that the method or strategy will work because it differs too greatly from their adopted strategy (their orthodoxy).

Interestingly, the reason why Mars was acceptable to the utopian subjects is not the same as what made the colony amenable to the resisters, which is instead the reinstatement of the resisters'

fertility. While Akin was in metamorphosis and unable to move or speak, some of the Resisters would come and keep him company. One of the Resisters "began to talk to Akin – to speculate about what had happened to Amma and Shkaht, to speculate about children he might someday father, to speculate about Mars. This told Akin for the first time that Gabe and Tate had spread the story, the hope that he had brought. Mars" (495). Here we see the process of an alternative utopian horizon (Mars) becoming a new Call for those who had resisted the earlier one, but we also see that the two utopian horizons cannot easily exist in the same political space. We also see that the hope that imbues both horizons, focused on the future, is anchored to the creation of the next generation (children). However, both utopian horizons originate *outside* of the populations that are meant to take them up as Utopian Calls – coming to the people fully formed, first in the concrete social and political form of the Oankali, and second as Akin's plan for the Resisters. So while *Xenogenesis* is useful for theorizing some of the logic of the Utopian Call, as well as some of the most significant political and social consequences of the Call, we must turn now to another set of texts that theorize the Call in a more organic context, where it grows out of the utopian struggle in history. To do so I will turn to Kim Stanley Robinson's *Mars* trilogy to see how a Call is formed through struggle against oppressive political and economic forces on the one hand and the negotiations and programs of various factions on the other and coalesces into a utopian horizon over the course of a few generations.

Chapter 2:

The Hardest Part is Leaving Earth Behind:

Utopia and the Movement of History in the *Mars* Trilogy

The Utopian Call and the Struggle in History

For Kim Stanley Robinson utopia itself is simply the name of the struggle for a better world. When reading one of Robinson's utopias it is with the sense of eutopia, or the good place, but without anything like a state of perfection that would be static and without personal conflicts. For Robinson, utopias are always a work in progress, and because utopia is just that struggle for a better world, it is intimately bound up with history and historiography. Kenneth Knoespel notes that, "What is at stake in the momentum of utopian narrative is not simply a projective model of the future, but a form of inquiry that draws its force from the critique of history. It is the simultaneous critique and projection that engages the reader of Robinson's work" (112). John Kessel argues that much of Robinson's fiction functions as an examination of how history works, asking questions about the relationship between individual choices and larger social forces (83).

In this chapter, I will argue that Robinson's work does more than express that utopia is the struggle for a better world and actually theorizes how the Utopian Call is one of the main driving forces of history. Robinson shows that any progressive bent to history owes itself to the machinations of the Utopian Call. In this respect, the Utopian Call functions in the same ways as the general outline of the Marxist dialectic, namely where social contradictions tend to resolve themselves in a series of thesis – antithesis – synthesis, wherein the first two terms determine the nature of the synthesis. However, for Robinson the logical priority is not given to a present state of affairs (the thesis), but to an imagined future state which then pulls the past and present toward it (the synthesis).

This conception of utopia as struggle in Robinson's work goes back to at least *The Pacific Edge*, wherein one of the characters struggles throughout the novel with how to define utopia. At one point he writes: "*Must redefine utopia. It isn't the perfect end-product of our wishes, define it so and it deserves the scorn of those who sneer when they hear the word. No. Utopia is the process of making a better world, the name for one path history can take, a dynamic, tumultuous, agonizing process, with no end. Struggle forever*" (95). The italicized sections of *Pacific Edge*, from which this passage was drawn, represent the journal entries of one of the characters from a time before the novel's utopian present. The journals are from a time when transnational capital ruled the world and a utopian future seemed highly unlikely if not impossible. In these sections we see the character of Tom Barnard struggling with writing a utopian novel and so also trying to work out for himself what utopianism actually means. Tom Moylan notes that Barnard "begins to come to grips with the relationship between utopian space, with its synchronic tendency to linger on already articulated alternatives, and historical disequilibrium, which diachronically displaces the product of the detached utopian imagination" ("Lives" 32). Utopia's synchronicity is such that utopia always has a spatial dimension as a place where people have tried to make real a better world based on "already articulated alternatives." The historical disequilibrium, however, means that so long as the utopian space is not universal then the struggle must continue, because "there's no such thing as a pocket utopia" (*PE* 36).

Robinson has further developed the notion that utopia is a struggle that takes place in history in the essay "Remarks on Utopia in the Age of Climate Change" noting that, "Climate change is inevitable – we're already in it – and because we're caught in technological and cultural path dependency, we can't easily get back out of it...It has become a case of utopia or catastrophe, and utopia has gone from being a somewhat minor literary problem to a necessary survival strategy" (9). While for previous generations the struggle for a better world could be justified on moral and ideological grounds, it was more easily dismissed as utopian in a strictly pejorative sense. Desiring a better world

and struggling for it too vehemently were unnecessarily noble because history may progress slowly towards justice but it does in fact progress. Robinson argues that this sentiment no longer makes any sense, because climate change will be catastrophic for humanity as a whole and our only way to really mitigate this unprecedented catastrophe is to prioritize the struggle for a better world, i.e. utopia. In other words, the Anthropocene is a fact that must be dealt with – do we allow it develop along the lines of the Capitalocene into some variation of an apocalyptic future where famines, wars, droughts, and floods compete with the sixth mass extinction event in contests over death tolls and aggregated suffering, or do we put all of our collective efforts into creating a good Anthropocene?

The concept of the "good Anthropocene" is a prime example of Ernst Bloch's concept of the "concrete utopia." Moylan states that, "Concrete utopias are points in history where utopian possibilities are established in the concreteness and openness of the material of history" (*Demand* 21). For Bloch, concrete utopia is anticipatory, looking to change the status quo into a not yet realized "Real-Possible," and is "the point of contact between dreams and life, without which dreams only yield abstract utopia, life only triviality" (145). That is, as the point of contact between dreams and life, concrete utopias could be said to comprise the full extent of the utopian horizon in any given age. While Bloch theorized this formulation through a Marxist lens, and thus viewed Marxism as *the* concrete utopia of his time, we can certainly expand his notion to include any of the utopian horizons that could lead us toward a good Anthropocene.

However, Bloch's notion of the "concrete utopia" does have some problems, namely that Bloch theorized the concrete utopia as connected to the "Real-Possible" and yet opposes it to "abstract utopia." In an analysis of concrete versus abstract utopia in Bloch, Ruth Levitas states that, "abstract utopia is fantastic and compensatory. It is wishful thinking, but the wish is not accompanied by a will to change anything" ("Educated Hope" 67). On its face this distinction seems significant, but only if utopian desire is kept at the level of the individual – wishful thinking that doesn't want to change the

world in any meaningful way does not seem to have any place in the utopian struggle in history. Levitas argues that one of the problems with Bloch's distinction is that it "does not rely, in the end, upon function, but upon content, for the content makes the function possible" ("Educated Hope" 73). The problem here is that once we leave the level of the individual we *cannot* know how the content will affect the function in regard to utopian dreaming: what might just be a flight of fancy to one person, who casually tells of it without a second thought may spark in others that connection between dreams and life which could have real material effects in the utopian struggle.

Despite the problem of Bloch's distinction between abstract and concrete utopias, his concept of the concrete utopia is extremely useful for theorizing how the Utopian Call functions as a motor in history. Moylan states that, "concrete utopia prevents the discarding of the visions of the goals ahead and calls for the living out of those visions in whatever is to be done" (*Demand* 21). What is important is for utopian subjects to transform themselves and their institutions by creating as many points of contact between dreams and life as possible, thus making the utopian struggle concrete in both content and function. Robert Markley argues that, "Robinson's phrase 'historical simulations' thus suggests his interest in reprogramming the mindset that divides nature from culture; rather than utopian longings, his [Mars] trilogy offers a carefully nuanced thought experiment in the greening of science, economics, and politics" (123). Here we see again that utopia is something that is struggled for, in this case as the greening of science, economics, and politics. That is, utopia is a process, but one that in our present circumstances can be undertaken through means of mitigating environmental damage[36] and attempting to drastically improve the health of as many local ecologies as possible.

Continuing his point about utopia being a survival strategy in the face of increasingly probable climate catastrophes, Robinson illustrates the need for sober and earnest attempts to build a good

36 Cf. Robinson: "[B]ecause capitalism itself is a big part of the climate problem, really we need to attack the problem of capitalism's detachment from reality if we are to have any hope of stabilizing the climate and our relationship to the biosphere more generally. Not to mention justice among humans, which is a question with an environmental impact too" (Canavan et al., 207).

Anthropocene as such:

> Now the future is a kind of attenuating peninsula: As we move out on it, one side drops off to catastrophe; the other side, nowhere near as steep, moves down into various kinds of utopian futures. In other words, we have come to a moment of utopia or catastrophe; there is no middle ground; mediocrity will no longer succeed. So utopia is no longer a nice idea but, rather, a survival necessity. This is a big change. We need to take action to start history on a path onto the side of the peninsula representing one kind of better future or another. The details of it don't matter; survival without catastrophe is what matters. ("Remarks" 10)

It is the capitalist world order that drops off into the abyss because it is a world order that is powered by fossil fuels – what Eco-Marxist Jason Moore calls "cheap nature" – and can only ascribe value to something insofar as it can be commodified and monetized,[37] and only to the extent that it can be so. Healthy ecosystems are both too abstract and too complex to be commodified or monetized in any meaningful way, so we need a completely different global system of values if we hope to maintain the viability of our planet. Utopia is the name of that other system as well as the struggle for it. Utopia is a *survival* strategy and not just a naive but noble pursuit. Robinson is pointing out here that in the Capitalocene, anti-utopia is equivalent to dystopia and therefore being against a utopian struggle at this moment is not to be worldly or wise but to be in favor of unprecedented and unmitigated planetary catastrophe raging across the next few generations.[38]

Robinson's *Mars* trilogy critically dramatizes the utopian struggle in history, showing how the Call arises organically pieced together from various articulations of a better world taken up from past

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37 "Young first-world secular citizens exist in a crisis of meaning: they know that life needs to be about more than hyperconsumption, but what that "more" might be is not clear. Meaning has never been priced, and thus it is confusing." ("Remarks" 13)

38 For example, see Eric Otto's "The Mars Trilogy and the Leopoldian Land Ethic," who shows how the utopianism of the *Mars* trilogy can be read as a reimagination of humanity's relationship to the land.

utopian struggles along with articulations of a better world that arise in response to the political, social, and physical environments in the text. The *Mars* trilogy, consisting of *Red Mars*, *Green Mars*, and *Blue Mars*, tells the story of the colonization and terraformation of Mars, beginning with the journey to Mars of the "first hundred" scientists and astro/cosmonauts up through the inauguration of a post-capitalist, radically democratic utopian society on a fully terraformed planet. The narrative centers around members of the first hundred, a group of scientists and astro/cosmonauts who were selected to establish the first settlements on the red planet. The novels are utopian in essence but with a greater emphasis on thinking about how to get there from here rather than what exactly all of the utopian institutions would look like. As such, the utopian struggle is prioritized, theorizing and dramatizing how the Utopian Call functions as a motor of history. This theorization happens through often violent debates over terraforming, or what humanity's relationship to the land and other nonhuman aspects of the world should be, as well as through debates over political and economic structures, or what institutionalized relationships between human beings should be like.

Much like *Xenogenesis,* the principle novum of the text that aids in theorizing the utopian struggle over a long period of time is a kind of gene therapy, called the "gerontological treatment," that allows people to live extraordinarily long lives. For example, in the final scene of *Blue Mars*, it is mentioned that one of the first hundred, Maya, was two hundred and thirty years old. The gerontological treatment allows the first hundred, as well as other significant characters, to see how the Utopian Call takes hold and develops over many generations, as well as giving ample opportunities to reflect on the nature of historical change, which many of the main characters do throughout the trilogy.

In this regard, Knoespel points out, "Robinson transforms Mars into one gigantic laboratory for historiography" (112), and in an analysis of *Red Mars,* Carol Franko argues that, "In *Red Mars* utopia becomes an ongoing task within and in conflict with history" (116). The characters in the trilogy not only struggle to enact certain utopian visions, but as they do so they struggle with their places in

history, what history is and how any of them can consciously affect it. While one of the main thematic elements of the *Mars* trilogy is the nature of history and how it progresses, the laboratory is set against the backdrop of the relationship between humanity and non-human nature. Markley argues that, "In one sense, the 'utopian' project of Robinson's trilogy is to render such cynicism, as far as possible, a historical artifact, to replace the politics of desperation with a simulated future in which hard-won forms of cooperation, synthesis, and the dialogic unity of eco-economics wins out over a coercive political economy based on the control of scarce resources" (130). "Eco-economics" is a post-capitalist economic system that develops on Mars based on the fulfillment of needs, both human and environmental, rather than on the creation of profits. Later in this chapter, I analyze how eco-economics is important for institutionalizing the Utopian Call on Mars, and how the process of institutionalizing eco-economics is a significant part of the utopian struggle in the narrative.

Near the end of the trilogy two of the first hundred, Sax and Ann, are discussing their generation's role in the utopian struggle, and while Sax laments that the "golden age" can only truly blossom once their generation dies off, Ann tells him that, "Everybody dies someday. Better to die thinking that you're going to miss a golden age, than to go out thinking that you had taken down your children's chances with you. That you'd left your descendants with all kinds of toxic long-term debts. Now that would be depressing" (728). Some of the greatest "toxic long-term debts" that we are presently leaving future generations are the devastating effects to the environment as a direct result of environmental concerns being treated as "externalities" in the Capitalocene. The costs that these devastations represent – catastrophic carbon emissions only being one such byproduct of capitalism along with other forms of environmental poisoning, deforestation, etc – are quickly coming due and will be paid in the form of environmental catastrophe in the coming generations, which is why Robinson said that, "the most powerful geoengineering technology for reducing our carbon burn would be a rapid shift to social justice and an end to capitalism" (Canavan et al. 214). In the *Mars* trilogy, the

environmentalism of the narrative indeed goes hand in hand with concerns for social justice. William Dynes states that, “Read as a whole, the Mars series evokes a utopian call for community: of wholeness within the self, within interpersonal relationships, within political and economic entities, within the species itself” (151). In other words, the utopian struggle in the trilogy is simply the Martian version of creating a good Anthropocene.

The Inertia of History

Perhaps the most significant obstacle to creating a good Anthropocene is the resilience of entrenched institutions of power such as those that comprise capitalism.[39] Entrenched power relations are generally what the Utopian Call struggles against to bring about a good society, and the amalgamation of all these power relations comprise the “inertia of history.” The inertia of history names the tendency toward institutional conservatism rather than ideological conservatism. It is important to note that in theorizing the inertia of history, institutions need to be considered in their interconnections with each other and it is their combination that creates a center of gravity that is so difficult to struggle against and creates seemingly impossible to overcome path dependencies. But the inertia of history is only difficult to overcome, not impossible; institutions of power are resilient, not immortal. One way to conceptualize the utopian struggle is as the dialectic between the Utopian Call and the inertia of history, which is how it is often presented in the *Mars* trilogy.

In the long lead up to the third Martian Revolution, Nirgal told Maya that, “Mars right now is the battleground of past and future, and the past has its power, but the future is where we're all going. There's a kind of inexorable power in it, like a vacuum pull forward. These days I can almost feel it” (*BM* 624). In the dialectic of the utopian struggle, the Utopian Call functions as a kind of vacuum pull forward – where what is missing from a society, that which would make it Good or ideal, pulls on the

39 Of course capitalism is a major source of institutional inequality, but one should keep in mind that all institutionalized hierarchies, whether they be racial, gendered, or those of the bureaucratic state (including religious and educational institutions) are interconnected and all of these are obstacles to building a truly just world.

present even when it is weighed down by the inertia of the past. This pull is the essence of the anticipatory nature of the concrete utopia and Bloch's not-yet-become.

The Utopian Call as a vacuum pulling the present forward is a useful metaphor to expand upon in order to understand history as well. The medium through which the Utopian Call is pulling the present is history, or the totality of human events. As the medium through which the Utopian Call pulls the present forward, history resists this pull and weighs down the present. One of the tropes that repeats in the trilogy is the difficulty of "leaving Earth behind": leaving Earth behind often seems like a prerequisite for the utopian struggle in the trilogy, while at the same time being in some ways impossible (i.e. the impossibility of starting a new society from scratch without using *anything* from what came before it) and in other ways undesirable (i.e. this would require a complete disavowal of those who have come before in the struggle for a better world).[40]

Near the beginning of the initial voyage from Earth to Mars in *Red Mars*, in one of the italicized counterpoints to the narrative, Robinson wrote that:

> History too has an inertia. In the four dimensions of spacetime, particles (or events) have directionality; mathematicians, trying to show this, draw what they call "world lines" on graphs. In human affairs, individual world lines form a thick tangle, curling out of the darkness of prehistory and stretching through time: a cable the size of Earth itself, spiraling round the sun on a long curved course. That cable of tangled world lines is history. Seeing where it has been, it is clear where it is going – it is a matter of simple extrapolation. For what kind of Δv would it take to escape history, to escape an inertia that powerful, and carve a new course?
>
> The hardest part is leaving Earth behind.[41] (50)

40 Cf. Elizabeth Leane: "The whole trilogy can, from one perspective, be seen as an attempt to theorize, or, more accurately, to narrativize, a postcolonial dystopia on Earth, and a postcolonial utopia on Mars; its central problematic is whether the two can exist simultaneously and interdependently" (146).

41 Cf. Fredric Jameson: "These spatial and dimensional paradoxes are also, I think, hints about the peculiar reading

The inertia of history is an important metaphor in the trilogy, with "the Earth" often being a metonym for this inertia. Elizabeth Leane argues that, "The inescapable question central to this narrative is how to cease repeating the mistakes of the past...and move to a new synthesis, how to escape the inertia of history" (148). Ian Buchanan writes that, "According to the Russian anarchist, Arkady, in order to have a political Utopia on Mars, earth ideas concerning economics and sexual politics, among other things, have to be canceled; that is, left on earth" (27). An important point here is that history does not "progress" on its own; the tendency of the "long curved course" of history is not to approach utopia on its own accord. It simply keeps following the path around the sun.[42] As Frank told John, "Things are always going to be falling apart on Earth, you might as well get used to it" (*RM* 279). However, "Unlike Earth, Mars does not bear the full weight of this history, Mars represents the possibility of a different direction, one that is not marked by an attempt to subsume the rest of nature into the human fold" (Huston 240).

Earth as the inertia of history evokes the image of Walter Benjamin's angel of history, in that it is the physical space of Earth, its mass and its gravity, that prevents the utopian struggle from reaching the point that could comfortably be called utopian. That is, no matter how much the struggle progresses an unsurpassable stretch remains eternally inserted between those who struggle and the distant utopian horizon. Benjamin wrote:

> A Klee painting named "Angelus Novus" shows an angel looking as though he is about to move away from something he is fixedly contemplating. His eyes are staring, his mouth is open, his wings are spread. This is how one pictures the angel of history. His face is turned towards the past. Where we perceive a chain of events, he sees one single catastrophe which keeps piling wreckage upon wreckage and hurls it in front of his feet.

methods we need to develop in order to navigate the structural peculiarities of utopian estrangement, which must separate us decisively from Earth before returning us to it" (412).

42 Cf. Knoespel (133).

> The angel would like to stay, awaken the dead, and make whole what has been smashed. But a storm is blowing from Paradise; it has got caught in his wings with such violence that the angel can no longer close them. This storm irresistibly propels him into the future to which his back is turned, while the pile of debris before him grows skyward. This storm is what we call progress. (257-8)

So that what we call progress is the storm that prevents the angel of history from closing its wings and intervening in human affairs on behalf of the victims. That is, as history unfolds the path that it takes when viewed holistically is one large catastrophe, and all the seemingly isolated events that make up the past are just different parts of the rubbish heap of history, or the inertia of history. Without an intervention that would radically alter the course of history, human societies will continue to be a catastrophe for large swaths of the population as well as the planet itself, and those improvements in society, "what we call progress" only add to the inertia because it prevents us from fighting for the Good society (i.e. the intervention of the angel of history) in favor of making the catastrophe more bearable for some.

The idea that the hardest part of building a new world is leaving Earth behind makes its appearance at the beginning of the first hundred's outward journey and is refrained much later on towards the end of *Blue Mars* after almost two centuries had elapsed, in which two revolutions had occurred and a third was drawing near. A group of matriarchs who had been one of the leading political groups on Mars for much of that time were leaving the solar system in a hollowed out asteroid converted into a space ship, "and in Dorsa Brevia, people [the matriarchs] are beginning to wonder if we don't have to get that distance from Earth to get a fresh start. The hardest part is leaving Earth behind. And now it's looking bad again. These unauthorized landings; it could be the start of an invasion. And if you think of Mars as being the new democratic society, and Earth the old feudalism, then the influx can look like the old trying to crush the new, before it gets too big" (634). Here we see

the inertial weight of history on those who take up the utopian struggle, and that no matter how much the struggle advances it will carry with it the baggage of Earth, or that the only way to achieve a fully utopian society is with a fresh start as far removed from that history as possible[43].

In *Xenogenesis* the Utopian Call does come from completely outside of history via a group of extraterrestrials with a completely different evolutionary and social history, but in the *Mars* trilogy the Utopian Call emerges from the struggle in history as a struggle *against* the inertia of history; it works on the consciousness of people "so that their toxic terran pasts would be diluted and forgotten" (*BM* 624). That is, the collective creation of "the true Martian culture" is not a result of the resolution of a thesis and antithesis into a synthesis, but is the synthesis of many disparate ideals, institutions, and practices each with its own historical trajectories,[44] reminiscent of the interaction between the archaeological and architectural modes of Levitas's utopian method.

In the second half of *Blue Mars,* Robinson gives a description of a theory of historical change created by a Martian historian that becomes the standard model of history for the twenty-second century. The theory presented gives a good outline of how the Utopian Call functions in the trilogy., and Robert Markley notes that the historian that Robinson ascribes the theory to is a woman from a matriarchal community whose impetus for coming up with her theory was to explain the emerging democratic society on Mars as one that does not "represent an anthropocentric, masculinist belief in the superiority of ideas to the lived experience of history" (136). The historian, Charlotte Dorsa Brevia, develops a "metahistory" that tries to be truly materialist and that takes into account the "complex effects of human needs, desires, and conflicts – and the spiraling cycles of intensification and the painful adjustments they dictate" (Markley 136). That is, the theory of the gross mechanisms of history shows how utopian longings must wade through a morass of historical baggage that shapes and is shaped by hierarchical institutions:

43 Cf. Huston (238).
44 Cf. Pak "Energy" (93).

> She described what she called a 'residual/emergent complex of overlapping paradigms,' in which each great socioeconomic era was composed of roughly equal parts of the systems immediately adjacent to it in past and future. The periods immediately before and after were not the only ones involved, however; they formed the bulk of a system, and comprised its most contradictory components, but additional important features came from particularly persistent aspects of more archaic systems, and also faint hesitant intuitions of developments that would not flower until much later. (*BM* 482)

This paradigm is similar to the Marxist dialectic except that it is the dialectic between the thesis and synthesis that give shape to the antithesis. The future acts upon the present system in a process which can be visualized through the metaphor of a "Big Seesaw" or a "movement from the deep residuals of the dominance hierarchies of our primate ancestors" which represents the inertia of history or the great rubbish heap that the angel of history has its gaze locked upon, which swings slowly "toward the very slow, uncertain, difficult, unpredetermined, free emergence of a pure harmony and equality which would then characterize the very truest democracy" (*BM* 483). It is the possibility of this distant utopia that calls back to people in past epochs and motivates them to take up the utopian struggle, moving history along.

On the other side of this struggle are the people for whom dominance, power, or simply a comfortably known place in a hierarchy drives history as well, but who slow its acceleration towards utopia, and even try to block the path altogether. The "Big Seesaw," or the struggle between the Utopian Call and the inertia of history is accordingly the mechanism by which history unfolds, and in this struggle "dominance hierarchies had underlain every system ever realized so far, but at the same time democratic values had been always a hope and a goal, expressed in every primate's sense of self, and resentment of hierarchies that after all had to be imposed, by force" (*BM* 483).

There are two main ways that the future pulls along the present in the above passage. First and

most apparent is as the emergent system in the "residual/emergent complex of overlapping paradigms" and second as the "faint hesitant intuitions of developments that would not flower until much later." The residual and emergent complex of overlapping paradigms is roughly equivalent to the most general form of the Marxist dialectic (feudalism into capitalism, then capitalism into socialism). However, there is nothing inevitable about the direction that history will march in:

> People now ordinarily understood capitalism to have been the clash of feudalism and democracy, and the present to be the democratic age, the clash of capitalism and harmony. And they also understood that their own era could still become anything else as well – Charlotte was insistent that there was no such thing as historical determinism, *but only people's repeated efforts to enact their hopes*; then the analyst's retroactive recognition of such hopes as came true created an illusion of determinism. (*BM* 484, emphasis added)

Thus even the gross mechanism, the "residual/emergent," relies on the "faint hesitant intuitions" in order to function. Eric Otto states that, "Robinson uses all 1900-plus pages of his trilogy to illustrate the challenges of moving beyond a history spawned on Earth and toward a future, Martian history generated by utopian social, political, scientific, and ecological ideas" (242). These ideas and intuitions of the far future are equivalent to Bloch's not-yet-conscious sparkling on the utopian horizon and coalescing in the Utopian Call. It is the utopian subjects thus interpellated who repeatedly attempt to "enact their hopes" in the struggle to overcome the inertia of history.

The Vacuum Pull of the Future

While there are certainly many causes for the inertia that a system exerts on the march of history, in the context of preventing the realization of utopian hopes and desires it is fair to say that the most dominant inertial force is that of entrenched positions of power and all of the institutions that legitimate and protect or perpetuate those positions.[45] These institutions are simultaneously the easiest

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45 Cf. Burling (162).

and the most difficult to change; they are the easiest in that they are the things that we take part in in everyday life: our jobs or hobbies, our ways of relating to each other, etc. And they are the most difficult to change because they are never alone; one institution is implicated in many others as well as relying on many others for its own continued existence. And so while one institution may be vulnerable to conscious manipulation by a determined group of individuals, the tapestry of all the other directly and indirectly connected institutions that make up a given system has the real potential to either resist institutional change in the first place or to pervert the altered institutions back into something resembling its former state.

A good example in the trilogy of the struggles inherent in the attempt to create new forms of everyday life is the existential crisis undergone by Nirgal in post-independence Mars. Once the obvious political struggle was behind him, Nirgal was pressed to find a meaningful way to live: “Some people said Nirgal had filled John Boone's empty shoes, that Nirgal had done the work John would have done had he lived. If that were so, *what would John have done afterward? How would he have lived?*” (*BM* 372, emphasis added) In his planetary wanderings, Nirgal eventually came across a group of “ferals” or people who were trying to establish a nomadic hunter-gatherer set of communities on Mars: “There were disk houses all over Lunae, the woman who had butchered the antelope told Nirgal. Other groups used the same set of houses, tending the orchards when they passed through. They were all part of a loose co-op, working out a nomad life, with some agriculture, some hunting, some gathering” (467). However, “Nirgal understood then that hunting was hard, that the group failed often. That they were perhaps not very good at it” (470).

Nirgal ended up spending much of his time living in the feral communities, and later in the lead-up to the crisis that sparked the third Martian revolution, Maya told Nirgal that due to his status as “the most important Martian in Terran history...There's a feral movement getting very strong in North America and Australia, and growing everywhere” (597). Yet while Nirgal and others were working on

new modes of life and community, the dominant hierarchies on both planets were becoming more intransigent and headed towards a likely war, which is why when Maya found Nirgal she had to infringe on his feral existence. “We have to keep Mars open. We have to fight for that, and you have to be a part of it. We need you more than anyone else” (597). So, not only was creating new quotidian forms of life difficult from a knowledge and skills perspective, but maintaining them against the impositions of the dominant hierarchies added a further, more intractable difficulty.

In “Remarks on Utopia” Robinson writes about how one of the main impetuses for his writing the Mars trilogy was to map out one possible way for us to get from where we are now (the Capitalocene) toward one possible utopian horizon: “I thought: 'OK, granted there are guns under the table. Utopia is not going to come easily. We therefore have to try the story again elsewhere, invent a utopian history, maybe give it two hundred years to develop rather than fifty, and tell the whole thing explicitly'” (3-4). So in the Mars trilogy Robinson gives about two centuries for the characters to change the institutions that govern their lives [e.g. governmental, economic, etc.) through changing the institutions they take part in in their daily lives, and shows throughout the narrative that this is in fact very difficult work that demands the concerted efforts of many people and groups taking part in what are multi-generational projects. K. Daniel Cho notes that “Robinson defers his vision to the final pages of the third installment, *Blue Mars,* and instead devotes the vast majority of the trilogy to considering the consequences of separation itself” (68).

The march towards the utopian fulfillment at the end of the trilogy is not simply the transition from a capitalist world-system to a truly democratic system. Besides the big clashes between world-systems that are more easily viewable as ideological and political battles, history is changed through the “faint hesitant intuitions” of societies not only yet to be born but not even approaching the immediate horizon. Despite the fact that these intuitions may be vague or seem strange[46] by

46 “But as each system passed on to the next, the circle of equal citizens had bloomed wider, by a slight or great margin, until now not only were all humans (in theory, anyway) equal, but consideration was being given to other animals, and

contemporary standards, they have a profound effect on the nature of the Utopian Call. These intuitions are a part of Levitas's archaeological mode of utopia, because they are nothing more than fragments of a social order that can only truly make (full) sense in their social and political contexts (*Method* 154). Yet they can still be used to construct an image of that society (via the architectural mode), and while there is essentially no way to get that image quite right we can use that image to reconstitute our own ideologies and to reorient ourselves toward a future vastly different from our own.

Frederic Jameson has argued that it is impossible to imagine a utopia radically different from our current reality (xv), but this limitation is only a real problem if we must imagine utopia wholesale and look over it with an omniscient eye, able to see into all of its shadows as clearly as we see its well-lit surfaces. But as Levitas points out, "Complete description is not possible; all accounts of past, existing or potentially existing societies are partial" (*Method* 154). Nor do we really need to know every aspect of a potential utopian society to want to heed the call for it. The faint glimmerings of a better world expressed in the closing paragraph of the trilogy, "Nowhere on this world were people killing each other, nowhere were they desperate for shelter or food, nowhere were they scared for their kids. There was that to be said" (*BM* 761), suggest certain social and political structures that we can confidently judge as better than our own without having to *know* the details of how they work. That is, the goals of the Utopian Call animate the utopian struggle in history and the Call casts light unevenly on how these goals can be realized, but the hope remains that as the struggle progresses, the broken, uneven beams of light cast by the Utopian Call will grow more plentiful and brighter until more of the utopian society is eventually illuminated.

Related to the "faint hesitant intuitions" of the future is the concept of *presque vu* ("almost seen") or the idea that something is just on the tip of one's tongue but never quite able to be articulated.

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even to plants, ecosystems, and the elements themselves. These last extensions of 'citizenship' Charlotte considered to be among the foreshadowings of the emergent system that might come after democracy per se, Charlotte's postulated period of utopian 'harmony'" (*BM* 483).

As the first hundred and others of their generation begin to age significantly beyond ordinary human limits due to the gerontological treatments, they also begin to have more and more problems related to memory. Michel, a psychologist who was a part of the first hundred, would categorize the different problems in terms of *déjà vu* (already seen), *jamais vu* (never seen), and *presque vu* (almost seen). As the narrative and the utopian struggle both progress, the first hundred (as well as all the other Martians) are moving closer and closer to the third Martian revolution, but of course without realizing that they were in fact approaching this horizon. In fact, they do not even realize that what they needed was another revolution to finally open up the utopian space that they had been struggling for over the past two centuries. Yet as the unforeseen tipping point approached, the past was beginning to be lost to them in the form of memory loss and they all had increased incidents of *déjà vu, jamais vu,* and *presque vu.*

Maya's incidents of *presque vu* also increased with the memory problems associated with senescence, so as she is losing her past in form of memory loss, she also has an increased awareness of the not yet, no matter how vague that awareness was. And the awareness was in fact quite vague, which seemed to be one of the main reasons that Maya could not get a hold on what she was "almost seeing." Maya was the only one of the first hundred that did not take part in memory treatments in the second to last chapter of *Blue Mars* – and so she is the only one of the first hundred who is still slowly becoming untethered from their history at the close of the trilogy.

Yet just near the end of the narrative, Maya had an epiphany concerning *presque vu* itself: immediately following a rather keen failure of memory on Maya's part wherein during a gathering in her apartment following the funeral of one of the other first hundred, she failed to recognize a picture of Frank that she had pinned on her wall. The others with her became extremely distraught at this and Maya, without ever realizing what her error was, ran out of the apartment and eventually ended up sitting on a bench overlooking the water at sunset. All of a sudden, she was hit by a rather forceful memory: "Suddenly the sea's color looked familiar to her, and she remembered looking down from the

Ares at the mottled orange ball that Mars had been, the untouched planet rolling below them after their arrival in orbit, symbol of every potential happiness. She had never been happier than that, in all the time since" (*BM* 629). And this sudden burst of memory triggered an episode of *presque vu* that finally resolved itself:

> And then the feeling came on her again, the pre-epileptic aura of the *presque vu,* the sea glittering, a vast significance suffusing everything, immanent everywhere but just beyond reach, pressing in on things – and with a little pop she got it – that the very aspect of the phenomenon was itself the meaning – that the significance of everything always lay just out of reach, in the future, tugging them forward – that in the special moments one felt this tidal tug of becoming as a sensation of sharp happy anticipation, as she had when looking down on Mars from the *Ares,* the unconscious mind filled not with the detritus of a dead past but with the unforeseeable possibilities of the live future, as, yes – anything could happen, anything, anything. (630)

Bloch states that, "the making conscious of the Not-Yet-Become, exists only in this space, a space of concrete anticipation, only here is the volcano of productivity to be found pouring out its fire" (127). The "unforeseeable possibilities of the live future" are all the utopian horizons available at the time and do not yet represent the Utopian Call itself. The moment when Mars first comes into view for Maya is the moment at which the utopian horizon is stretched as far as it can go in all directions. It is the moment in which the Earth has been left behind and what lies before her and her fellow travelers is a world of new possibilities where the inertia of history is the most diluted, and the "volcano of productivity" was able to pour forth all of its fire and illuminate large sections of the utopian horizon as the not-yet-become moved into consciousness. The Utopian Call grows out of this somewhat undifferentiated potentiality as the horizon slowly shrinks, causing different utopian visions to come into focus.

Carl Abbot states that, “Robinson is a novelist who takes history seriously. The fall into history is the transition from the carefully controlled circumstances of a single contingent of first comers to the intractability of multiple groups, peoples, values, and agendas. It is the collapse of the open-ended possibilities of a new place into the constrained situations of historicity” (67). Maya may be seen as falling out of history due to her senescence, but probably more to the point, her unnaturally long history is coming to a culmination. Just as much of her past is being lost to her, the high point of her own history is brought back to her in a rush of the not yet seen. That high point was when the future seemed at its most open and she was not even aware of the utopian struggle that would consume Martian history up until the third revolution. However, once the conditions were ripe for the third revolution it was Maya, the person who was no longer in thrall to her own history but living with increased glimpses of the not yet seen, who catalyzed the rest: “Once again it was Maya who pulled them into action, playing the wrist like Frank used to, calling everyone in the open Mars coalition and many others besides, orchestrating the general response” (743).

In order for the conditions for the third Martian revolution to become ripe, the utopian struggle needed to develop over a fairly long period of time, i.e. across multiple generations of consistent struggle. Jameson notes that, “Unlike the 'monological' utopias of the tradition, which needed to dramatize a single utopian possibility strongly because of its repression from Terran history and political possibility, this more 'polyphonic' one includes the struggle between a whole range of utopian alternatives, about which it deliberately fails to conclude” (410). The utopian struggle in history is two-fold: on the one hand there is the struggle over competing visions and the attempts to forge a single unified Call, and on the other hand it is the struggle to make these visions a reality and to break free of the inertia of history and to build a future based on a collective sense of the Good and not simply continue forward in chains wrought in an unreconciled past.[47]

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47 Cf. Otto (243).

The unfolding of the narrative of the *Mars* trilogy shows how these two aspects of the utopian struggle mutually reinforce each other. The Utopian Call becomes clearer and sharper as the struggle unfolds, with different utopian visions synthesizing as a direct result of a shared struggle among many disparate groups against the institutions of power inherited from the past and in control of the present.[48] Dynes notes that, "John is both right and wrong. All of the colonists have a vision of what Martian life can be, and should be, but they do not all have the same vision. This is John's crucial discovery, and perhaps the heart of the series as a whole" (161). And Cho states that, "As the trilogy demonstrates, Utopia is inevitably an iterative process, involving the development and implementation of multiple versions of revolution itself along the way. But these revolutions – both the successful and the less so – are the necessary tumults of Utopia" (78). And it is through this tumult that disparate vision become refined and synthesized in ways that were unimaginable at the beginning of the struggle: "And even though people had gone underground on Mars for very different reasons, still, they all seemed to be converging here, in a kind of life that had certain paleolithic aspects to it, harking back perhaps to some ur-culture behind all their differences, or forward to some new synthesis – it did not matter which – it could be both at once" (*GM* 388).

The Utopian Call on Mars: Areophany, Viriditas, Redness

The most basic name for the Utopian Call as it manifests on Mars in the trilogy is the "areophany." The areophany is a quasi-religious ideology that develops in the Martian underground and then flourishes among the generations born on Mars. The areophany is conceptually tied to what in the trilogy is called "areoforming," which is the process by which something (usually people in this context) become more Martian, as opposed to the process of terraforming where they make the planet more earth-like. In this regard, areoforming is the process of becoming a utopian subject, which is governed by the Call of the areophany. In an argument with some of the Reds,[49] a young martian native,

48 Cf. Jameson (412).
49 The Reds are people who did not want Mars to be terraformed, i.e. they wanted to keep Mars "red."

Jackie Boone, tells Ann that, “We terraform the planet...but the planet areoforms us...It's happened to everyone born here...Like the rest of the natives, Mars is all I know, and all I care about. I was brought up in a culture made of strands from many different Terran predecessors, mixed to a new Martian thing” (*GM* 365).

The two most significant aspects of the areophany are called “viriditas,” related to the flourishing of life as such, and “Redness,” which has to do with a profound respect for the primal, pre-human, mineral Mars. Viriditas and Redness often act as polar opposites in the narrative, but also function dialectically as different aspects of the areophany. Just as utopia itself is a process of struggle, not only between utopian and anti-utopian social forces, but also the struggle among comrades over the nature of the Call itself, the areophany as Utopian Call develops throughout the narrative as a struggle between viriditas and redness – or as a struggle between life as the ultimate value and non-organic entities having value in themselves which thus have claims that need to be taken into account.

The areophany guides the utopian struggle on Mars, mediating the dialectic between making Mars more earth-like and guarding against the historical inertia that Earth represents: “But it's so easy to backslide into old patterns of behavior. Break one hierarchy and another springs up to take its place. We will have to be on guard for that, because there will always be people trying to make another Earth. The areophany will have to be ceaseless, an eternal struggle. We will have to think harder than ever before what it means to be Martian” (*BM* 3). This sentiment is also what John Boone and Arkady stressed early on in the trilogy – that Mars was a kind of new beginning for humanity and they could (as well as should) consciously choose which institutions (political, social, economic, cultural, etc.) they wanted on Mars. In making this point, Arkady created the first wedge in the first hundred while they were still on the voyage to Mars, when he vehemently argued that they should consciously choose their own destinies: “'So that if we choose to establish certain institutions on Mars, there they will be! And if we choose others, there *they* will be!' A wave of his hand encompassed them all, the people

seated at the tables, the people floating among the vines: 'I say we should make those choices ourselves, rather than having them made for us by people back on Earth. By people long dead, really'" (*RM* 88).

William J. Burling states that, "Robinson's term for this 'philosophy of freedom,' one which he carefully establishes and expands throughout the entire Martian trilogy...is called *areophany*, a concept so complex and vast that it defies any simple definition, reaching as it does into many pockets of subjectivity, action, and implication" (167). Yet the areophany was not only about consciously choosing the institutions under which one would live, but more importantly it was allowing those institutions to shape and reshape consciousness so that the utopian struggle could progress, so that the vacuum pull of the future would lead the people to create even better institutions that more concretely embodied their principles and ideals. In other words, the areophany areoformed the inhabitants of Mars, transforming them into utopian subjects who would willingly appropriate the utopian struggle as their own.

While Maya was trying to thwart Jackie Boone's political agenda and leave Mars open to terran immigration, she was out dancing one night: "Great dancing, all night long; a sign that assimilation might be happening, *the areophany working its invisible spell on everyone who came to the planet*, so that their toxic Terran pasts would be diluted and forgotten, and the true Martian culture achieved at last in a collective creation" (*BM* 624, emphasis added). It is important to note that "the true Martian culture" did not yet exist more than three-quarters of the way into the third book of the trilogy because the Martian culture that did exist still held too much of Earth's toxicity in it and thus the "true" one still remained on the horizon. The areophany worked slowly but inexorably on each person who came to the planet – but the weight of history meant that the process would necessarily be slow in stripping away old thought patterns that lay hidden in the outward manifestations of social and political practices.

