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A Child Shall Lead Them: Exploring Discourses of Efficacy and Climate Change as They Appear in Children's Animated Film

Jason Derry
University of Denver

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Abstract

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Second Advisor

Joshua Hanan

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Mary Claire Morr Serewicz

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Jason Derry

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Advisor: Christina Foust

Author: Jason Derry
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CHAPTER ONE: INTRODUCTION

A recent United Nations Children's Fund (UNICEF, 2015) study of global demographic data and climate change projection maps affirmed that "there may be no greater, growing threat facing the world's children – and their children – than climate change" (p. 6); and among the current population it will be "children who will suffer most" from forced migration, malnutrition, disease, and death (p. 8). With such a frightening implication for the progeny of the human species, UNICEF (2015) notes that surprisingly little research has been completed on children and climate. Alongside this, they emphasize the importance of listening to "the voices of children and young people who, for better or worse, will inherit the planet we share" (p. 6). While such phrasing is certainly invitational, the report ultimately relegates children to merely communicating their perspective. Action is reserved for adults, and primarily for adult experts in scientific, civil, and educational positions. For example, a list of possible strategies includes: (a) "adaptation, preparedness, and disaster risk reduction at national and sub-national levels;" (b) "climate change education;" (c) "reducing inequities among children;" (d) and "low carbon development to reduce greenhouse gas emissions" (p.9). Following these is the rationale that "overwhelming scientific evidence" should convince the world to act, and that there is "no excuse" to do otherwise (p. 9).

In general, UNICEF's (2015) proposed responses to climate change are positive and seek to benefit the planet and children. However, underlying the report are the

following implications: (a) the threat of cataclysmic suffering; (b) a focus on the abilities of experts in leadership positions to alleviate that suffering; (c) an inability of children to directly participate; (d) and the epistemological centering of science. Such presuppositions highlight a tension in contemporary society regarding efficacy (understood here as the potentiality to effect change) and the issue of climate change, especially in regards to children. Considering that "media representations of climate change are the main source of information for many individuals" (Schafer & Schlichting, 2014, p. 153), it therefore seems germane to investigate how the rhetoricity of such representations frame climate change for children. Alongside this exploration, we might also glean potential insights for how adults may find greater levels of empowerment amidst similar discursive tensions.

With this in mind, I now turn to elaborate on how several factors contribute levels of complexity to investigations of climate change discourse. Then, I expand further on efficacy and the disempowerment of children, and outline key developmental considerations of children aged 6-to-12 in light of climate change as a hypermediated discourse. From this, I overview framings of climate change as they emerge along predominate environmentalisms (such as preservationism, conservationism, etc.). As informed by this overview, I follow with a grounding of my methodological approach and central research questions.

Climate Complexities

In recent years, 195 countries from around the globe joined together to solve the climate crisis. Known as the "Paris Climate Agreement," this partnership represents the

first global, legally binding, commitment to reduce the planet's changing global temperature to within a 2°C variance and thus mitigate the worst effects of climate change (European Commission, 2016). It may represent the culmination of the best efforts of the world's governments at this time to mitigate climate change. Yet even with this, the world is still "failing miserably" to adequately respond to the climate crisis (Milman, 2018). Since there may be no greater threat to children than this issue (UNICEF, 2015), it is pertinent to note that scientists have been warning the world about climate change since at least 1965 (see: President's Science Advisory Committee, 1965). Yet, even with over 50-years of warnings, most of the US population (66%) does not even occasionally discuss it (Howe, Mildenberger, Marlon, & Leiserowitz, 2016).

Based on communicated risk, it would certainly seem that climate change warrants discussion. Outlining this, the United States Global Change Research Program (USGCRP, 2016) provides a detailed assessment of climate change and expected health impacts, of which all are noted to disproportionately affect sensitive groups (including children). These include the following categories: (a) temperature, including up to tens of thousands of additional deaths in summer (p. 6); (b) air quality, including greater potential for ozone depletion, acute respiratory symptoms, and "lost school days" (p. 7); (c) vectorborne diseases, including an expansion of ticks (Lyme) and mosquitoes (West Nile) (p. 10); (d) water related illnesses, including the proliferation of pathogens and toxin-producing algae in fresh, marine, drinking, and recreational water (p. 11); (e) food safety, including a rise in foodborne illness, decreased nutrient availability, and a reduction in food availability (p. 13); (f) extreme weather, including an increase in the intensity and frequency of extreme weather events such as precipitation, hurricanes,

coastal inundation, drought, and wildfires (p. 15); (g) and media coverage, which may result in "substantial adverse mental health outcomes," especially for children (p. 17).

Considering how dire this may seem, several factors may be contributing toward the world's general silence and inaction on the issue of climate change. These include social convention, fear of criticism, and conversational norms (Norgaard, 2001), political framing (see: Coffrey & Joseph, 2013), and possibly even apocalypse fatigue (Nordhaus & Shellenberger, 2009). Perceptions and responses may also be affected by the distant exigency of climate change's worst effects. In specific, slow moving events like climate change tend to be seen as less concerning than more ephemeral dangers like a stalking predator (Ehrlich & Ehrlich, 1990). When distant threats occur alongside fatalist announcements, it may lead more to an acceptance of loss than to an impetus for action (Cox, 1982, p. 239). Similarly, alarmist portrayals of climate change can be counterproductive (Hulme, 2009). In addition, people may be less likely to act when an issue is perceived as inevitable, catastrophic, and beyond control (Foust & Murphy, 2009, p. 153). Confounding these myriad factors even further, anthropogenic climate change may face higher rates of denial merely because the proposed solutions are unsatisfactory (Campbell & Kay, 2014). Denial may likewise result as a deflection strategy against perceived threats to identity, which can stem from the necessitated behavior changes