The fact that this insight came to Maya as she was dancing shows the importance of joy in the

utopian project.[50] Changing political institutions is not enough to make a good society. It is certainly a necessary condition but it is far from sufficient. In an interview Robinson stated that, "I wanted to write a Utopia that people might want to live in. I know I couldn't please everybody, but I could suggest that Utopia is a world in which most pleasures will be pursuable" (Foote 280). Sometimes in the trilogy the pursuit of pleasure shows up as small rituals like sharing kavajava, a drink that was a mixture of coffee and kava which gave the drinker a slight buzz, and one that Art Randolph used to help smooth over differences during both major political conferences on Mars. For example, when the Dorsa Brevia conference was getting off to a rocky start, Art told Nadia: "'Just get them [the Swiss delegation] to drink kava with the anarchists,'...And in fact that night...Nadia passed by Art and saw that he was doing just that" (*GM* 356). Pleasure infusing social institutions also shows up in religiously inflected rituals such as chanting the litany of the names of Mars as John Boone did when he first visited with a Sufi caravan: "He shouted the planet's names and they repeated them after him, in call and response style...their dervish ceremonies could perhaps be shifted into the areophany, as during his chant" (*RM* 314). Or it manifests as the outright mystical, especially when involving Hiroko[51], such as how she and her followers opened and closed the Dorsa Brevia conference, which also included a chanting of the Martian litany (*GM* 358; 395). It also shows up as play in the middle of any important political processes, such as when the CEO of the "metanat" Praxis showed up at the Dorsa Brevia conference and was not well received, until one night Nadia came to the river running through the settlement and saw the superannuated Terran executive swimming and surfing with the young Martian natives (*GM* 387). These examples highlight the fact that the utopian struggle is not merely about building new political institutions but is just as importantly concerned with building new forms of (communal) life that will in turn define the shape of these political institutions.

The areophany itself began with Hiroko, the chief "biosphere designer" of the first hundred and

50 Cf. Kessel (91).
51 Cf. Jameson (408)

eventual spiritual leader of the Martian underground, and her “lost colony” in a ritual where she and her followers ingested some of the Martian dirt. Ian Buchanan describes the early “lost colony” led by Hiroko: “Turning their back on earth ideas altogether, Hiroko and a small group of like-minded agriculturalists, found a pagan cult and worship the very dirt of Mars in strange neo-primitive rituals designed to bring them into close contact with the alien planet” (27). Likewise, Dynes notes that, “the focus of the areophany is a celebration of interdependency with the planet rather than exploitation of it, and takes as its Eucharist the ingestion of Martian soil” (160). Robinson describes this “celebration” of the areophany in full:

> They were celebrating the areophany, a ceremony they had created together under Hiroko's guidance and inspiration. It was a kind of landscape religion, a consciousness of Mars as a physical space suffused with *kami,* which was the spiritual energy or power that rested in the land itself. *Kami* was manifested most obviously in certain extraordinary objects in the landscape – stone pillars, isolated ejecta, sheer cliffs, oddly smoothed crater interiors, the broad circular peaks of the great volcanoes. These intensified expressions of Mars's *kami* had a Terran analogue within the colonists themselves, the power that Hiroko called *viriditas*, that greening fructiparous power within, which knows that the wild world itself is holy. *Kami, viriditas;* it was the combination of these sacred powers that would allow humans to exist here in a meaningful way.” (*RM* 228-9)

Viriditas is an important concept in the trilogy and very important for understanding the Utopian Call on Mars conceptually as well as in the effects that it has on the consciousness of various characters, or how it helps them to understand their world[52]. Robert Markley argues that, “*Green Mars*, which spans the decades after the war, might be seen as Hiroko's book because it is the moral force of her lived-philosophy of viriditas which brings together the scattered groups of the underground in a loose

52 Cf. Leane (152).

confederation and which eventually provides the rationale and moral authority for Martian independence" (132). It is certainly the case that the action in *Green Mars* is largely driven by characters such as Hiroko's son, Nirgal, who grew up with viriditas as part of his daily life, and the scientist Sax Russell, who over the course of *Green Mars* develops from being a politically and socially aloof scientist into a utopian subject through the influence of viriditas and the areophany.

It is significant that the Utopian Call takes on a quasi-religious aspect, because it is not simply a matter of trying to build a good society but to build a society based on the Good, which should tend to make those who answer the Call to be far more committed to it and unwilling to compromise in their quest to make real their vision of a good society. William J. White describes, *"Kami* and *viriditas* [as] the two metaphysical principles that form the essence of Hiroko's Mars-worshipping 'areophany,' a kind of 'landscape religion' acknowledging, on the one hand, the spirit of the place inhering within the landscape of Mars itself (*kami*), and on the other hand, the fructifying 'greening power' (*viriditas*) residing with human beings and life more generally" (207-8). These two tendencies are most clearly synthesized in the character of Nirgal.

In the beginning of *Green Mars,* we are first introduced to Nirgal, the son of Hiroko and Desmond or the "Coyote," who stowed away with the first hundred and then soon became one of the leaders of the Martian underground. Nirgal soon becomes the greatest ethical force on Mars throughout the rest of the trilogy, and early on we catch a glimpse of one of the lessons that Hiroko imparted to the children of her colony:

> And because we are alive, the universe must be said to be alive. We are its consciousness as well as our own. We rise out of the cosmos and we see its mesh of patterns, and it strikes us as beautiful. And that feeling is the most important thing in all the universe – its culmination, like the color of the flower at first bloom on a wet morning. It's a holy feeling, and our task in this world is to do everything we can to foster it. And one way to

do that is to spread life everywhere. To aid it into existence where it was not before, as here on Mars. (*GM* 9)

We see here how viriditas is the highest good for Hiroko;[53] she characterizes the interplay between people and viriditas as holy and asserts that "our task in this world is to do everything we can to foster it." That is, the fostering of the relationship between mind and viriditas is not just *one of* our tasks but just *is* our task without qualification. Markley argues that, "For its ecologically-minded proponents, terraformation is not the imposition of humankind's will on an alien environment but a heroic project to recreate conditions that existed three to four billion years ago when massive floods scoured the surface of a warmer and wetter Mars...This postmodernist vision of the Sleeping Beauty myth makes humankind's technological mastery of planetary engineering the equivalent of a magical kiss" (128).

One of Hiroko's acolytes, Michel, the psychologist of the first hundred, characterized the relationship between life and mind as follows:

> Biogenesis is in the first place psychogenesis. This truth was never more manifest than on Mars, where noosphere preceded biosphere – the layer of thought first enwrapping the silent planet from afar, inhabiting it with stories and plans and dreams, until the moment when John stepped out and said Here we are – from which point of ignition the green force spread like wildfire, until the whole planet was pulsing with viriditas. It was as if the planet itself had felt something missing, and at the tap of mind against rock, noosphere against lithosphere, the absent biosphere had sprung into the gap with the startling suddenness of a magician's paper flower. (*GM* 246)

In *Blue Mars* there is a chapter titled "Viriditas" that follows a young Martian, Zo, as she gallivants across the solar system doing the bidding of her mother, Jackie Boone, John Boone's granddaughter and one of the preeminent politicians on Mars. We are meant to see Zo as the pure efflorescence of

53 Cf. Jameson (407).

viriditas, a hedonist and adrenaline junkie who explained her ideology to Ann as a kind of hedonistic nihilism, stating that all that can be done is to enjoy "Pleasure. The senses and their input. I'm a sensualist, really. It takes some courage, I think. To face pain, to risk death to get the senses really roaring" (538). Yet even her sensualism was based on the relationship between mind and viriditas: "It's like a rainbow. Without an observer at a twenty-three-degree angle to the light reflecting off a cloud of spherical droplets, there is no rainbow. The whole universe is like that. Our spirits stand at a twenty-three-degree angle to the universe. There is some new thing created at the contact of photon and retina, some space created between rock and mind. Without mind there is no intrinsic worth" (540).

After Sax had developed along the lines of the areophany, embodying viriditas in his appreciation of all the forms that life took on Mars, he tried to understand senescence and the gerontological treatments in terms of viriditas. Because despite the gerontological treatments, many people were beginning to die off with no underlying explanation in what was called the "quick decline": "There was orderly behavior, there was chaotic behavior; and on their border, in their interplay, so to speak, lay a very large and convoluted zone, the realm of the complex. This was the zone in which viriditas made its appearance, the place where life could exist" (*BM* 647). Prior to Sax's transformation by the areophany, Sax was the quintessentially "apolitical" scientist who views Mars as one big laboratory for terraforming. The reader sees his progression to a far more ethically minded citizen-scientist in *Green Mars* and *Blue Mars,* but even though in the first book of the trilogy he is not influenced by Hiroko's areophany or viriditas,[54] Sax takes a position in a debate with another member of the first hundred, Ann Clayborne, concerning the fate of terraforming. Sax's position is best understood as an early articulation of the philosophy of viriditas:

The beauty of Mars exists in the human mind...Without the human presence it is just a

54 In an early chapter of *Green Mars,* Nirgal sees the world as a contrast between the Green and the White, or viriditas and the superstructure of the universe governed by the lifeless laws of physics, and he sees Sax as exemplifying the white world. Cf. Lean (152).

> collection of atoms, no different than any other random speck of matter in the universe. It's we who understand it, and we who give it meaning...And yet the whole meaning of the universe, its beauty, is contained in the consciousness of intelligent life. We are the consciousness of the universe, and our job is to spread that around, to go look at things, to live everywhere we can. It's too dangerous to keep the consciousness of the universe on only one planet, it could be wiped out. (177-8)

However, Sax's argument for life being the goal of the universe treats the part of the universe that we do not find special as a mere instrument, which is dangerously close to how the land is instrumentalized without any real consideration in the Capitalocene.

As a counter to this position, Ann argues against treating the environment instrumentally because our relationship with the environment ought to remain as external(ized) as possible – that is, she argues for a relationality between humans and nature as close to nil as possible. Russell's position is clearly anthropocentric – but doesn't necessarily rely on anthropocentrism because he also makes the argument for life as such as another unique relationship in the universe (or even just the solar system). Because of humanity's position as the conscious form of life, humans have a (at least a soft) duty to spread life around the part of the universe that they can.

While viriditas is the mystical underpinning of the "Green" position that Mars should be terraformed so that its surface is habitable for human beings, the opposing position that Mars should be left pristine and that humans should always have to mediate their interactions with the planet through suits and other machinery is the Red position, which is best exemplified through the character of the geologist become areologist, Ann Clayborne.

Redness in itself is not a realistic position in its pure form in that once humanity had decided that there would be settlements on Mars, it would be difficult if not impossible to imagine that people

would not in reality try to make the environment more hospitable to people over time.[55] However, in spite of the unrealistic nature of a pure Red position, it functions in one way as a check on unfettered terraforming, and as a check on treating Mars as nothing more than a collection of raw materials to be extracted from the planet and shipped back to Earth as a way to breathe new life into the capitalist economies. That is, it is a check on some of the ideological underpinnings of the Capitalocene and helps to provide part of a basis for a land ethic for a good Anthropocene. Otto makes a similar point that much of the trilogy, especially *Green Mars* and *Blue Mars,* involves the working out of the dialectic between the red and green positions (249).

At its best, Redness represents a respect for the intrinsic and not just the instrumental value of Mars. Elizabeth Leane argues that, "[Ann] recognizes the impulse of the colonists to ignore this autonomous history and to recreate the colonized landscape in their own planet's image: to 'terraform'...Thus Ann promotes a kind of ecofeminism, based on an appreciation, scientific and political, of 'otherness'" (149). Leane then argues that because of this stance, Ann's science is intrinsically activist and never apolitical. One of the questions that the trilogy keeps coming back to is the nature of this activism – whether the Reds' sabotage of terraforming efforts is the righteous defense of a planet that is being gratuitously harmed and exploited or the actions carried out by the Reds in defense of the Martian lithosphere (sometimes with Ann's approval and sometimes not) are simply terrorism (*GM* 376), bringing to the fore questions as to whether *all* ecological interventions are fundamentally harmful, or to put it another way: whether or not it is possible to have a "good" Anthropocene. During the constitutional convention, "the fear of civil war was strong among them. Ann was in exile with the Kakaze [Red extremists], and sabotage in the outback was a daily occurrence" (*BM* 126). While viriditas had room for a non-instrumental aesthetic value for Mars, it could still not value its primal mineral existence independently of this aesthetic value in the way that

55 Whether that effort lasted only a couple of centuries as in the *Mars* trilogy or if it took well over a dozen centuries, I do not find it believable that terraforming would not be an integral part to any hypothetical *permanent* Martian colony.

Redness could.

There is an important scene where Ann is speaking to a group of Reds about what their place will be in an independent Mars. She questions whether they will remain faithful to an ideal of purity and thus live on the margins of post-revolutionary Martian society as they did on pre-revolution Mars, and thus continue their guerrilla war against terraforming with the major change being that they would simply be eco-terrorists and no longer freedom fighters in the eyes of all of their former comrades. Ann begins by censuring the younger Reds who were preparing to embark on missions of sabotage: “It's pointless to achieve a red Mars by pouring blood over the planet...Not even by killing animals or plants, or blowing up machines...The more we do things like that, the more green they become. So we defeat our purpose. If we know that and do it anyway, then we're betraying the purpose” (*BM* 271). Ann tries to convince the Reds that they must now integrate into Martian society in order to advance the Red's purpose. That is, she does not want them to assimilate to the green's culture but she wants them to join it so they can influence the greater Martian culture by setting up Red settlements “all over the place, and establishing tenure and stewardship rights, so that we can speak for the land and they will have to listen. Wanderer's rights as well, areologists' rights, nomads' rights. That's what areoformation might mean.” (*BM* 272).

What Ann was finally beginning to realize was that her appeal to a pristine Mars as highly significant for science[56] was not even rhetorically powerful enough to persuade her fellow scientists and so of course it would not carry the weight with non-scientists that she thought it should. She began to notice how Hiroko used the religious significance of viriditas to imbue terraforming with a value for people beyond its instrumentality. This value is best seen in Sax's increasing care for all living things on Mars.[57] Ann tells the young Reds,

The areophany has always been understood as a green thing, right from the start. I

56 Cf. Huston (236).

57 “Trudging over the rubble, alert for any plant life underfoot, Sax veered toward his car” (*BM* 639).

> suppose because of Hiroko, because she took the lead in defining it. And in bringing it into being. So the areophany has always been mixed up with viriditas. But there's no reason that should be. We have to change that, or we'll never accomplish anything. There has to be a red worship of this place that people can learn to feel. The redness of the primal planet has to become the counterforce to viriditas. (*BM* 272)

None of the Reds were enthusiastic about Ann's position to say the least, but there is a truth in Ann's point that Redness must be an integral part of the areophany in order to have the impact that she and the other Reds hoped for. Whether they liked it or not, the areophany is the shape that the Utopian Call took on Mars, and thus positioning Redness outside of it would have meant that Redness could be nothing more than a counter-revolutionary position. Shaun Huston notes that, “The question thus becomes: will humans terraform Mars in order to reproduce an environment convenient to human activity, or will they choose to terraform in a manner that co-operates with the Martian environment and gives rise to a unique order of life” (234)? Ann is simply trying to make sure that the Reds have a say in the direction that terraforming will take because stopping it is essentially impossible.[58] There is an important lesson here to remember as we search for our own Utopian Call in the Anthropocene. Ecological interventions will continue to happen and what we do not want is for them to continue to look like they do in the Capitalocene, fracking and strip mining being prime examples, but neither do we want them to be large scale “geoengineering” projects that play dice with the environment.[59] The respect for the land that the Reds profess is a valuable corrective to an over-reliance on techno-fixes as the principle way for guiding the Anthropocene.

Despite its focus on the land, there is also a way in which the Red position was highly anthropocentric, albeit in a way quite different from Sax's and the other greens.[60] While seemingly

58 Cf. Cho (76).
59 For a brief review of the types of geoengineering projects, as well as their potential “side effects,” that are under consideration see Lawrence et al.
60 Cf. Huston (234); Otto (250).

“worshiping” rock, in this case the “pristine” landscape of Mars, when she makes rock sacred she is at the same time separating humanity from the rest of the universe apart from Earth. There are two presuppositions in this line of reasoning that rely on human exceptionalism. First that humanity (or even organic life in general) is not part of the natural world in precisely the same way as everything else in the universe. Second, that there is a “real” or “true” Mars that exists outside of any contact with human beings; that while the phenomenal Mars is dynamic, the “real” Mars is static and everything that comes after contact with human and non-human life is simply the history of the contamination of the “real” Mars. These two presuppositions – that humans are distinct from the natural world and that the “true” nature of the planet is the state that exists outside of human contact are just the other side of the coin from treating all of the natural world as mere resources for humanity.[61] These two positions offer at best a feeble relationship between humanity and the rest of the world, in one case as the master or lord of creation and in the other case a total non-relation.

While the non-relationality of the Reds is physically untenable, it does contribute to a position of minimal interference in an environment, or at least attempts to make sure that when humans interfere with the environment, they do so in the most respectful way possible. However, the pure Red position even balked at supporting *minimal* interference. When Art Randolph was trying to get the Reds on board with the constitution he asked what they thought about ecopoesis, the most respectful form of terraforming in the trilogy. They told him, “The ecopoets just use biological methods to create changes in the atmosphere and on the surface, but they're very intensive with them. We think they all should stop, ecopoets or industrialists or whatever” (*BM* 134). The lumping together of ecopoets with industrial terraformers brings to mind the concerns of environmental Marxists such as Jason Moore, who believe that the word “Anthropocene” similarly glosses over “questions of capitalism, power and class, anthropocentrism, dualist framings of 'nature' and 'society,' and the role of states and empires”

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61 Cf. Buchanan (26).

("Introduction" 5). That is, the Reds see humanity as such as the problem, which means that any human relationship with the land will be bad, no matter the form or the content. When pressed, the Reds cannot reasonably hold this position, and so do end up adjusting some of their attitudes, because "the current situation could not be wished away, they had to start from there" (*BM* 134).

If nothing else, the Red's position is understandable as a polemic against the instrumentality of Sax's early position. Even if Russell's position is tempered by the idea of stewardship over the mineral, vegetable, and animal worlds, the Reds can make sure that environmental respect is put into practice.[62] Jameson argues that the green position represented by Hiroko, as well as the Red position, represented by Ann, both form a negative ideological force: "Ann Clayborne because she herself implacably personifies refusal and opposition, Hiroko because her ultimate incarnation and avatar seems to have become absence itself: she negates empirical reality in the spirit of an ideal, while Ann seeks to undermine it in the political activism of an opposition to activism and an attempt to end history itself in a different way, by bringing change and 'progress' to a halt" (405). These points only really work when viewing Ann's or Hiroko's positions in isolation, but they never are isolated in the text but always interact with one another or with other positions (such as Sax's early industrial terraforming). As ingredients in the Utopian Call, these two positions do not remain purely negative but help give shape to positive aspects of how humans should relate to their larger environments.

Revolutionary Space and Recruiting Utopian Subjects

The Utopian Call is first and foremost about major changes in society, from changing economic and political systems to changing the ways that people relate to each other and the rest of the world around them. So, in some ways the Utopian Call, and the utopian struggle in history, and most likely utopia as such is about revolution.[63] In an important sense, the entirety *Mars* trilogy is Robinson meditating on

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62 Cf. Otto (245).

63 The German anarchist Gustav Landauer equated revolutions with utopias bursting forth in history in between periods of relative stability in his 1908 essay titled "Revolution".

the practical meaning of revolution, especially in terms of what constitutes a revolutionary consciousness in a population. The three books in the trilogy each dramatize the creation of a different type of revolutionary consciousness that develops around basic economic, social, political, and technological institutions on Mars. Each book ultimately culminates in its own respective version of revolution: in *Red Mars* it is in a classic form of rebels trying to seize control of (State) apparatuses and ends up in a spectacular failure with most of the first hundred and their allies either dead or in hiding. *Green Mars* ends with a far more successful revolution but leaves unchanged too many institutions of power. Because the areophany had been working on the Martian population for quite a few decades and continued to be refined over the course of *Blue Mars*, the third book ends with a truly democratic revolution that was meant to allow even more space for the Utopian Call to transform the people on Mars.

With the failure of the first revolution in the second half of *Red Mars,* Robinson calls into question the logic of "the Revolution" wherein a revolutionary body effects a regime change then uses the governmental institutions to bring about a more just social order. The large scale industrial terraforming projects led by both terran national governments and transnational corporations led to a revolutionary consciousness among the Martian inhabitants along classical Marxist lines because one of the consequences of the scale of industrial terraforming was that it consolidated the decision making process into the hands of a few. The leadership of certain states did not change the logic of the owner class versus the worker/producer class. In the *Mars* Trilogy many of the actual nations were increasingly captured as "flags of convenience" for individual transnational corporations, but this is just the most glaring example of the nation as member of the owner class. When he was trying to understand the events leading to the failed revolution, Sax noted that, "the emergence of the transnationals in the 2040s had set the stage, and was the ultimate cause of the war" (*GM* 222). That is, the consolidation of capitalist firms into larger and larger corporations had created a situation in which

power was too concentrated at the top and finally "in 2060 when the transnats had come under fire from desperate poor countries, it had been the Group of Seven and its military might that had come to their defense" (*GM* 223). Pragmatically, from the perspective of the worker/producers, what difference does it make if a nation is captured by a single capitalist enterprise (no matter how large and "diversified") or if a nation is captured by capitalism as such?

In "Remarks on Utopia", Robinson states that,

> The Mars novels therefore describe three revolutions because I felt that in *Pacific Edge* I had dodged the necessity of revolution, however broadly conceived. And yet I was not comfortable with the idea of reinvoking the violent revolutions of the eighteenth and twentieth centuries; they didn't seem appropriate to Mars or to our current world either. The classic revolutions had often been failures, in the sense of causing such violent backlashes that they made more problems than they solved, principally by institutionalizing violence. I also felt very uncomfortable about being a first-world person stating that revolutions were necessary in third-world countries, when first-world weapons systems would then be used against them. Revolution itself needed to be reconceptualized, I felt; and indeed in the various velvet revolutions of 1989 I had just seen different models for rapid change in social order. These new images for revolution became one of the central preoccupations of the Mars novels. We're still stuck with this problem, of course, because we still need a revolution or two. (4)

Part of the lead-up to the second Martian revolution focused on theorizing what had went wrong with the first one in 2061.[64] Sax noted that the events of 2061 did not just concern Mars, but concerned all of Earth and especially the global capitalist system, which at that time was ruled by giant corporations called "transnats": "It had been, he concluded, a deadly synergistic combination of fights among the

64 Cf. White: "The implication is that the entirety of *Red Mars* can be seen as a kind of prologue, the final failure of an old political paradigm to bring about a just social order in a new world" (210).

transnats, and revolutions by a wide array of disenfranchised groups against the transnat order" (*GM* 224). Even though the Martians were engaged in their own utopian struggle and caught in the grips of their own nascent Call, they struggled simultaneously with many other peoples against the same unjust system, and like all of their counterparts on Earth, the Martians failed spectacularly.

The failure ultimately happened because, "in 2060 when the transnats had come under fire from desperate poor countries, it had been the Group of Seven and its military might that had come to their defense" (*GM* 223). That is, the failed revolution was precipitated by a crisis in capitalism as a world system, and the forces who struggled against it were defeated by the larger countries joining their military might to put down all of the rebellions and "When it was over, Mars had been seized firmly in the grip of the major transnationals, with the blessing of the Group of Seven and the transnat's other clients. And Terra had staggered on, a hundred million people fewer" (*GM* 224). Because of the spectacularly bloody failures of the first attempt at revolution, Nadia, who eventually became the first president of an independent Mars, told a working group at the Dorsa Brevia conference that was trying to make sense of the events of 2061, "I'm tired of this being discussed in purely military terms...The whole model of revolution has to be rethought. This is what Arkady failed to do in sixty-one, and this is why sixty-one was such a bloody mess" (*GM* 359).

The underground essentially never came up with a solution to the question of how to conduct a revolution, and even as it became clearer that they all had workably similar goals (except perhaps for the more radical Reds), "the argument over methods only got more vehement. Back and forth it would go, Nadia against Coyote, Kasei, the Reds, the Marsfirsters, and many of the Bogdanovists" (*GM* 392). The closest they came to agreeing was to make violence more strategic and targeted like a coup, or as Art Randolph put it, "integrated pest management."[65]

The problem of course was that Earth was still casting its long shadow on Mars, and as such

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65 Cf. Cho (72).

Mars was not simply an outpost for large corporations to extract resources from. It was that, but it was also a part of the terran political system, and as Nadia pointed out to her comrades, "As long as they're in chaos, we're in danger" (*GM* 376). Earth was indeed still in the chaos that is engendered by a system that perpetuates and intensifies inequality. As Sax noted to himself earlier, "nothing else had changed. *None of its problems had been addressed*. So it all might happen again. It was perfectly possible. One might even say that it was likely" (*GM* 224, emphasis added). It eventually did happen, with the occurrence of the second Martian revolution which did have some moments of violence and destruction of land and installations, but this second iteration did not share the essential logic of the revolution of '61 as that of a struggle between two camps opposed along lines of class antagonisms. The partisans of the second revolution (even those who were the same actual characters) were marked by a different kind of consciousness than class consciousness.

Revolutionary consciousness on Mars was a result of the production of a uniquely Martian culture rooted in the areophany and spread through the underground and the "Demimonde" by the movements of certain peoples and groups who adopt, enact, and spread various customs that arise both organically and deliberately. The customs that help to comprise the Martian culture emerge alongside the economic and political practices of the underground and as such are part of a shared vision for what Martian society could be without terran powers in control of the planet.

In fact, the second Martian revolution owed much of its success to the existence of the Demimonde – a collection of cities and settlements that were not officially sanctioned but were home to many people and groups who were ostensibly anti-Terran. Nirgal was in shock the first time he visited a settlement in the demimonde. His greatest confusion was around the fact that they did not live in fear of being attacked or arrested by terran forces.[66] Desmond explained to him that,

It's possible they could be. But they haven't been yet, and so they don't think it's worth the

66 This "hiding in plain sight" is similar to how Michael Collins and many of the other members of Irish independence movement treated the British colonialists. See for instance Coogan (33).

> trouble to hide. You know it takes a tremendous effort to hide...And some people down here just don't want to do it. They call themselves the demimonde...Anyway, now the resistance includes the underground and the demimonde, and having the open towns is a big help to the hidden sanctuaries, so I'm glad they're here. At this point we depend on them. (*GM* 41)

The demimonde acted as a buffer between the dominant terran forces (the UNTA) and the Martian underground – which was quite beneficial for the first hundred[67] or the more radical parts of the underground like the Reds or the anarchist Bogdanovists, all of whom could never be out of UNTA's cross-hairs. Perhaps even more significant than the fact of being a buffer is that the demimonde acted as a conduit between the official Mars, which for instance was still in charge of the terraforming efforts, and the underground, through which information and people could flow. Thus while the UNTA had much more power overall, the underground had the advantage in information because of the demimonde: "The Sabishiian intelligence experts, however, thought that the conference was unknown in Burroughs or Hellas or Sheffield...for clearly they had penetrated far into the halls of UNTA, and indeed throughout the whole structure of transnational power on Mars. *That was another advantage to the demimonde; they could work in both directions*" (*GM* 355, emphasis added).

Because of the unofficial nature of the demimonde and underground, the stitching together of various groups into a coherent resistance to the UNTA did not rely on official channels of information flow, but rather relied on different individuals traveling throughout the underground making and reinforcing connections between different communities. In *Red Mars,* John Boone functioned in this capacity as he roved around Mars: "Whether Arkady had intended to or not, he had made John one of the leaders of his movement...He could be a sort of bridge between this underground and the rest of the people on Mars – operating in both worlds, reconciling the two, forging them into a single force that

67 Desmond to Nirgal: "The UN is out to get the First Hundred, if you ask me. And its family too, unfortunately for you kids" (*GM* 41).

would be more effective than either alone. A force with the mainstream's resources and the underground's enthusiasm, perhaps" (350). The fact that the revolution failed so miserably implies that one person cannot fill this role – especially considering that after John's death there was no infrastructure to maintain the flow of information between the official Mars and the more radical members of the underground, which is why the demimonde became so important for the success of the second revolution: it was building institutions of duel power paralleling the official society and did not rely on any one person to continue functioning effectively.

Once the repressions began in earnest by the terran forces, the demimonde cities also began to absorb the people of the underground who were fleeing their sanctuaries as a result of the raids leading up to the second Martian revolution (*GM* 513). However, the demimonde is not without danger: as they were absorbing refugees from all the scattered sanctuaries, the cities of the demimonde became bigger targets for the UNTA and when those in power came to believe that a show of force was the more effective way of maintaining control than looking the other way the UNTA forces violently seized control of Sabishii, the "capital" of the demimonde, killing Hiroko and most of her inner circle in the process (*GM* 520). Thus while it may be necessary to have semi-official (or at least not in open conflict with those in power) spaces and institutions that can act as bases from which revolutionary forces can build up their power in times of relative peace, these spaces will be vulnerable to state and/or corporate repression if those in power do not feel that tolerance is in their best interest.

Roughly halfway through the trilogy, there was a conference held among the Martian underground and demimonde to try to coalesce the resistance forces. This conference took place in a settlement called Dorsa Brevia and was a touchstone for the revolutionaries on Mars for years to come. For example, in the lead-up to the second Martian revolution Nirgal told Maya that when he talked to people, "I use the Dorsa Brevia document. My notion is that we should enact it immediately, in our daily lives" (*GM* 470). The document that Nirgal alludes to is a list of points of agreement about what

the various groups that composed the underground wanted Mars to be like if and when they gained permanent political control of the planet. The document tried to balance individual rights with actual material respect for the planet and the emerging biosphere as well as to ensure that some of the worst forms of exploitation and domination that were not only allowed but encouraged under capitalism could have no legal or political justification on Mars.[68] That is, they tried to take the animating force of the areophany and put down practical principles that they could eventually codify and live by. In our terms, the Dorsa Brevia Accord was a kind of agreement on how to move from the Capitalocene to a good Anthropocene.

However, the Dorsa Brevia Agreement had no legal status on Mars, especially when it was first adopted as most of the people who drafted it likewise had no legal status on Mars. But what it did do was to articulate the Utopian Call in some specific ways that could be used as Nirgal did to rally people to the revolutionaries' cause. Cho argues that, "The Dorsa Brevia Conference gives the Martian population a more definitive collective form, turning this 'collection of strangers' into an agonistic plurality" (75). The revolutionary forces on Mars could use the demimonde as a space to recruit those who were not yet part of the underground – but recruit them to what exactly? The Dorsa Brevia agreement gave people like Maya and Nirgal a positive articulation of their utopian struggle instead of just a vague awareness that the world-system they all lived under was unjust and needed to be replaced.

Ultimately, the Dorsa Brevia agreement was used as a starting point for the new Martian constitution following the second revolution: "The declaration...remained the underground's best effort to write down what they had agreed on back when they were out of power, so it made sense to start with it; it gave them some precedent, some historical continuity" (*BM* 125). Thus, while the specifics might have changed going from the Dorsa Brevia Agreement to the Martian constitution, it was important for the underground to articulate a shared vision (no matter how provisional) while still in the

68 Cf. Dynes (162).

middle of their struggle, and indeed at a point where the possibility of realizing their visions seemed remote at best, or utopian in the pejorative sense. So although unrealistic at the time of articulation, the act of articulating it and then continuously re-articulating this vision was part of what helped it to eventually become possible and ultimately to be realized.

Much of the narrative of each book consists in the lead-up to the respective revolutions, and while the revolutions were each precipitated by the conflicts between Martian (utopian) forces and the hegemonic Terran (capitalist) world-system, the lead-up to the revolutions consisted of building a shared revolutionary (utopian/Martian) consciousness through creating and participating in new Martian institutions that would vie to replace old terran institutions. Knoespel states that, "Although economic theories are considered, the finance systems that enable the Martian cities to be sustained are not described. As a consequence, technological apparatus – the propulsion systems, mining, city canopies, the genetics of areoformation – contribute to an ideological trajectory" (130), meaning that the fact that humans had to adapt their technologies for life on Mars in turn had a profound effect on how they wanted Mars to be organized. One might say that the creation of a *livable* Anthropocene led directly to the desire for more just social institutions for the Anthropocene.

Becoming Utopian Subjects: Areoformation

While the areophany is the generic name for the Utopian Call in the text, the process by which this ideology manifests in practice is called "areoformation."[69] Areoforming stands in obvious contrast to terraforming, or the process of making Mars, or any other planet, more earth-like and thus more habitable for humans, while areoformation is the process by which the people become more Martian. Areoformation happens as the people on Mars develop the areophany from a vague yearning for a system in which both life and (non-organic) place have not merely instrumental value but rather for a coherent ideology where these notions manifest in various social and cultural practices such as their

69 See also Dynes (163).

economic system or the feral movement. Thus as the narrative progresses there is a complex interplay between terraforming Mars and areoforming people, or as Chris Pak stated, "Robinson's *Mars* trilogy explores the fusion between the physical adaptation of the environment and the transformation of social practices and institutions" ("Energy" 92). This dialectic dramatizes the search for the good Anthropocene and is very resonant with the type of diffusion of agency that is argued for by Latour.

Latour sets up the problematic of establishing a new kind of relationship with the land (and nonhuman life) that does not rely on the conceptual division between nature and society as such: "Politics needs a common world that has to be progressively composed. Such composition is what is required by the definition of *cosmopolitics*. But it is clear that such a process of composition is made impossible if what is to be composed is divided into two domains, *one that is inanimate and has no agency, and one which is animated and concentrates all the agencies*" (14, emphasis in original). Both the human and the nonhuman have agency in the interplay between terraforming and areoforming: people work towards making the land more hospitable for humans as well as for all other nonhuman organic life. When Nirgal is attempting to settle himself down in one area and become an ecopoet, others in his area "were beginning to formulate a local 'native inhabitant' list...they were developing their own mix of high-altitude fauna and flora, and there was a growing sentiment to regard this mix as 'natural' to Tyrrhena, to be altered only by consensus" (*BM* 394). Here we see that the "naturalness" of the local ecology is something that is created but not just by direct and conscious human action. Many of the local plants had come to them on the wind, but once established help to create what was natural in the local ecology. The Martian ecopoets helped to create the local ecologies but allowed these local ecologies (and thus how humans fit into them) to be shaped by the wind or watersheds, which were both shaped by the geological formations.

What we see here is not exactly humans acting on the natural world, but people who make interventions that are guided in part by their own desires for what the land should be but also by how

the rocks, plants, animals, wind, water, etc. express their own desires, so to speak. Latour argues that

> the point of living in the epoch of the Anthropocene is that all agents share the same shape-changing destiny, a destiny that cannot be followed, documented, told, and represented by using any of the older traits associated with subjectivity or objectivity. Far from trying to 'reconcile' or 'combine' nature and society, the task, the crucial political task, is on the contrary to *distribute* agency as far and in as differentiated a way as possible – until, that is, we have thoroughly lost any relation between those two concepts of object and subject that are no longer of any interest anymore except in a patrimonial sense. (15, emphasis in original)

The large industrial terraforming projects carried out in *Red Mars* and continuing in the trilogy even as an ethic of ecopoesis had taken hold in many of the "green" Martians were examples simply of humans acting on a world that they were ontologically separate from. That is, they were carried out according to a strict division between "society" and "nature," with clear subjects and objects, and only the anthropocentric desires for *human* habitability served as the criteria for the politics of terraforming. But as the process of areoforming developed, from Hiroko and her small band's mysticism or John Boone's hope for a Martian society that escaped the inertia of Earth's history into something that was taken for granted among the Martian natives, it changed the conceptual relationship between humans and the land.

The first chapter of *Green Mars* is titled, "Areoformation," and in the italicized section opening the chapter there is a discussion of how despite the fact that all of the life brought to Mars is terran, as well as the people making the interventions on the landscape, Mars itself will have the greatest impact on how life evolves there, especially as the time frame is drawn out into the future: "The process, no matter how much we intervene in it, is essentially out of our control. Genes mutate, creatures evolve: a new biosphere emerges, and with it a new noosphere. And eventually the designers' minds, along with

everything else, have been changed forever. This is the process of areoformation" (3). Here we see agency both diffused and differentiated widely, with human beings only representing one set of agents among many who create the world in an ongoing process of areoformation. Latour argues that the process of changing our (understanding of our) relationships with the rest of the world will have a profound effect on politics. He states that, "no one will be surprised to find their decisions entangled with former 'forces of nature' that will have taken on a totally different tenor now that they appear as one of many new forms that *sovereignty* has taken. Forces will not enter the political arena as what stops discussions but as what feeds them" (16, emphasis in original). This kind of politics is institutionalized on Mars through the creation of the environmental courts under their constitution in *Blue Mars*, which is one of the most powerful political institutions in the new government (155). That is, the relationship between humans and the land is the starting point for political discussions, or their context, and any political solutions have to take them into account. The land must be taken into account in terms of avoiding some of the worst types of environmental exploitation and degradation as typical in the Capitalocene as well as in terms of the various geological and biological processes as if they were agents who have interests of their own and would continue to act in line with those interests. Thus politics, in this regard, is not only concerned with balancing the competing demands among humans, but also with the institutionalization of the environmental court as perhaps the most powerful governmental body on Mars. Nonhuman interests enter into this balance from the beginning of any discussion and are not made to fit merely human concerns after the fact.

As the areophany develops, the ideals and principles that it expresses become more and more internalized in the Martian population leading eventually to a radical shift in society.[70] During the constitutional convention in *Blue Mars,* Art noted how the generations born on Mars did not fit well into older terran political categories: "They were Martian natives. Nisei, sansei, yonsei – whatever

70 "But Sax," Michel protested, "right here on Mars we have seen both patriarchy and property brought to an end. It's one of the greatest achievements in human history" (*BM* 426).

generation, they had been formed in large part by their Martian experience – areoformed, just as Hiroko had always foretold" (150). It is this radical shift in values, or *werteswandel* (mutation of values), that is the greatest effect of areoformation and is what made possible the third and finally utopian revolution on Mars. As the process of areoformation progresses, the revolutions on Mars become more successful, and the reactionary forces become more impotent because they are then dealing with people who have forms of consciousness that simply do not accept systems of domination and exploitation as normal or natural. The process of areoformation ultimately resulted in the coming of a truly utopian society in the final pages of *Blue Mars,* wherein "Nowhere on this world were people killing each other, nowhere were they desperate for shelter or food, nowhere were they scared for their kids. There was that to be said" (761). That is, the *Mars* trilogy is not primarily concerned with the details of what a utopian society could look like outside of some of its constituent but still inchoate parts, but the bulk of the narrative shows the process of areoformation, or the Utopian Call becoming louder and more ubiquitous until the advent of "The third Martian revolution [which] was so complex and nonviolent that it was hard to see it as a revolution at all, at the time; more like a shift in an ongoing argument, a change in the tide, a punctuation of equilibrium" (*BM* 743).[71]

The most significant character for setting the tone of the "ongoing argument" that shifted to inaugurate the third Martian revolution was John Boone. William J. White states that, "[John] Boone is a mystic alchemist, pursuing an 'areoformation' that will shape humans to Mars. That pursuit is the central motif of *Red Mars*" (210), and indeed it is not just *Red Mars,* but the political tone of the entire trilogy that is overwhelmingly set by Boone – whose rivalry with Frank Chalmers led to his death in the opening chapter of *Red Mars.* Boone is the first man on Mars and is the moral center of the First

71 One of the historiographical strands running through the trilogy is working through the analogy that history is Lamarkian, first expressed by the Russian anarchist, Arkady: "No, no, no, no! History is not evolution! It is a false analogy! Evolution is a matter of environment and chance, acting over millions of years. But history is a matter of environment and choice, acting within lifetimes, and sometimes within years, or month, or days! History is Lamarckian! So that if we choose to establish certain institutions on Mars, there they will be! And if we choose others, there *they* will be" (*RM* 88)!

Hundred, but most significantly he is the mainstream: "Robinson telegraphs Boone's heroic status by his fame, his charisma, and his identification as 'astronaut'" (White 216). While Arkady's anarchism expresses forcefully the utopian ideal of freedom that has undergirded revolutionary thought and praxis for centuries and Frank's realpolitik represents the idolization and worship of power, at the beginning of the narrative John is almost apolitical by virtue of his boy-next-door persona. Yet throughout the narrative of *Red Mars* we see his revolutionary consciousness develop as he was interpellated into being a utopian subject.

Carol Franko argues that, "John Boone is not looking so much for truth as for a new and better social existence based in the physical realities of Mars and in what humans can do with those realities" (118). Franko argues that Boone's utopian contribution to Mars follows a path of Bakhtinian dialogism, and that, "In the first volume of the Mars trilogy, John Boone is the character most concerned with developing a definition of 'we' in relation to the 'here' of Mars, and his death furthers this goal. Boone's death transforms the theme of utopian destiny in *Red Mars*" (120). Thus it was not simply the politics that he ended up with that is significant politically, but how he himself was the mechanism by which a Martian culture or ideology began to develop. Abbott states that, "Boone seeks utopia through dialog, and the speech in which he sums up his ideas about forging a new Martian society pulls together and packs together thoughts and suggestions that he has picked up in years of conversation" (78). That is, by traveling around the planet and visiting different groups of people and developing his own ideology dialogically with all those he spent time with he was able to stitch together enough of a common Martian identity that was important both culturally and politically,[72] even if the process begun by his travels wouldn't reach maturity for well over a century after his death.

The mechanism by which diverse groups are stitched together to form a coherent imagined community on Mars involves a few individuals following in John Boone's footsteps and going from

72 Cf. Abbott (74).

group to group, talking to everyone – or what the Coyote wryly called “the John Boone method.” Art Randolph was attempting to do just that at the beginning of *Blue Mars* when they were trying to form the first independent government on Mars following the successful revolution at the end of *Green Mars.* The “John Boone method” appears to be Robinson's way of trying to show how an imagined community could be created in a bottom-up fashion in an era of quick travel and even quicker communication. This process of utopian interpellation contrasts with top-down cultural production through mass media and allows for more democratic control over the shape that the community took, even if at the same time the bonds of the imagined community would be more tenuous because they would need to be renewed and refreshed from time to time in a way far more time consuming than the on-demand nature of mass media. Markley states that, “In all three novels, major characters...wander the planet, at times almost aimlessly, working on various projects, meeting new settlers and old friends, and taking stock of the infinite changes being wrought on the planet and its inhabitants. In some respects, this rootlessness seems a necessary antidote to the bureaucracy, interference, and tyranny of metanational capitalism” (139).

In an analysis of the Chilean student movement of 2011, media critic Jorge Saavedra Utman argued that one of the significant factors that gave the student movement its power was the emergent commons based on the appropriation of “voice” from below (8); with voice “understood as the process in which people give an account of their life and make the narration a constituent element of democracy” (4). Utman argues that the creation of a communicative commons was facilitated by what he termed “walled intimacy practices” which “helped to move from an individualistic and consumerist notion of democracy by making an explicit demand to first listen, talk, and – as long as it was possible – trust someone before trusting in something” (98). That is, Utman argues that the ideology that emerged from the coming together of activists, students, and other interested parties was preceded by new forms of sociality that required safe spaces for intimate contact such as within peoples homes, at

community picnics, and later at occupied campus buildings (84). Ultimately, Utman believed that the movement failed to sustain itself because the communication technologies, most notably Facebook, reproduced neoliberal logics of individualism and talking rather than listening (185). The problem was not technology or social media platforms though, but rather the fact that the most important factor was "the cultures of participation in which these practices were embedded" (193). That is, the "walled intimacy practices" that helped to foster greater political participation for historically marginalized groups, or the voiceless, did not have enough time to become institutionalized to sustain the student movement in Chile. Similar to the situation in Chile as described by Utman, Martian ideology formed as an effect of intimate communicative practices, but with the addition of enough time to create other opportunities for participation such as the implementation of a non-capitalist economic system.

This process plays out most explicitly throughout *Green Mars,* and then to a lesser extent in *Blue Mars,* mostly through the characters of Coyote and Nirgal in the ways in which "eco-economics" and the gift economy are implemented as the basic economic structure for the Martian underground.[73] Then we see it politically through Nirgal, Art, and Nadia at the Dorsa Brevia conference, especially through the use of highlighting shared desires and how those shared desires could actually manifest in shared political commitments for people who had often conflicting ideologies. We also see it politically through Maya in the way that she would prepare the ground for the second and third revolutions. Nirgal represents the greatest practitioner of the "John Boone method" on Mars in terms of building the Martian culture. More than anyone else in the trilogy, Nirgal acts as the ethical compass for the new society.

In the character of the Coyote/Desmond the cultural stitching is done through the implementation of a large-scale project, eco-economics, a system "in which basic necessities are distributed in a regulated hydrogen peroxide economy, where things are priced by calculations of their

73 Cf. Cho (76).

caloric value. Then when you get past the necessities, the gift economy comes into play, using a nitrogen standard. So there were two planes, the need and the gift" (*GM* 369).[74] Eco-economics was the economic system of the underground and the demimonde: as Desmond told Sax at one point, "In the South we have lived by eco-economics for years now" (*GM* 236). Eco-economics made it into the Dorsa Brevia Agreement, which itself acted as an articulation of the Utopian Call on Mars: "The metanational order ruling Earth...cannot be applied here. In its place we must enact an economics based on ecologic science. The goal of Martian economics is not 'sustainable development' but a sustainable prosperity for its entire biosphere" (*GM* 389). The implementation of eco-economics marks the conscious choice of the Martian underground to move out of the Capitalocene and into a good Anthropocene. Then in *Blue Mars*, during the constitutional convention in a debate with one of Jackie Boone's hangers-on, one of the first hundred and a founder of eco-economics, Vlad, stated that "we have been preparing for this opportunity for seventy years" (147) And indeed, once they had their opportunity to formally institutionalize and codify eco-economics it was added to the constitution,[75] providing for a commission that "was to oversee the establishment of a version of the underground's eco-economics, including both not-for-profit enterprises concentrating on the public sphere, and taxed for-profit enterprises which had legal size limits, and were by law employee-owned" (*BM* 155).

Of course, it is not simply enough to work out an economic theory and then just legislate it into being, or even just to convince enough people that it would in fact benefit them to practice it. It had to be continuously applied and in such a way that people would want to use it, which is where the Coyote became important for the underground: "What did Desmond recall...out there driving around Mars in disguised boulder cars, being loved by Hiroko, flying over the night surface in a stealthed plane, *playing the demimonde, knitting together the underground*" (*BM* 710, emphasis added); and he did so

74 Cf. Markley (123).

75 Cf.: "Instead of exploding the congress, however, the hardest of all problems, the economic, becomes the catalyst which enables the successful creation of the new Martian world order" (Burling 164).

by moving the surplus goods of different settlements around even if each settlement was "mostly self-sufficient, actually, except for these few criticalities" (*GM* 42).[76]

In the process of establishing eco-economics as *the* economic system of the underground, Coyote was also doing whatever he could to advance anything that could help create a free Mars: "He was a strong supporter of all Red efforts, apparently, and he had been a big help to them from the start, giving them aid from the underground refuges, connecting them up with each other, and helping them to build their own refuges" (*GM* 130). Pak argues that the implementation of eco-economics is the basis for a revolution without war, what Art had called "integrated pest management" ("Energy" 96).

The Coyote's protege in spreading eco-economics was Nirgal, who helped to implement it when he left Hiroko's polar refuge, Zygote, as a teenager. But Nirgal quickly surpassed Coyote, and really everyone else in the narrative, as the most important figure on Mars in driving both the second and third revolutions: "Some people said Nirgal had filled John Boone's empty shoes, that Nirgal had done the work John would have done had he lived" (*BM* 372). And indeed, everywhere he went there was always a crowd with him (*GM* 299), and through his nomadic wanderings Nirgal inadvertently created what became the largest and most influential political party on Mars, Free Mars, which helped to bring about the successful second revolution and then dominated the Martian political landscape until the third: "Free Mars was now a political party, the biggest on Mars. It had not always been that way...In many ways it had been Nirgal's creation. So many of the natives had been interested in autonomy...they had wanted something new. And so Nirgal had traveled around the planet, and stayed with people who organized meetings or discussions, and this had gone on for so long that eventually people wanted a name" (*BM* 356).

Markley argues that,

76 Desmond to Nirgal: "Christianopolis makes light bulbs, and Mauss Hyde grows new kinds of plants, as you saw, and Bogdanov Vishniac makes everything big and difficult, like reactor rods and stealth vehicles and most of the big robots, and your Zygote makes scientific instrumentation, and so on. And I spread them around" (*GM* 42).

> Nirgal, therefore, cannot be described as a 'postmodern' self in the usual sense of that term; his subjectivity is a function of his political-spiritual calling as a spokesperson and exemplar of viriditas...For this ectogenic *homo martialis*, one does not practice eco-economics so much as one becomes a function of its aerophonic energies. The generation of Martian natives which he represents marks the end of the classically conceived *homo economicus*, that phantom of the endless self-aggrandizement, who must be banished for any ecotopia to thrive. (140)

That is, Nirgal more than any other character in the trilogy represents a fully interpellated utopian subject, who has indeed appropriated the utopian struggle as his own. While other of his generation make their mark politically, such as Jackie Boone[77] and Ann's son, Peter, Nirgal is the one who endeavors to explore what a utopian existence might look like in reality and then to live it out in all of its complexities.

Areoforming Science

According to Robinson, science in general has been a kind of un-self-aware utopian project: "But to me the idea of science as a utopian coming-into-being has seemed both true and useful, suggestive of both further stories and action in the world" ("Remarks" 4); and when asked in an interview what are some of the features of our current world that he would save, Robinson replied, "I would retain science, as a method. The pure play of science, I think, is one of the best expressions of human values" (Foote 282). The important thing here is that science expresses *human values* and not value in financial terms. Thus according to Robinson, "we are entering a zone of history where the struggle between science and capitalism for dominance of our culture...may become explicit and open. I hope so...I've been arguing for years that the utopian ethics and politics buried in the scientific method makes science the

77 Jackie represents the danger of maintaining hierarchies in the utopian struggle. Although she is committed to the Martian cause, the others "wonder if Jackie will try to create a system with a strong president, and use the natives' numerical superiority to become queen" (*BM* 136).

equivalent of the most powerful leftist politics we have ever had" (Canavan et al. 204). But the problem with this assessment is that science as it is often practiced in the real world is generally tied to capitalism, especially in the minds of many people on the Left, of which Robinson is fully aware ("Remarks" 13). However, Robinson maintains that science is a praxis – a leftist, utopian praxis – that is compromised because it functions in a capitalist world-system. But this gives rise to the big and sticky question of: "How do we liberate science from capital?" (Canavan et al. 206)

The answer that the *Mars* trilogy provides is also one of the clearest examples of areoformation in the trilogy – the gradual creation of "Martian science," mirrored by Sax's development from the archetypal "apolitical" scientist to one of the leaders of both the second and third Martian revolutions. Markley notes that, "Sax's efforts to regain his speech" after being tortured by the metanat forces "metaphorically underscore his emergence as a symbol and practitioner of a science committed to the ethical imperatives of viriditas and eco-economics" (137). By the time that the Dorsa Brevia conference took place in the middle of *Green Mars,* Sax had already gone through a few significant changes. He began *Green Mars* as an "apolitical" scientist, despite the fact that he lived in hiding because the dominant political forces on the planet wished to imprison or, what was more likely, kill him. Then Sax underwent plastic surgery and assumed a new identity so that he could slip from the underground through the demimonde and into official Mars so that he could rejoin the terraforming efforts that he had initiated in *Red Mars.* He was eventually discovered, captured and tortured, leaving him almost dead and suffering from brain damage. Finally, he went through a prolonged recovery during which Michel helped him to regain his speech, and as he recovered he also began to embody the areophany. That is, as he was being essentially rebuilt he was also being areoformed.[78]

There is a scene in *Green Mars* where Sax, under his assumed identity, attends a scientific conference and as it progressed Sax became disgusted when it became apparent that most of the

78 Cf. Leane (147).

scientists there took the positions advanced by particular metanats that funded their research independent of what the evidence suggested (213). As Mars became more and more governed by policies that were nakedly capitalist, and Mars itself was simply a battleground for different metanational corporations over resources, the scientists on Mars became not much more than puppets for those corporations, a reflection of our present world: "Science has always had to seek funding and capitalism has always tried to buy science and to own the results of science – to aim science's creation of ability and capital in certain easily owned directions, and to own that capital" (Canavan et al. 206). That is, when capitalism dominated Mars its science was what leftists had feared. The solution was not to give up on science, but rather to put a great amount of effort into helping to create a scientific community on Mars that was not beholden to the desires of Capital. Because, "supporting science is a necessary part of the project[, it] isn't the same as supporting capitalism, as some critics seem to assume. *We need to de-strand those two* and recognize that science is our ability to increase capacity to understand the world and then to manipulate it for our collective good" ("Remarks" 13, emphasis added). Robinson is here arguing that the way out of the Capitalocene and into a good Anthropocene is to put science consciously and deliberately to use for this end.

Towards the very end of the trilogy when Sax was devoting all of his efforts to helping to solve the problem of senescence in general and memory loss in particular, Sax reflected on the nature of the scientific community that he helped to create:

> As he watched them Sax realized for the first time that the versatile, responsive, highly focused nature of science that he was getting used to in Da Vinci was not confined to Da Vinci alone, but was a feature of all the labs arranged as cooperative ventures; it was the nature of Martian science more generally. With the scientists in control of their own work, to a degree never seen in his youth on Earth, the work itself had an unprecedented rapidity and power. In his day the resources necessary to do the work would have belonged to other people, to institutions with their own interests and

> bureaucracies, creating a ponderous and often foolish clumsy scattering of effort; and even the coherent efforts were often devoted to trivial things, to the monetary profits of the institution in control of the lab....They chose among themselves what to work on, and when they were asked for help, if they were interested, they could respond immediately. (*BM* 669)

Of course the overly-bureaucratic and clumsy science that was so problematic was science that was in the service of capitalism and what Sax is reveling in is the utopian nature of science when it is no longer shackled by capitalism.[79] He was reveling in the fact that science had finally become a collective effort at improving life for the collective, without any parasitic institutions that took what was of most profitable in scientific research for their own selfish gains. The point that Robinson is trying to emphasize here is that once capital no longer rules a society, as was the case on Mars, first in the underground in *Green Mars* then in its entirety in *Blue Mars*, then the utopian potential of science could blossom:

> now *this* was science, by God, this was Martian science, in the hands of the scientists themselves, working together for some collective goal that made sense, that was for the common good; pushing at the edge of what they knew, theory and experiment bouncing back and forth like a blur of Ping-Pong balls, week after week finding out more, going after more, extending the great invisible parthenon right out into the uncharted territory of the human mind, into life itself. It made him so happy that he almost didn't care if they ever figured things out; the search was all." (*BM* 681)

Utopian Subjectivity: New People and *Werteswandel*

Perhaps the most significant consequence of areoformation is the creation of a new people – a people that were citizens of utopia-in-waiting, or those who have internalized the Utopian Call in the course of the utopian struggle, via projects such as building and implementing an economic system that

79 Cf. Canavan et al. (206).

was based on a respect for the land rather than the exploitation of it and the creation of a science that had been "de-stranded" from capitalism. Once the Utopian Call had become such an integral part of who they were and having had so many glimpses at other possibilities they were ready to take a giant leap toward the utopian horizon; they had reached "the moment of mutation, history in the making, and they could see it right there in their hands – and so they seized the moment, and wrenched it in a new direction" (*BM* 746).

Even though all those immigrating to Mars from Earth brought with them the baggage of history, it became diluted enough and the problems shared by the settlers were Martian enough that the pincers of history slackened just enough to allow the Utopian Call to be taken up with an earnestness that would be difficult to achieve with the concentration of power and the barriers to broad social change that exist on Earth. During the constitutional convention there was a debate concerning how to balance individual rights against local communities that may wish to retain their particular hierarchies: "The young Martian natives, however, looked surprised that this was even considered an issue. To them the fundamental rights were innate and irrevocable, and any challenge to that struck them as just one more of the many emotional scars that the issei were always revealing, as a result of their traumatic dysfunctional Terran upbringings" (*BM* 129).[80] That is, the young Martian natives not only had been fully interpellated by the Call but their entire subjectivity had been formed by it and so their subjectivity and thus their worldview was entirely utopian.

As the trilogy progressed, terran history become less important as an intrinsic hindrance to the utopian struggle, even while it still acted externally to try to frustrate the Utopian Call in favor of the most entrenched hierarchies (capital, patriarchy, etc.). This is evident fairly early on in the chronology of the series when John remarks to Ann that, "Anyway, whenever I get discouraged about all this I try to remember that it's natural. It's inevitable that people are going to fight, but now we're fighting about

80 Cf. "They were embryo areurges, to use Michel's term, young gods operating their world, people who knew they were meant to be free, and were confident they would get there, and soon" (*GM* 514).

Martian things. I mean people aren't fighting over whether they're American or Japanese or Russian or Arab, or some religion or race or sex or whatnot. They're fighting because they want one Martian reality or other. That's all that matters now. So we're already halfway there" (*RM* 252). That is, one of the main struggles on Mars from the beginning was over the nature of the Utopian Call, and it was only those forces aligned with terran institutions, such as the UN (States) or a given metanational corporation (Capital) that were against the Utopian Call in itself. This alignment was best exemplified in the character of Phyllis Boyle – one of the first hundred's geologists who worked with both the metanats and the UN until she was killed by Maya during Sax's rescue from those same forces. On the other hand, all those who were becoming Martian first and foremost were becoming utopian subjects due to the power of the areophany, or the process of areoformation.

Similar to the way the utopian struggle progressed in *Xenogenesis,* as the Utopian Call becomes more integral to a society over time the new generations become monstrously different from the previous generations, and also like *Xenogenesis,* we see this monstrosity manifest not only socially and culturally but physically as well. For example, due to growing up in low gravity the people born on Mars are physically much larger than their terran born counterparts, and while this is just a phenotypic adaptation due to the lower gravity on Mars, it is also suggestive of how Earth is representative of not only history but of *the weight of history*, or the force that pushes down on the present that impedes the efflorescence of a better future: making the lower gravity on Mars not only a function of its physical mass but also of getting away from much of the oppressive weight of the past so that the newer generations can grow beyond what is possible for those born and raised in the oppressive societies on Earth: "If you were born on Mars your outlook was simply different, areocentric in a way that no Terran could even imagine – not just because of the whole complex of areorealities they had known from birth, *but also because of what they didn't know*" (*BM* 138, emphasis added).

Quite a few times throughout the trilogy it is remarked by one of the first hundred that the new

generations seem like a brand new species. Quite often this observation is made through the eyes of Maya during her political organizing when she finds herself surrounded by those born and raised in the utopian struggle on Mars. For example, when she was organizing in the lead-up to the second revolution, she noted that "a lot of them were born on Mars since '61. And they were different, profoundly different, sharing interests and enthusiasms perfectly incommunicable to any other generations...so that members of the old *Homo sapiens* were now coinhabiting the planet with a new *Homo ares*" (*GM* 474). Part of the problem here is a kind of utopian jealousy – the fact that the utopian struggle is a process – a long, multigenerational process – means that as the Utopian Call takes hold on a population some of what were merely goals for previous generations will be starting points for the newer until they seemed like "a new species, *with new minds of their own*" (*GM* 544, emphasis added). That is, there is at the very least a jealousy among the older generations because the newer will have a more intimate relationship with the Utopian Call, simply by virtue of having been raised under a more refined version of it, and this more intimate connection will give to the newer generations a different worldview which can even seem at odds with the Call itself from the point of view of the older generations.

In fact this jealousy can also become a sense of betrayal, such as Ann felt towards her son, Peter: "Once he had been hers. On this rock I will build. Peter Tempe Terra, the Rock of the Land of Time. The new man, *Homo martial.* Who had betrayed them. Remember" (*BM* 276). However, as the utopian struggle continued and Ann had had quite a few decades for the areophany to work itself on her, it was she who assuaged Sax in his moment of utopian jealousy (*BM* 728).

Late in the narrative, the new generations (as well as some of the terran born like Sax) began to manipulate their DNA to give them traits that are beneficial for their new (utopian) realities – ranging from the frivolous such as the ability to purr like a cat (*BM* 517) to the utilitarian like the ability to handle increased carbon dioxide levels like a crocodile (*BM* 411), so as to better handle the atmosphere

on Mars. The different types of genetic modifications that Zo and Ann see on their trip through the solar system illustrates how as the Utopian Call takes hold in earnest and more and more of the inertia of history is overcome, the newer generations will develop their own visions of utopia that were not even imaginable at earlier moments in the struggle. As Zo told Ann: “The young natives out here are less than fifteen m-years old, they've lived in point-one g all their lives, they don't care about Earth or Mars. They believe in the Jovian moons, in water, in swimming and flying” (*BM* 529). That is, at some point in the struggle in history, the children born of and into the Utopian Call will finally be able to leave Earth behind and pursue not only the impossible but the unimaginable.

Chapter 3

Cathedrals of Our Time:

Institutionalizing the Utopian Call in "Mother Projects"

In the first two chapters I expanded on some of the theoretical aspects of the Utopian Call. By focusing on two trilogies that had similar nova wherein characters who originally heard and heeded the Call were able to live for at least a couple of centuries, the original utopian subjects were able to see how the Call would be refined over a few generations and likewise could see (and react to) what the refinement of the Call would do to those subsequent generations. We saw how the most important effects of the Call are most easily seen on a social scale rather than on an individual one – how utopian subjects are progressively transformed by the embodiment of the Call up to the point that later generations appear monstrous even to those who originally heeded the Call. We also saw how the Call emerges in the struggle in history and then helps to direct the utopian struggle towards a particular point on the utopian horizon.

However, both of these trilogies are somewhat divorced from the Anthropocene: the Earth of *Xenogenesis* is not *our* Earth and is something that we could never extrapolate to from the Capitalocene, and while the *Mars* trilogy is much closer in this regard, the utopian struggle takes place on another world, even if it does so in the context of "our" Anthropocene. In this chapter and the one following we will be coming back closer to home, to theorize a Utopian Call that is practical for *our* utopian struggle against the dominant forces of the Capitalocene.

In this chapter, I will turn back to the works of Octavia Butler, in this case to her duology comprising *Parable of the Sower* and *Parable of the Talents,* written in the 1990s and taking place in a near future California set between 2024 and 2035. The fact that these novels extrapolate only three or

four decades from the time of Butler's writing them can help to theorize how the Utopian Call can be put into practice to move from our present moment of the Capitalocene to a good Anthropocene. I will do this by showing how utopian subjects do not directly embody the Call in the two *Parables,* but how utopian embodiment is mediated through large scale, multigenerational projects that act as an organizing principle for the utopian struggle.

The *Parables* center around Lauren Olamina, a young black woman living in a walled cul-de-sac in a suburb of near future Los Angeles. The world of the *Parables* is an extrapolation based on the premise that none of the fundamental problems of the Capitalocene will be seriously addressed, and in fact many of the problems such as privatization and deregulation will continue to the point that they cause near total breakdown of civil society. In interviews, Butler spoke about *Parable of the Sower* as a cautionary tale, with the three largest social and political aspects influencing the dystopian world of *Sower* being climate change and environmental degradation, privatization, and assaults on public education (Francis 172; 224). At the beginning of *Parable of the Talents*, Lauren's husband, Bankole, remarks in his memoirs that

> I have read that the period of upheaval that journalists have begun to refer to as "the Apocalypse" or more commonly, more bitterly, "the Pox" lasted from 2015 through 2030 – a decade and a half of chaos. This is untrue. The Pox has been a much longer torment. It began well before 2015, perhaps even before the turn of the millennium. It has not ended.
>
> I have also read that the Pox was caused by accidentally coinciding climatic, economic, and sociological crises. *It would be more honest to say that the Pox was caused by our own refusal to deal with obvious problems in those areas.* We caused the problems: then we sat and watched as they grew into crises...I have watched education become more a privilege of the rich than the basic necessity that it must be if civilized

> society is to survive. I have watched as convenience, profit, and inertia excused greater and more dangerous environmental degradation. I have watched poverty, hunger, and disease become inevitable for more and more people. (8, emphasis added)

The Capitalocene is this "coinciding [of] climatic, economic, and sociological crises," and the Pox is what happens when these crises are systemic and seemingly intentional on behalf of political and corporate elites, who refused "to deal with obvious problems in those areas." Madhu Dubey remarks that, "the dystopia in *Parable of the Sower* is so closely extrapolated from current trends...that it produces a shock of familiarity rather than estrangement" (106). And one might argue that the only collective response to these issues in the past couple of decades in the United States has been an increase in mass shootings and far right violence, causing the dystopia of the *Parables* to only become even more shockingly familiar. As Jim Miller asserts that in the *Parables,* "we are confronted with a dystopian world, but one which is only 20 minutes in the future" (352).

Immediately following the above extract, Bankole wrote, "Overall, the Pox has had the effect of an installment-plan World War III" (8). As the world continues to accumulate ecological and sociological disasters, "installment-plan World War III" may end up being the most apt description of the Capitalocene; but this is the bad Anthropocene, and while it serves as the context for the two *Parable* novels, it is not a static situation; there is a way out of it and towards a good Anthropocene. The utopian energies of the community that grows around Lauren are directed toward leaving Earth rather than fixing the various social, political, and ecological problems here on this planet. Moylan argues that the utopian potential of the *Parables* are attenuated because the desire of the utopian subjects are not that of bringing "the walls of the system tumbling down and seek[ing] to build anew from those scattered stones" (Moylan *Scraps* 244). Yet the logic that the group uses to advance their version of the Call has powerful lessons for those looking to build a good Anthropocene.

It is in the context of the social and ecological crises of the Capitalocene that Lauren creates a

religion, Earthseed, that absolutizes and deifies Change. The reader is exposed to the tenets of Earthseed through verses from *Earthseed: The Book of the Living*, written by Lauren, as well as through discussion about these verses between Lauren and her companions. The verse beginning the first chapter of *Sower* is:

> All that you touch
> You Change.
>
> All that you Change
> Changes you.
>
> The only lasting truth
> Is Change.
>
> God
> Is Change. (3)

If nothing else, the Anthropocene is a time of extreme change on a world stage that, as Chakrabarty points out, far exceeds the mere history of one of the planet's species. In light of this, Earthseed is not only concerned with Change in itself, but is mostly concerned with how change shapes people (and communities, environments, etc.) and just as importantly how people can shape change. The Utopian Call in the *Parables* is provided by the Earthseed religion, and as such is concerned with how we shape our time of great change, the Anthropocene.

The narrative structure of the *Parables* as a whole includes four distinct episodes across the two novels: (a) the first half of *Sower* when Lauren lives inside of a walled community in Robledo, a fictional suburb of Los Angeles, until it was destroyed and she fled north; (b) Lauren's trek northward,

originally with the only two other surviving members of her community, Harry and Zahra, but eventually numbering thirteen members who eventually settle on some vacant land in northern California; (c) the development of their community, called Acorn, up to its eventual destruction at the hands of ultra-religious fascists; and finally (d) the search for Acorn's stolen children and the spread of the Earthseed religion.

While the narratives in *Xenogenesis* and the *Mars* trilogy took a couple of centuries to unfold, allowing us to see the Utopian Call develop over a long period of time, apart from the epilogue in *Talents*, which takes place in 2090, the entire narrative of the two *Parables* takes place in just over a decade, from July of 2024 to December of 2035. This concentrated timeline does not allow the Utopian Call to develop too much over the course of the narrative except to be further articulated and explicated. However, a decade is more than enough to provide a coherent strategy for how to use the Call to shape the Anthropocene. The Call manifests in the "Earthseed Destiny," which is to "take root among the stars," or in other words to engage in interstellar exploration and colonization. The epilogue of *Talents* tells of the Destiny being fulfilled as a an eighty-one year old Lauren watches the first ships disembark in their flight to other star systems, where Butler had meant to expand the series into a third installment called *Parable of the Trickster* telling the story of the colonists.[81] Despite the fact that "Earthseed's ambition to flee to the stars is in the end as much the nullification of the possibility of historical change as it is any type of realization of it" (Canavan *Butler* 139), the logic expressed by the Earthseed Destiny is exemplary for theorizing how to shape the world without recourse to revolutionary violence, and thus to ultimately create a good Anthropocene.

Adam Johns notes that Earthseed "is a theology for a wholly natural world in constant upheaval" ("Time" 403). As such, the Earthseed Destiny is meant to focus the energies of the adherents of Earthseed so that they could help to shape the changes in this world of constant upheaval.

81 See for instance Canavan *Butler* (144-151).

Essentially, in order for the Destiny to be achievable there would need to be a great many technological innovations before interstellar spaceflight could become possible, especially if the ships were meant to carry enough human and nonhuman life for the colonization of other worlds. Thus the creation of an interstellar ship (or fleet of ships) serves as a "Mother Project" for the Earthseeders. That is, the Destiny is a project that is so vast and has so many other smaller nested projects that would need to take place over a fairly long period of time by an enormous number of people, that it is capable of directing and focusing the Utopian Call. It is also extremely important to keep in mind that many of these smaller projects, and technological innovations that would be necessary for their completion would have a great many material benefits for people whether they are adherents of Earthseed or not, and whether they will actually make it to the stars or not.

The Earthseed Destiny also brings together different aspects of the Utopian Call – how humans relate to each other as well as to nonhuman others – but especially those aspects that have to do with education and work. Additionally, because of the nested nature of the projects that would be necessary for the Destiny, we can also see how a unified Call still has a great amount of space for individual purpose and initiative, and indeed relies on these two things for its success. That is, despite the fact that the Utopian Call is articulated by a unitary voice in the *Parables* (Lauren), each utopian subject interpellated by the Call must appropriate the utopian struggle as their own.

Earthseed and Education: Forethought and Adaptability

Learning and teaching are two of the most central concerns for Earthseed. At one point, Lauren told a new member of the community at Acorn, "One of the first duties of Earthseed is to learn and then to teach" (*Talents* 74), but it is not the verses of Earthseed that must be learned and taught in this context; it is not theology as such that is important for Earthseed. One of the verses that exemplifies Earthseed's attitude toward learning and teaching is as follows:

Your teachers

Are all around you.

All that you perceive,

All that you experience,

All that is given to you

or taken from you,

All that you love or hate,

need or fear

Will teach you –

If you will learn.

God is your first

and your last teacher.

God is your harshest teacher:

subtle,

demanding.

Learn or die. (*Sower* 251)

From this we can see that for Lauren, (and certainly for Butler)[82] learning is just simply a part of being human. That is, as a human you learn from all experiences, whether those experiences are positive or negative, or rather that you are taught by all of that you experience. The question is whether you will learn from these experiences, or rather what you will learn; will you learn the lessons that are being taught: how to live in the world and how to adapt to your circumstances, or will you fail to learn these lessons and die in the process? Clearly this is a bit hyperbolic, people fail to glean worthwhile lessons from their experiences all the time, and while death is an occasional outcome, if it were in fact the only

82 Butler stated in a supplement to *Talents*: "But, in fact, people will learn, no matter where they are. We are learning animals, we humans. College classes or no college classes, people will learn. The only question is what they will learn" (417).

outcome, or even the most likely outcome, then there would probably be far fewer people alive than there are today. But if we take this epigraph in the context of the novels, or when looking at the Capitalocene, then not humanity as a whole but civilization as we know it will perish because of an inability to learn from past collective experiences.[83]

Sarah Outterson argues that, “Butler's concept of violence in education is accurate beyond her overt message. The process of teaching is inescapably violent in the sense that the inherent goal of teachers is to communicate ideas. No matter how progressive or Socratic the pedagogy, the final goal is still to produce specific effects and changes in the student, and those changes do not come easily” (452). However, Outterson's insistence on equating any change whatsoever with violence does not seem very plausible, and thus neither does her conception of Butler's pedagogical theory as being extremely pessimistic, especially because learning seems to be one of the few consistently optimistic themes in Butler's works. While there are certainly more or less violent forms of pedagogical practices, those adopted by Earthseed are far more dialogic than coercive. Educator Paulo Freire argues that, “true dialogue cannot exist unless the dialoguers engage in critical thinking – thinking which discerns an indivisible solidarity between the world and [people] and admits no dichotomy between them – thinking which perceives reality as process, as transformation, rather than as static entity – thinking which does not separate itself from action, but constantly immerses itself in temporality without fear of the risks involved” (81). The type of education that Lauren bases Earthseed on is dialogic, both in terms of its theology as well as the practices that emerge in Acorn and carry on in Lauren's teachings after Acorn's destruction.

The ubiquity of learning and teaching is brought to bear early in *Sower* on the quest north just after the Robledo community was destroyed and Lauren, Harry, and Zahra were in the process of

83This logic resembles Robinson's in his essay on Utopia or catastrophe. We have reached a point at which we must deal with problems that we as humans have caused, or we face utter catastrophe due to inertia or the social dominance of political reactionaries.

deciding what to do next. At this point Zahra was feeling like the outsider to the twosome of Harry and Lauren, because while these two had been friends their entire lives, Zahra had lived on the streets until she was a teenager, and then was generally sequestered by her hyper-patriarchal husband while she lived in their community. Lauren assuaged Zahra's concerns, telling Zahra that if she wanted to join Harry and Lauren, “All you had to do was let us know” (154). The coming together of these three after the destruction of their homes was the beginning of the Earthseed community, even though they did not know it at the time. Also beginning here, this community would be built on a mutualism where no one tried to consciously dominate the others and they could all learn dialogically from each other. Freire states that, “Love is at the same time the foundation of dialogue and dialogue itself. It is thus necessarily the task of responsible Subjects and cannot exist in a relation of domination” (77-8). Of course as of this point in the narrative there was not really “love” between the three: Zahra was more of an acquaintance by sight and Harry and Lauren were just childhood friends, yet as Freire argued love is equated with dialogue that is not an attempt for one party to dominate the other. So, as they begin a dialogic relationship they simultaneously begin to form a community that is based on love.

The dialogic basis of their relationship is highlighted after Zahra admitted to having stolen some peaches that the three breakfasted on. Lauren said to her, “You have a useful skill, then, and information about living out here.” Then later in the conversation she said to Zahra:

> “I'm inexperienced,” I admitted. “But I can learn. You're going to be one of my teachers.”
>
> “One?” she said. “Who have you got but me?”
>
> “Everyone.”
>
> She looked scornful. “No one.”
>
> “Everyone who's surviving out here knows things that I need to know,” I said. “I'll watch them, I'll listen to them, I'll learn from them. If I don't, I'll be killed. And like I said,

I intend to survive." (154)

Lauren is articulating a kind a valorization of homeless persons that is not a romanticization of the abject but is rather a recognition of the merits of a kind of "lumpen knowledge." Freire states that, "Dialogue, as the encounter of [people] addressed to the common task of learning and acting, is broken if the parties (or one of them) lack humility" (78). Michael Bucher and Simon Dickel analyze a similar logic in some of the work of Samuel R. Delaney. They argue that Delaney's treatment of how his protagonists relate to the homeless men that they meet and engage with are likewise dialogic in essence because the protagonists "are willing to listen to the thoughts and ideas of the homeless men" as fellow humans who have their own sets of knowledge based on radically different life experiences, and that doing so marks an example of "the societal transformations that might happen if the subaltern, who, as Spivak has argued, can speak, is listened to, and heard" (299).

Ultimately they argue that Delaney is using his work "to think of such encounters as part of regular life. The focus is on the everyday, and on building lasting relationships. *The ability to learn from each other is presented as a prerequisite for forging such lasting, living relationships*" (302, emphasis added). Likewise, Lauren expects to deal with her encounters (including just her observations) of all the others that she meets and sees as she begins her trek northwards, starting with Zahra. But the nature of Lauren's and Zahra's relationship is not simply that Zahra's lumpen knowledge is valorized to the point that there is something like a mentor-mentee relationship while Lauren learns the ways of the streets. Rather there is a dialogic relationship where they both learn from each other, as well as from the others who eventually join their group: "Education must begin with the solution of the teacher-student contradiction, by reconciling the poles of the contradiction so that both are simultaneously teachers *and* students" (Freire 59, emphasis in original).

On the day following the above conversation while Lauren is writing in her journal, Zahra asks Lauren to teach her to read and write, and whenever there is a rest period there is mention of the

literacy lessons that both Lauren and Harry give to Zahra. Later on, a few more people joined them: "I began Zahra's reading lesson and Jill and Allie looked interested. I included them as though I had intended to from the first. It turned out that they could read a little, but hadn't learned to write. Toward the end of the lesson, I read a few Earthseed verses to them in spite of Harry's groans" (*Sower* 240). Lauren is also beginning to use literacy instruction as a way of teaching Earthseed as well, and after the destruction of Acorn, Lauren spends some of her time in Georgetown, a permanent squatter camp not too far from where Acorn was, teaching people to read and write exclusively with Earthseed verses: "This is what I did in Acorn, and I did it automatically in Georgetown" *(Talents* 296).

While literacy is a critical concern for Butler, learning in the *Parables* involves much more than either just literacy or experiential knowledge, but is also forward looking. The central tenet of Earthseed is that "God is Change" and that it is the duty of the Earthseed practitioners to shape God while also being shaped by God. In order to do this one must be adaptable, which is to say that one must be able to learn in order to cope responsibly with change. Part of the significance of calling the books "parables" in their titles is to make explicit that the books are meant to provide practical lessons on some level. As Lauren notes, "My father loved parables – stories that taught, stories that presented ideas and morals in ways that made pictures in people's minds...Because he believed stories were so important as teaching tools, I learned to pay more attention to them than I might have otherwise" (*Talents* 14).

By absolutizing Change from a religious perspective, Butler is attempting to establish a cosmology from which practical social and political institutions can emerge that are fundamentally different from those of our own society. Johns argues that Lauren "does not believe, despite the condition of her world, in endings: she believes in transformation. This is a revelation – an unveiling – she experiences as a consequence of being caught up in a period of intense change, but most of all she is an *incarnation* of change: because of her hyperempathy syndrome, she experiences life in an original

way, and responds with an original morality" ("Time" 403, emphasis in original). Hyperempathy is the novum of the series and is a delusional disorder caused by Lauren's mother's abuse of a prescription "smart pill," causing Lauren to "feel what I see others feeling or what I believe they feel...It hurts, that's all I know...I'm supposed to share pleasure *and* pain, but there isn't much pleasure around these days" (*Sower* 10-11). Johns states that, "sharers [those with hyperempathy syndrome] are bound by their own biology to understand the self and its relationship to others in a new way" ("Time" 404). That is, Lauren's basic understanding of the world is deeply intersubjective – the experience of another person's pain (or pleasure) teaches Lauren just as much as her own experiences do, and as such it is not surprising that Lauren would seek to institutionalize that kind of shared learning in whatever way she could. Clara Escado Agustí argues that in the *Parables,* "utopia is interior because, contrary to traditional male utopias, change takes place within the individual and, in her process of relating, at the juncture between subject and object" (355). One of the sources of change in relationality is Lauren's hyperempathy which Agustí argues "is a source of stability and equality that can be used politically to counteract discourses of oppression" (357). Lauren cannot help but establish a dialogic pedagogy, because if it relied on coercion or the threat of violence, Lauren would share any pain that she perceived any of her interlocutors experiencing.

Given the fundamental role of change in Earthseed as well as the importance of dialogic education, two of the main tenets of Earthseed is shaping change and adaptability (or being shaped by change). Towards the beginning of *Sower*, when Lauren was still living in her walled cul-de-sac community in Robledo, CA, she began to read and study up on anything she could that related to survival. As she put it to a friend: "I mean to learn everything I can while I can...If I find myself outside, maybe what I've learned will help me live long enough to learn more" (51). This statement is not only about being adaptable but also about training oneself to be adaptable. Lauren is quite aware of the problems facing her society – illiteracy, homelessness, climate catastrophes, violent crime, etc. She

is also aware that despite its walls her community is vulnerable to the point of inevitable catastrophe. When her friend remarks that no one can see the future, Lauren replies, “You can if you want. It's scary, but once you get past the fear, it's easy” (*Sower* 49). Lauren's ability to see the future is not akin to Bloch's intuition of the not-yet but is merely the recognition that when no collective effort is put forth to solve collective problems then individuals, particularly those most vulnerable, are likely to suffer the consequences of those problems.

Getting past the fear to glimpse at where the future is going is the simple premise that lends Butler's dystopia a shock of familiarity rather than estrangement (Dubey). Doing so will allow people to be more adaptable because as the Capitalocene unfolds, it seems likely that foresight will mitigate a lot more suffering than will merely reacting to each consecutive catastrophe. One of the Earthseed verses especially apt in this regard is as follows:

> Intelligence is ongoing, individual
> adaptability.
> Adaptations that an intelligent
> species may make
> in a single generation, other species
> make over many generations of selective
> breeding and
> selective dying. Yet intelligence is
> demanding.
> If it is misdirected by accident or by
> intent, it can
> foster its own orgies of breeding and dying.
> (*Sower* 25)

We saw in *Xenogenesis* that intelligence can be misdirected is when it is put in the service of hierarchy. Dialogic pedagogy is one way to temper the tendency to direct intelligence towards domination, either of some humans dominating others or of human beings attempting to dominate the rest of the natural world. The Capitalocene is the consequence of centuries of intelligence being directed by hierarchical tendencies, and in order for humans to "adapt" our way out of the Capitalocene we need to learn better ways to direct our collective intelligence. As the above verse points out, "intelligence is demanding," meaning that redirecting it will not be an easy process, but because learning is lifelong and collective (especially when the results of this learning are not subject to patents or "trade secrets"), such redirection is demanding but not necessarily onerous.

Another verse that makes the connection between learning and adaptability is as follows:

> A victim of God may,
> through learning adaptation,
> Become a partner of God.
> A victim of God may,
> Through forethought and planning,
> Become a shaper of God.
> Or a victim of God may,
> Through shortsightedness and fear,
> Remain God's victim,
> God's plaything,
> God's prey.
> (*Sower* 27)

By learning adaptation, a "victim of God" or one that suffers the ill consequences (or is likely to suffer them) of problems as they accrue – ecological, socio-economic, political – can begin to shape the

change in the world, and thus begin to solve these problems. Once again, the Anthropocene is fundamentally a time of great change, and Lauren, Zahra, and Harry were indeed victims of the change wrought by the Capitalocene. They were certainly victims of a gang of drug-crazed pillagers who killed their families and destroyed their homes, but the power of the gangs would not have been possible without the social and ecological breakdowns engendered by the Capitalocene: the privatization of the police, the loss of adequate jobs and worker protections, and a prolonged drought were only a few of the conditions in the text that gave rise to the type of gangs that destroyed Robledo. Therefore, Lauren and her companions were victims of a change that was beyond their control; they were "God's plaything, God's prey." In this light, Lauren's earlier conversation with Zahra concerning Lauren's "teachers" was about learning to adapt in order to become a "partner of God," so that she could help to shape the change around her.

Educating for a Good Anthropocene: Reinhabitation

Although we only get brief glimpses of what the actual educational model in Earthseed communities would be, what is alluded to would seem to fit with the pedagogical model of a "critical pedagogy of place" as set forth by David Greenwood.[84] Greenwood argues that the traditions of critical pedagogy as theorized and practiced by Paulo Freire, Michael Apple, Henri Giroux, and Peter McLaren among others, and that of place-based pedagogy, with its emphasis on environmental and ecological concerns such as in the work of C. A. Bowers, ought to be synthesized in order to create truly transformative educational practices. Greenwood states that, "Place-based pedagogies are needed so that the education of citizens might have some direct bearing on the wellbeing of the social and ecological places people actually inhabit. Critical pedagogies are needed to challenge the assumptions, practices, and outcomes taken for granted in dominant culture and in conventional education" (308). Both place-based and critical pedagogies are fundamentally concerned with shaping the changing

84 Formerly David Greunewald.

world around them, or more to the point, they strive to empower the next generation to shape their physical and social worlds, respectively.

Greenwood terms the synthesis between critical and place-based pedagogies as “critical pedagogy of place,” which he argues would have at its core two complementary orientations, *reinhabitation* and *decolonization*. Reinhabitation refers to the process of changing our relationships to our wider environments, “to pursue the kind of social action that improves the social and ecological life of places, near and far, now and in the future.” (314). Earthseeders try to establish such an education system in Acorn: they tend to the land that they occupy in order to make it more livable for the group, and it is oriented toward the future in that Lauren views it as a model to be translated into other settings for other Earthseed communities – not in the sense that each Earthseed community would reproduce the environment of Acorn, but instead use it as a model to find what is the most sustainable form of living in different environments, and then to conform human behaviors and their community to what makes the most sense in that particular place. That is, the Earthseeders see themselves as embedded within a relationship with the natural world characterized by mutual adaptation, wherein the humans adapt to the natural environment as it is, but also adapt the environment to meet their needs in an evolutionary dialectic. According to Peter Stillman, “Earthseed teaches that human beings embrace evolutionary change: we human beings, consciously and by choice, should reject the stance that we are superior to animals and the laws of nature, and should throw ourselves willingly into a process of open, unpredictable change, where we are open to and embrace evolutionary change, and where in our actions with each other on the world we act to try to preserve the species” (30). By embracing change we first accept it as happening – we are in the Anthropocene, but alas! It's the bad Anthropocene, the Capitalocene! – and second by learning to adapt so that we can accept our role in shaping change, with the major qualification that our role is not one of mastery. Any version of the Anthropocene is dangerous, but not as dangerous as allowing it to continue to develop along the lines of the

Capitalocene unimpeded. Putting different versions of the developing Anthropocene in conversation with each other is why *visionary* Anthropocene literature is so necessary: pure extrapolation just shows overwhelming processes of Nature acting on humanity, but here in the *Parables* we find a strategy wherein victims of the Capitalocene are encouraged to learn to *partner with natural processes* in order to give shape to a good Anthropocene.

Partnership with natural processes is exemplified in the way that the Earthseeders were delivered from their captivity:

> Day before yesterday, we had a terrible storm – truly terrible. And yet, it was a wonderful thing: wind and rain and cold...and a landslide. The hill where our cemetery once was with all its new and old trees, that hill has slumped down into our valley. Our teachers had made us cut down the older trees for firewood and lumber and God. I never found out how they came to believe we prayed to trees, but they went on believing it. We begged them to let the hill alone, told them it was our cemetery, and they lashed us. Because they forced us to do this, the hillside has broken away and come rumbling down to us. It has buried a maggot [an armored vehicle] and three cabins. (*Talents* 254)

The reinhabitation of Acorn by the Earthseeders is brought into contrast with the way their captors had come into the area without any regard for the environment; without any understanding of the ways that land, plant, and human are in a network of relations to one another. The lack of "forethought and planning" on behalf of the captors destroyed their own protection against this "natural" catastrophe.

The Earthseeders tried to live in some kind of sustainable relationship with the environment around them, as can be seen in their burial rites: cremating the dead and then using their ashes to fertilize plants.[85] At the close of *Talents,* when Lauren is preparing to watch the departure of the first Earthseed ship she states that, "I will go with the first ship to leave after my death... Let them someday

85 The Earthseed funeral rite is as follows: "We give our dead/ To the orchards/ And the groves./ We give our dead/ To life" (*Talents* 383).

use my ashes to fertilize their crops. Let them do that. It's arranged. I'll go, and they'll give me to their orchards and their groves" (406). Earthseeders understand themselves as fully integrated into their environments and consequently that they are part of the ecosystems in which they live. Just as they generally grow most of their own food,[86] the Earthseeders give back their own bodies to nourish the plants which will in turn nourish the remaining members of the group. On the other hand, the religious fundamentalism of their "teachers" blinded them to seeing the trees as anything but false idols and natural resources. Although the trees were a part of the Earthseeders' burial rituals, they were still just trees to them, and as such were an integral part of the local ecology, not a "resource" that could be extracted without any repercussions to that ecology.

Even before Lauren had fled her original community, her family and neighbors, through efforts largely spearheaded by her father, had already been in a process of reinhabiting their small walled-in cul-de-sac. In part of a conversation about a book on "California plants and the way Indians used them," Lauren's father explained to her:

> You wouldn't have the acorn bread you like so much without that one – not to mention a few other things we take for granted...Most of the people in this country don't eat acorns, you know. *They have no tradition of eating them*, they don't know how to prepare them, and for some reason, they find the idea of eating them disgusting. Some of our neighbors wanted to cut down all our big live oak trees and plant something useful. You wouldn't believe the time I had changing their minds. (*Sower* 56, emphasis added)

Thus we see here that reinhabitation is about building new traditions. Whether they are based on indigenous or folk knowledges or cutting edge science, the point is to allow people to build optimal

86 Their subsistence farming is not so much by choice. That is, this decision is not based on moral or even environmental considerations for either the Earthseeders or for the people in Lauren's Robledo community, but is instead a matter of economic necessity and a concern for safety. It is a matter of economic necessity because food prices are simply too high for them to buy much of it on a consistent basis. It is a safety matter because the surrounding areas of both Robledo and Acorn are simply too dangerous to make regular trips to outside places to buy groceries.

relationships with the existing environment while also doing the least amount of damage possible.

Greenwood states that, “Reflecting on one's situation corresponds to reflecting on the space(s) one inhabits; acting on one's situation often corresponds to changing one's relationship to a place” (310). Finding himself in the situation of an advancing Capitalocene where food was harder to come by, Lauren's father changed his and his neighbors' relationship to their place (their cul-de-sac) by changing their relationship to the plant life that was already there. In an analysis of the symbolism of oak trees in the *Parables,* John Blair Gamber states that, “This specific indigenous plant alludes to sustainable and non-invasive species as a contrast to tortured ecologies – the toxic conditions of the Pox” (36). Lauren's father saved the oak trees because they were already “something useful,” and as such helped to begin the process of reinhabiting their small piece of land. Greenwood states that, “Wherever one lives, reinhabitation will depend on identifying, affirming, conserving, and creating those forms of cultural knowledge that nurture and protect people and ecosystems” (318-9). There is consequently a sense of mutualism in what Lauren's father did: by preserving their small ecosystem he was also able to preserve the people there for a while by introducing a “new” staple food source to them.

However, while Lauren's father was attempting to reinhabit their cul-de-sac in Robledo, he was doing so in a way that was divorced from what was happening in the larger society. Greenwood states that, “Place...foregrounds a narrative of local and regional politics that is attuned to the particularities of where people actually live, *and that is connected to global development trends that impact local places*” (308, emphasis added). It was the global forces of the Capitalocene that finally destroyed Robledo. Gamber notes that, “Being a rigid hardwood tree, [the oak] serves a symbolic purpose...as the tree that breaks because it cannot bend. Robledo, the oaken place,[87] is overrun because it cannot mold its ideology to the changing events around it” (36).

87 “Robledo” is Spanish for “oak wood.”

Likewise, Gamber argues that, "The acorn, while symbolizing the potential of new life, is a replication of the oak" (36). Whether or not Acorn was meant to be a "new Robledo," it did meet a similar fate, except those who overran Acorn were fascist Christian "crusaders" bent on "making America great again" (*Talents* 20), rather than a gang of orgiastic drug users who only cared about raping and pillaging. The crusaders came to Acorn, seizing the land and imprisoning everyone, turning a thriving community into a prison or "reeducation" camp. The crusaders also desecrated the land in the process beyond simply cutting down trees that acted not only as a monument to the dead but also as an anchor holding the hill in place: "Rain beat against the window and blew roofing off cabins, limbs off trees, and trash from the dump that the teachers had made us create. We had had no dump before. We had a salvage heap and a compost heap. Neither was trash. We could not afford to be wasteful. Our teachers have made trash of our entire community" (*Talents* 255). Here environmental degradation goes hand in hand with oppression and social injustice, which is why Greenwood argues that environmental education is not enough. That is, it is not enough to reinhabit an area and attempt to remediate the damage done to a place; educators ought also work towards decolonization as a pedagogical method as well. Greenwood is using the term decolonization as an umbrella for theorizing human oppression and injustice as well as the practice of working to redress injustices through emancipatory social movements.

The social relations addressed through decolonization are often at the root of the environmental degradation that reinhabitation seeks to address, and the environmental degradations that reinhabitation seeks to remedy are often critical for perpetuating or intensifying the unjust social relations that decolonization attempts to transform.[88] Greenwood argues that a transformative education that does not reproduce the ills that we are trying to move away from needs to attend both to reinhabitation and decolonization: "a critical pedagogy of place aims to (a) identify, recover, and create material spaces

88 See for example, Dorceta Taylor, *Toxic Communities: Environmental Racism, Industrial Pollution, and Residential Mobility.*

and places that teach us how to live well in our total environments (reinhabitation); and (b) identify and change ways of thinking that injure and exploit other people and places (decolonization)" (319). In order to get to a good Anthropocene we must deal with as many of the problems that comprise the Capitalocene as possible: as we attempt to reinhabit the many spaces of our world we also need to confront the human degradation engendered by capitalism, and in order to do so, we will turn to how Earthseed theorizes the concept and practice of "work."

Earthseed and the Re-Structuring of Work

One of the important lessons of the Capitalocene is to pay close attention to the ways that the global and the local interact. In the *Parables* the local is totally unshielded from larger national and transnational forces due to the intensive privatization of even the most basic public services and the seemingly wholesale deregulation of any environmental and labor protections. In Butler's version of the Capitalocene a mere "20 minutes in the future," the power of corporations increase in absolute terms while simultaneously eroding any and all worker and environmental protections, causing inequality to increase exponentially.

The best example of privatization in the *Parables* is the town of Olivar, which we hear about in the first half of *Sower* prior to Lauren's community being destroyed. Jim Miller argues that, "In the example of Olivar, Butler is showing us how local and national problems are interrelated with the international movement of capital" (358). Olivar is a predominately white upper-middle class beach community that elects to sell its entire township to a foreign transnational corporation, Kagimoto, Stamm, Frampton, and Company (KSF), which wanted to "expand the desalination plant to vast size. That plant will be the first of many. The company intends to dominate farming and the selling of water and solar and wind energy over much of the southwest – where for pennies it's already bought vast tracts of fertile, waterless land" (*Sower* 106). Olivar acts as a lure to many of the educated middle-class people in the surrounding area, including members of Lauren's community, in large part because of the

security that is promised to the residents. Lauren's step-mother Cory was one of those professionals willing to take what KSF had to offer: “she was desperate to get in ahead of the crowd. Dad just shrugged and let her call.” (*Sower* 107)

As Lauren's father points out, going to live in Olivar is not a good solution to the crisis by any criteria. First of all, Olivar is electing to become a company town, and even though it is largely populated by professionals and people who were accustomed to having a certain amount of social privilege, it is still a company town and so it follows that it will eventually (and probably in fairly short order) reduce the population to perpetual indentured servitude. The laws passed during this time in the narrative essentially legalize and legitimize indentured servitude and debt slavery with no practical protections for the workers involved. Even the promise of security seems to be a trap in a sense. As Lauren points out: “there would be all those guards...I've noticed that people who have a little bit of power tend to use it. All those guards KSF is bringing in – they won't be allowed to bother the rich people, at least at first. But new, bare-bones, work-for-room-and-board employees...I'll bet they'll be fair game” (108). And while Lauren's family did not go to Olivar, one family of her neighbors did end up going there before the destruction of their Robledo community.

While the citizens of Olivar did in fact choose to sell their town wholesale to a transnational corporation, a closer look at the context shows the troubling nature of this choice. Olivar is described as “one more beach/bedroom suburb of Los Angeles, small and well-to-do. It has little industry, much hilly, vacant land and a short, crumbling coastline...Olivar, located between the sea and Los Angeles, is getting an influx of salt water from one direction and desperate poor people from the others...But it can't protect itself from the encroaching sea, the crumbling earth, the crumbling economy, or the desperate refugees” (105). So there are two main forces that are putting the town in a vice, climate change and political/social/economic collapse. The first, climate change, puts pressure on the town along two fronts, the erosion of the actual town into the sea: “Olivar's flat, sandy beach is already just a

memory. So are the houses and businesses that used to sit on that beach. Like coastal cities *all over the world,* Olivar needs special help" (105, emphasis added). Olivar's sea level rise is simply the local expression of a truly global problem, one shared by every coastal city in the world. A further consequence of climate change in the novels is the prolonged regional drought in California, causing there to be such a shortage of water that water stations had largely taken the place of gas stations as the price of water actually exceeded that of gasoline. Consequently, the drought is what opens the door for Olivar to be privatized, so that the firm KSF can use the town as a base to make a fortune by using desalinated water for farming or selling it to other dehydrated cities throughout the region.

Which brings us to the other force pushing against the town, the political, social, and economic forces represented in the figure of the refugee. As Butler put it in the supplemental interview for *Talents,* "The problem, of course, with throwing people away is that they don't go away. They stay in the society that turned its back on them. And whether that society likes it or not, they find all sorts of things to do" (418). In *Rising Tides: Climate Refugees in the Twenty-First Century*, John R. Wennersten and Denise Robbins argue that, "It is often difficult to differentiate between those refugees driven by environmental factors and those driven by other factors. Economics, politics, culture, and climate intertwine like some sociological double helix. What refugees have in common, however, is that they are suffering, and often they are impoverished by the environmental degradation of their homeland, affected by tsunamis, desertification, water scarcity, and disease" (10). After Lauren's community was destroyed and she became a refugee walking northwards she described the highway as a "broad river of people" who were fleeing, for example, other burnt and ravaged communities (Bankole), lives of prostitution (Allie and Jill), indenture (Travis and Natividad), and slavery (Emery and Grayson).

On their way northward, Lauren and her companions came to the small town of Salinas, looking to rest and resupply, but "Salinas had the look of a 'stay on the road' type of town – the kind that wanted you gone by sundown unless you lived there. This week and last, we had run across a few

little towns like that" (*Sower* 215). The response of the townsfolk of Salinas prefigures much of the xenophobic response to recent large scale migration to the United States and much of Europe. Wennersten and Robbins note that, "No matter how peaceful climate refugees may be, in most cases their arrival will generate significant levels of public suspicion and mistrust" (21). They also note how like in *Sower*, "water is the key component of climate change" (19), both in terms of too much (flooding) and in terms of water scarcity due to droughts or the drying up of major rivers due to glacier loss (20). Ultimately, "when profound water shortages [such as in *Sower*] or ravaging floods put populations on the move, they must go somewhere, and this migration can create conflict in the area receiving migrants" (21).

When Lauren asked her father if he would "ever think about leaving here, heading north to *where water isn't such a problem* and food is cheaper?" he told her that, "You've got to sneak into Oregon if you get in at all. Even harder to sneak into Washington. People get shot every day trying to sneak into Canada. *Nobody wants California trash"*[89] (*Sower* 72-3, emphasis added). Water shortages, coupled with economic and social breakdowns force multitudes of people to migrate north in search of a better life, but the places to where the refugees are headed only view them as trash.

Despite also being in southern California, Olivar was "an upper middle class, white, literate community of people who once had a lot of weight to throw around" (*Sower* 105), and thus did not view itself as California trash. With the prospects of being drowned by either the rising sea or by the hordes of social cast-offs, they made the seemingly only choice available – to survive. However, the terms of that survival were set by those who saw them as only marginally different from the barbarian hordes just outside the gates.

Upon the destruction of her own community, Lauren became just another member of the

89 By making California the site from which water-starved refugees flee, Butler is presenting a kind of reversal of what happened during the Dust Bowl era of the 1930s: "'Oakies' from the Oklahoma plains faced slurs, discrimination, and beatings. Their shacks were burned, and police manned the California border to block their entry into the state" (Wennersten and Robbins 21).

wandering hordes, and after wandering the highways and escaping death in a variety of ways, Lauren and her group finally settle in the backwoods of Humboldt County in northern California in the hopes that they are remote enough to escape some of the larger national and transnational pressures, such as sea level rise, drought, crop loss, increased range of tropical diseases, war, and slavery (*Talents* 82). *Talents* opens with an Earthseed community at Acorn that was relatively thriving until they were seized by a paramilitary force with ties to the fascist president Andrew Steele Jarret. After the community finally escapes from its bondage, the survivors must scatter to the wind. At this point Lauren begins to build networks of individuals and eventually other Earthseed communities, but not simply to insulate themselves from larger social and political forces but to create their own alternative social force centered around the Earthseed Destiny. Agustí argues that "Olamina will achieve a more democratic society not by proposing a specific economic system, that is, by defining a society's infrastructure, but by modifying its cultural relationships, and this will lead us to observe how, *from her interior utopia of relationships, a more rational organization of work and wealth can ensue"* (352, emphasis added).

The Earthseed Destiny functions in the novels as a unifying goal for the practitioners of Earthseed, or as Lauren reiterates from time to time, it is a way to reach Heaven without first having to die. If Earthseed represents the Utopian Call, making various claims on how to reconstitute society through changing human beings' relationships with each other and the natural world, then the Earthseed Destiny represents a strategy on how to get from here (the Capitalocene) to there – in this case the "there" is interstellar travel and colonization. It acts as a unifying goal by virtue of the common purpose that it gives people to do something concrete on a grand scale and over a long period of time; it is a project that would take so long and require so many advancements in technology before it can even become remotely feasible, requiring innumerable smaller projects which would in turn require new modes of social organization. In a later section I will show how the Earthseed Destiny functions as a "mother project" in order to do just this, but first I will show that recasting work into self-and group-

initiated projects can function as an alternative to capitalism, and at its best constitutes a challenge to hierarchical power structures that belong not only to capitalism but to other oppressive institutions as well.

Well before the Earthseed Destiny could be used to focus work to be in line with the Utopian Call, the Earthseeders began to organize their lives around work in a way substantially different from work under capitalism. The first thing to notice about Earthseed's attitude toward work is that it is intimately tied to learning:

> We do not worship God.
>
> We perceive and attend God.
>
> We learn from God.
>
> With forethought and work,
>
> We shape God.
>
> In the end, we yield to God.
>
> We adapt and endure,
>
> For we are Earthseed,
>
> And God is Change.
>
> (*Sower* 15)

Between learning from God and shaping God is "forethought and work." Forethought requires critical education and the ability to envision some of the consequences of one's actions, especially in the context of trying to build a good Anthropocene because of the interconnectedness of the systems that need to be "shaped." Just as learning begins at birth and ends at death (i.e. it is coextensive with being human), work ought to be coupled with learning in a dialectical process where learning dictates what tasks are needed to be done (forethought) and the necessary tasks of reinhabitation and decolonization inform the community where to direct education. This dialectical process is much easier to grasp when

work is understood to encompass a wide array of human activities, and not simply the kinds of activity that are legitimized through the capitalist wage system.

The conceptual decoupling of work from waged labor is part of John Holloway's central argument in *Change the World without Taking Power.* Holloway argues that there are essentially two forms of power: power-to (-do) and power-over, and these are linked with how they relate to "doing" as general human activity which becomes organized in power-to as a social activity and becomes co-opted as power-over in a parasitical position to power-to, wherein some people, the "powerful" appropriate what is done by others for their own benefit (29). According to Holloway, "Power-to...is never individual: it is always social...its existence will always be part of the way in which sociality is constituted, the way in which doing is organized. Doing (and power-to-do) is always part of the social flow, but that flow is constituted in different ways" (28). Yet while in the process to redirect their power-to in a social flow that would flow in the direction of the utopian horizon, the Earthseeders simultaneously had to struggle against those who wished to have power over them.

Firms like KSR clearly represent a heightened form of power-over in relation to contemporary capitalism, and the crusaders who captured Acorn likewise represent a heightened form of the prison-industrial complex. There is another figure in the *Parables,* though, that represents an extreme case of power-over that needed to be struggled against: the pimp/slaver. The figure of the pimp-slaver is represented by a man named Cougar from whom Lauren purchased her brother, Marcus, and used as a contact for finding the children of Acorn who had been abducted by Christian America. Lauren also remarks that through the policies of the fascist Jarret, the number of slavers has been on the rise (*Talents* 298) and there had never been any political will to reign them in (*Talents* 289). The reader gets their first glimpse of the slave collars from a conversation in *Talents* between Lauren and Marcus wherein he relates his experiences after the destruction of their Robledo community. He explains how the collars "choke" the wearer if they do anything to try to get them off, or if they get too far away

from the control unit: “it gives you so much pain that you can't keep going” (130). The collared person doesn't even have the hope of killing their slaver to earn their freedom because, “It's got a fingerprint lock. And if the fingers trying to use it are wrong or are dead, it chokes you and stays on choke until someone with the right living fingers turns it off” (130). Marcus expresses the power-over of the slaver: “The guy with the control unit can play you the way Mama used to play piano” (129).

The near absolute power-over of the slaver was certainly in play when the crusaders captured Acorn and enslaved all of the Earthseeders as well as some of the refugees in the surrounding towns. For example, Lauren wrote in her journal after having been raped by one of the guards, “There are a few men here, though, a few 'teachers', who lash us until they have orgasms. Our screams and convulsions and pleas and sobs are what these men need to feel sexually satisfied. I know of three who seem to need to lash someone to get sexual pleasure. Most often, they lash a woman, then rape her. Sometimes the lashing is enough for them” (233). The sadism of the crusaders is an extreme case of power-over though, and one that is beyond any economic justification, but it is consistent with what Marcus had described concerning the pimp/slavers who enjoyed power-over in this violent sense as well as in an economic sense. Whether it is struggling against the power-over of neoliberalism as represented by KSF or against violent domination in the form of the pimp/slaver, the Earthseeders sought to liberate their power-to-do.

Holloway begins his analysis with the “scream” of refusal to accept the injustice of the world, which in our analysis is the critical aspect of the utopian function. He states that our starting point is the “rejection of a world that we feel to be wrong, negation of a world we feel to be negative” (2). However, the refusal of the status quo is not enough; Holloway relates the “negation of the present, a pushing towards a radically different world, a struggle to walk erect” (*Change* 158) with Bloch's concept of the Not-Yet. Holloway argues that, “The struggle of the scream is the struggle to liberate power-to from power-over, the struggle to liberate doing from labour, to liberate subjectivity from its

objectification. In this struggle, it is crucial to see that it is not a matter of power against power, of like against like. It is not a symmetrical struggle. The struggle to liberate power-to from power-over is the struggle for the reassertion of the social flow of doing, against its fragmentation and denial" (*Change* 36). That is, the refusal of the status quo, of the Capitalocene, is coupled with the desire to organize our social power-to differently – to work towards a good Anthropocene.

During her time in Robledo, Lauren had focused her learning around survival: for example, learning self-defense and use of firearms, learning about native edible plants, how to find potable water, and how to skin and clean rabbits. Then, early on in her journey north, just after joining up with Travis and Natividad, Lauren spoke with some locals at a Santa Barbara beach about job prospects in the area, and the trouble with fitting her and her companions' skills in with an economy that increasingly devalued work and especially devalued and dehumanized the people doing that work: "but no one knew where I could earn money. That didn't mean there weren't any such jobs, but if there were, they would be hard to find and harder to qualify for. That's going to be a problem wherever we go. And yet we know a lot, the three of us, the five of us. *We know how to do a great many things.* There must be a way to put it all together and make us something other than domestic servants working for room and board" (*Sower* 193, emphasis added). Despite the fact that the group can do a great many useful things, their skills need to be marketable, and even pooling together they have no power to effectively struggle against their situation: certainly they had no power to struggle against their position as "victims of God" in relation to larger social forces, and even if they found jobs their potential employers would have close to absolute power over them in their everyday lives.

Holloway goes on to argue that to effectively struggle against power-over we should not try to form a separate power base and then confront those with power-over on their own terms, but should instead develop what he calls anti-power:

Often the revolutionary movement has been constructed as a mirror image of power,

> army against army, party against party, with the result that power reproduces itself within the revolution itself. *Anti-power, then, is not counter-power, but something much more radical: it is the dissolution of power-over, the emancipation of power-to.* This is the great, absurd, inevitable challenge of the communist dream: to create a society free of power relations through the dissolution of power-over. This project is far more radical than any notion of revolution based on the conquest of power and at the same time far more realistic. (*Change* 37 emphasis added)

Building institutions of anti-power is how broad social change was successfully carried out in the *Mars* trilogy and is essentially what the Earthseeders decide to attempt when they opted to settle on Bankole's land and establish Acorn. At the close of *Sower* the group that had traveled north together were arguing about whether to stay on Bankole's land or whether they should continue heading further north. Part of the arguments centered around their safety because Bankole's sister and her family had been living on the land but had been murdered and all of the buildings had been burnt down a few months prior to the group arriving there. The consensus ended up being that they were no less safe there than anywhere else, and with proper security measures were probably even safer. The other point of contention though was centered around work and earning money. The person who was most concerned in this regard was Harry, one of the two other survivors from Lauren's original community. Harry and Bankole had the following exchange:

> "I want something of my own," [Harry] said. "Land, a home, maybe a store or a small farm. Something that's mine. This land is Bankole's."
>
> "Yes," Bankole said. "And you'll be getting the use of it rent free – and all the water you need. What are those things going to cost you farther north – if you can get them at all farther north – if you can get yourself out of California."

"But there's no work here!"

"There's nothing but work here, boy. Work, and a lot of cheap land. How cheap do you think land will be up where you and all the rest of the world are heading?" (*Sower* 289-90)[90]

Harry is stuck in the mindset that work is waged labor: manual or intellectual is beside the point here, the significant point is that it is waged. Unfortunately, much of the work that is possibly available is for room and board or company scrip instead of cash, or even forms of debt slavery. All of these forms of non-waged labor (in the form of liquid currency) are also meant to denote work that is not "true" work for Harry.

Bankole points out though that "there is nothing but work here," meaning not only the immediate tasks of survival – building shelters, planting food, putting in security measures, etc. – but also of building a new community that by the beginning of *Talents* exactly five years later, numbers over sixty people. The community that they created, Acorn, is an example of a "crack" that Holloway analyses in *Crack Capitalism.* Holloway asserts that, " A crack is the perfectly ordinary creation of a space or moment in which we assert a different type of doing...We take the moment or space into our own hands and try to make it a place of self-determination, refusing to let money (or any other alien force) determine what we do" (21). The nature of the "we" is important here: it is not simply individual self-determination (even if this does play a part) but how collectives can determine the shape of their world and how they live in it. That is, following Holloway's logic, in order to build a good Anthropocene we need to put as many cracks in the Capitalocene as possible, and they can be most

90 There are also racial and gendered dimensions to having Harry being the one to voice this: he is the only white male in the group and is certainly embodying the notion that he ought to be the breadwinner and essentially "self-reliant." This point is brought to bear when one of the women of the group, Emery Solis, who had escaped from slavery with her daughter before joining up with Lauren and the others, suggested to Harry that he be a "driver" because they are usually paid in cash and the company owners usually preferred white men for the job. Harry remarked that he did not know how to drive a truck but that he could learn. He was quite appalled and offended when she clarified that she meant a *slave* driver. Agustí argues that Harry was so appalled by this suggestion because at this point in the narrative traditional masculinity has been so thoroughly undermined (358).

effective as collective efforts.

Holloway states that, “If capital is the negation of self-determination, then the push towards self-determination or autonomy must be fundamentally different in its forms of organization. If our struggle is not asymmetrical to capital in its forms, then it simply reproduces capitalist social relations, whatever its content. Cracks, then, are explorations in asymmetry, explorations in the anti-politics of dignity” (*Crack* 39). Cracks allow an exploration of social relations defined by a dignity of self and of others: a mutual recognition of the shared responsibility and worthiness of each other to shape the social relations that we want to comprise the world. But in order to address the Capitalocene and not just capitalism, the relations must also encompass the larger environment, treating nonhuman organisms and systems as if they have a dignity of their own, a dignity that seems to be another expression of the recognition of another's agency as argued for by Latour.

We already saw how the Earthseeders attempted to reinhabit Acorn, and conversely how the crusaders neglected the dignity of the trees and the land (soil) to their own detriment. The assumption of dignity is essential for dealing with the problems of the Capitalocene, both in terms of assuming the dignity of others within the community as well as individuals taking on dignity for themselves when they had previously been denied it as “victims of God.” While Lauren always wanted Acorn to be a home base for the cultivation and spread of Earthseed communities, many of the other members saw it simply as a place where they could finally live with dignity. Jerry Philips argues that “Acorn is best viewed as a kind of left-wing communitarian survivalism” because, “as opposed to the fascistic, wider world where people seek their own 'kind,' Acorn is a community that embraces diversity, in terms of race, class, and sexual identity: its members are black, white, Asian, and Latino, rich and poor, gay and straight. However, Butler makes clear that Acorn is not so much 'heaven on earth' as the modest attempt to realize that ideal” (308). That is, this attempt to create a community that actually *embraces* diversity

in practice and not just rhetorically is the creation of a crack in the existing unjust social order.[91]

In a scene not too long before Acorn was overrun, Zahra confronted Lauren about rumors that she and her husband, Bankole, were going to leave Acorn so that Bankole could work as a physician in a neighboring town. Bankole was adamant about going, whereas Lauren was even more adamant about staying and continuing to shape Acorn into a model Earthseed community. Lauren began her rebuttal to the rumors by stating that, "I think we've got something worthwhile going here, *and its ours*" *(Talents* 144, emphasis added). Zahra initially insisted that Lauren was crazy for giving up on the chance to pursue a "normal" suburban existence, and that she, Zahra, would definitely take the chance if given to her. Lauren used the Earthseed Destiny as her main reason for not wanting to leave, whereupon Zahra said:

> "It ain't enough."
>
> *"It's a beginning. It's a way of trying to build tomorrow instead of cycling back into some form of yesterday."*
>
> "Do you ever stop preaching?"
>
> "Am I wrong?"
>
> She shrugged. "You know I'm not religious the way you are." (145, emphasis added)

What was keeping Zahra there rather than any religious devotion was the fact that, as Lauren put it, "You know that here at Acorn we're with you if you get in trouble. And you know we would take care of your kids if anything happened to you and Harry. Who else would do that?" Lauren and Zahra, as well as the rest of the community, are restructuring their social relations outside of the way that the

91 Oddly enough both Mathias Nilges and Vincent Lloyd both argue that Earthseed reproduces and reinforces neoliberalism. Nilges argues that Earthseed is anti-progressive because Change is somehow a neoliberal concept, and ultimately Earthseed presents a return to paternalistic authoritarian social structures. For Lloyd it is because the relationships in *Sower* are built around "neoliberal love" (which he bases on neoliberal rhetoric rather than practices) and that race is only present in the novels as an embrace of neoliberal multiculturalism. Neither of their arguments prove very persuasive though and ignore or decontextualize the bulk of the narrative.

dominant culture structures social relations, whether it is ostensibly around the Destiny as in Lauren's mind, or whether it is around friendship and mutual aid as it is for Zahra.[92]

Ultimately, though, when Zahra was satisfied that despite any rumors to the contrary Lauren would definitely not be leaving Acorn, she said, "Good...You're right. I wouldn't want to go, and I wouldn't want you to go either. Maybe that's because I'm as big a fool as you are. I don't know. But...we do have something good here. Acorn and Earthseed – they're both too good to let go of" (146). We can see from this brief conversation that Acorn is a crack in the system in Holloway's sense. It is fundamentally about developing and creating new and better forms of sociality, about treating each other with dignity, and it is self-directed. As Lauren said, it is something worthwhile, and it is *ours.* Holloway argues that, "The old notion of planning for the future revolution sounds hollow when we know that there may be only a very limited future. Communism (or whatever we choose to call it) becomes an immediate necessity, not a future stage of development" (*Crack* 26).

Inside the crack that is Acorn, the Earthseeders began to organize work in ways similar to their dialogic model of education – that is, work was cooperative and mutually edifying whenever possible. When Lauren was searching for her daughter after escaping from captivity, she took odd jobs and remarked that: "I've spent my first week doing other people's scutwork. Odd how familiar all the jobs are – helping to plant vegetable or flower gardens, chopping weeds, pruning bushes and small trees, cleaning up a winter's accumulation of trash, repairing fences, and so on. *These are all things I did at Acorn where everyone did everything*" (*Talents* 299, emphasis added). Lauren lists another group of jobs in a discussion with a teenager that they had rescued while still at Acorn: "Everyone works here, kids and adults. You'll help in the fields, help with the animals, help maintain the school and its grounds help do some building. Building homes is a communal effort here. There are other jobs – building furniture, making tools, trading at street markets, scavenging. *You'll be free to choose something you*

92 Once again, Clara Escoda Agustí's formulation of Earthseed as a "utopia of relationships" is both provocative and informative.

like. And you'll go to school" (*Talents* 74, emphasis added). She also listed another group of job types in Acorn when she was trying to find work that her brother, Marcus, could do while he was staying at Acorn: "*I have tried to interest him in several kinds of work we do here.* He isn't lazy. He pulls his weight. But he doesn't like fieldwork or working with animals or trading or teaching or salvaging or carpentry. He tried repairing tools, but it bothered him that he had so much to learn even about simple things" (*Talents* 152, emphasis added).

The major take away from putting these lists of jobs side by side is that first, "everyone does everything" and second that no one is forced to do any jobs on a regular basis that they do not find interesting. The logic of the organization of work at Acorn is similar to the "balanced job complexes" that are a part of Michael Albert's participatory economics (Parecon): "With the contrasting non-hierarchical approach, we have no secretaries or CEOs. Each person has a complex of tasks unique in its details but nonetheless *comparable to every other person's regarding its quality of life and empowerment effects*. We each do some rote and some creative work, some mechanical and some conceptual work. The mix gives us a fair share of burdensome and fulfilling and/or boring and empowering tasks" (21, emphasis added). And "Basically, participatory economic job complexes would be organized so that every individual would be regularly involved in both conception and execution tasks, *with comparable empowerment and quality of life circumstances for all*. The precision of the balance would depend on many factors, and would improve over time" (111, emphasis added). The major constraint in Acorn is that much of their work is based on what is necessary for building a community from scratch, and the fact that some necessary tasks will not be too rewarding or interesting means that no one will be fully engaged in what interests them all of the time. But as Albert points out, there would be improvement in how empowering each individual's work would be over time as kinks are worked out of a new system. In Acorn's case, it would be safe to assume that many of the tasks associated with building a community from scratch are fairly time intensive, so that as much of the

work slowly shifted to upkeep the amount of time needed for certain types of necessary tasks would diminish over time.

The point about work needing to be interesting is driven home in a conversation between Bankole and Lauren when he was trying to convince her to move to a neighboring town where he would take work as a physician and she could be a school teacher:

> [Bankole:] "You should be able to do it in your sleep after what you've had to put up with in Acorn."
>
> "In my sleep," [Lauren] said. "That sounds like one definition of life in hell."
>
> (*Talents* 142)

A job that one could do in their sleep would offer no sense of empowerment or edification, and as such seems like a version of hell to Lauren. That is, comfort in the Capitalocene is not enough for Lauren; as a utopian subject she is compelled to appropriate the utopian struggle as her own and work towards building a world based on different (better) social relations in the here and now. The fact that Lauren included her own needs of empowerment indicates that the utopian struggle is not purely altruistic but is about building communities of *mutual* empowerment wherein the needs of all are taken into consideration.

However, by saying that "everyone does everything" does not mean that there is no specialization. As Albert argues, "This does not say that every person must perform every task in every workplace...The aim is not to eliminate divisions of labor, but to ensure that over some reasonable time frame people should have responsibility for some sensible sequence of tasks for which they are adequately trained and such that no one enjoys consistent advantages in terms of the empowerment effects of their work" (104). And likewise that no one should be disempowered by their work. Even though building Acorn into a thriving community meant that everyone had to do "everything," there is still a considerable amount of specialization that takes place based on individual interest. For example,

Bankole trained a group of others in medicine: “Then Michael moved past me past me to check the bodies. He, Natividad, Allie Gilchrist, and Zahra Balter have learned to assist Bankole. They have no official medical or nurse training, but Bankole has trained them – is training them – and they're careful and serious about their work” (*Talents* 38). Of course, Bankole's trainees are neither doctors nor nurses, yet they are beginning to acquire and use medical knowledge for the benefit of the wider community.

Another example of an empowering division of labor is that of Gray Mora and Allie dividing up Acorn's carpentry tasks: “Gray likes to build things – cabins, storehouses, buildings of any kind. He designs them, organizes the building, and works on them. *As long as he's building something, he's a happy man.* The school is his doing, and if he were any more proud of it, he'd be impossible. But he leaves the designing and building of small things, furniture in particular, to Allie Gilchrist” (*Talents* 173, emphasis added), and later after Acorn had been destroyed, Allie made a living in the squatter camp Georgetown making and repairing furniture: “Once Delores George had seen the quality of her work, Allie was allowed to do the things she loved for her living” (333). Construction of buildings and furniture were both necessities for a community being built from scratch, but necessities that Gray Mora and Allie elevated to an art. And thus they were able to make necessary work rewarding as well. It is important to note that the point in the narrative when *Talents* begins is only five years after the founding of Acorn with only thirteen members; they had added about fifty more members in the interim. As such, most of the work would likely be related to cultivating food and building shelters, i.e. work related to everyday survival, and so the types of work that would be based on individual interests would be limited.

While building a community based on rewarding work from scratch clearly takes time, the organization of the working community was already built on a cooperative model rather than as a hierarchically structured corporation. Early on in *Talents,* Lauren and a few others helped to rescue a group of three children in an armored vehicle (the parents had been killed and their bodies were still in

the vehicle), and with the new truck the group was trying to decide whether or not to expand their businesses in the surrounding area. They discussed this decision at their weekly Gathering Day:

> Our Gatherings, aside from weddings, funerals, welcomings, or holiday celebrations, are discussions. They're problem-solving sessions, they're times of planning, healing, learning, creating, times of focusing, and reshaping ourselves. They can cover anything at all to do with Earthseed or Acorn, past, present, or future, and anyone can speak.
>
> During the first Gathering of the month, I lead a looking-back-looking-forward discussion to keep us aware of what we've done and what we must do, taking in any necessary changes, and taking advantage of any opportunities. And I encourage people to think about how the things we do help us to sustain purposeful religious community. (66)

After one such discussion, the group eventually voted to expand their business and after all of the group's business was concluded they had a communal meal. At this point Dan, the oldest surviving kid who had been rescued in the truck was asking Lauren whether he would get a vote as well. Lauren answered him: "No vote, but you'll get a share of the profit from the sale of the crop, and from the other businesses if things work out. That's after you've been here a year. You won't have a decision-making role unless you decide to join. If you do join, you'll get a larger share of the profit and a vote" (*Talents* 74). Along with the physical infrastructure of Acorn, the Earthseeders also are trying to build democratic economic and social institutions as well.

Mother Projects

In the previous two sections we saw how Earthseed, as the Utopian Call, attempts to re-conceptualize both education and work in order to make them both more sociable in practice. For Earthseed, education is dialogic and is directed towards building new, emancipatory social relations as well as new relations between a community and its environment. Similarly, work is conceptualized according to the

same logic as dialogic education, in that it is non-coercive and is meant to empower each member of the community to do tasks that align with their own interests. Additionally, both work and learning are viewed by Earthseed as lifelong processes wherein each individual is shaped by and shapes change, and because of Earthseed's process oriented views, work especially is not organized around the production of commodities. Even though Acorn did produce commodities to sell at local markets, these were incidental to the organization of their work and its organizing principle.

Holloway states that, “The commodity is the point of fracture of the social flow of doing. As a product produced for exchange, it stands at the unhinging or dis-articulation of social doing...It stands on its own to be sold on the market, the work that produced it is forgotten” (*Change* 46). Commodities are first and foremost “produced for exchange,” and not primarily for use, whereas much of the work at Acorn, for example, was specifically for use – food, shelter, etc. With the centrality of use-value of the objects, the work that produced it is not forgotten – Grayson is proud every time he sees the school he built; the artistry of Allison's furniture is meant to be appreciated in its use, but also to make her time spent making it more worthwhile. That is, by focusing on the use-value of the tasks to be accomplished, the “social flow of doing” is not broken but is a source of enjoyment beyond even the use-values of the products.

The fact that some work products are produced for exchange is not in itself a problem; even if some communities are largely self-sufficient, the goal of having a world of economically isolated communities is not in line with a Utopian Call that is concerned with new forms of sociality. The goal is to empower the “social flow of doing” and not to fracture it along different lines than it is under capitalism. The problem, therefore, is not exchange but that exchange, and thus commodities, is hegemonic: “It is now the quantitative, monetary measure of value (price) which provides social validation for the doing of people. It is money which tells you whether what you do is socially useful” (*Change* 46). That is, the power-to of individuals and communities is dominated by the power-over of

the market, and by extension by those who hold power in the market. Production merely for exchange, which is done through commodities, is hegemonic as an organizing principle for social relations as well as for the relations between people and the nonhuman world. Holloway states that, "Commodity fetishism is, therefore, the penetration of capitalist power-over into the core of our being, into all our habits of thought, all our relations with other people" (*Change* 50). Thus what is needed is a different organizing principle that fosters different kinds of habits of thought and different kinds of social relations.

However, focusing simply on use-value will not move us toward a good Anthropocene; enjoyment of the use of a work product needs also to be coupled with the enjoyment of its production. Yet this is still only a part of an organizing principle for shaping the change needed to move toward a good Anthropocene. As the Utopian Call, Earthseed viewed work and education as a fundamentally unified process, and most significantly that they were unified in *projects*.

As an organizing principle, projects are neither concerned with producing use-value or exchange value, although both or either of these may be produced in any given project. However, *projects are concerned with producing a future state of affairs*, which, coincidentally, is also what the Utopian Call does as the imaginary reconstitution of society. The strategy that Earthseed adopts to prosecute its utopian struggle is the Earthseed Destiny, or interstellar travel and colonization, which is "a long-term, expensive, uncertain project" (*Talents* 49). The Destiny as project was not meant *only* to produce certain objects such as space ships that were capable of keeping humans and nonhuman organisms alive long enough to make it other star systems, rather, "The Destiny is important for the lessons it forces us to learn while we're here on Earth, for the people it encourages us to become. It's important for the unity and purpose that it gives us here on Earth. And in the future, it offers us a kind of species adulthood and species immortality when we scatter to the stars" (*Talents* 156). That is, the Destiny was meant to direct the "social flows of doing" as well as to encourage certain kinds of

relationality through shared purpose. Additionally, "the people it encourages us to become" are utopian subjects, who are interpellated by the Call (Earthseed) and thus compelled to reconstitute society along the lines espoused by Earthseed.

The fact that Butler cast Earthseed as a new kind of religion rather than merely as a new kind of ideology is significant for forming utopian subjects who were committed to fulfilling the Earthseed Destiny. In an interview in Locus magazine in 2000, Butler stated that, "I used religion because it seems to me it's something we can never get away from. I've met science fiction people who say, 'Oh, well, we're going to outgrow it,' and I don't believe that for one moment. It seems that religion has kept us focused and helped us to do any number of very difficult things, from building pyramids and cathedrals to holding together countries, in some instances. I'm not saying it's a force for *good* – it's just a force. So why not use it to get ourselves to the stars?" (Francis 182-3) Here we see that Earthseed as a religion is used to focus the energies of the believers so that they can accomplish projects on a grand scale. In *Talents,* while Lauren was still focusing on locating the children of Acorn she wrote in her journal, "That's why I must teach teachers. I must create not only a dedicated little group of followers, not only a collection of communities as I once imagined, but a movement. I must create a new fashion in faith – a fashion that can evolve into a new religion, *a new guiding force*, that can help humanity to put its great energy, competitiveness, and creativity to work doing the truly vast job of fulfilling the Destiny" (*Talents* 297, emphasis added).

In another interview, Butler stated that, "People have often used religious mandates to work on very long-term difficult projects, from the pyramids to the cathedrals of the Middle Ages. And why not give them a long-term difficult project that, if they actually manage to complete, would actually do some good for the human species" (Francis 201)? Thus besides using a new religion to help organize the labor to accomplish a "long-term difficult project," Butler also believed that the Destiny would as a whole be beneficial for the human species. Butler has, both in interviews and through Lauren in the

Parables, spoken of the Destiny in terms of "species insurance"[93] especially if we happen to kill ourselves off through nuclear warfare or some other form of mutually assured destruction, or if the Capitalocene develops unfettered to the point that the Earth is almost totally poisoned beyond hopes of recovery – the truly worst case scenario, no matter how unlikely. But beyond being an insurance policy, Butler also believed that actually carrying out the Destiny would result in a great many material benefits for those who stay and live their lives on Earth because of the scientific and technological advances that would be necessary before interstellar travel could even be possible. The reason for this optimism regarding space exploration is that Butler uses the space race between the US and the USSR as an analogy for the Destiny: "Part of the reason I came up with that as [Olamina's] goal is because I was a kid during the space race...It was riveting. It seemed important. Later I thought this was our way of having a nuclear war with the Russians without having one. You had the kind of fallout that you get from war, the technological fallout, and you had the competition. And yet massive numbers of people were not dying" (Francis 200-1). So, according to this logic, with the space race we get the technological benefits of war without all of the death and destruction.[94]

The reason that Lauren believed that there needed to be a "new fashion in faith" to accomplish the Destiny was that it was too large and long-term to fit into either the conventional political or liberal economic paradigms of the Capitalocene. While explaining the Destiny to her companion Len, Lauren states that:

> Fulfilling the Destiny is a long-term, expensive, uncertain project – or rather it's hundreds of projects. Maybe thousands. And with no guarantees of anything. Politicians, on the

---

93 David Morris points out that this species insurance is not simply about preserving the human species 'just in case', but has a strong evolutionary component to it: "It is the desire to abandon mastery, to allow the amoral forces of the universe to help change a group of thoughtful and purposeful humans – in ways unforeseen and invited – that makes Earthseed a radical project" (278-9).

94 For examples of the practicality of this logic see Matt Bille and Erika Lishok, *The First Space Race*. For a critique of this logic from the perspective of how it only amplifies some of the less desirable aspects of nationalist politics see Michael Sheehan, *The International Politics of Space.*

> other hand, are short-term thinkers, opportunists, sometimes with a conscience, but opportunists nevertheless. Business people are hungry for profit, short- and long-term. The truth is, preparing for interstellar travel and then sending out ships filled with colonists is bound to be a job so long, thankless, expensive, and difficult that I suspect that only a religion could do it. A lot of people will find ways to make money from it. That might get things started. But it will take something as essentially human and as essentially irrational as religion to keep them focused and keep it going – for generations if it takes generations. I suspect it will. (*Talents* 360)

Lauren does not see how the Destiny could fit into a conventional political paradigm: it will be long-term, expensive, uncertain, thankless, and difficult. These attributes are not compatible with conventional political thinking because the power of politicians and political parties is based on short-term opportunism. First of all, the fact that the Destiny is long-term and politicians predominately think in the short-term makes it politically untenable. But it is not just the time frame that causes the problem here. For instance, concerns over the time frame could be alleviated by recasting some of the goals associated with the Destiny as national security concerns, especially if there are ostensible military applications.[95] The fact that the project is difficult and uncertain is sufficient though for placing insurmountable obstacles in the way of pursuing the Destiny as a political project because elected politicians are opportunists, and no opportunist would generally be expected to put their name to a a difficult and uncertain project that could not come to fruition until generations after that particular opportunist was gone.

The other factor lending to the nonviability of the Destiny's political prospects is that it would be tremendously expensive. Being expensive, though, is not necessarily a problem for conventional politics as such. The fact that something is extremely expensive – i.e. too expensive for a single firm to

95 See Sheehan.

effectively carry out – ought to put it directly in the purview of conventional politics (so long as it meets certain other criteria such as promoting the general welfare). The fact that cost is given such an unreasonably disproportionate significance in conventional politics is a function of the increased marketization of politics, particularly wherein market logic is seen as the ultimate metric for the viability or even goodness of political policies. Political theorist Wendy Brown states that, "As the legitimacy and task of the state becomes bound exclusively to economic growth, global competitiveness, and maintenance of a strong credit rating, liberal democratic justice concerns recede. The economy becomes the organizing and regulative principle of the state and of postnational constellations such as the European Union" (40). In other words, because the "health" of capitalism is the organizing principle for states, projects that are meant to move us out of the Capitalocene will not be politically viable.

However, Lauren points out that "a lot of people will find ways to make money from it. That might get things started," which just points to the fact that some of the technological advances that would be needed to make interstellar travel feasible would certainly have applications here on Earth, or even for space travel within our solar system, and that some of these technologies and applications will be profitable for investors. But however much different sub-projects would be profitable, the project as a whole would have no return on investment because there would be no plan to return to Earth. As such, the Destiny as a whole cannot be a capitalist enterprise even if some of the smaller projects would likely be, and indeed some of the smaller projects would already be undertaken by capitalist firms without any intention of relating them to the Earthseed Destiny. An example from *Talents* of an independently produced bit of technology that could be adapted for the Destiny is artificial wombs: "I can see artificial wombs being useful when we travel into extrasolar space – useful for gestating our first animals once they're transported as frozen embryos and useful for gestating children if the nonreproductive work of women settlers is needed to keep the colony going. In that way, perhaps the

eggs may be good for us – for Earthseed – in the long run. But what they'll do to human societies in the meantime, I wonder" (*Talents* 87).[96]

Yet Earthseed could not wait around for the market to churn out the "hundreds of projects. Maybe thousands" that would be necessary to fulfill the Destiny. Butler argued in an interview that, "the best way to get out there [to the stars] is to create a *huge family of projects*...to get us out there" (Francis 175, emphasis added). The Earthseed Destiny is the overriding project that unifies this large family of projects, and as such I term it a "Mother Project." A mother project guides and orients the smaller projects towards a goal of creating a future state of affairs – that is, the world in which this project has been accomplished. Lauren's daughter, Asha, noted how Lauren "found sources of money and directed them into areas of study that brought the fulfillment of the Earthseed Destiny closer. She sent promising young students to universities that helped them fulfill their own potential" (*Talents* 404). That is, the fulfillment of the Destiny was not only about the creation of starships but was used to direct the "social flow of doing" in a specific direction, towards a particular utopian horizon. When Lauren was just starting to turn Earthseed into an actual social movement she remarked that,

> If the Earthseed Destiny is to have any meaning beyond a distant mythical paradise, Earthseed must be not only a belief system but a way of life. Children should be raised in it. Adults should be reminded of it often, refocused on it, and urged toward it. Both should understand how their current behavior is or isn't contributing to the fulfillment of the Destiny. By the time we're able to send Earthseed children to college, they should be dedicated not only to a course of study but to the fulfillment of the Destiny. If they are, then *any course of study they choose can become a tool for the fulfillment.* (*Talents* 389, emphasis added)

96 The point about artificial wombs releasing women from reproductive labor has resonance with Shalamuth Firestone's demand for, "The freeing of women from the tyranny of their biology by any means available, and the diffusion of the childbearing and childrearing role to the society as a whole, to men and other children as well as women" (238).

Here we see the unification of work with education manifesting in projects, and due to the belief system underlying these actions the education is still dialogic and the work is still empowering. As utopian subjects, Earthseeders have appropriated the utopian struggle, the fulfillment of the Earthseed Destiny, as their own, and as such any course of study that they choose can become a tool in the service of the utopian struggle. That is, the Earthseed Destiny as a mother project provides an overarching purpose for the Earthseeders' work and education, but the individual utopian subjects must still provide their own purposes for their own contributions if the struggle is to be appropriated as their own.

The individual initiative of fitting one's own project into a larger project is an extension of the project-based pedagogy that took place in Acorn:

> All of our kids work on projects as part of their education. Each kid does at least one group project and one individual project per year. Most kids find the two unrelated projects influencing one another in unexpected ways. This helps the kids begin to learn how the world works, how all sorts of things interact and influence one another. The kids begin to teach themselves and one another. They begin to learn how to learn. (*Talents* 148)

Even if the group projects were chosen by the teachers, or more likely guided by the teachers given the dialogic nature of Earthseed's pedagogical practices, the important thing is that “most kids find the two unrelated projects influencing one another in unexpected ways.” It is not only the details of the projects that would connect in various ways, but also that individual and collective purposes would find ways to influence and build on one another. Through this process of seeing how the world is interconnected, and how when working together in partnership seemingly disparate purposes can connect with and influence each other, the kids begin to “learn how to learn” by teaching themselves and each other. Freire states that, “cooperation leads dialogical Subjects to focus their attention on the reality which mediates them and which – posed as a problem – challenges them. The response to that challenge is the

action of dialogical Subjects upon reality *in order to transform it*" (168, emphasis added). The Earthseeders were empowered through cooperation from a young age to view reality as something to be transformed through their own projects; they were meant to shape change through the smaller projects that would provide the link between the mother project and their own purposes or interests.

Part of what makes the Utopian Call effective in the process of interpellation is that the Call is a carrier of purpose. As the Utopian Call, Earthseed provides an overarching purpose in the form of the Earthseed Destiny, but this is not the only way that Earthseed carries purpose for its utopian subjects. It also encourages its adherents to find and cultivate their own purposes. One verse that expresses the role of purpose for Earthseed is as follows:

> Purpose
> Unifies us:
> It focuses our dreams,
> Guides our plans,
> Strengthens our efforts.
> Purpose
> Defines us,
> Shapes us,
> And offers us
> Greatness.
> (*Talents* 137)

The "purpose" in this verse ostensibly refers to the Destiny but is applicable to any collective purpose. Likewise, the Utopian Call's most fundamental attributes are guiding plans and strengthening the efforts of utopian subject; it is itself a form of focused dream. The goal provided by the Utopian Call, or one might say the purpose of the Call, gives an overriding direction to all the tasks that would be

needed in order to accomplish it – to achieve the chosen purpose and make real the utopian horizon that forms the content of the Call's interpellation. The Earthseed Destiny functions as such a purpose in the *Parables*.

Yet, it is important to note that the Earthseed religion is radically existential in its orientation. That is, while Lauren codifies the Earthseed Destiny in the Earthseed texts, she also maintains that people have no predetermined purpose, no goals except for survival, and that we must choose our own purposes, our own goals and ultimately our own projects, or at least choose which projects that we would like to join. Following the destruction of Acorn and the abduction of the community's children by Jarret's "Crusaders," Lauren was on the road looking for her daughter as well as any of the other stolen children of Acorn. She was traveling with a girl named Len who was introduced to her by one of the other former Acorn members. At one point while they are walking they had a discussion concerning purposes:

> [Lauren:] "Earthseed isn't just what I believe. It's who I am. It's why I exist."
>
> "You say in your book that we don't have purpose, but potential."
>
> I smiled. She had a photographic memory or nearly so. But she wasn't above using it unfairly to win an argument.
>
> I quoted,
>
> "*We are born*
>
> *Not with purpose,*
>
> *But with potential.*"
>
> "We choose our purpose," I said. "I chose mine before I was old enough to know any better – or it chose me. Purpose is essential. Without it, we drift." (*Talents* 361)

Although Lauren is the founder of Earthseed and the author of the *Book of the Living*, she still speaks of her purpose as choosing her. That is, Lauren was interpellated by the Utopian Call and became a utopian subject who was *compelled* to carry out the purpose that was expressed through the Call. Lauren's compulsion was at the root of her daughter, Asha's, rejection of her: “All that she did, she did for Earthseed. I did see her occasionally, but Earthseed was her first 'child,' and in some ways her only 'child'” (*Talents* 404). Asha's bitterness toward Earthseed is understandable considering how Bankole had offered Lauren a comfortable existence in a nearby town where the two of them could raise their daughter in relative peace. But Lauren rejected Bankole's offer, Acorn was overrun, Bankole was killed, and Lauren's baby was stolen by fascist crusaders. In Asha's commentary on Lauren's journal entry concerning the rejection of Bankole's offer, Asha wrote that, “she sacrificed us for an idea” (*Talents* 138). What Asha failed to realize is that Lauren was *compelled* to accomplish the purpose that “chose” her; without it Lauren would have drifted, anchored in place to a small out-of-the way town, but untethered from the utopian horizon that gave her life meaning.

Stillman argues that the community of Acorn and the religion of Earthseed represented an “integrated utopian vision” wherein “the community must be a collective project based on the conscious interdependence and agreement of its members, who must know, trust, and be able to work with each other for shared purposes” (22). Later in the above conversation between Lauren and Len, Lauren explained how her sense of purpose helped to unite the community forming up around her:

> “People followed me, though,” I continued. “And they didn't only do it because they were convinced that I could help them get what they wanted. *They followed me because I seemed to be going somewhere.* They had no purpose beyond survival. Get a job. Eat. Get a room somewhere. Exist. But I wanted more than that for myself and for my people, and I meant to have it. They wanted more too, but they didn't think they could have it.

> They weren't even sure what 'it' was."
>
> "Weren't you wonderful?" Len murmured.
>
> "Don't be an idiot," I said. "*Those people were willing to follow an 18-year-old girl because she seemed to be going somewhere, seemed to know where she was going.* People elected Jarret because he seemed to know where he was going too. Even rich people like your dad are desperate for someone who seems to know where they're going." (*Talents* 363, emphasis added)

Lauren's claim concerning the appeal of having a purpose to guide action to people who "wanted more too, but...didn't think they could have it" is especially pertinent in addressing the anti-utopianism of the Capitalocene. Lauren argues that those without purpose are eager and even desperate to follow someone who seems to have a purpose, which had clearly disastrous consequences in the text when people followed Jarret as he attempted to remake the United States into an ultra-conservative Christian fascist nation. Thus we can see how instilling self- and group- directed purpose into the education system could serve as a counter to demagoguery: if people are taught not only to recognize the purposes of others, but trained on how to create their own purposes as well as to formulate plans for carrying them out then this training should at the very least be an obstacle to the ability of demagogues to form a strong and sustained movement, and at the same time is completely contrary to the dictate that there is no alternative to capitalism. They need training in evaluating the purposes of others. There certainly are alternatives to the purposes of endless economic growth and commodity fetishism engendered by capitalism, the real trick is in uniting various individual purposes to form coherent institutions of anti-power that can help to create a politically plausible alternative to capitalism. The Earthseed Destiny as mother project was such an attempt to build alternative institutions that were outside of capitalism. However, Tom Moylan claims that because their goal was escaping the world

through the Destiny, Earthseed "has become an alternative and no longer an oppositional force" (*Scraps* 243). I will analyze the problem of the content of the Earthseed Destiny in the next chapter, but even though the Destiny is ultimately escapist, the logic that it presents as a mother project is still quite capable of being an oppositional force.

The above conversation came to a close as the two stumbled upon an isolated house where its single resident, a middle-aged woman, tended her garden. Lauren and Len asked if they could work in exchange for a meal, after which they spoke with her and Lauren slowly began to fold her into the network that was just beginning to take shape in her mind. We see here the beginnings of what would ultimately become Lauren's method for spreading Earthseed and pursuing the Destiny – a method which depended on uniting different individual purposes and interests under the aegis of the Destiny.

Lauren learned that the woman had been a school teacher up until the almost total dissolution of the public school system. Lauren piqued her interest in Earthseed by quoting verses while she sketched the woman after the work had been done. Among the verses was:

> To shape God
>
> With wisdom and forethought
>
> To benefit your world,
>
> Your people,
>
> Your life.
>
> Consider consequences,
>
> Minimize harm.
>
> Ask questions.
>
> Seek answers.
>
> Learn.
>
> Teach. (367)

As Lauren left she planned to use the woman's interest in teaching and her lack of any clear purpose beyond mere existence to help to begin building an Earthseed movement by bringing children to her to look after: “By the time we did leave, she was as much with me as Len was. The verses and the sketches and memories will keep her with me for a while. I'll have to visit her again soon[97] – say within the year – to hold on to her, and I intend to do that. I hope I'll soon be bringing her a child or two to protect and teach – one of Acorn's or not. *She needs purpose as much as I need to give it to her*” (372, emphasis added). As we can see, the way that Lauren began to create a network that would eventually give the Earthseed Destiny shape as an actual project was through trying to provide a sense of purpose for people. Unlike the demagogue (Jarret) who provides the purpose wholesale and ready-made, Lauren found a purpose for this woman based on what the woman's own purpose was prior to the dissolution of the public education system – to teach and nurture children. Although Lauren did provide the purpose, it was a purpose that the woman would have readily provided for herself had she believed that it was possible before having had met Lauren. Lauren's leadership does seem problematic, though, until we take a closer look at how her *authority* was undermined in various ways that were institutionalized in Earthseed.

Limits to Authority and Radical Partnership

In interviews, Butler spoke of the trouble that she had getting started on the *Parable* novels largely because she knew that she wanted Lauren to be a power seeker but also a sympathetic character. The author had trouble reconciling these two desires.[98] Butler overcame this dilemma with the realization that as a tool, it is how power is used that is the problem and not necessarily power as such. The power

97 Lauren's method for using Earthseed to create a strong and viable alternative to capitalism is reminiscent of how a coherent Martian culture was created in the *Mars* trilogy, through repeated face to face interactions that built a coherent community through the strengthening of social bonds as well as through its cultural content.

98 Through an analysis of Butler's notes and archives, Gerry Canavan shows how Lauren's character changed from Butler's initial vision of “a steely and callous and, at times, brutal political operator” (*Butler* 130): “When she reflected on the series after it was finished, she realized that she started out not liking Lauren because she was a power seeker; it was only later that she came to see power as just another tool that could be wielded better or worse” (*Butler* 131).

that Lauren sought was in many ways to liberate her own and others' power-to-do from the various nodes of power-over of the Capitalocene. Yet Lauren also displayed tendencies of asserting power-over others. Either because of a wariness of this tendency, or in spite of it, Earthseed sought to institutionalize various checks of any accumulation of power-over that any one individual (or group of individuals) might seek to establish.

Lauren clearly viewed herself as the leader throughout the *Parables*: "Those people were willing to follow an 18-year-old girl because she seemed to be going somewhere, seemed to know where she was going" (*Talents* 363). Additionally, just after Acorn had been captured, one of Lauren's first reflections was that "these were my people – *my people.* They had trusted me, and now they were captives. And I could do nothing – nothing but give them galling advice and try to give them hope" (*Talents* 201). Even much earlier, while on the trek north from Robledo, when Emery and her young daughter first joined the group by infiltrating their camp, Lauren essentially invited her to join the group prior to discussing it with the rest of her cohort:

> "Give us a moment to decide," I said. I meant, *Go away so my friends can yell at me in private,* but the woman didn't seem to understand. She didn't move.
>
> "Wait over there," I said, pointing toward the trees nearest to the road.
>
> "Let us talk. Then we'll tell you." (*Sower* 255)

But even though Lauren was the leader of Earthseed and Acorn in many respects, her authority was not absolute by any means.

As the Utopian Call, Earthseed sought to establish and develop radically democratic institutions, and while there are nodes of power in Earthseed, particularly around Lauren, there are also counters to any power centers built into the Earthseed theology as well as the practices that began in Acorn. For example:

Once or twice

each week

A Gathering of Earthseed

is a good and necessary thing.

It vents emotion, then

quiets the mind.

It focuses attention,

strengthens purpose,

and unifies people. (*Sower* 192)

Earthseed Gatherings are weekly events that the entire community attends in order to discuss the affairs of the community. The democratic aspects of the Gatherings were highlighted in a conversation between Lauren and her brother Marcus who wanted to preach a Christian sermon at one of the Gatherings. Lauren told him that he could, but that he had to be ready for highly critical questions and discussions afterwards. He told her that he just wanted to preach, but Lauren told him that it was not the way that the Earthseeders did things and that "we're as serious about the discussion as you are about the sermon. Some of our people might probe and dissect in ways you won't like" (*Talents* 149). Lauren was correct on both accounts: the Earthseeders did probe and dissect Marcus's sermon and Marcus did not like it. It was his failure at establishing preacherly authority that ultimately prompted Marcus to leave Acorn not long before it was captured.

The democratic aspirations of Earthseed are quite apparent in the following verse:

Partnership is giving, taking,

learning, teaching, offering the

greatest possible benefit while doing

the least possible harm. Partnership

is mutualistic symbiosis. Partnership is life.

> Any entity, any process that
> cannot or should not be resisted or
> avoided must somehow be
> partnered. Partner one another.
> Partner diverse communities. Partner
> life. Partner any world that is your
> home. Partner God. Only in
> partnership can we thrive, grow,
> Change. Only in partnership can we
> live. (*Talents* 135)

Earthseed's basic principle for organizing society is partnership, or "mutualistic symbiosis." Mutualistic symbiosis seems like it could be synonymous with Holloway's characterization of power-to, that it is a way of socially organizing doing in a way that is beneficial to all, but perhaps the best way to understand Earthseed's notion of radical partnership is through Etienne Balibar's concept of "equaliberty." Equaliberty basically means that both equality and liberty are mutually dependent concepts, that it is impossible to have one without the other, or that "equality is identical to freedom, is equal to freedom, and vice versa. Each is the exact measure of the other" (46). Balibar argues that the identification of equality and liberty was the condition of possibility for modern understandings of citizenship, and ultimately that we need a new concept of citizenship divorced from the confines of the nation-state based around a deeper understanding of both equality and liberty.

Balibar states that, "You will understand why under these conditions, at the end of the day, I prefer the expression 'diasporic citizenship' – or, on the local level, 'co-citizenship' – to that of nomadic citizenship (though it is perhaps in part a matter of convention), designating not so much 'citizenship of the world' as a totality as 'citizenship in the world', that is, a movement of expansion and relocation

made up for by symbolic and institutional relocations" (276). The concept of "diasporic citizenship" seems to be almost the inverse of utopian subjects who are not united by dispersal from a homeland, but are united through the struggle to form a homeland in the future. Yet "diasporic citizenship" does seem appropriate for Lauren and the others who joined her at Acorn, all of whom were refugees fleeing different problems caused by the Capitalocene prior to coming to Acorn and then once again became refugees following its destruction.

Whether utopian subjectivity is better cast as diasporic or somehow opposite of it, the "mutual symbiosis" of the Earthseeders does imply that "co-citizenship" would be apt, but not in the sense of citizenship that is of a particular nation-state but a citizenship of a future state of affairs. Balibar argues that the history of citizenship is open, "just as the history of equaliberty is open. They have a past before modernity and its bourgeois or socialist revolutions, declaration of rights, etc., but they certainly also have a future after modernity" (127). The future after modernity will be shaped by the Anthropocene; a continuation of the Capitalocene would surely see the diminution, both conceptually and in practice, of equality, liberty, and citizenship, much as in the world of the *Parables,* but a good Anthropocene would necessarily see new, more radically inclusive versions of each of these terms. According to Earthseed, "Only in partnership can we live;" partnership with other utopian subjects working to carry out the utopian struggle, but also partnership with the nonhuman world in the attempt to reinhabit all of the spaces damaged by the Capitalocene.

As a reflection of "mutualistic symbiosis," equaliberty is what legitimizes democratic power, meaning that decisions made and carried out by individuals and collectives within a democratic society are only legitimate when they conform with principles of equality and liberty. Yet the individual initiative that is indispensable for a truly democratic society that does not have its rules enforced coercively through the threat of state violence still has the danger of allowing power to concentrate too greatly in a single individual, or even in a group of individuals that might form a new "elite." In the

Parables individual initiative and collective decisions are subject to discussion by the entire group, and the group is characterized by the ideal of radical partnership. Furthermore, for utopian subjects, individual initiative is intimately bound up with the purpose of the Utopian Call. Therefore, *the authority of any given utopian subject in the utopian struggle is dependent on how well their individual initiative is compatible with the goals of their partners in the struggle*. Thus the only guarantor of individual initiative in the utopian struggle is continued partnership with their "co-citizens," which because of the compulsion to realize the utopian struggle is the most important thing for a utopian subject as such, as was evidenced by Lauren's willingness to sacrifice anything in the name of the Utopian Call. There is a similar logic that Peter Linebaugh and Marcus Rediker describe as the "hydrarchy from below" that marked the social organization of pirate ships in the late seventeenth and early eighteenth centuries in *The Many Headed Hydra*: "The pirate ship was democratic in an undemocratic age. The pirates allowed their captain unquestioned authority in chase and battle, but otherwise insisted that he be 'governed by a Majority.' As one observer noted, 'They permit him to be Captain, on Condition, that they may be Captain over him.'... The pirate ship was egalitarian in a hierarchical age, as pirates divided their plunder equally, leveling the elaborate structure of pay ranks common to all other maritime employment" (162-3).

While the Earthseed communities were far from perfect, their democratic aspirations were clear, and just like the pirates of the early modern period, "They had also self-consciously built an autonomous, democratic, egalitarian social order of their own" (172).[99] While the Earthseed Destiny certainly "belonged" to Lauren, in another sense it was simply the larger project that unified and directed the power-to-do of the Earthseeders in opposition to the institutions that perpetuated the Capitalocene.

99 The hydrarchy Linebaugh and Rediker describe – a web of ships, ports, and maroon communities building their own alternative culture and social structures throughout the Atlantic seems to have parallels with the organizational strategy adopted by Lauren after the destruction of Acorn.

Finally, at the close of *Talents* there is a brief glimpse of the limits to Lauren's authority when she is waiting to watch the departure of the first ship, the *Christopher Columbus*: “I object to the name. This ship is not about a shortcut to riches and empire. It's not about snatching up slaves and gold and presenting them to some European monarch. *But one can't win every battle.* One must know which battles to fight. The name is nothing” (406, emphasis added). Like Lauren, we must use our individual initiative in partnership with others, and have the forethought and adaptability in our struggle to shape our radically changing world into a good Anthropocene.

Chapter 4:

The Call of the Commons:

Utopia and Ecological Health

Thus far we have seen how the Utopian Call interpellates utopian subjects to be something other than human: in *Xenogenesis* this process is at its most dramatic, as the characters become increasingly monstrous as a result of a Utopian Call that originates from an absolutely alien source. The same process happens in the *Mars* Trilogy guided by breakthroughs in biomedical technologies that allow future generations to modify their bodies with genetic codes from terrestrial, albeit non-human, sources. In both cases, the physical changes that make newer generations monstrous to the older generations illustrate that as the Utopian Call takes hold of a group and becomes more refined over time, the generations that grow up viewing the world through the lens of the Utopian Call will be other than, and, it is hoped, more than, merely human.

Furthermore, in both the *Xenogenesis* and *Mars* trilogies the relationship between history and the Utopian Call is highly significant. In *Xenogenesis,* the Call comes from outside of history, and to make this point even more explicit, it comes to the fractionally small remnants of humanity after history is ended through nuclear annihilation. However, in the *Mars* Trilogy the relationship between utopia and history is a central theme to the narrative; earlier, we established that utopia is the name for the struggle in history that tries to break with the inertia of history and inaugurate a truly just society.

In the *Parable* series, we found a further exploration of how the Utopian Call manifests in the struggle in history, with the struggle coalescing around a mother project, which would allow people to live out their freely chosen purposes engaged in a variety of projects that are organized in one large multigenerational project. This project is meant to focus the energies of the adherents of the Utopian

Call, giving various material benefits to humanity as well as advancing the utopian struggle. However, the ultimate goal of the mother project in the *Parables,* the Earthseed Destiny, was meant to break with history in such a way as to leave behind the bulk of humanity to remain trapped by the inertia of history.

In this chapter I analyze how the focus outward ultimately hinders the utopian struggle and so the struggle must be focused inward towards the problems of Earth as well as being oriented towards the future. I will analyze three recent stand alone novels by Kim Stanley Robinson, each expressing the utopian struggle as moving in similar directions. As in Butler's *Parables* the struggle in these novels is directed through projects that are freely chosen, a major goal of which is to consciously advance the world towards a good Anthropocene. The three novels I will analyze are *Aurora*, *2312*, and *New York 2140*. Despite Robinson's recent advocacy for geoengineering projects that rely on state intervention in the environment on fairly large scales (Kaufman), the solutions offered in these three novels appear to be grounded in a completely different logic that may use the State, but does not rely on it. More importantly the mother projects in these texts are concerned with targeted interventions in local ecologies rather than attempting to "engineer" the entire planet at once.

Aurora is a novel that begins on a spaceship traveling from Earth to the Tau Ceti system in the hopes of terraforming one of the earth-like moons in the system. The novel is narrated by the sentient ship and begins when they are nearing the end of the almost two centuries long voyage, focusing on a girl named Freya, who despite or perhaps because of her apparent simplicity becomes the *de facto* leader of the spacefarers, especially in the second half of the novel. Unfortunately the ship is beginning to break down in a myriad of unanticipated ways to the point that it is unclear whether the nearly two thousand people on board will make it to the Tau Ceti system at all. They do, but once there they find that the moon that was their greatest hope – an earth analog that they dubbed Aurora – was infested with a "very small prion" that was "like a strangely folded protein, maybe, but only in shape. It's much

smaller than our proteins" (187). This very small prion caused severe allergic reactions in the humans exposed to it, eventually causing anaphylactic shock and ultimate death.

After a very brief period of violence and much heated debate about what to do in light of Aurora's prion infestation, half of the crew decided to stay in the Tau Ceti system and the other half decided to head back to Earth. The narrative follows the latter half, led by Freya and her allies, presumably with those who opted to stay not being able to make it work and dying out after a few years.

2312 is not quite a sequel to the *Mars* trilogy. Its main characters are from settlements other than Mars and while there are allusions to the *Mars* trilogy, many of the details of the events alluded to show that the world of *2312* runs parallel to that of the earlier trilogy and does not follow directly from it. There are two main plot lines in the narrative, the first being a system-wide conspiracy centering around some "qubes" or quantum computers, wherein some of the qubes appear to be gaining sentience and autonomy. Some of these qubes, along with some human conspirators, are using the superior computational power of the quantum computers to create "pebble mobs" as a weapon. The pebble mobs are basically a large bunch of very small asteroids on specific trajectories that will arrive at a target all at exactly the same time, essentially creating a very high mass, high velocity body that is able to get past a planet's security measures that larger bodies could not pass through unnoticed.

A pebble mob is used to devastate the lone city on Mercury, Terminator, which uses the massive heat differential between the night and day sides of the planet to perpetually move along tracks to stay just shy of the sun breaking over the horizon. Later on in the narrative a pebble mob threatens the "sunshield" of Venus – an orbital screen used to block out direct radiation from the sun – which, if compromised, would cause the sun to rapidly heat up the surface (543), ruining the terraforming efforts already underway and ultimately allowing a competing faction to take control of further terraforming efforts of the planet.

The second plot line, and the one which expresses the Utopian Call centers around the re-introduction of animal species to Earth that are either extinct or extremely endangered in the wild. The regeneration of these species was made possible by the hollowing out of a great many asteroids creating various habitats, each with large areas set aside as nature preserves with sizable animal populations (43): “the beautiful terraria in their thousands, jewel-filled geodes, spinning like tops” (386). Ultimately the animals were reintroduced in an event called “the Reanimation,” wherein animals were dropped to Earth from space in clear bubbles in different parts of the world in the hopes of revitalizing many of the Earth's attenuated ecosystems as well as creating rippling effects throughout all of Earth's political ecologies as well.

Just as moving from *Aurora* to *2312* brought us significantly closer to our own historical moment, so then moving to *New York 2140* moves us another century and a half closer still. David Sergeant argues that even though *New York 2140* is a near future novel, it shares more generic features with historical novels (especially those written in nineteenth century France) than other, far more pessimistic contemporary novels of the near future (7). Sergeant suggests that even more than the historical novel, *New York 2140* is closest to a “range of cross-disciplinary texts that Robinson himself has labeled 'utopian non-fiction,' such as those by Naomi Klein, David Harvey, and Bill McKibben” (2). Ultimately Sergeant suggests that generically *New York 2140* could be an example of “the genre of here to there, perhaps” (20). The “here” is a capitalist world system and the “there” is a post-capitalist future where we can actually deal with the problems of the Anthropocene.

The novel takes place in the 2140s, a couple of generations removed from the worldwide catastrophe of the “second pulse” of sea level rise. Thus by the time the story takes place much of the shore line has been stabilized and many of the coastal cities have adapted to being now in the intertidal zones, or completely drowned, with many of the old skyscrapers being waterproofed below the water line and reclaimed as residential centers by the adventurous, enterprising, or just plain desperate people

of the preceding generation or two.

Because governments and investors largely left these cities to drown, a vacuum was created for people to reclaim the drowned cities and experiment with new social structures not dominated by either the State or Capital:

> Squatters. The dispossessed. The water rats. Denizens of the deep, citizens of the shallows. And a lot of them were interested in trying something different, including which authorities they gave their consent to be governed by. Hegemony had drowned, so in the years after the flooding there was a proliferation of cooperatives, neighborhood associations, communes, squats, barter, alternative currencies, gift economies, solar usufruct, fishing village cultures, mondragons, unions, Davy's locker freemasonries, anarchist blather, and submarine technoculture, including aeration and aquafarming. Also sky living in skyvillages that used the drowned cities as mooring towers and festival exchange points; container-clippers and townships as floating islands; art-not-work, the city regarded as a giant collaborative artwork; blue greens, amphibiguity, heterogeneticity, horizontalization, deoligarchification; also free open universities, free trade schools, and free art schools. Not uncommonly all of these experiments were being pursued in the very same building. Lower Manhattan became a veritable hotbed of theory and practice, like it always used to say it was, but this time for real. (209)

The story focuses on the Met Life building in Madison Square in Manhattan and takes place at a time when the drowned parts of the city have created a new hip culture, termed the "SuperVenice" to highlight the desirability and romanticism of this lifestyle, which of course means that now investors want to reclaim the real estate that Capital had abandoned generations before. The narrative advances as the people of the Met building, as well as other denizens of the SuperVenice, try to hold on to the physical and social structures they had created, all while in the midst of a struggle against those who

wish to commodify and financialize their way of life.

In all three novels analyzed here the Utopian Call is centered around ecological health. That is, the most general form of the principle underlying the Utopian Call is that in order for individuals to thrive they can only do so in a healthy environment, both physically and socially. Physically in terms of the plants, animals, and so on in a given space and socially in terms of the political and social institutions that govern people's lives. The need for the most basis ecological health is similar to Maslow's hierarchy of needs, which the character Swan uses explicitly to justify some of the direct actions that she was involved with on Earth (*2312* 448). However because humans are fundamentally interdependent beings, with each other as well as with different non-human aspects of their environments, the hierarchy of needs must extend to the entire planet in order to truly be effective. Thus the Utopian Call demands that the hierarchy of needs be attended to by and for all, making ecological health the ultimate goal and grounding for the utopian struggle, especially as the consequences of the developing Anthropocene will increasingly shape both our political and physical landscapes.

Ecological Health and Commoning

The way that ecological health is pursued is through the creation of a commons. The commons as a political concept has made a great resurgence in the past two decades largely galvanized by the Zapatista uprising in Mexico and continued to gain traction as a reaction against a wave of enclosures under neoliberal regimes (Linebaugh 5; Caffentzis 24). The commons represents a third term that is neither private nor public in that it is not owned by either private interests or a state but is stewarded by all those who use it. George Caffentzis and Silvia Federici state that, “Commons are not given, they are produced,” and that “commons are not essentially material things but are social relations, constitutive social practices” (i101). The social relations referred to here are of course between human beings, but they are also between humans and their environments, and all of these relations take on the form of the

kind of radical partnership pursued by the Earthseeders. Elsewhere Federici states that in the context of building new commons in the twenty-first century that, “Land, here understood as in the culture of the native populations of the Americas, is not only an economic factor, but is also a *source of sociality*, of new knowledges and spirituality” (209, emphasis added). I suggest that what Federici is referring to is not the land as a foil for new forms of intrahuman sociality, but as a source of sociality it is much more like the nonhuman agents spoken of by Latour: “Politics needs a common world that has to be progressively composed. Such composition is what is required by the definition of *cosmopolitics*. But it is clear that such a process of composition is made impossible if what is to be composed is divided into two domains, *one that is inanimate and has no agency, and one which is animated and concentrates all the agencies*” (14, emphasis in original). Robinson points to this kind of “cosmopolitics” when he argues that geoengineering needs to be re-conceptualized so that it is not understood as a practice based on mastery over the environment, but rather as “geotweeking, geofinessing, or geobegging where *we beg Gaia to do the thing that we are praying it to do with these tiny gestures*” (“No Sheriff,” emphasis added).

The common world that needs to be progressively composed in order for a cosmopolitics to be possible is a global commons. However, Caffentzis and Federici argue that, “the principle [of the commons] must be that those who belong to the common contribute to its maintenance: which is why...we cannot speak of 'global commons,' as these presume the existence of a global collective which today does not exist” (i102). Rather Caffentzis and Federici “think of how a specific community is created in the production of the relations by which a specific common is brought into existence and sustained” (i102). But because the Capitalocene is a truly global problem and the creation of a good Anthropocene needs to be a global project if it is not to reproduce some of the destructive hierarchies of capitalism (e.g. First World/Third World; North/South), the creation of a commons needs to be global as well. Yet at the same time, a unified world state that would represent a global collectivity capable of

coordinating activities on a global scale "perhaps will never exist as we do not think it is possible or desirable" (Caffentzis and Federici i102). So instead of a single political entity creating a unified global commons, what is needed is a globally networked set of commons and "commoners"[100] who are committed to restoring ecological health to their own commons as well as to forming new social and political relations based on shared concerns for justice that take on the shape of radical partnerships between individuals and their wider world. In this regard, Caffentzis and Federici argue that, "commons are not only the means by which we share in an egalitarian manner the resources we produce, but *a commitment to the creation of collective subjects, a commitment to fostering common interests in every aspect of our life"* (i103, emphasis added). These commitments are identical to the formation of utopian subjects by the interpellation of the Utopian Call – a Call to commoning that links up and networks with other commoners who have appropriated for themselves their own local versions of the same utopian struggle of commoning.

Likewise, Antonio Negri and Michael Hardt argue that, "The action of 'commoning' must be oriented not only toward the access to and self-management of shared wealth but also the construction of forms of political organization. The commoner must discover the means to created alliances among a wide variety of social groups in struggle" (106). The networking of all the various acts of commoning is the Mother Project that has the best chance to move us toward a good Anthropocene. Historian Peter Linebaugh writes about the commons not as a noun but as a verb: "The activity of commoning is conducted *through* labor *with* other resources; it does not make a division between 'labor' and 'natural resources'" (13, emphasis in original). The laboring of "commoning" is done fundamentally through projects which require "the posture and attitude of working alongside, shoulder to shoulder" (Linebaugh 15), and it is through globally networked projects that the radical change that is necessary

100Michael Hardt and Antonio Negri describe this use of the term "commoner" as such: "commoners are not just common for the fact that they work but, rather and more important, because they work on the common. We need to understand the term *commoner*, in other words, as we do the designations of other occupations...a commoner "commons," that is, makes the common" (105).

for a good Anthropocene will be realized. Commoning is our Utopian Call for the twenty-first century because it is primarily concerned with the creation of new forms of sociality based on principles of solidarity between humans as well as nonhuman aspects of our world, and visionary Anthropocene literature is a medium that should be able to help readers think about what commoning in the Anthropocene could look like.

Caffentzis and Federici argue that, "Anti-capitalist commons are not the end point of a struggle to construct a non-capitalist world, but its means" (i103), and this struggle is dramatized in some of the recent novels of Kim Stanley Robinson. I will analyze these works as visionary Anthropocene literature, each providing different, albeit related, takes on commoning as a mother project. But before analyzing how these works dramatize the creation of new sets of commons, I will briefly analyze the arguments expressed in *Aurora* for why a Mother Project such as the Earthseed Destiny cannot focus the utopian struggle toward a good Anthropocene as effectively as that of globally networked commoning.

Earth is the Only Home

One does not need to reach too far to view the plot of *Aurora*[101] as an argument against the Earthseed Destiny, certainly in terms of the overall message in that for the Earthseed Destiny, interstellar space travel is not simply a *good* goal but holds a central position on the utopian horizon, whereas in *Aurora* interstellar travel is rejected as dangerous for human beings as well as the Earth. In an interview with Gerry Canavan, Robinson comments on the idea that "humanity has a destiny to colonize the universe, the 'cradle' is of only momentary importance, a thing to be used in infancy and then discarded, or at most revered as 'Old Earth.' The story therefore carries within it terrible mistakes

101Robinson named the planet and book *Aurora* as an allusion to Isaac Asimov's book *The Naked Sun.* In *Foundation and Earth,* based in the same universe, the reader learns that humanity's colonization of the galaxy began with fifty original settlements, the first of which was a planet called Aurora. So through the actual title of the book, Robinson could be making another subtle rejection of humanity's expansion outside of our own solar system – suggesting that humanity should not colonize the entire galaxy, no matter how extremely long term the project would be, because humanity should never begin to spread out from our solar system in the first place.

in thinking about our reliance on our planet, and it rightly causes an instinctive revulsion against the space project on the part of people who are a little more grounded" (254). *Aurora* does not just reject interstellar travel as a project but also rejects it as a quasi-mystical Destiny as well as an evolutionary imperative, and makes the case that casting space travel in this light is both dangerous and wrong. This position carries a certain resonance with Geoff Ryman's "Mundane Manifesto,":[102] "That interstellar travel remains unlikely...That magic interstellar travel can lead to an illusion of a universe abundant with worlds as hospitable to life as this Earth. This is also unlikely." And the reason why fixating on interstellar travel as a fix for problems here on Earth is that, "this dream of abundance can encourage a wasteful attitude to the abundance that is here on Earth" (Ryman et al. 1). While this attitude does not seem to be applicable to the details of the Earthseed Destiny, seeing how its adherents also strove to create a more harmonious relationship with the land while residing in Acorn, it is relevant to the ultimate goal of leaving the Earth behind.

The first rejoinder to the Earthseed Destiny is made after the Ship finally reaches Aurora and the crew that made landfall had all become fatally infected with a prion that they came into contact with on the surface. One of those infected, Euan, who was one of Freya's closest friends, broadcast his thoughts to Freya and the rest of the ship after he started to become ill and knew that he was dying:

> But you know, I bet they're all like this one. I mean, they're either going to be alive or dead, right? If they've got water and orbit in the habitable zone, they'll be alive. Alive and poisonous. I don't know. Maybe they could be alive and we live with them and the two systems pass each other by. But that doesn't sound like life, does it? Living things eat.

102The Mundane Manifesto came out of a session of the Clarion Science Fiction Writers Workshop and was rather tongue-in-cheek in tone. The general gist of it was to "go back and start leaving all the tired old SF tropes out so that we can invent some new ones, and to look at futures we might actually have" (Hill). Even though it is jestingly hyperbolic, I think that the manifesto does express an interesting point about the relationship between the literary imagination and the political imagination as expressed in sf. One might say that mundane sf attempts to eschew the arcanum in favor of solely having a novum in the text, but as sf author Ted Chiang noted about mundane sf: "adherence to real science is a worthy goal for sf writers, but I do not think it is either a necessary or sufficient condition for fiction that is relevant to the issues facing our world today" (213).

> They have immune systems. So that's going to be a problem, most of the time anyway. Invasive biology. Then on the dead worlds, those'll be dry, and too cold, or too hot. So they'll be useless unless they have water, and if they have water they'll probably be alive. I know some probes have suggested otherwise, like here. But probes never stop and test thoroughly. They might just as well be running their tests from Earth, if you think about it. Bugs like these we've got here, you aren't going to find those unless you slow down and hunt really hard. Live nearby for a while and look. At which point it's too late, if you get a bad result. You're out of luck then. (190)

Here Euan gives the basic argument that will also be taken up later in the narrative by other members of the crew once they are back on Earth and are forced to defend their decision to return. Any planet that humans wish to colonize must either have some life or be totally dead to begin with. If a planet is totally devoid of life to begin with, then it is most likely because it does not have the conditions that support life as we know it, such as water, an atmosphere and/or magnetosphere to guard against excessive radiation, sufficient sunlight, etc.,[103] and in cases such as this humans would have to provide the planet with these things in quantities that are sufficient to support life for an entire planet. This process would take centuries, and while it could be undertaken as a very long-term project, there is the problem of providing a base of operations that would be sufficient to sustain that many generations of human beings to live without any room for failure. And because any such planet is likely to be too far away from Earth to be easily reachable in anything resembling a reasonable time frame, if a planet does not already have those things conducive to life in sufficient quantities then it is simply not a possible candidate for terraforming and colonization. During a discussion between the chief engineer of the ship, Devi, and her husband she said that everything needed to work or they would all die, and he retorted that it had always been that way. Devi responded by saying: “No. Not on Earth. We had room

103See for instance J. Horner and B.W. Jones, “Determining Habitability: Which ExoEarths Should We Search for Life?”

for error there. But ever since they put us in this can, it's been a case of get everything right or else everyone is dead" (127).

In the *Mars* trilogy, Robinson tells the story of a possible path that terraforming a dead planet could take, albeit with a substantially shortened timeline, only taking a couple of centuries for a project that could possibly take millennia. The thing that could allow Mars to be a possible target for terraforming that planets outside of our solar system lack is simply the proximity to Earth, especially because of the continuous introduction of more humans and other lifeforms that a thriving and diverse ecosystem would require. However, continuous resupplying simply could not be an option for anywhere outside of our solar system, and as such Chris Pak argues that *Aurora* dramatically critiques the possibility for successful terraformation at a fundamental level ("Terraforming" 510).

On the other hand, if a planet has enough of the things that make up the conditions for life, then that planet would most likely have some form of life, even if in an infinitesimally basic form such as the prion that inhabits Aurora.[104] As Euan points out: "Living things eat. They have immune systems...Invasive biology." The sudden collapse and death caused by the prion on Aurora is just an extreme dramatization of this logic: prior to any hostilities towards humans that any hypothetical intelligent aliens would act upon let alone harbor, the microbial life of an alien planet would more than likely be anathema to human and non-human terran life. Gerry Canavan notes that, "Ecology becomes the despoiler of that greatest of science fiction dreams, the conquest of the stars; even if we decide to brave the centuries-long journey to another star, and even if we are lucky enough to find a habitable planet there, we are likely to find ourselves greeted by a counter-ecology with which we cannot biologically interact or co-exist, much less eat or interbreed with" ("Eco" 23). As such, planets that already have the conditions for life in sufficient quantities could not be a possible target for terraforming or colonization.

104And of course the members of the crew died before they could explore very much of Aurora to discover whether there were other forms of life there as well.

Therefore, because no planets outside of our solar system offer suitable candidates for colonization, the project of interstellar space travel is simply unrealistic, and because the people sent out in the service of this project would die out either from lethal exposure to alien life forms or the eventual breakdown of suitable habitats, it would be morally wrong to carry out this project.

Another problem with interstellar space exploration and colonization being the Utopian Call is that it is too circumscribed. Tom Moylan argues that the realization of the Destiny in *Talents* offers only a “secure space” to those who are departing on the ships, “one that soon will be cosmically elsewhere – rather than a utopian enclave wherein its members can strive to become agents in and of themselves, preparing to burrow within the very historical context that has brutalized and terrorized them” (*Scraps* 244). As a generic mother project it may spur the development of many different beneficial technologies, but as the Utopian Call its ultimate end is the sacrifice of a small group of people in the hopes that their descendants will be able to construct a better society outside of the influence of the inertia of history and consequently outside of the utopian struggle in history. Even if the initial crew chose to go towards a distant star, their descendants could never have that choice and so are sacrificed to the Utopian Call without their consent. Gib Prettyman states that “Their interstellar mission was predicated not only on precise balance of initial 'environmental' systemic conditions and elaborate technical infrastructure, but on all of its multigenerational passengers remaining in ideal physical and mental condition so that they could fulfill crucial roles” (18). While the original crew *may* have been able to meet these exacting standards, there would be every reason to believe that even under the best of circumstances *all* of their descendants would not be able to, at least not to the degree that would be *necessary* to deal with the problems that would surely arise aboard such a ship.

The sentiment that some people ought to be sacrificed for the possibility of spreading humanity to the stars is expressed in some of the reaction of the people of the Earth to the return of the Ship and its crew:

> They can scroll for themselves on their wristpads and see what people are saying about them. But it's disturbing to do so, because then they see and hear how much resentment, contempt, anger, and violent hatred is directed at them. Apparently to many people they are cowards and traitors. They have betrayed history, betrayed the human race, betrayed evolution, betrayed the universe itself. How will the universe know itself? How will consciousness expand? They have let down not just humanity, but the universe! (449)

A similar point of view is expressed by some of the characters in the *Mars* Trilogy (e.g. Sax and Zo), namely that humanity is the consciousness of the universe, and so humanity has an obligation to expand as much as possible so as to spread this consciousness as far and wide as possible. Freya does not understand why some of the people of Earth are so vehement in their hatred of the returning spacefarers. Aram conjectures that it is because people live in their ideas, "and those ideas, whatever they happen to be, make all the difference" (449). Once the idea that humanity must seed the galaxy becomes incorporated into a Utopian Call, then it takes on the religious significance that was seen in the Earthseed Destiny and, as seen here, any reconsideration of this destiny will be seen by some as a betrayal to all of humanity.

This same sentiment is expressed even more starkly a few scenes later when Freya, Aram, and some of the other crew went onto a televised panel discussion about new plans to "send out many small starships carrying hibernating passengers, who will sleep while the ships make their way out to all the hundred closest stars that have Earthlike planets in their habitable zone" (458). Eventually Aram stands up and explains why the problems of interstellar space exploration are insurmountable. The moderator of the discussion then tried patiently to explain to the spacefarers that they are a sacrifice that will eventually lead to the fulfillment of humanity's galactic destiny, and thus have no right to betray this destiny: "There are really no physical impediments to moving out into the cosmos. So eventually it will happen, because we are going to keep trying. It's an evolutionary urge, a biological imperative,

something like reproduction itself. Possibly it may resemble something like a dandelion or a thistle releasing its seeds to the winds, so that most of the seeds will float away and die. But a certain percentage will take hold and grow. Even if it's only one percent, that's success!" (460) This calculation hardly seems like success for those who make up the ninety-nine percent who will not take hold and grow, not to mention that given the issues with terraforming planets outside of the solar system previously mentioned, the dismal one percent success rate seems unrealistically optimistic. Freya certainly was not impressed with the sentiment and instead of offering a detailed rebuttal simply punched the moderator in the face, after which the spacefarers were quickly whisked away.

Technoscience in the Capitalocene

One of the premises of the moderator's argument was the notion that if something can be done then it should and/or will be done.[105] This notion is at the heart of many of the debates between various characters in the *Mars* trilogy particularly the Reds and the Greens, as well as being at the heart of the imperative for interstellar travel in *Aurora*. This notion is an expression of an uncritical faith in technological advancement, a faith that whatever problems humans find in nature will have a technological fix, and it is born from the fact that there are technological fixes for a great many things. Robinson's fiction is no stranger to the embrace of large scale technofixes for ecological crises. The large-scale industrial terraforming efforts in the *Mars* trilogy certainly fall into this category, yet these methods are critiqued in the text itself through the voices of the Reds and the practices of the ecopoets. In addition, Robinson's "Science in the Capital" trilogy embraces large scale geoengineering technofixes, which Ernest J. Yanarella and Christopher Rice point out are "all high technological policy solutions of Big Science, university and private research institutes, and corporate capitalist firms" which "are in a fundamental sense the very shaping forces that created the social, cultural, and

105Perhaps the most popular proponent of this view today is physicist Michio Kaku who, in *The Future of Humanity,* makes the case for the colonization of space as humanity's insurance policy. His argument that it will happen is roughly that previous technologies thought to be impossible ended up being possible, so any imaginable future technology will also someday likewise become possible.

ecological crisis" (2244). Yanarella and Rice rightly criticize the technofixes in the *Science in the Capital* trilogy for attempting to use some of the same institutions and techniques that perpetuate the Capitalocene in order to fix the Capitalocene. Yet they are also correct in their assertion that Robinson's "ecological imagination, fealty to the utopian promise of science, and paleolithic postmodern personal-political commitments" (2251) offer great insights into how to deal with the Capitalocene without relying too heavily on large scale geoengineering projects.

One of Robinson's insights for thinking about how to move toward a good Anthropocene is the recognition that the background of our daily lives is formed by an accretion of decades worth of technofixes, which puts us in the milieu of what Robinson calls the "technological sublime."[106] Robinson points out that one of the features of the sublime is that it is relatively rare (in nature). It is something to be sought out or stumbled upon as an event, or an extraordinary experience that is meant to be profoundly special and even sacred. Furthermore, the terrifying nature of the sublime means that you should want it to be a very limited and occasional experience, and not something that is relied upon for day to day living. The sublime is a glimpse at the awesomeness of the universe; there is something within people that makes them want to see it, or to be in its presence. Yet it is also exceedingly stressful to maintain that presence, so it should be sought out in only the rarest of circumstances.

Robinson believes that because of the ubiquity of technology we are constantly in the presence on the sublime, which creates a large amount of stress for people. On the other hand, activities such as walking and running, making music, making food, sitting around a fire and chatting should be the norm with occasional moments when people confront the awesome power of the world around them in order to have their need for the sublime satiated until the next rare occasion. Robinson claims that contrary to this situation, we as a society immerse ourselves in the technological sublime through activities such as

106There is some scholarship done on the technological sublime, particularly by David Nye, and although there are some overlaps between how Nye and Robinson are using the term, for Nye it is much more about the sublime nature of new technological wonders while they are still new whereas for Robinson the technological sublime increasingly forms an unnoticed background of everyday life.

moving at high speeds or looking at the ground far below us from high buildings, in both cases being separated from danger by a sheet of transparent glass, which means nothing to a part of brain that sees the dangers all the same. And while we immerse ourselves in the technological sublime on a daily basis, basic human activities like walking around outside tend to be relegated to our spare time if we can find it ("Google"). Silvia Federici makes a similar point, arguing that part of the problem of the Capitalocene is that it alienates us from what she refers to as our "autonomous powers," which "refer to the complex of needs, desires, and capacities that millions of years of evolutionary development in close relation with the natural world have sedimented in us, and that constitute one of the main sources of resistance to exploitation. I refer to the need for sun, the winds, the sky, the need for touching, smelling, sleeping, making love, being in the open air, instead of being surrounded by closed walls" (204).

The technological sublime has thus become too ubiquitous and quotidian, having been tamed by humanity and put to use in the daily operation of a greater and greater part of various human societies. However, because people possess the power to call forth the technological sublime in such mundane circumstances does not mean that human beings have the psychological or emotional makeup to deal with this over-saturation of what should be a rarity. Likewise, Federici states that, "What levels of stress the digitalization of work and social relations is producing can be measured by the epidemics of mental illnesses – depression, panic, anxiety, attention deficit, dyslexia – that are now becoming typical of most technologically advanced countries" (206).

The reach for the stars is just the continuation of this logic until the technological sublime is the entirety of existence for the crew of the ship, from food production to the very sun shining on their faces. Most of the inhabitants did not seem to think about their utter immersion in technology in this way, but there was one small group on board that did. The technological sublime used as a rare experience to mark a significant moment in the life of an individual or group is illustrated early on in

the narrative of *Aurora*, when Freya was on her "wander year." One of the first places she went was a biome on the ship called Labrador, where there was a

> yurt community that brought up their children as if they were Inuit or Sami, or for that matter Neanderthals. They followed caribou and lived off the land, and no mention of the ship was made to their children...Then, during their initiation ceremony around the time of puberty, these children were blindfolded and taken outside the ship in individual spacesuits, and there exposed to the starry blackness of interstellar space, with the starship hanging there, dim and silvery with reflected starlight. Children were said to return from this initiation never the same. (64-5)

The adults of this village defended the rite by telling Freya that, "When you've grown up like we do it...then you know what's real. You know what we are as animals, and how we became human. That's important, because this ship can drive you mad" (65). Freya's informant went on to argue that most people on the ship actually were mad because they had no way of experiencing their world as human animals, because the technological sublime was all that they ever knew. Certainly the adults of the village also were immersed in the world of the technological sublime, but they argued that because of their earliest experiences and the sudden, sublime initial acquaintance with the ship as ship, they had a way of judging right from wrong and anything else for that matter: "So, if we get sick of the way things work, or the way people are, we can always go back to the glacier, either in our head or actually in Labrador" (65). All of the children who went through this process were traumatized on some fundamental level, but "more than you'd think" returned to the village after leaving for a while and raised their children in the same way.

Concerns for the over-reliance on technology for all matters of existence is also present in *2312*. It is noted in one of the "Extracts" sections that for those living in artificial environments (i.e. all of the "spacers"), "statistically very significant results in actuarial tables suggest longevity beyond historical

norms is impossible without frequent return not just to a one-g environment, but *to Earth itself.* Why this should be so is a matter of dispute, but the fact itself is very clear in the data" (94, emphasis added). That is, the spacers all take sabbaticals every seven years or so because as human animals they need to spend some time on the surface of the Earth unmediated by technology in order to live a full, healthy life.[107]

Besides the problem of using large scale geoengineering technofixes, or using some of the causes of the Capitalocene to try to "fix" the Capitalocene, and the alienating effects of the ubiquity of the technological sublime, there is a third entanglement of technology with the Capitalocene that needs consideration: the problem of the social or cultural path dependency, or the tendency for present decisions to be governed by the effects of past decisions, associated with any contemporary technologies. That is, there is an inertia of history that is not directly based on forms of hierarchy and domination but is based on "the seduction that the products of capitalist 'technology' exert on us, as they appear to give us powers *without which it would seem impossible to live*" (Federici 202, emphasis added).

In *Aurora,* the Ship itself represented the path that the Utopian Call would take generations before the start of the narrative. Devi was the only person who treated the Ship as an integral part of the Utopian Call itself and not simply as a means to reach the goal. In fact, it was by treating the Ship as a person, as a part of the society that had heeded the Call, that allowed for the Ship to become an agent in its own right, which in turn became a necessary condition for the survival of any of the actual crew. Prettyman's basic argument is that Anthropocene knowledge practices must take into account the point of view of the non-human world. The Ship as both mini-earth and narrator is a dramatic illustration of this form of knowledge practice (15). Most of *Aurora* is narrated by the Ship, and as the reader comes to find out, Devi had commanded it to make a narrative account of the voyage (54), and was eventually

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107Cf. Bergthaller (6).

able to do so because of the programs that Devi and some others added to improve the decision making capacity of the Ship (276). One of the reasons Devi did this was because, as she told the Ship, "The situation could get tricky. If problems crop up with them settling this moon, they may not be able to deal. Then they'll need your help...Sometimes you have to decide, and then act. You may have to act" (121). The Ship did end up having to intervene in the brief civil war between those who wished to stay in the Tau Ceti system and those who wished to return to Earth (243).

Dithering in the Capitalocene

Now that anthropogenic climate change is common knowledge as well as the fact that a large driver of climate change is the burning of fossil fuels, the continuation of the Capitalocene for the immediate future can perhaps best be understood as the result of the path dependencies of technologies (and socio-political hierarchies) that are dependent on the continued extraction and burning of fossil fuels.[108] The continuation of the path we are on, i.e. the further development of the Capitalocene rather than a global shift towards a good Anthropocene, over the course of the next two centuries is the historical context for the events that take place in *2312.*

Chris Pak notes that,

> Terraforming and geoengineering narratives magnify the human capacity to modify space at geological and climatological scales, which enables them to imagine and theorize the present and future of Anthropocene adaptation. By positioning the contemporary climate crisis as the historical backdrop to the societies of the accelerando, the communities depicted in *2312* function as instances of societies informed by the failure to ground societal configurations in relation to the fragility or otherwise of the planetary environments in which they are embedded. ("Terraforming" 508)

The climate crisis is not just ecological in nature because so much of the crisis is social and political.

108See for instance: Aghion et al.; Arbuthnott and Dolter; Stein.

The rather suggestive name for *our* present era, the era when we have collectively chosen to not address any of the fundamental causes or problems of the Capitalocene, presented in *2312* is "The Dithering," a period from "2005 to 2060. From the end of the postmodern (Charlotte's date derived from the UN announcement of climate change) to the fall into crisis. *These were wasted years*" (277, emphasis added).[109] In this scenario, ours is the period when we as a species know with absolute certainty that we need to radically change society in order to moderate climate change as much as possible and at the very least to build the infrastructure to mitigate the catastrophes that we will inevitably suffer. But global elites, both in government and in business, continue to dither with respect to any substantial changes.

Richard Crownshaw argues that, "fictions of the Anthropocene also stage near, middle and far futures in which the effects of the unfolding Anthropocene are more discernible if not catastrophically realised and, from that future, the cultural remembrance of how this catastrophe came to be. In other words, what is remembered is an aetiology of the conditions that are imagined in the future but which are unfolding in the present of this literature's production and consumption" (890). The Dithering names the cultural remembrance of our imagined descendants, and there does not seem to be much of a possibility that our descendants could look at our present in any kind of favorable light. Pak notes that, "*2312* theorizes the future impact on society and culture of the material conditions underpinning the Anthropocene" ("Terraforming" 508). The name "Dithering" points to the fact that it would be difficult to even imagine them saying, "Well, at least they tried..."

Within the text there was a consensus among the people of the twenty-fourth century concerning these wasted years: "How they despised the generations of the Dithering, who had heedlessly pushed the climate into a change with an unstoppable momentum to it, continuing not only into the present but for centuries more to come" (361). The Dithering is a period of half-measures,

109Donna Haraway states that, "Perhaps the Dithering is a more apt name than either the Anthropocene or the Capitalocene!" ("Chthulucene" 161).

where even the smallest gains are highly contentious and highly precarious, exemplified by the Paris Climate Accord which could only have been considered a large step forward because the climate policies of the collective governments of Earth were so exceedingly poor. The Dithering is the socio-political expression of a global society wherein politicians need to give no heed to science (and by extension what is the case for the world), and where the health of capitalism is the sole legitimator of the status quo.

The "spacer" civilizations that developed were a reaction against the failure to act either in the best interest of the people or the land. Ursula K. Heise states that, "Even though *2312* only refers to the Anthropocene in passing, the novel clearly acknowledges the disastrous consequences of current planetary transformations, but it also seeks to outline alternative scenarios in which humans' ecological interventions enhance and beautify natural landscapes rather than merely destroy their diversity and ecological functionality" (11). The affiliation of many of the space settlements with some communities on Earth in the Mondragon Accord was a way of trying to make right these failures, to move humanity towards a utopian horizon, but this was not the only way that people dealt with the problems of the past. Inspector Genette told Swan during a discussion about who may have been behind the pebble mob attacks that, "The Mondragon is a beautiful thing, but there are many terraria not in it, some of them are seriously deranged. Ultimately what we get by not enforcing a universal law is some kind of accidental libertarian free-for-all" (260). One of the later "Extracts" chapters mentions that one of the mistakes of the Accelerando, or the period of rapid colonization of space, "was that no generally agreed-upon system of governance in space was ever established. That repeated the situation on Earth" (385). While this extract is explicitly referring to a lack of unified government, the point is just as cogent when applying it to the lack of coherent and unified *governance* over economic matters, especially how the economy directly effects the environments of the various worlds.

One of the principle reasons why our present era is referred to as the Dithering is that "The

problem is that what's needed to be done has been clear for centuries now, but no one does it because it would take a very large number of people to enact it. Construction work, landscape restoration, decent farming, they all take huge numbers of people" (*2312* 409). Swan immediately points out that the one thing that the Earth has in abundance is people, and especially people who have nothing productive to do, most noticeably in the armies of the un- and under-employed, Marx's famous "surplus population," which of course are necessary for capitalism to function, both in order to keep down wages as is often noted, but far more importantly to create an underclass. Capitalism, besides any of its other flaws, is an engine for creating inequality, for separating people according to class, conferring the most decadent privileges on a small elite and denying a great many privileges to a large portion of the population.[110]

However, capitalism also confers some of these same privileges, usually in a very attenuated or watered down form, on a fairly sizable portion of the population, the middle class.[111] An important part of Capitalism's hegemony is that the middle class identifies more with the tiny elite which it has almost nothing essential in common with rather than the precariat – an amalgamation of low wage workers, temporary workers, and the chronically un- and under-employed. This identification is accomplished in a very simple way: at one end of the socioeconomic spectrum there is a class of people that has every imaginable privilege and at the other end there is a class of people who have basically none. Those who have some privileges, even though they may be quite attenuated in relation to the elite's privileges, will identify with those whom they see as sharing in those privileges rather than identifying with those who they see as lacking them.[112]

The inevitability of capitalism in the imagination of the middle class is one of the main driving forces for the Dithering, which is reminiscent of Jameson's well-known statement that it is easier to

110See for instance, David Harvey *The Enigma of Capital and the Crises of Capitalism* (243).
111Cfp Harvey (120).
112This logic underlies what W. E. B. DuBois called the wages of whiteness, which were the non-monetary benefits that poor whites enjoyed after the American civil war, such as the use of public parks, restaurants, or department stores. These "wages" then were partially responsible for preventing poor whites from finding common cause with former black slaves and their descendants. See for instance, David Roediger *The Wages of Whiteness.*

imagine the end of the world than the end of capitalism. The Dithering is the ultimate anti-utopian moment because we are confronted with the end of the world as we know it – an increasingly inevitable era of catastrophes that can only be alleviated, or even just mitigated, if we as a species reckon with the externalized costs of capitalism and then move as far away from capitalism as a world system as possible. Although it is clear to anyone that the privileges of the elite far eclipse those of the middle class, or even the moderately wealthy, in both breadth and depth, it is assumed that it is better to have attenuated privileges than to have none at all, or close enough to none as to be functionally without them. This assumption along with the naturalness and inevitability of capitalism means that the inertia of the middle class is a large factor in the continuation of capitalism, even when there is evidence that they are being damaged by it, or in this case that the entire planet is being actively destroyed by capitalism. The effort to forestall the collapse of capitalism is the root of the Dithering. The environment was trashed in exchange for a relatively dry cabin on a sinking ship: "the space diaspora occurred as late capitalism writhed in its internal decision concerning whether to destroy Earth's biosphere or change its rules. Many argued for the destruction of the biosphere, as being the lesser of two evils" (138).

One way of formulating our Utopian Call is to say that we choose the Earth's biosphere over capitalism, and in so choosing we seek to enter into new partnerships with the land to help move the world toward a good Anthropocene. In *Xenogenesis* the ships are conscious entities with which the Oankali had reciprocal relationships of intimacy and care; in the *Mars* trilogy the Reds invested the mineral substrate of the land with an absolute moral consideration while the ecopoets tended and stewarded the land in a way that required an attentiveness to and intimacy with the land that did not allow for its exploitation; in the *Parables* we saw the importance of land rehabilitation as an integral part of social justice; and in *Aurora, 2312,* and *New York 2140* we will see how land restoration fits in with certain ways of life that have value in themselves and thus too is a necessary part of social self-

determination. In an interview, Robinson stated that, “Individual happiness comes from health, and, because we're social creatures, from helping others. Health, broadly regarded, means keeping the whole biosphere healthy, because we're so interpenetrated with it” (Haesilin). So here we can see Robinson explicitly tying together the health of individuals, both physical and mental, with the health of the land, and the way that these are tied together is through “utopian projects.” One way to conceptualize the projects associated with reinhabitation is through the healing of “metabolic rifts.”

Attending to the Rifts

Robinson explicitly invokes “metabolic rifts” in *Aurora*, a concept taken from Karl Marx and brought back into contemporary use by environmental Marxist John Bellamy Foster. Marx originally employed it to theorize the ecological harm done by industrial farming techniques in England, whereby local nitrogen cycles were thrown out of whack.[113] In general, metabolic rifts arise when humans see themselves as apart from the natural world and see nature only as various resources that can be extracted from one place and then traded away to be used anywhere else without any concern for what this does to either place.[114] Foster and Brett Clark argue that when there is concern for the environmental degradation of different capitalist firms, it manifests in technofixes that ignore “the underlying system of alienated nature and alienated society” (4) such as industrial fertilizers for nutrient depleted soils or waste management companies that “clean up” problems by moving them out of sight (5).

The Ship in *Aurora* began to experience various metabolic rifts as it approached the Tau Ceti system, the first of which to be noticed was phosphorus depletion in agriculture (99). Yet there were other metabolic rifts as well, such as different rates of evolution: “The bacteria are evolving faster than the big animals and plants, and it's making the whole ship sick” (110)! The health of the ship is so

113See for instance Foster (156).
114See for instance Jason W. Moore, “Metabolic Rift or Metabolic Shift?” (297) or John Bellamy Foster and Brett Clark, “Marxism and the Dialectics of Ecology” (4).

important because the crew cannot get off the ship, nor can they restock what they need such as phosphorus until they reach the Tau Ceti system. But even then, they can address only some of the metabolic rifts, specifically those dealing with mineral shortfalls, but cannot do anything about the new strains of microbial life. No matter how much people planned to make an ecosystem healthy, the fact that the ecosystem is closed and so much smaller than the earth means that it could never have enough genetic diversity nor the ability to restock minerals any terran environment has access to, regardless of how localized or seemingly cut off that environment is. However, despite the difference in scales, the Ship was meant to function as a mini-Earth, and as such the fact that it was so much smaller than the Earth and a much more closed system (i.e. it did not gain any energy from the sun) meant that its metabolic rifts would become catastrophic far more quickly and more noticeably than on Earth. Prettyman argues that "*Aurora* particularly evokes the Anthropocene" for the reason that the metabolic rifts create such an existential problem for the ship and the crew (11). Likewise, McKenzie Wark states that "We're not good at thinking of closed worlds, as if the Earth will never run out of places to dump our chaotic mess. Kim Stanley Robinson's *Aurora* is a very fine instance, with its moving picture of a closed system slowly running down. It is a bracing corrective to certain endless optimism, not just about space travel but also about living in closed systems in general" ("Imagining" 5766). That is, the optimism that Wark speaks of is the sadism of TINA (there is no alternative) and climate denial; the optimism which attempts to protect the Capitalocene from being properly addressed.

Wark argues that:

> The Anthropocene is a series of metabolic rifts, where one molecule after another is extracted by labor and technique to make things for humans, but the waste products don't return so that the cycle can renew itself. The soils deplete, the seas recede, the climate alters, the gyre widens: a world on fire. Earth, water, air: there is a metabolic rift where the molecules that are out of joint are potassium nitrate, as in Marx's farming example; or

where they are dihydrogen-oxide as with the Aral sea; or where they are carbon dioxide, as in our current climate change scenario. (*Molecular* xiv)

Water (dihydrogen-oxide) and carbon dioxide are two major metabolic rifts that serve as the background for the problems on Earth in *Aurora, 2312,* and *New York 2140.* Carbon dioxide is a metonym for climate change and the burning of fossil fuels as such. Water is a significant metabolic rift in all three novels in terms of catastrophic sea level rise.[115] In *2312*, sea level rise is dramatically illustrated by the drowning of Florida, which existed now as a "dark reef under a shallow sea" (433) as well as in the drowned city-scape of Manhattan (100), which is taken to a further extreme in *New York 2140.* In *New York 2140,* sea level rise is a significant part of the narrative. Rather than rising gradually, the sea level rose in two separate "pulses" due to the catastrophic breakup of sections of the Antarctic ice shelves. The first pulse happened in the 2050s and raised the sea level by 10 feet and the second pulse raised the sea level by about 50 feet in the last years of the twenty-first century. These two pulses were each major catastrophes, especially considering how much of the world's population live near the coast. Sergeant argues that although "the sea rise described in *New York 2140* is catastrophic, this catastrophe is just more of the same rather than a slate-cleaning event of apocalyptic proportions" (6). Despite the floods, the Capitalocene was left to develop unchallenged, providing the main driving force of the plot as the main characters attempted to do just that.

Another significant metabolic rift for *2312* and *New York 2140* is that of plant and animal extinction. In *2312*, the hollowed out asteroids that serve as homes for many of the spacers also "conserve species that on Earth are radically endangered or extinct in the world...As such, these spaces are already crucial to humanity and Earth" (43). In *New York 2140*, the threat of extinction is illustrated through the figure of the polar bear, which because of the metabolic rifts associated with the disappearance of sea ice "kept the bears away from the seals, which were their main source of food"

115 We saw the opposite end of water's metabolic rift in the *Parables,* wherein it was water scarcity that helped to define Lauren's world, especially in *Sower.*

(99). The case of the polar bears also shows how metabolic rifts form feedback loops, where for example the increased CO2 in the atmosphere resulting from burning fossil fuels formerly in underground reserves increases atmospheric heat which prevents water from freezing at latitudes where it had in the recent geologic past – in turn preventing the polar bears from migrating and finding food and presumably further affecting the local food webs.

Justin McBrien conceptualizes the sixth mass extinction explicitly as a metabolic rift created by capitalism: "Capitalism leaves in its wake the disappearance of species, languages, cultures, and peoples...Extinction lies at the heart of capitalist accumulation" (116). Two of the underlying causes of the metabolic rifts that define the Capitalocene are the view that humanity is separate from nature on the one hand and who is included and left out of "humanity" on the other. Jason Moore argues that, "Colonialism, ethnic cleansing, and the emergence of Nature" ("Shift" 294) as a concept evolved together because of the "assumption that Nature included indigenous people" ("Shift" 293). That is, metabolic rifts are the result of perceiving the separation between humanity and the rest of the natural world on an ontological level, but the concept of "humanity" in the Nature/Human divide always has dimensions of race, gender, and class, which is why reinhabitation must be coupled with decolonization. The way toward a good Anthropocene must reckon with the many social *and* ecological problems of the Capitalocene by building new sets of relations.

Reanimating the Commons

Contrary to the capitalist mode of distinguishing between Nature and Society, Peter Linebaugh argues that, "The activity of commoning is conducted through labor with *other resources*; it does not make a division between 'labor' and 'natural resources.' On the contrary, it is labor which creates something as a resource, and it is by resources that the collectivity of labor comes to pass" (13, emphasis added). First, we see here that in commoning labor is just another natural resource; there is no separation between Nature and Society, but there is an intimate relationship between human beings

and the wider world. Second, in this view Nature is an integral part of the "social flow of doing" in Haraway's sense and as such any metabolic rifts in the commons are not an entrepreneurial opportunity for those innovative enough to find the right technofix, but are traumatic for the community that is involved with that particular commons. Caffentzis and Federici argue that a community's relationship with a commons is not established through any kind of "property rights" but is established "on the basis of the care-work done to reproduce the commons and *regenerate what is taken from them.* Commons in fact entail obligations as much as entitlements" (i102, emphasis added).

Therefore, a major component of commoning as the Utopian Call that can help us move toward a good Anthropocene is addressing the metabolic rifts of the Capitalocene. This repair work is undertaken in a variety of ways in the three novels: as beach restoration projects in both *Aurora* and *New York 2140*, through the use of shellfish to filter toxins from the water in *New York 2140*, and through "assisted migration" in both *2312* and *New York 2140.*

Once interstellar travel is abandoned by Freya and the rest of her shipmates as the Utopian Call they must then find something else to take its place, something to occupy their time that will also provide the meaning and purpose that they lost upon abandoning their previous utopian project. After the spacefarers' disastrous stint on television they needed to find something to do, as well as to get as much out of the public eye as possible due to the intensifying political ramifications of their existence *on* Earth. The spacefarers arranged to meet with a representative from a group "terraforming Earth" through beach restoration. The lady they met with described their project as follows: "We bring [the beaches] back, that's all. And we love it. We devote our lives to it" (470). She goes on to state how these are all long term projects that take a couple of decades to even get started.

The "terraforming" of Earth is also an explicit reaction against the focus on space travel, their contact told them: "there's a political element to all this, which you need to understand. We don't like the space cadets...This idea of theirs that Earth is humanity's cradle is part of what trashed the Earth in

the first place. Now there are many people on Earth who feel like it's our job to make that right. It'll be our job for generations to come" (471). Pak argues that, "Speculation about terraforming and geoengineering has in many ways informed our contemporary understanding of the Anthropocene" ("Terraforming" 512). And Prettyman states that, "The Anthropocene is an estrangement of human being in the world because it destroys the foundational assumption of separation between humans and the world" (23). Taking these two thoughts together, we can see that the "terraforming" that is being undertaken at the end of *Aurora* is much more like the ecopoetical interventions than the large scale industrial projects from the *Mars* trilogy, because it focuses on human beings' relationships with the Earth as an integral part of themselves rather than viewing Nature and Society as ontologically separate.

Beach restoration is part of a larger project of habitat restoration in general in *Aurora*, which serves as a mother project for people who are trying to deal with many of the problems initiated at the start of the Anthropocene. The habitat restoration projects do not merely represent work to be done for its own sake but as an integral part of a way of life:

> But for now it's good-bye to the beaches, and indeed many a celebrated island of yore now lies deep under the waves. *An entire world and way of life has disappeared with these fabled places, a lifeway that went right back to the beginning of the species in south and east Africa, where the earliest humans were often intimately involved with the sea.* That wet, sandy, tidal, salty, sun-flecked, beautiful beach life: all gone, along with so much else, of course; animals, plants, fish. It's part of the mass extinction event they are still struggling to end, to escape. (468, emphasis added)

There are more than just political and environmental aspects to these projects, although both of these are extremely important in their own rights: there are aesthetic and ethical reasons as well: "Freya sees it: this beach is their artwork. These people are artists. They have an art they love" (476). The love that

the people infuse into their project of reinhabiting the beach is an example of “re-enchanting the world” advocated by Federici, wherein she argues that this kind of work expresses a different kind of logic from that of capitalism; one that is “not only opposed to social and economic injustice but reconnecting with nature, *reinvesting life as a process redefining what it means to be a human being*” (211, emphasis added).

Beach restoration is only an ancillary project in *New York 2140*, but the character whose project it is, Idelba, uses her sand dredging equipment to help a pair of treasure hunting orphans to dig up two chests of gold worth roughly four billion dollars which in turn becomes a fairly significant driver of the plot. As in *Aurora*, the beach restoration project in *New York 2140* was not a State project but was paid for by some of the local communities (405). When a hurricane displaced much of the sand that Idelba and her crew had already deposited on a new beach, they were initially frustrated until they dove underwater and found that “some of her beach was still down there, and near enough to the tide line that wave action would move it there. Ultimately sand was where it was because waves pushed it there” (571). Here we see how the humans who are reinhabiting the beaches are only some of the nodes in the network that will re-establish the beaches, and like the people in *Aurora*, Idelba and her crew were engaged in a labor of love: “'We'll just keep pouring it on'...The crew seemed to regard this endless task as a good thing” (572).

Along with beach restoration, the residents of the intertidal remade their spaces to address other metabolic rifts of the Capitalocene. For example, the rift bequeathed to them comprising “toxic water with all its organics and effluents and microflora and fauna and outright poisons, the whole chemical stew that made up the city's estuarine flow” (96) was being addressed by “the hundreds of millions of clams in the aquaculture cages all over the intertidal...doing yeomen work in filtering clean the water” (94). So it was not as if the “water rats” of the intertidal were content to live in filth while the elites enjoyed the man-made sanitary environments of the upper stories of “superscrapers.” There is a part in

2312 when Swan visits a similarly drowned New York, a scene which Heise states, "not only turns the familiar science-fiction scenario of the drowned metropolis from dystopia to utopia but also presents an altered perception of the city as a profoundly natural place: even the most built-up and densely inhabited cityscape is part and parcel of planetary ecosystems" (19). Both the utopian and ecological elements of the drowned city are expanded in the depiction of the SuperVenice of *New York 2140.*

The most significant reinhabitation project in *New York 2140* is "assisted migration" of "endangered species to ecozones where they were more likely to survive the changed climate" (38). Assisted migration supplemented the creation of habitat corridors: "many [roads] were also taken out entirely, to create the habitat corridors reckoned necessary for the survival of the many, many endangered species coexisting on the planet with humans, other species now recognized as important to humanity's survival" (380). Both the habitat corridors and the assisted migrations were strategies to close some of the metabolic rifts of the Capitalocene, especially those that contribute to the developing mass extinction event of the present:

> Amelia's cloud show was about assisting the migration of endangered species to ecozones where they were more likely to survive the changed climate, so the sight of all the nearly unoccupied land passing below, for hour after hour, was fairly common for her, but nevertheless always encouraging to see. She and her cloud audience could not but realize that there were indeed habitat corridors, well established, and in them wild animals could live, eat, reproduce, and move in whatever directions the climate pushed them. They could migrate to survive. And some of them were even lucky enough to catch a lift in the right direction of the *Assisted Migration.*" (38)

The habitat corridors represent the idea that sometimes the best things humans can do is to leave an area alone and to no longer view the land as a set of resources and raw materials that can be extracted or refined in order to make someone some profits. Since capital inevitably causes metabolic rifts in the

natural world, the withdrawal of capitalist enterprises from a region could conceivably help to heal some of those rifts. However, the damage already wrought by capitalism may not be able to heal itself quickly as a result of the toxicity of some of the byproducts of extraction and refinement. However, toxicity is really only addressed in the text in relation to the water in the partially drowned city.

Consequently, some of the rifts that are either caused or exacerbated by climate change would take centuries to reach an equilibrium whereas many plant and animal species adapted to specific climates do not have the time to find the parts of the world that may now be more hospitable to them. In considering whether assisted migration is a viable option in the near future, "Ecologists must recognize, however, that even optimistic estimates of natural movement may be insufficient for species to keep pace with climate change" (McLachlan et al. 297). One of the major reasons for this problem is "because the extensive clearing and destruction of natural habitats by humans disrupts processes that underpin species dispersal and establishment" (Hoegh-Guldberg et al. 345). Thus having robust habitat corridors would likely reduce the need for a lot of assisted migrations, and by not having corridors already in place many species' "movement in the direction required by climate change may be blocked by human dominated landscapes" (Hoegh-Guldberg et al. 346).

An important point that Robinson is making is that given the facts of climate change, we should not use the ecosystems of the twentieth century as the standard for judging the appropriateness of any specific ecological niche going into the future. For example, Amelia had agreed to take the first six of an eventual twenty polar bears from the arctic to Antarctica, where it was hoped that they would be able to survive as a species until the climate was cooled enough to ship "them back up north in a few generations or a few hundred years. Round them up when things get cold enough again up here, send them home" (356). However, a few hours after Amelia had released the polar bears in Antarctica the bears were bombed by a group called the "Antarctic Defense League" who saw it as their mission to protect Antarctica as "the last pure place, they call it. The world's national park, they call it" (260).

Amelia rails against this idea of purity, maintaining that we live in a “mongrel world” already and so must do whatever we can to ensure the survival of as many species as possible, no matter what their geographical niches were prior to the Anthropocene.

In assessing the present debate around assisted migration as a strategy to mitigate some of the most dire consequences of the Capitalocene, MacLachlan et al. state that, “opponents of assisted migration can take some comfort in knowing that existing species have accommodated rapid climate change in the past, but they must also accept the likelihood that restricting population spread to natural mechanisms may result in the extinction of species *that might otherwise have survived*” (299, emphasis added). The polar bears here serve as a rather tragic example of a likely extinction that may have been prevented. Clearly polar bears could never migrate from the arctic to the antarctic polar region on their own, but there are a great many species where “natural mechanisms” for spreading to more habitable climates are blocked by artificial means. Because, “data and models suggest that extinctions are likely to be *numerous and imminent* given the range shifts and contractions currently underway” (MacLachlan et al. 299, emphasis added), perhaps the best thing to do is to not look at human intervention in species migration as either natural or artificial, given that much of the Earth's landscapes are neither purely “natural” nor “artificial,” but instead look at our interventions as the culpable species “nursing the world back to health.” While “assisted colonization will always carry risk...these risks must be weighed against those of extinction and ecosystem loss” (Hoegh-Guldberg et al. 346).

The form that assisted migration takes in *2312* is called the “Reanimation,” wherein Swan, Warham, and many other spacers reintroduce various wild animals to biomes all over the world where they would hopefully flourish. What makes this project interesting, and certainly a “utopian project,” is that it was carried out not only with the intention of improving various ecologies that had been damaged during the Anthropocene's mass extinction event, but also with the express intention of

upsetting the political status quo on Earth.

What happened as a result of the Reanimation was similar to the "aerogel" revolution at the close of the *Mars* trilogy, but in reverse. The aerogel revolution, while also being "invisible," was preceded by decades of projects to create healthy ecologies on Mars, both physical and social, but here on Earth in *2312* the revolution was preceded by an event, the Reanimation, which then led to the re-creation of the terran landscape, "both physical and political".

Hannes Bergthaller offers a reading of *2312* based on the conjoined concepts of ecological "community" and "immunity." He writes that, "What popular conceptions of ecological community often fail to take into account, then, is the extent to which ecological community is not only a source of life, but in precisely the same measure, also a constant source of danger threatening the organism with dissolution and death" (3). Because any ecology is formed of organisms that must feed and be fed by other organisms in the same ecology, an ecological community poses threats to any given individual in that community, and such needs to be the case for any ecology to be healthy. Immunity works to remove certain individuals from that danger, or at least to lessen it as much as possible, seeing how no amount of immunization can confer immortality. We might view these two concepts in terms of metabolic rifts: ecological immunization creates certain rifts because it removes some organisms from cycles of predation and consumption that are natural to the ecological community.

While being immune to some of the dangers of the natural world does seem like a net positive, especially from the perspective of the individuals who are thus immunized, at issue is the fact that,

> The single most important factor driving large-scale ecological immunization was the discovery of fossil fuels as a source of power, which allowed humans quite literally to quit the "biotic community" as conceived by Leopold: they no longer depended on the slow trickle of solar energy through the trophic pyramid, and became able to construct material and symbolic spaces in which human life could flourish seemingly regardless of

> ecological conditions...The great irony of this development is, of course, that the very success of modern societies in immunizing themselves against the vagaries of ecological existence precipitated a crisis of the biospheric commons which now threatens to undo all of these accomplishments. (Bergthaller 4-5)

Thus there are dangers in being too entrenched in a biotic community but likewise there are dangers in immunizing ourselves against too much community, at least in the ways ecological immunity has developed over the last couple of centuries. But the dangers here are not symmetric at all: increased participation in ecological communities does increase personal dangers for the individuals within them while the dangers of industrial over-immunization precipitate the collapse of the entire ecological community, as evidenced by the mass extinction event that the Reanimation was meant to address. It also seems that there are other ways to mitigate the dangers of ecological community without industrial forms of immunization. For instance, "People were unused to be being potential prey for big predators lurking right at the edge of town. It was enough to make them band together. Those who used to go out on their own now usually found company. Some who didn't got eaten, and the rest shivered and complained and then sought out friends or strangers to walk with, not just at night but in the broad light of day" (480). One of the revolutionary dimensions of the Reanimation is that as it expanded the ecological community it also intensified human communities as a direct result of this expansion. The kind of project that the Reanimation represents is full of both risk and reward. Bergthaller argues that Swan "embodies the principle of community in the novel," because "she accepts the risks that come from hosting strangers with reckless abandon, continually transgressing limits and expanding the boundaries of the common" (8).

C. P. Curtis notes how Swan's overbearing and reckless attitudes have their antidote in Warham, a colleague, co-conspirator, and eventual love interest. While Swan's risk-filled behavior expands the realm of the common, Warham is "persistent and willing to do the hard, boring, day-to-day work that

might gradually begin something better" (12). That is, Swan's openness to the Other, despite the risks, *expands* the ecological community and Warham's focus on detail and commitment to carrying out necessary work *strengthens* that community. Curtis argues that the eventual union of these two opposites – the "mercurial" Swan and "saturnine" Warham – at the close of the narrative "requires just the kind of imaginative courage needed for a commitment to a theory of justice – a commitment to change the world in which we live" (12).

In the *Mars* Trilogy, the laying of the groundwork for life after the revolution was not done explicitly in the narrative by building various social, political, and economic institutions throughout the entire trilogy. In contrast to the narrative structure of the *Mars* trilogy, the revolution in *2312* was more spontaneous though not necessarily unplanned for: "This leading of animal migrations across agricultural land was the biggest organized act of civil disobedience ever committed by spacers on Earth, but the hope was that after being escorted the first time, the animals would manage on their own, and become popular with the indigenous humans, even the farmers, who were not having that much success anyway" (457). The kind of revolution encouraged by the Reanimation enacts the forms of commoning which is called for by Federici, who claims that the care work involved in maintaining ecosystems will form the basis of revolution (212). In fact, revolution was one of the principal desired effects of the Reanimation, a way to force the hand of the Earth's population to either change their ways of life in order to be the midwives in the rebirths of a great many species or let the extinctions of the previous centuries be the final word on the matter. In a discussion concerning solar systemwide politics with other Saturnians, Warham remarked how the Reanimation had led to many other projects such as the restoration of the Amazonian rainforest and other environmental improvements (614), and in the last set of extracts just before the epilogue it is noted that, "the so-called invisible revolutions on Earth led to the recreation of its landscapes both physical and political, all of which followed the Reanimation" (631).

Networking the Commons

There is a problem in the way that the Reanimation was planned for and executed, which was far from democratic. Patrick D. Murphy states that the Reanimation "functions as a catalyst, but one that is imposed externally by, if you will, exiles and refugees, perhaps much the way that expatriate political parties have functioned in recent years to facilitate regime change and political upheavals in various countries" (157). However, those who planned the Reanimation were not doing so to seize power in their own right, or in Holloway's terms they were not attempting to "construct a counter-power, a power that can stand against the ruling power." Rather, the group that organized the Reanimation, the Mondragon Accord, was a form of "anti-power," which was not a "counter-power, but something much more radical: it is the dissolution of power-over, the emancipation of power-to" (*Change* 36).

The fictional Mondragon Accord was modeled after, or perhaps inspired by, the historical Mondragon Cooperative Corporation, a federation of worker cooperatives, from the Basque region of Spain. The group cooperated "as if in a diffuse Mondragon, the individual space settlements, widely scattered, associated for mutual support" (138), but it was also a model to expand "beyond their scientific station origins to a larger economic system" wherein "*the necessities of life were a shared commons*" (137, emphasis added). Thus the Mondragon Accord was comprised of a networked set of commons, the bulk of which were terraformed asteroids (28), and as such form a model of a globally networked commons, which could act as both a form of anti-power in projects such as the Reanimation, a "Mondragon project to help Earth cope with its various problems by ecological means" (290), as well as a counter-power to the larger political entities of the system (424).

Interestingly, because of the horizontalist nature of the Mondragon economy (99) and the diffuse nature of the commons organized within it, the network was by necessity not centralized and likewise could not coerce its members into anything, even membership itself. Rather, "the Accord was

renewed at a conference every five years" (139), which is in line with what Linebaugh asserts about commoning, which "is exclusive inasmuch as it requires participation. *It must be entered into*" (15, emphasis added). Robinson is attempting to show how this participation is not a burden, but is something that participants value because "the longer the Mondragon Accord went on, the more robust it got" (139).

The fact that the Mondragon Accord became more robust with time shows how commoning, and indeed the Utopian Call in general, does not require perfection, especially in its initial stages. Nor does it even require that much competence in the beginning, because the commitment to the Call should compel utopian subjects to want to learn to common better as they seek to embody the Call. In the *Mars* trilogy, Nirgal remarked how the feral communities were not very good at being nomadic hunter-gatherers, but as Nirgal stuck with it, these communities became a viable way of life on both Mars and Earth. In *New York 2140,* after extremists who wanted to preserve the world in exactly the state it had been in prior to the Anthropocene killed the polar bears that she had helped to bring to Antarctica, Amelia, one of the residents of the Met, gave a plea to her "cloud" audience to help the world in whatever way they could: "So we have to nurse the world back to health. We're no good at it, but we have to do it. It will take longer than our lifetimes. But it's the only way forward. So that's what I do. I know my program is only a small part of the process" (259). The Utopian Call is a function of both necessity *and* desire. People need to lead lives they view as good, and in order to do so the planet they live on must meet a minimum threshold of healthfulness. In other words, food shortages, housing shortages, massive storms, human violence, and general precarity are simply not conducive to a good life for anyone apart from profiteers and other elites who live in excess while others go without: "This is why we speak neither of rights nor obligations separately" (Linebaugh 15).

Just as the Mondragon Accord in *2312* was organized around both a shared commons and mutual aid, in *New York 2140* the people who lived in the intertidal were organized in mutual aid

societies that offered each other assistance but also tended the intertidal as a set of commons. For example, the Met life building, which itself was a co-op and is where the main characters all lived, belonged to a mutual aid society called LMMAS: “LMMAS, pronounced 'lemmas' or 'lame-ass,' depending on mood, the Lower Manhattan Mutual Aid Society, which was the biggest of many downtown cooperative ventures and associations, a kind of umbrella for all the rest of the organizations in the drowned zone” (51). The mutual aid societies were not just organizations for people to help each other out, but also formed the basis for various forms of dual power, such as having their own currencies (51), or their own data analysts and detectives (367), as well as providing mutual aid in building maintenance (27) or disaster relief (474), as well as providing a monthly meeting venue to deal with any matters of mutual interest (274). Inspector Gen, Vlade, and Charlotte all explicitly used LMMAS contacts to investigate what was happening to the building in terms of the sabotage to the building and the offers on it, which apparently was happening all throughout the intertidal as the forces of capital attempted to appropriate, enclose, and gentrify the intertidal: “gentrification my ass. Fucking slimeballs just want what we got. We got the SuperVenice humming and they want to horn in. We're going to have to hang together to keep what we got” (273). The way they hung together was through the mutual aid societies such as LMMAS. Charlotte remarked that capitalism is “a fragile system, based on mutual trust that it's sane, and as soon as that fiction breaks down, everyone sees it's crazy and no one can trust anyone” (433). So while capitalism is based on a fictive trust that must be pretended, the mutual aid societies were based on a real trust: a trust that is perpetually reinforced because the lives of the people in those mutual aid societies depend on that trust being real and not just a convenient fiction.

Timothy Beatley reads *New York 2140* as a way to think about coastal resilience and its importance as the Anthropocene continues to develop. The novel, he writes, “is a wholesale redefining of urban life in the future that assumes the ability of an urban population to be or become profoundly

more resilient: it is at once exciting and scary, and foreshadows many of the challenges ahead" (16). The redefinition of urban life represented by LMMAS, based on actual communal trust, is reminiscent of how Swan would expand her ecological community through her trustful engagement with the Other or of the radical partnership pursued by the Earthseeders. And just as Swan's form of commoning promoted ecological health, LMMAS's form helps the people of the drowned city to be more resilient, improving the socio-ecological health of the city.

Stephanie Peebles Tavera uses Donna Haraway's concept of the cyborg to argue that, "the corporation exists as always already in a cyborgian interaction with human and nonhuman material bodies and, further, that in recognizing the corporation's flat ontology, we might reclaim it as socialist rather than capitalist" (21). She analyzed the Mondragon Cooperative Corporation (MCC) as an example of a non-capitalist corporation, which while serving as one of Robinson's influences in the post-capitalist spacer society in *2312*, also seems to be helpful in understanding LMMAS as an organization of confederated cooperatives. Tavera argues that, "Instead of MCC's humanist approach toward worker-owner self-management...I find that cyborg corporations require a posthumanist approach to their internal consciousness that recognizes the nonhuman's role in co-constituting human production, to create an ethical corporate model in the Anthropocene" (28). With Robinson's commitment to the Leopoldian land ethic as well as the centrality of the water to all facets of life in the intertidal, LMMAS does seem to be an at least inchoate form of the post-capitalist, posthuman cyborgian corporation that Tavera is advocating for.

Popping the Bubble

There is another way that commoners network in *New York 2140*, although here they are not quite commoners, but are made up of the dispossessed, the oppressed, and the refugee. This other network is the Householders' Union, which was "the immigrant and refugee office got semiprivatized last year... Now we're called the Householders' Union. Supposedly a public-private agency, but that just

means both sides ignore us" (11). The Householders' Union is basically a union of the dispossessed, or those whose debts are leveraged by others and not by themselves. When the group at the Met was trying to figure out a way to bring financial civilization to its knees, Franklin explained the situation as such,

> Think about ordinary people in their own lives. They need stability. They want what you could call illiquid assets, meaning home, job, health. Those aren't liquid, and you don't want them liquid. So you pay a steady stream of payments for those things to say illiquid, meaning mortgage payments, health insurance, pension fund inputs, utility bills, all that sort of thing. Everyone pays every month, and finance counts on having those steady inputs of money. They borrow based on that certainty, they use that certainty as collateral, and then they use that borrowed money to bet on markets. They leverage out a hundred times their assets in hand, which mostly consist of the payment streams that people make to them. Those people's debts are their assets, pure and simple. (347)

After the devastation caused by the hurricane had pushed the financial bubble centered around speculation on intertidal real estate towards popping, Amelia encouraged her "cloud" audience to join the Householders' Union and start a general strike as she was surveying the wreckage around the city: "You might think that not paying your mortgage would get you in trouble, and it's true that if it was just you, that might happen. But when everyone does it, that makes it a strike. Civil disobedience. A revolution. So everyone needs to join in. Won't be that hard. Just don't pay your bills" (527). Thus people pursued a coordinated plan of financial non-compliance: "not paying rents and mortgages and calling that a political act was proving to be very popular... The householders' strike even looked like a logical response to the bashing of the city by Mother Nature and the clueless intransigence of the absent rich in their empty uptown towers" (553).

However, it is never just the absentee rich that is the problem, but it is always also the case of

who does their bidding.[116] *New York 2140* highlights the problem that when the State is fully captured by Capital, it is unable to deal with ecological crises: “The flood caused an unprecedented loss of assets and a cessation of trade,” which would be expected in any such widespread ecological catastrophe, and using the precedents of the 2008 bank bailouts, “the big private banks and investment firms went to the big central banks, meaning the governments of the world, and demanded to be saved from the impacts of the floods on their activities. The governments, *being long since subsidiaries of the banks anyway,* caved again” (207, emphasis added). Because governments are captured by finance capital, they are incapable of promoting the general welfare in any meaningful way, which has to do with how capital views problems as only ever economic in nature. In *Seeing Like a State*, James C. Scott argues that one of the things that gave rise to the modern state is governments beginning to make the territories (the people, the land, etc.) that they governed more simplified and legible by flattening out the terrain and viewing it “rather like abridged maps. They did not successfully represent the actual activity of the society they depicted, nor were they intended to; *they represented only that slice of it that interested the official observer*” (3, emphasis added). Scott points out that this more simplified form of seeing was neither good nor bad in itself but was simply necessary for making more precise interventions in a given territory, i.e. governing. The problem here is not the mode of seeing but what interests the official observer and why. When the State is captured by Capital, the official observer is not looking at a situation in order to assess how best to intervene to feed and house climate refugees for instance, hence the need for the Householders' Union, which was born out of the privatization of the state apparatus that would have made that type of intervention. What Capital wants to see is best represented in the text by Franklin's “Intertidal Property Pricing Index,” or IPPI, which helped people to value the intertidal,

116These entities would include the private security forms, or mercenary armies that the State allows the rich to employ. These mercenary armies appear to be fairly ubiquitous in the fictional world of *New York 2140*, but they are already becoming more commonplace in our present world – not only in the quaintly termed “contractors” used by the US State to execute foreign wars, but also those used by the US State to fight against the commoning of the Standing Rock Sioux. See for instance the documentary *Black Snake Killaz.*

"because if the intertidal has any value at all, even if it's only a zillion or two, then someone wants to own that. And other people want to leverage that value right out to the usual fifty times whatever it might be. Fifty zillion dollars in leveraged opportunities, if only someone could put a plausible number on it, or (which is really the same thing) allow people to bet on what a plausible number might be, thus creating the value. That's what my index did." (120)

Thus when the State is captured by Capital, "seeing like a state" means seeing like an investor, or probably more like a financier whose "maps" tell people how and where to invest. Nowhere in that scenario is the public good or welfare of the people accounted for, only insofar as these would measure into returns on investment either as costs or assets. Societal health is thus equivalent to economic health in such a view, so if there is some sort of catastrophe, the question is how to make sure that the financial markets do not hit a downturn, and this becomes the most important task of government. A consequence of governments' focusing on the market is that when catastrophe strikes, people are on their own even if they initially believe that their government will give them the aid that they need to survive and to return to a kind of normalcy. Although the Householder's Union was not so much concerned with the commons as such, but more concerned with public services, "one of the challenges we face today is *connecting the struggle over the public with those for the construction of the commons,* so that they can reinforce each other" (Caffentzis and Federici i102, emphasis in original).

The massive sea level rise which came in the two "pulses" gave lie to the idea that the State was responsible for the common well-being of its citizens because "the public" had become in thrall to private (market) interests: "And so the First Pulse and Second Pulse, each a complete psychodrama decade, a meltdown in history, a breakdown in society, a refugee nightmare, an eco-catastrophe, the planet gone collectively nuts. The Anthropocide, the Hydrocatastrophe, the Georevolution" (34). The Georevolution is what happened in the aftermath of this "meltdown in history" when the intertidal zones were abandoned by the State and Capital and left to fend for themselves, and a new culture began

to arise in this vacuum. When another ecological disaster struck, the people went on strike against Capital in order to force the hand of the State: "We will have to tell our government what to do at this point. If our government tries to back the banks instead of us, then we elect a different government. We pretend that democracy is real, and that will make it real[117]" (527).

As such, the general strike forced the financial institutions to reckon with the costs they had been externalizing for the past couple of centuries. David Graeber argues that "a debt is just a perversion of a promise. It is a promise corrupted by both math and violence" (*Debt* 391). In the *Debt Resistors Operation Manual* (DROM) put out by a joint effort between Occupy Wall Street and a group called StrikeDebt, they state that, "We gave the banks the power to create money because they promised to use it to help us live healthier and more prosperous lives – not to turn us into frightened peons. They broke that promise. We are under no moral obligation to keep our promises to liars and thieves. In fact, we are morally obligated to find a way to stop this system rather than continuing to perpetuate it" (2). The anger expressed in the DROM is the same anger that is expressed by the group at the Met when they said they wanted to crash the system, Amelia wanted it "for the animals", Charlotte "for this building," and Mutt and Jeff simply because of what capitalism does to people in general (339). Compare the reasons of the Met gang with those given in the DROM: "This collective act of resistance may be the only way of salvaging democracy because the campaign to plunge the world into debt is a calculated attack on the very *possibility* of democracy. It is an assault on our homes, our families, our communities and on the planet's fragile ecosystems – all of which are being destroyed by endless production to pay back creditors who have done nothing to earn the wealth they demand we make for them" (2, emphasis in original).

Nationalization of the banks meant that the nature of these financial institutions would have to

117Cf. "The public is the site where much of our past labour is stored and it is in our interest that private companies do not take it over...what we call 'the public' is actually *wealth that we have produced and we must re-appropriate it*" (Caffentzis and Federici i102, emphasis added).

change – instead of holding people's needs hostage and forcing them into debts that could then be leveraged to produce valueless wealth, financial institutions would under the nationalization scheme in the text be used to pay the costs to create healthy ecosystems, both physical and social.[118] And as Franklin explained to Charlotte, once the banks were nationalized, "finance is back in action, but its profits go to the public. They work for us, we invest in what seems good. Whatever happens, the results are ours." (427)

Called to Common

Michael Hardt and Antonio Negri state that, "A movement of organized refusal [i.e. a debt strike] allows us to recognize who we have become and to set out on becoming different. It helps us free ourselves of the morality of debt and the work discipline it imposes on us, bringing to light the injustice of the social inequalities of a debt society" (104). Hardt and Negri are making their argument in the context of advocating that the revolutionary movements of the twenty-first century ought to be about creating new forms of the commons. Likewise, David Harvey argues that, "The political recognition that the commons can be produced, protected, and used for social benefit becomes a framework for resisting capitalist power and rethinking the politics of an anti-capitalist transition" (*Rebel* 87). Commoning is a thread that runs through all of the works thus far analyzed – in *Xenogenesis* the ships themselves are sentient members of the community and so private ownership of the land would be impossible. In the *Mars* trilogy the relationship to the commons is best expressed through the way that the feral communities used the land. In the *Parable* novels the Earthseed group's home of Acorn was structured around the common stewardship of the land, which can be contrasted with how Lauren's cul-de-sac was set up at the beginning of *Sower*, where there was much pooling of resources but those resources remained privately distributed among the residents. The Ship in *Aurora*

118Cf. Hardt and Negri, "In order to realize the constituent principles and inalienable rights of the multitude, banks must become institutions managed in common for the common good, and finance must become a tool for democratic planning" (72).

could be seen as one giant commons, and like the ships in *Xenogenesis,* was a sentient member of the community. In *2312* the Reanimation acted as a prompt to re-establish the commons to a certain extent through rewilding animals in a way that highlighted the parts of the natural world that were beyond the bounds or consideration of private property as such, as well as in the networked commons of the Mondragon Accord.

While commoning is an important aspect of all of these novels, *New York 2140* makes the commons as such a focus of the Utopian Call. One of the principal struggles in the novel is between the people who are living in the intertidal zones and creating new forms of society with a robust commons and the forces of capital who are trying to enclose as much of the intertidal as possible in order to gentrify them and turn the communities into investment properties for the super wealthy. Linebaugh notes that the "Commons is antithetical to capital. Commoners are quarrelsome (no doubt), yet the commons is without class struggle. To be sure, capital can arise from the commons, as part is sequestered off and used against the rest" (14). Likewise, George Caffentzis argues that the hyper-privatization under neoliberalism has prompted a reaction among some liberals, and even the World Bank, to view the commons as necessary for capitalism, both as a source for future enclosure, but also as a "common pool" to help sustain workers so that capitalists can continue exploiting them (31). Caffentzis poses the question as to "whether 'the commons' will be ceded to those who want to enclose it semantically and use it to further neoliberal capitalism's ends or whether we will continue to infuse in 'the commons' our struggle for another form of social life beyond the coordination of capital" (41).

The struggle over the nature of commoning unfolds through the character of Franklin Garr, a hedge fund trader who was, in the beginning of the narrative, ruled by the neoliberal ethos of greed and selfishness. Franklin is the only character besides the otherwise absent "citizen" whose chapters are narrated in the first person, illustrating the progression of this struggle as a series of moral dilemmas. Early on he was meditating on how to classify the populated intertidal zones, stating that, "some legal

theorists ventured, it was perhaps some kind of return to the commons," but because of the nature of common law based around custom and habit, "the analogy of the intertidal to a commons was of little help to anyone interested in clarity, in particular financial clarity" (119). At this point in the narrative Franklin only cared about financial clarity so that investors could make a fortune from trading properties in the intertidal.

Franklin then spent some time explaining how he created the IPPI to help in the process of monetizing the intertidal, and how the index was contributing to a new speculative bubble. As he remarked, "Some places, like good old Manhattan, had a huge influx of technological innovation and human capital and sheer money, and here we were going to uptake the intertidal and make the best of it" (123). At this point in the narrative Franklin is identifying as part of the "we" of finance capital, and finance capital was trying to gentrify the SuperVenice, or what was called "aerating" in the text, a term borrowed from the process of making submerged areas habitable. But those on the left used it "to describe the recapture of the intertidal by global capital. You aerate a place and suddenly it's back in the system. It's undrowned" (156). Harvey notes, "Capitalist urbanization [e.g. gentrification] perpetually tends to destroy the city as a social, political and livable commons" (*Rebel* 80).

The dispossessed had created the SuperVenice as a place to live with new ways of life attached to it: "The mutual aid societies were making something interesting, the so-called SuperVenice, fashionably hip, artistic, sexy, a new urban legend" (279). Lieven Ameel notes that, "the water takes central stage, and its central status, also in legal terms, is foregrounded, to the extent that it is the intertidal's specific properties that enable (and in part, force) the protagonists to act, livelihoods to be amassed, and the plot to develop" (9). While water certainly has a starring role in the plot of the novel, water as an active shaper of human behavior is probably even more acute for the pre-history of the narrative (i.e. our possible future in the Anthropocene). The "water rats" who formed the mutual aid societies and built the SuperVenice did so in response to the environment, finding ways of living that

adapted to the newly drowned environment rather than trying to master it. However, once it became fashionable it became the target for gentrification, because “it still pleased the rich to stash away a billion or three in a skypartment somewhere in New York, visit for a few days a year, enjoy the great city of the world” (282).[119] Additionally, there was the desire to make a lot of money off of the hard work of others: “Aeration! Submarine real estate! A new market to finance, and then to leverage, so that the cycle could repeat at a larger scale, as the first law demanded. *Always grow*” (282, emphasis in original). Finance does not adapt, it appropriates; what people build through commoning finance threatens with enclosure. Or as Harvey states, “urbanization is about the perpetual production of an urban commons” (*Rebel* 80), or what the water rats had been doing with the SuperVenice, “and its perpetual appropriation and destruction by private interests” (80). Franklin began the novel as a representative and facilitator of those private interests but later identified with the “commoners.”

There are two main forces that set Franklin on the path away from the neoliberal ethos – the aid that he periodically, albeit reluctantly, offers the young boys Stefan and Roberto, and his crush on a fellow hedge fund trader named Jojo who spurned him because she found him to be too shallow in his single-minded pursuit of money. After Jojo put a halt to their relationship, he started to consider how finance could be used to improve the world apart from producing profits for investors. He meditated: “Instead of financializing value, I need to add value to finance. That was at first beyond me to conceptualize. How could you add more value to finance, when finance existed to financialize value? In other words, how could it be about more than money when money was the ultimate source of value itself” (278)? While the notion that money is “the ultimate source of value” is expressed through Franklin Garr's character, the opposite notion, that money not only was not the source of value but dissolved value wherever it found it, was expressed in Charlotte Armstrong: “Did they really imagine

119 The solution to this particular problem after the general strike and subsequent capture of the State by the left was to create powerful incentives for the superwealthy not to leave any apartments vacant: “The new absentee tax is pretty persuasive. Between that and the capital asset taxes, they're either being occupied or being sold to people who will occupy them” (596).

that money in any amount could replace what they had made here? It was as if nothing had been learned in the long years of struggle to make lower Manhattan a livable space, a city-state with a different plan. Every ideal and value seemed to melt under a drenching of money, the universal solvent. Money money money. The fake fungibility of money, the pretense that you could buy meaning, buy life" (331).

As a result of his musings, Franklin came up with an idea to create floating city blocks, a form of public or low income housing, in a bid to win back Jojo's affection:

> So, there's a combination of new techs that add up to what you might call eelgrass housing. Some of it comes from aquaculture. Basically, you stop trying to resist. You flex with the currents, you rise and fall on the tides. You take graphene's strength, and newglue's stickiness, and fauxfascia's flexibility. You put bollards in the bedrock, however deep that is, and anchor them to bands of fascia cord that would stretch with the tides and would always be long enough to reach the surface, where you attach a floating platform. You make the platform the size of your ordinary Manhattan block. (286)

Jojo was not won back by Franklin's effort, though, and in fact the next time they had met after he told Jojo about this idea she claimed that it was hers and that she was also working on a similar project. Ultimately though they combined their resources and worked together on the project. After all of his pining after Jojo, Franklin ended up in a romantic relationship with Charlotte, who was far more his polar opposite. But as David Sergeant points out, "Charlotte and Franklin bring together intellectual and strategic modes that find expression in the need for organizing frameworks, material and abstract infrastructures" (13), which is to say they bring together the understanding of how the financial system works (Franklin) so that they can pop the bubble through an organized debt strike (Charlotte).

While his romantic interest in Jojo spurred him to start thinking about the actual relationship between finance and value on an intellectual level, and his union with Charlotte helped to materialize

the revolutionary moment, it was his relationship with the two orphans, Stefan and Roberto, that helped him to truly understand non-monetary value. His relationship with the two boys developed through a series of the boys' misadventures and Franklin being forced to respond to their dire circumstances. Each time he rescued the boys he found himself getting more entangled with the community of people at the Met tower, and his naked self-interest is slowly eroded throughout the course of the novel. The first time he saved them, when their boat's motor had lost power and they were in danger of drifting out to sea, Franklin was going to leave them to their fates until they recognized him as living at the Met (62). The second time, the two youngsters saw Franklin while he was on a date with Jojo and needed his help to save their friend, Mr. Hexter, who was stuck in building that had "melted" in to the bay. Franklin "would have ignored them and hummed on anyway, but Jojo was watching me with a startled expression, surprised no doubt that I would just motor on, ignoring such a direct appeal" (127). The third time the building's super, Vlade, enlisted a reluctant Franklin to go to the rescue of Roberto, who was stranded under a makeshift diving bell while he was trying to dig for treasure (197).

At this point in the narrative the boys trusted Franklin enough that they wanted his help with how to deal with all the treasure they found from the wreck of the *Hussar* (roughly four billion dollars worth of gold) because "they said that [he'd] come through every time they've gotten in trouble" (343). Being brought into the consortium that grew up around the boys helped Franklin to finally achieve a *werteswandel* (mutation of values) concerning the nature of value itself, and this small group trying to hold onto their building and the way of life it represented against the onslaughts of finance capital (in the form of real estate speculators) helped to catalyze the general strike later on. Ameel reads this part of the narrative as a small group extracting wealth from the commons; it was a story of "how a group of disaffected individuals rise from the submerged city, become tied together by revolutionary zeal and the urge to change the world, and are eventually transformed into the 'Met gold gang' and a 'holding company', a group going into urban redevelopment and real estate investment without the blink of an

eye" (13). Ameel's reading of this part of the plot is fairly disingenuous, glossing over all of the details of what the group actually did with the treasure of the Hussar, as well as their motivations for doing so. A more generous (as well as more accurate) reading would see this group as using the "master's tools" to destroy the master's house, or at least to use the tools in the service of commoning rather than enclosure. And finally, after the hurricane struck, Franklin was willing to help find the boys without too much prodding from Vlade and Charlotte (477).

As Franklin comes to realize that it is better to be a member of a robust community than to be an isolated atom in a world that only cares about profitability, he begins to put this realization into action by buying out his old mentor from his floating block housing project near the end of the narrative after he finds out that his mentor was partly behind the predatory bids (and attendant sabotage) on the Met and other affiliated buildings (582).[120] Linebaugh states that, "we understand common solidarity in contrast to individual egotism" (14), and Franklin, who at the beginning of the narrative was the consummate egotist, finally learns how to common in solidarity.

The Comedy of the Commons

While Franklin's transition from a neoliberal mindset to a more communitarian one is an important example of the *werteswandel* that needs to happen in our present world, the narrative structure of the text itself also enacts the need for a new society-wide relationship to the land as commons, namely in the book's chapter titles, beginning with the first chapter, "The Tyranny of Sunk Costs." The "sunk costs" refer to the problems wrought by the pulses drowning the world's coastlines but also to the problem in economics when previous bad investments compel people to throw good money after bad rather than searching out a new investment, feeling that they had already invested too much time and/or money in the bad investment. The bad investment here is of course capitalism itself, and the thinking characterized by "There Is No Alternative" is the ultimate form of the tyranny of sunk

120Cf. Sergeant (9-13).

costs.

Chapter five is titled “Escalation of Commitment,” which is basically synonymous with the tyranny of sunk costs, yet the chapter here inverts the meaning: rather than the anger caused by the inequities of capitalism causing the characters in the novel to escalate their commitment to the sunken cost (capitalism), throughout the course of the chapter the various characters become more committed to building a better world, the health of capitalism be damned. So, when someone asks Charlotte if “to save your co-op from takeover you would destroy the entire global economic system?” she simply replies, “Yes” (339).

The following chapter is titled “Assisted Migration,” suggesting a method for getting people out of the crisis of capital and into a post-capitalist world – a way to move things along with the goal of promoting ecological health, in all of its manifestations from the non-human and human habitats to the social and political ecologies. In this chapter the characters brainstorm the plan to tank the economy through mass refusal to pay rents and debts with the subsequent nationalization of the banks (427). The general strike *is* the migration for assisting human societies to get from an ecology within which they cannot thrive (capitalism) to one that is truly habitable for everyone. Coincidentally, it was from her airship, the *Assisted Migration*, that Amelia called for the general strike following the hurricane.

The final chapter is titled “The Comedy of the Commons,” which of course is a play on the reactionary phrase “tragedy of the commons,” coined by Garret Hardin in 1968 for an article that combined “fake scientism, faux mathematics, and the invocation of a global holocaust to justify a conclusion of coercive demographic policy” (Linebaugh 148). So while the *tragedy* of the commons was trying to invoke an “argument with an inhuman conclusion: 'Freedom to breed will bring ruin to us all'” (Linebaugh 146), the *comedy* of the commons will show how freedom, not only for the riff-raff to breed but to breed new forms of life, will make space for history to progress cheerily towards a utopian horizon for a time, that horizon reconstituting society via commoning. Hardt and Negri argue that, “The

task of the commoner, then, is not only to provide access to the fields and rivers so that the poor can feed themselves, but also to create a means for the free exchange of ideas, images, codes, music, and information" (105), or all of those forms of sociality that capitalism attempts to enclose.

Brigitte Kratzwald notes how the commons is not just a place where people can gather resources from a common pool but also sites where people could meet and discuss the things that were pertinent to their daily lives as with LMMAS, or in the common room in the Met, the site "from which resistance and rebellion against the landowners began" (Kratzwald 30). Throughout the novel, the reader is reminded, either by direct appeal from "the citizen" (495) or through characters talking to one another (400), to "Remember: ease of representation." This is a fallacy in which one takes a small sample size to adequately represent the whole, but "it's always more than what you see, bigger than what you know." The reason Robinson keeps reminding the reader not to fall for the trap of ease of representation is, "Individuals make history, but it's also a collective thing, a wave that people ride in their time, a wave made of individual actions" (603). Ultimately each person heeding the Utopian Call cannot be afraid to act because of the erroneous belief that history is made by others in some other place, because "the commoner is thus an ordinary person who accomplishes an extraordinary task" (Hardt and Negri 105), namely the creation of a world beyond the Capitalocene.

To counter the danger of falling into the trap of ease of representation, the comedy of the commons must be attached to a specific place with specific actors because "Commoning has always been local" and the commons "is where life is conducted face to face" (Linebaugh 19). That is, the commons is always localized because, "the commons refers neither to resources alone nor to people alone but to an intermixture of them both. The commons is not only 'common pool resources' nor is the commons purely 'the people'. *In other words it is not a thing but a relationship*" (Linebaugh 18, emphasis added). The commons is not just a relationship between people but also between people and the land: "At the heart of the practice of commoning lies the principle that the relation between the

social group and that aspect of the environment being treated as a common shall be both collective and non-commodified – off-limits to the logic of market exchange and market valuations” (Harvey, *Rebel* 73).

The nature of enclosure and the capitalist economic system that relies on it views the land as a set of resources to be extracted and monetized and those who live there as people who must pay rents to gain access to the necessities of life, leading to various metabolic rifts as different elements that comprise a given location or ecological niche are extracted or refined away leaving behind toxic byproducts or deficiencies that cause unbalances in an ecosystem: “The means of production become the way of destruction, and expropriation leads to exploitation” (Linebaugh 14). The commons, on the other hand, is meant to be a shared place for generations, and so its health must be tended to: a good Anthropocene can only be produced through a relationship of stewardship based on solidarity, intimacy, care, and radical partnership: that is, through commoning.

While “Capital derides commoning by ideological uses of philosophy, logic, and economics which say the commons is impossible or tragic” (Linebaugh 14), the Utopian Call answers back with the Comedy of the Commons, combining commitments to equality and social well-being with a Leopoldian land ethic[121] that tells us that what is good for the land is simply good. Amelia told her “cloud” audience that some of the consequences of the Leopoldian land ethic are that “it would encompass agriculture, and animal husbandry, and urban design. Really, all our land use practices. So it would be a way of organizing our efforts all around. Instead of working for profit, we do whatever is good for the land. That way we could hope to pass along a good place to the generations after us” (361).

Creating a new commons, or a new way of relating to other human beings as well as to the land

121 Environmentalist Aldo Leopold was an advocate for including nonhumans in any ethical systems: “The land ethic simply enlarges the boundaries of the community to include soils, waters, plants, and animals, or collectively: the land” (Leopold quoted in Otto 243).

and all the life forms on it, is a mother project that would take generations to move us toward a truly good Anthropocene but would also have myriad real positive effects at every step along the way. And while some of the projects, such as the beach restoration as seen in both *Aurora* and *New York 2140* may tend towards nomadic lifestyles, many, if not most, would bind people to a specific area of land because all commons are local, so there would be projects that could be undertaken almost anywhere in the world, including most of the world's population's own backyards. As Linebaugh noted, “since the city, in the sense of law, force, and commodity, has abolished the countryside commons and the 'bourgeois' nations destroyed the 'barbarian' ones, the commoners of the world can no longer retire to the forest or run to the hills. Unprecedented as the task may historically be, the city itself must be commonized” (40). This task may be historically unprecedented, but the Utopian Call interrupts the inertia of history anyway, compelling those who heed it to create new precedents, and a new and better world along with them.

Conclusion:

Using Visionary Anthropocene Literature

to Theorize the Tasks Ahead

The Anthropocene poses an overwhelming number of problems: the interconnections between ecologies and human social institutions are almost too extensive and too intensive to fathom. Just as the nineteenth and twentieth centuries were largely defined by struggles over and against capitalism, the twenty-first century will be defined by how human beings collectively respond to the Capitalocene. Will we dither, allowing our collective energies to be co-opted by States and corporations in the creation of a logically incoherent "green" Capitalocene?[122] Will we watch as the rising tide of nationalisms, xenophobias, and outright fascism attempt to make something even worse? Or will we band together in a truly utopian struggle for a good Anthropocene?

The Anthropocene is indeed overwhelming: the problems are so various, *covering the entire planet*, and will continue to have effects well into the foreseeable future, paradoxically meaning that the Anthropocene has more emancipatory potential than any other problem ever faced by humanity because building a *good* Anthropocene will require as many people as possible to take part in projects designed to bring all those interconnected local ecologies back to health; to create *new* relationships with the land based on the best practices of peoples from the past and present as well as scientific innovations that I believe have enormous potential for engendering new emancipatory forms of human sociality. That is, so long as we collectively opt to build a *good* Anthropocene we will also have to choose to build social institutions based on solidarity, mutual recognition of dignity, and radical partnership between humans and nonhumans alike.

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122 While certain products can be "green" or environmentally friendly, capitalism as a system cannot because the system is predicated on the *exploitation* of "cheap" nature (Moore, "Cheap Nature" 291).

Yet, the Anthropocene is overwhelming: Chakrabarty argues that it is so overwhelming that it defies understanding, and taking the Anthropocene in its totality, Chakrabarty is probably correct. However, there is no reason why any person must understand the totality in order to understand *some* parts of it *enough* to help guide the Anthropocene in a "positive" direction. These partial understandings, both in terms of critically understanding the problems of the Anthropocene and in imaginatively understanding what could realistically be done to address some of those problems, are precisely what visionary Anthropocene literatures present to their readers. I chose to focus on two authors who I believe are exemplary in their abilities to "stay with the trouble" of the Anthropocene and work out possible paths that the utopian struggle for a better world could take in their narratives. I also believe that Butler and Robinson complement each other well; both authors share similar concerns for the state of the world that human beings continue to shape as well as share similar commitments to what a world better might look like.

In a companion interview to *Parable of the Talents,* Butler sums up these concerns and commitments:

> We human beings will use our talents – our intelligence, our creativity, our ability to plan, to delay gratification, to work for the benefit of the community and of humanity, rather than only for ourselves. We will use our talents or we will lose them. We will use our talents to save ourselves or we'll do what other animal species do sooner or later. We will continue turning as much of the world to our use as we can. Technology helps us to do this faster, more thoroughly, and more disastrously than any animal species could. At some point, this must end. Earth is finite. Consciously or unconsciously, we must decide whether, in all our intelligence and industry, we choose to be no more than, as Olamina says in *Parable of the Sower*, smooth dinosaurs. (411)

Visionary Anthropocene literature is one such way that human beings can use their intelligence and

creativity to extrapolate from our present relationships to each other and the land (i.e. the Capitalocene) to either our own species destruction or to imagine social configurations that work for the benefit of the community and of humanity.

In a similar vein, Robinson stated in an interview that, "It's important what story you tell about the future. Stories that say the future can be better because people are smart, because they want democracy, because, ultimately, people rule and banks don't, can be self-fulfilling. They give people actions to help break the story that says they are screwed because international finance is way more powerful" (Adee and Robinson). The continuation of the Capitalocene relies on the story that TINA tells: that there is no alternative to capitalism, and so if we must choose between capitalism and the environment then the choice is pre-ordained. Visionary Anthropocene literature tells different stories, stories that use human imagination and creativity as the weapon of choice against TINA, and if Robinson is correct then the fact of telling stories of actual alternatives to capitalism can be self-fulfilling precisely because they rend TINA powerless. Butler writes, "Sometimes the only thing more dangerous than frightened, confused, desperate people looking for solutions is frightened, confused, desperate people finding and settling for truly bad solutions" (*Talents* 414). Visionary Anthropocene literature casts a critical lens on the types of bad solutions that people could opt for: a more "humane" or "green" capitalism, xenophobia, fascism, etc. And visionary Anthropocene literature also offers up solutions to collective problems that can act as prompts for others in our struggle for a good Anthropocene: so even if some of the solutions may not be realistic or even all that desirable (such as leaving Earth behind, either to go to another part of our solar system or to other stars) they still shine a light on different utopian horizons, illuminating portions of those horizons that may very well make it into the Utopian Call that would lead humanity towards a good Anthropocene.

Only future generations will be able to know if we have taken up a Utopian Call successfully; whether it was "correct" in its analysis of how to get to a good Anthropocene and whether or not it was

effective in the utopian struggle that it engendered. Visionary Anthropocene literature can also help to imagine how future generations will see our own era: are we living on the cusp of a heroic age when people decide to realize their ideals of equality, liberty, and community, extending them to the Earth as well as to all other human beings? Or will our age be the age where the end of humanity began, with millions of voices sounding in the wilderness until the voices and the wilderness both pass silently into unreadable histories of a planet that continues its march around the sun without us?

The Anthropocene is truly and vastly overwhelming: not only in terms of the problems it poses but also in terms of the obligations and responsibilities to future generations that it lays at the feet of humanity. The tasks are too many and too difficult, but as in the Mars colony in *Xenogenesis* this difficulty may just force human beings to cooperate instead of dominate: cooperate with each other and with the world that we have never been separate from in actuality. The Anthropocene may be just the thing that prompts the radical partnerships that are the bases for any realistic utopia.

The Anthropocene is overwhelming but it is not jealous. Unlike capitalism which employs TINA to suppress and denigrate alternative narratives, the Anthropocene invites stories that dramatize its own possibilities and paths of becoming. These stories are filled with catastrophe and hope, dystopian possibilities and utopian alternatives. Robinson has remarked that, "As soon as you say, 'we're going to talk about the future,' you're saying you're going to talk about history. You're going to talk about the planet. You're going to talk about everything. That's what science fiction does" (Feder 98). The Anthropocene may be overwhelming but telling its many stories is not. One of the principle tasks for building a good Anthropocene is to struggle against the cynicism of TINA and definitively break from the Capitalocene, and visionary Anthropocene literature invites readers to do just that.

Works Cited

Adee, Sally, and Kim Stanley Robinson. "The Power of Good: Stories about a Better Future Can Break the Hold of Stories That Say You're Screwed." *New Scientist,* vol. 234, issue 3129, 2017, pp. 44-45.

Aghion, Phillipe et al. "Path Dependence, Innovation and the Economics of Climate Change." *Center for Climate Change Economics and Policy,* 2014.

Agustí, Clara Escoda. "The Relationship Between Community and Subjectivity in Octavia E. Butler's *Parable of the Sower." Extrapolation,* vol. 46, no. 3, 2005, pp. 351-9.

Albert, Michael. *Parecon: Life After Capitalism.* Verso, 2003.

Althusser, Louis. *Essays on Ideology.* Translated by Ben Brewster, Verso, 1984.

Ameel, Lieven. "Agency at/of the Waterfront in New York City: *Vision 2020* and *New York 2140*," *Textual Practice,* 2019, pp. 1-17.

Arbuthnott, Katherine D., and Brett Dolter. "Escalation of Commitment to Fossil Fuels." *Ecological Economics,* vol. 89, 2013, pp. 7-3.

Asimov, Isaac. *Foundation and Earth.* New York: Doubleday, 1986.

---. *The Gods Themselves.* New York, Bantam, 1972.

Balibar, Etienne. *Equaliberty: Political Essays.* Translated by James Ingram*,* Duke UP, 2014.

Beatley, Timothy. "Evolving Perspectives on Coastal Resilience," *City and Community,* vol. 17, no. 1, 2018, pp. 16-20.

Benford, Gregory. "Star-flight Dreaming," *Nature,* vol. 523, July 2015, pp. 407.

Benjamin, Walter. *Illuminations: Essays and Reflections.* Translated by Harry Zohn, Schocken Books, 1968.

Bergthaller, Hannes. “Ecological Immunity and Kim Stanley Robinson's *2312*,” *The Journal of Ecocriticism,* vol. 8, no. 1, 2018, pp. 1-12.

Bille, Matt, and Erika Lishok. *The First Space Race: Launching the World's First Satellites.* Texas A & M UP, 2004.

Black Snake Killaz. Unicorn Riot, 2017.

Bloch, Ernst. *Principle of Hope, Volume One.* Translated by Neville Plaice, Stephen Plaice, and Paul Knight, The MIT P, 1986.

Braidotti, Rosi. “Posthuman, All Too Human: Towards a New Process Ontology.” *Theory, Culture & Society,* vol. 23, no. 7-8, 2006, pp. 197-208.

Brown, Wendy. *Undoing the Demos: Neoliberalism's Stealth Revolution.* Zone, 2015.

Buchanan, Ian. “Metacommentary on Utopia, or Jameson's Dialectic of Hope.” *Utopian Studies,* vol. 9, no. 2, 1998, pp. 18-30.

Bucher, Michael, and Simon Dickel. “An Affinity for the Lumpen: Depictions of Homelessness in Delaney's *Bread & Wine* and *The Mad Man.” African American Review,* vol. 48, no. 3, 2015, pp. 289-304.

Burling, William J. “The Theoretical Foundation of Utopian Radical Democracy in *Blue Mars*.” *Kim Stanley Robinson Maps the Unimaginable,* edited by William J. Burling, Jefferson, NC, McFarland, 2009, pp. 157-169.

Butler, Octavia. *Clay's Ark.* Aspect, 1996.

---. *Fledgling.* Grand Central, 2005.

---. *Lilith's Brood*. Grand Central, 2000.

---. *Parable of the Sower.* Aspect, 1993.

---. *Parable of the Sower.* Grand Central, 2000.

---. *Parable of the Talents.* New York, Aspect, 1998.

Caffentzis, George. “The Future of the 'Commons': Neoliberalism's 'Plan B' or the Original Disaccumulation of Capital?” *New Formations*, no. 69, 2010, pp. 23-41.

Caffentzis, George, and Silvia Federici. “Commons Against and Beyond Capitalism.” *Community Development Journal,* vol. 49, no SI, 2014, pp. i92-i105.

Canavan, Gerry. “Ecology 101,” *SFRA Review,* vol. 314, 2015, pp. 16-25.

---. “Introduction: If This Goes On” in *Green Planets:Ecology and Science Fiction* edited by Gerry Canavan and Kim Stanley Robinson*,* Wesleyan UP, 2014, pp. 1-21.

---. *Octavia E. Butler.* U of Illinois P, 2016.

---. “Struggle Forever: Review of Kim Stanley Robinson's *2312*,” *Los Angeles Review of Books,* 2012.

---. “There’s No Sheriff on This Planet: A Conversation with Kim Stanley Robinson.” edgeeffects.net, 2019, accessed September 20, 2019.

Canavan, Gerry, and Kim Stanley Robinson. “Afterword: Still, I'm Reluctant to Call This Pessimism,” in *Green Planets: Ecology and Science Fiction,* edited by Gerry Canavan and Kim Stanley Robinson, Wesleyan UP, 2014, pp. 243-260.

Chakrabarty, Dipesh. “The Climate of History: Four Theses.” *Critical Inquiry,* vol. 35, Winter 2009, pp. 197-222.

Chiang, Ted. “Is *Air* Mundane.” *Extrapolation,* vol. 49, no. 2, 2008, pp. 211-213

Coogan, Tim Pat. *The Man Who Made Ireland: The Life and Death of Michael Collins.* Roberts Rinehart, 1992.

Crist, Eileen. “On the Poverty of Our Nomenclature.” in *Anthropocene or Capitalocene: Nature, History, and the Crisis of Capitalism,* edited by Jason W. Moore, PM Press, 2016, pp. 14-33.

Crownshaw, Richard. “Speculative Memory, the Planetary and Genre Fiction,” *Textual Practice,* vol. 31, no. 5, 2017, pp. 887-910.

Crutzen, Paul J. and Eugene F. Stoermer. “The 'Anthropocene.'” *IGBP Newsletter,* 41, 2000, pp. 17-18.

Curtis, Claire P. "Post-apocalyptic Fiction as a Space for Civic Love," *English Studies in Africa,* vol. 58, no. 2, 2015, pp. 4-14.

Dubey, Madhu. "Folk and Urban Communities in African-American Women's Fiction: Octavia Butler's *The Parable of the Sower.*" *Studies in American Fiction,* vol. 27, no. 1, 1999.

Dynes, William. "Multiple Perspectives in Kim Stanley Robinson's Mars Series." *Extrapolation,* vol. 42, no. 2, 2001, pp. 150–164.

Evans, Rebecca. "Fantastic Futures? Cli-fi, Climate Justice, and Queer Futurity." *Resilience: A Journal of the Environmental Humanities,* vol. 4, no. 2-3, 2017, pp. 94-110.

---. "Nomenclature, Narrative, and Novum: "The Anthropocene" and/as Science Fiction." *Science Fiction Studies,* vol. 45, no. 3, 2018, pp. 484-499.

Feder, Helena. "The Realism of Our Time: Interview with Kim Stanley Robinson." *Radical Philosophy,* vol. 201, 2018, pp. 88-98.

Federici, Silvia. "Re-enchanting the World: Technology, the Body & the Construction of the Commons." *The Anomie of the Earth: Philosophy, Politics, and Autonomy in Europe and the Americas,* edited by Federico Luisetti et al., Duke UP, 2015, pp. 202-214.

Ferreira, Maria Aline. "Symbiotic Bodies and Evolutionary Tropes in the Work of Octavia Butler." *Science Fiction Studies,* vol. 37, no. 3, 2010, pp. 401-415.

Firestone, Shalamuth. *The Dialectic of Sex: The Case for Feminist Revolution.* New York: Bantam, 1970.

Foster, John Bellamy. *Marx's Ecology: Materialism and Nature.* New York, Monthly Review P, 2000.

Foster, John Bellamy, and Brett Clark. "Marxism and the Dialectics of Nature," *Monthly Review: An Independent Socialist Magazine,* vol. 68, no. 5, 2016, pp. 1-17.

Francis, Consueal, editor. *Conversations with Octavia Butler.* UP of Mississippi, 2010.

Franko, Carol. “The Density of Utopian Destiny in *Red Mars.*” *Kim Stanley Robinson Maps the Unimaginable,* edited by William J. Burling, McFarland, 2009, pp. 115-121.

Freedman, Carl. *Critical Theory and Science Fiction.* Wesleyan UP, 2000.

---. “Science Fiction and Utopia: A Historico-Philosophical Overview,” in *Learning from Other Worlds: Estrangement, Cognition, and the Politics of Science Fiction and Utopia”* edited by Patrick Parrinder, Duke UP, 2001, pp. 72-97.

Freire, Paulo. *Pedagogy of the Oppressed.* Translated by Myra Bergman Ramos, Continuum, 1970.

Fuss, Diana. *Essentially Speaking: Feminism, Nature & Difference.* New York: Routledge, 1989.

Gamber, John Blair. *Positive Pollutions and Cultural Toxins: Waste and Contamination in Contemporary U.S. Ethnic Literatures.* U of Nebraska P, 2012.

Geoghegan, Vincent. “Ideology and Utopia.” *Journal of Political Ideologies,* vol. 9, no. 2, 2004, pp. 123-138.

---. *Utopianism and Marxism.* New York: Methuen, 1987.

Gilroy, Paul. *Against Race: Imagining Political Culture beyond the Color Line.* Belknap P, 2000.

Glass, Rodge. “Global Warning: The Rise of 'Cli-Fi.'” *The Guardian.* May, 31, 2013.

Goldstein, Dana. *The Teacher Wars: a History of America's Most Embattled Profession.* New York: Doubleday, 2014.

Graeber, David. *Debt: The First 5,000 Years.* New York: Melville House, 2011.

---. *The Democracy Project: A History. A Crisis. A Movement.* Penguin, 2013.

Graham, Stephen. “Vertical Noir,” *City: Analysis of Urban Trends, Culture, Theory, Policy, Action,* vol. 20, no. 3, 2016, pp. 389-406.

Grayson, Sandra M. *Visions of the Third Millennium: Black Science Fiction Novelists Write the Future.* Trenton, NJ: Africa World P, 2003.

Green, Michelle Erica. “'There Goes the Neighborhood': Octavia Butler's Demand for Diversity in Utopias.” *Utopian and Science Fiction by Women: Worlds of Difference,* edited by Jane L. Donawerth and Carol A. Kolmerten, Syracuse UP, 1994, pp. 166-189.

Greenwood (Greunewald), David A. “The Best of Both Worlds: A Critical Pedagogy of Place.” *Educational Researcher,* vol. 32, no. 4, 2003, pp. 3-12.

Haeselin, Dave. “Earth First, Then Mars: An Interview with Kim Stanley Robinson.” *publicbooks.org.* 2016. https://www.publicbooks.org/earth-first-then-mars-an-interview-with-kim-stanley-robinson-reprint/

Haraway, Donna. “Anthropocene, Capitalocene, Plantationocene, Chthulucene: Making Kin,” in *Environmental Humanities,* vol. 6, 2015, pp. 159-165.

---. *Primate Visions: Gender, Race, and Nature in the World of Modern Science.* New York, Routledge, 1989.

---. “Staying with the Trouble: Anthropocene, Capitalocene, Chthulucene,” in *Anthropocene or Capitalocene: Nature, History, and the Crisis of Capitalism.* Edited by Jason W. Moore, PM Press, 2016.

Hardt, Michael and Antonio Negri. *Declaration.* Argo Navis Author Services, 2012.

Harvey, David. *The Enigma of Capital: And the Crises of Capitalism.* New York, Oxford UP, 2010.

---. *Rebel Cities:From the Right to the City to the Urban Revolution.* Verso, 2012.

Heise, Ursula K. “Terraforming for Urbanists,” *Novel: A Forum on Fiction, vol.* 49, no. 1, 2016, pp. 10-25.

Hill, Carolyn. “Geoff Ryman Interview, in Four Parts.” *Science Fiction Fantasy Chronicles,* June, 2006.

Hoegh-Guldberg, O., L. Hughes, S. McIntyre, D. B. Lindenmayer, C. Parmesan, H. P. Possingham, and C. D. Thomas. “Assisted Colonization and Rapid Climate Change,” *Science*, vol. 321, 2008, pp.

345-6.

Holden, Rebecca J. and Nisi Shawl. "Strange Matings and Their Progeny: A Legacy of Conversations, Thoughts, Writings, and Actions," in *Strange Matings: Science Fiction, Feminism, African American Voices, and Octavia E. Butler,* edited by Rebecca J. Holden and Nisi Shawl, Aqueduct P, 2013.

Holloway, John. *Change the World without Taking Power: The Meaning of Revolution Today.* New York, Pluto P, 2002.

---. *Crack Capitalism.* New York, Pluto P, 2010.

Horner, J. and B. W. Jones. "Determining Habitability: Which ExoEarths Should We Search for Life?" in *International Journal of Astrobiology,* vol. 9, no. 4, 2010, pp. 273-291.

Huston, Shaun. "Murray Bookchin on Mars! The Production of Nature in the Mars Trilogy." *Kim Stanley Robinson Maps the Unimaginable,* edited by William J. Burling, Jefferson, NC, McFarland, 2009, pp. 231-241.

Imarisha, Walidah. "Introduction," in *Octavia's Brood: Science Fiction from Social Justice Movements,* edited by Adrienne Maree Brown and Walidah Imarish, AK Press, 2015.

Jacobs, Naomi. "Posthuman Bodies and Agency in Octavia Butler's *Xenogenesis."* in *Dark Horizons: Science Fiction and the Dystopian Imagination,* edited by Raffaella Baccolini and Tom Moylan, Routledge, 2003.

Jameson, Frederic. *Archaeologies of the Future: The Desire Called Utopia and Other Science Fictions.* New York, Verso, 2005.

Jemisin, N. K. *The Fifth Season.* Orbit, 2015.

---. *The Stone Sky.* Orbit, 2017

Jesser, Nancy. "Blood, Genes and Gender in Octavia Butler's *Kindred* and *Dawn*." *Extrapolation,* vol. 43, no. 1, 2002, pp. 36-61.

Johns, (J.) Adam. “Becoming Medusa: Octavia Butler's 'Lilith's Brood' and Sociobiology.” *Science Fiction Studies,* vol. 37, no. 3, 2010, pp. 382-400.

---. “'The Time Had Come for Us to Be Born': Octavia Butler's Darwinian Apocalypse.” *Extrapolation,* vol. 51, no. 3, 2010, pp. 395-413.

Joo, Hee-Jung Serenity. “Old and New Slavery, Old and New Racisms: Strategies of Science Fiction in Octavia Butler's *Parable* Series.” *Extrapolation,* vol. 52, no. 3, 2011, pp. 279-299.

Kaufman, Alexander C. “The King of Climate Fiction Makes the Left's Case for Geoengineering.” *Huffington Post,* July 28, 2018.

Kaku, Michio. *The Future of Humanity: Terraforming Mars, Interstellar Travel, Immortality, and Our Destiny Beyond Earth.* Doubleday, 2018.

Kessel, John. “Remaking History: The Short Fiction.” *Kim Stanley Robinson Maps the Unimaginable,* edited by William J. Burling, Jefferson, NC, McFarland, 2009, pp. 83-94.

Klein, Naomi. *This Changes Everything: Capitalism vs The Climate.* Simon and Schuster, 2014.

Knoespel, Kenneth. “Reading and Revolution on the Horizon of Myth and History: Kim Stanley Robinson's Mars Trilogy.” *Configurations,* vol. 20, no. 1-2, 2012, pp. 109-136.

Kratzwald, Brigitte. “Urban Commons – Dissident Practices in Emancipatory Spaces,” in *Urban Commons: Moving Beyond State and Market,* edited by Mary Dellenbaugh, Markus Kip, Majken Bieniok, Agnes Katharina Mueller, Martin Schwegmann, Berlin, Birkhauser Verlag, 2015.

Landauer, Gustav. David J. Parent transl. *For Socialism.* Telos P, 1978.

---. *Revolution and other Writings: A Political Reader.* Translated by Gabriel Kuhn, PM Press, 2010.

Latour, Bruno. “Agency in the Time of the Anthropocene.” *New Literary History,* vol. 45, no. 1, 2014, pp. 1-18.

Lawrence, MG et al. “Evaluating Climate Geoengineering Proposals in the Context of the Paris

Agreement Temperature Goals." *Nature Communications,* vol. 9, no. 1, 2018, pp. 1–19.

Leane, Elizabeth. "Chromodynamics: Science and Colonialism in the Mars Trilogy." *Kim Stanley Robinson Maps the Unimaginable,* edited by William J. Burling, Jefferson, NC, McFarland, 2009, pp. 144-156.

Levitas, Ruth. *The Concept of Utopia.* Syracuse UP, 1990.

---. "Educated Hope: Ernst Bloch on Abstract and Concrete Utopia." *Not Yet: Reconsidering Ernst Bloch,* edited by Jamie Owen Daniel and Tom Moylan, Verso, 1997.

---. "For Utopia: The (Limits of the) Utopian Function in Late Capitalist Society." *Critical Review of International Social and Political Philosophy,* vol. 3, no. 2-3, 2000, pp. 25-43.

---. *Utopia as Method: The Imaginary Reconstitution of Society.* Palgrave Macmillan, 2013.

Levy, Ze'ev. "Utopia and Reality in the Philosophy of Ernst Bloch," *Not Yet: Reconsidering Ernst Bloch,* edited by Jamie Owen Daniel and Tom Moylan, Verso, 1997.

Linebaugh, Peter. *Stop Thief:The Commons, Enclosures, and Resistance.* PM Press, 2014.

Linebaugh, Peter, and Marcus Rediker. *The Many-Headed Hydra: Sailors, Slaves, Commoners, and the Hidden History of the Revolutionary Atlantic.* Beacon P, 2000.

Lloyd, Vincent. "Post-Racial, Post-Apocalyptic Love: Octavia Butler as Political Theologian." *Political Theology,* vol. 17, no. 5, 2016, pp. 449-464.

Loftus, P. J., Cohen, A. M., Long, J. C. and Jenkins, J. D. "A Critical Review of Global Decarbonization Scenarios: What Do They Tell Us about Feasibility?" *WIREs Climate Change,* vol. 6, 2015, pp. 93-112.

Magedanz, Stacy. "The Captivity Narrative in Octavia E. Butler's *Adulthood Rites." Extrapolation,* vol. 53, no. 1, 2012, pp. 45-59.

Mannheim, Karl. *Ideology & Utopia: An Introduction to the Sociology of Knowledge.* Translated by Louis Wirth and Edward Shils, San Diego, Harcourt Brace Jovanovich, 1936.

Markley, Robert. “Falling into Theory: Simulation, Terraformation, and Eco-Economics in Kim Stanley Robinson's Martian Trilogy.” *MFS Modern Fiction Studies,* vol.43, no. 3, 1997, pp. 773-795.

Mason, Paul. *Postcapitalism: A Guide to Our Future.* New York, Farrar, Straus, and Giroux, 2015.

McLachlan, Jason S., Jessica J. Hellmann, and Mark W. Schwartz. “A Framework for Debate of Assisted Migration in an Era of Climate Change,” *Conservation and Policy,* vol. 21, no. 2, 2007, pp. 297-302.

McKibben, Bill. “Introduction.” *I'm With the Bears,* edited by Mark Martin, New York, Verso, 2011.

McManus, Susan. “Fabricating the Future: Becoming Bloch's Utopians.” *Utopian Studies,* vol. 14, no. 2, 2003, pp. 1-22.

Mentz, Steve. *Break Up the Anrhropocene.* U of Minnesota P, 2019.

Michaels, Walter Benn. “Political Science Fictions.” *New Literary History,* vol. 31, 2000, pp. 649-664.

Miéville, China. “Afterword: Cognition as Ideology: A Dialectic of SF Theory,” *Red Planets: Marxism and Science Fiction,* edited by Mark Bould and China Miéville, Wesleyan UP, 2009.

---. “The Limits of Utopia.” *Salvage,* 2014.

Miller, Jim. “Post-Apocalyptic Hoping: Octavia Butler's Dystopian/Utopian Vision.” *Science Fiction Studies,* vol. 25, no. 2, 1998, pp. 336-360.

Moore, Jason W. “The End of Cheap Nature. Or How I Learned to Stop Worrying about 'The' Environment and Love the Crisis of Capitalism,” *Structures of the World Political Economy and the Future of Global Conflict and Cooperation,* edited by Christian Suter and Christopher K. Chase-Dunn, Hamburg: Lit Verlag, 2014.

---. “Introduction: Anthropocene or Capitalocene? Nature, History, and the Crisis of Capitalism,” *Anthropocene or Capitalocene: Nature, History, and the Crisis of Capitalism,* edited by Jason W. Moore, PM Press, 2016, pp. 1-11.

---. “Metabolic Rift or Metabolic Shift? Dialectics, Nature, and the World-Historical Method.” *Theory*

and Society, vol. 46, no. 4, 2017, pp. 285-318.

Morris, David. "Octavia Butler's (R)evolutionary Movement for the Twenty-First Century." *Utopian Studies,* vol. 26, no. 2*,* 2015, pp. 270-88.

Moylan, Tom. "Bloch Against Bloch: The Theological Reception of *Das Prinzip Hoffnung* and the Liberation of the Utopian Function," *Not Yet: Reconsidering Ernst Bloch,* edited by Jamie Owen Daniel and Tom Moylan, Verso, 1997, pp. 96-121.

---. *Demand the Impossible: Science Fiction and the Utopian Imagination.* New York, Methuen, 1986.

---. *Scraps of the Untainted Sky: Science Fiction, Utopia, Dystopia.* Boulder, CO, Westview, 2000.

---. "'Utopia Is When Our Lives Matter': Reading Kim Stanley Robinson's Pacific Edge." *Utopian Studies,* vol. 6, no. 2, 1995, pp. 1-24.

Murphy, Patrick D. "Pessimism, Optimism, Human Inertia, and Anthropogenic Climate Change," *Interdisciplinary Studies in Literature and Environment,* vol. 21, no. 1, 2014, pp. 149-163.

Nanda, Aparajita. "Re-writing the Bhabhian 'Mimic Man': Akin, the Posthuman Other in Octavia Butler's *Adulthood Rites*." *ARIEL,* vol. 41, no. 3-4, 2010, pp. 115-135.

Nilges, Mathias. "'We Need the Stars': Change, Community, and the Absent Father in Octavia Butler's *Parable of the Sower* and *Parable of the Talents*." *Callaloo,* vol. 32, no. 4, Middle Eastern & North African Writers, 2009, pp. 1332-1852.

Peppers, Cathy. "Dialogic Origins and Alien Identities in Butler's Xenogenesis." *Science Fiction Studies,* vol. 22, no. 1, 1995, pp. 47-62.

Oldfield, Frank, et al. "The Anthropocene Review: Its Significance, Implications and the Rationale for a New Transdisciplinary Journal." *The Anthropocene Review*, vol. 1, no. 1, 2014, pp. 3–7.

Otto, Eric. "The Mars Trilogy and the Leopoldian Land Ethic." *Kim Stanley Robinson Maps the Unimaginable,* edited by William J. Burling, Jefferson, NC, McFarland, 2009, pp. 242-256.

Outterson, Sarah. "Diversity, Change, Violence: Octavia Butler's Pedagogical Philosophy." *Utopian*

Studies, vol. 19, no. 3, Octavia Butler Special Issue, 2008, pp. 433-456.

Pak, Chris. “'All Energy Is Borrowed' – Terraforming: A Master Motif for Physical and Cultural Re(up)cycling in Kim Stanley Robinson's Mars Trilogy.” *Green Letters,* vol. 18, no. 1, 2014, pp. 91-103.

---. “Terraforming and Geoengineering in Luna: New Moon, 2312, and Aurora,” *Science Fiction Studies,* vol 45, no 3, SF and the Climate Crisis, 2018, pp. 500-514.

Phillips, Jerry. “The Intuition of the Future: Utopia and Catastrophe in Octavia Butler's *Parable of the Sower.” Novel: A Forum on Fiction,* vol. 35, no. 2-3, Contemporary African American Fiction and the Politics of Postmodernism, 2002, pp. 299-311.

Plisner, Andrew. “Arboreal dialogics: an ecocritical exploration of Octavia Butler's *Dawn.” African Identities,* vol. 7, no. 2, 2009, pp. 145-159.

Prettyman, Gib. “Anthropocene Knowledge Practices in McKenzie Wark's *Molecular Red* and Kim Stanley Robinson's *Aurora.*” *C21 Literature: Journal of 21st -century Writings,* vol. 6, no. 1, 2018, pp. 1-27.

Rice, Christopher and Ernest J. Yanarella. “Global Warming and the Specter of Geoengineering: Ecological Apocalypse, Modernist Hubris, and Scientific-Technological Salvation in Kim Stanley Robinson's Global Warming Trilogy.” *Engineering Earth: The Impacts of Megaengineering Projects,* Dordrecht, Springer, 2011, pp. 2233-2252.

Ricoeur, Paul. *Lectures on Ideology and Utopia.* Edited by George H. Taylor, Columbia UP, 1986.

Rieder, John. “Science Fiction, Colonialism, and the Plot of Invasion.” *Extrapolation*, vol. 46, no. 3, 2005, pp. 373-394.

Robbins, Denise and John R. Wennersten. *Rising Tides: Climate Refugees in the Twenty-First Century.* Indiana UP, 2017.

Robinson, Chuck. “Minority and Becoming-Minor in Octavia Butler's *Fledgling”. Science Fiction*

Studies, vol. 42, no. 3, 2015, pp. 483-499.

Robinson, Kim Stanley. *2312.* Orbit, 2012.

---. *Aurora.* Orbit, 2015.

---. *Blue Mars.* New York, Bantam, 1997.

---. "The Good Anthropocene: Terraforming Earth." uploaded by Berkeley Arts + Design, January 24, 2019, https://www.youtube.com/watch?v=qJuytQ8Xm9g.

---. *Green Mars.* New York, Bantam, 1995.

---. "Kim Stanley Robinson on Google and Climate Change." *Youtube* uploaded by Google Tech Talks, December 11, 2007. https://www.youtube.com/watch?v=R-jz86gMiHw

---. *New York 2140.* Orbit, 2017.

---. *Red Mars.* New York, Bantam, 1993.

---. "Remarks on Utopia in the Age of Climate Change." *Utopian Studies,* vol. 27, no. 1, 2016, pp. 2-15.

Roediger, David R. *The Wages of Whiteness: Race and the Making of the American Working Class.* Verso, 1991.

Ryman, Geoff, et al. "The Mundane Manifesto." https://sfgenics.wordpress.com/2013/07/04/geoff-ryman-et-al-the-mundane-manifesto/

Sargent, Lyman Tower. "The Three Faces of Utopianism Revisited." *Utopian Studies,* vol. 5, no. 1, 1994, pp. 1-37.

Scott, James. *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed.* Yale UP, 1998.

Sergeant, David. "The Genre of the Near Future: Kim Stanley Robinson's *New York 2140,*" *Genre,* vol. 52, no. 1, 2019, pp. 1-23.

Shaviro, Steven. "Exceeding the Human: Power and Vulnerability in Octavia Butler's Fiction,"

Strange Matings: Science Fiction, Feminism, African American Voices, and Octavia E. Butler, edited by Rebecca J. Holden and Nisi Shawl, Aqueduct P, 2013.

Sheehan, Michael. *The International Politics of Space.* Routledge, 2007.

Slonczewski, Joan. "Octavia Butler's Xenogenesis Trilogy: A Biologist's Response." presented at Science Fiction Research Association, June 30, 2000, Cleveland.

Spiegel, Simon. "Things Made Strange: On the Concept of 'Estrangement' in Science Fiction Theory." *Science Fiction Studies*, vol. 35, no. 3, 2008, pp. 369–385.

Stein, Amy L. "Breaking Energy Path Dependencies." *Brooklyn Law Review,* vol. 82, no. 2, 2017, pp. 559-604.

Stein, Rachel. "Bodily Invasions: Gene Trading and Organ Theft in Octavia Butler and Nalo Hopkinson's Speculative Fiction." *New Perspectives on Environmental Justice,* edited by Rachel Stein, Rutgers UP, 2004.

Stillman, Peter G. "Dystopian Critiques, Utopian Possibilities, and Human Purposes in Octavia Butler's Parables." *Utopian Studies,* vol. 14, no. 1, 2003, pp. 15-35.

Streeck, Wolfgang. *How Will Capitalism End? Essays on a Failing System.* New York, Verso, 2016.

Strike Debt and Occupy Wall Street. *Debt Resistor's Operation Manual.* 2012. https://strikedebt.org/The-Debt-Resistors-Operations-Manual.pdf

Suvin, Darko. *Defined by a Hollow: Essays on Utopia, Science Fiction and Political Epistemology.* New York, Peter Lang, 2010.

---. "Locus, Horizon, and Orientation: The Concept of Possible Worlds as a Key to Utopian Studies," *Not Yet: Reconsidering Ernst Bloch,* edited by Jamie Owen Daniel and Tom Moylan, Verso, 1997.

---. "Theses on Dystopia 2001." *Dark Horizons: Science Fiction and the Dystopian Imagination,* edited by Rafaella Baccolini and Tom Moylan, Routledge, 2003, pp. 187-201.

Tavera, Stephanie Peebles. “Utopia, Inc.: A Manifesto for the Cyborg Corporation,” in *Science Fiction Studies,* vol. 44, no. 1, 2017, pp. 21-41.

Taylor, Dorceta. *Toxic Communities: Environmental Racism, Industrial Pollution, and Residential Mobility.* New York UP, 2014.

Trexler, Adam. *Anthropocene Fictions: The Novel in a Time of Climate Change*. U of Virginia P, 2015.

Tuhus-Dubrow, Rebecca. “Cli-Fi: Birth of a Genre.” *Dissent,* no. 3, Summer 2013, pp. 58-61.

Tucker, Jeffrey A. “'The Human Contradiction': Identity and/as Essence in Octavia E. Butler's 'Xenogenesis' Trilogy.” *The Yearbook of English Studies,* vol. 37, no. 2, Science Fiction, 2007, pp. 164-181.

Utman, Saavedra Jorge. *The Media Commons and Social Movements : Grassroots Mediations Against Neoliberal Politics.* Routledge, 2019.

Vint, Sherryl. *Bodies of Tomorrow: Technology, Subjectivity, Science Fiction.* Buffalo, U of Toronto P, 2007.

Walker, Alison Tara. “Destabilizing Order, Challenging History: Octavia Butler, Deleuze and Guattari, and Affective Beginnings.” *Extrapolation,* vol. 46, no. 1, 2005, pp. 103-119.

Wallace, Molly. “Reading Octavia Butler's “Xenogenesis” after Seattle.” *Contemporary Literature,* vol. 50, no. 1, 2009, pp. 94-128.

Wark, McKenzie. “Imagining and Reimagining the Future,” *International Journal of Communication,* vol. 10, 2016, pp. 5763-5770.

---. *Molecular Red: Theory for the Anthropocene.* Verso, 2015.

Weik von Mossner, Alexa. “Imagining Geological Agency: Storytelling in the Anthropocene.” in “Whose Anthropocene? Revisiting Dipesh Chakrabarty's 'Four Theses,'” edited by Robert Emmett and Thomas Lekan, *RCC Perspectives: Transformations in Environment and Society,* no. 2, 2016, pp. 83-88.

White, William. "'Structuralist Alchemy' in *Red Mars*." *Kim Stanley Robinson Maps the Unimaginable,* edited by William J. Burling, Jefferson, NC, McFarland, 2009, pp. 204-226.

Williams, Rhys. "Recognizing Cognition: On Suvin, Miéville, and the Utopian Impulse in the Contemporary Fantastic." *Science Fiction Studies,* vol. 41, no. 3, 2014, pp. 617-633.

Wolmark, Jenny. *Aliens and Others: Science Fiction, Feminism and Postmodernism.* U of Iowa P, 1994.

Zaki, Hoda M. "Utopia, Dystopia, and Ideology in the Science Fiction of Octavia Butler." *Science Fiction Studies,* vol. 17, no. 2, Science Fiction by Women, 1990, pp. 239-251.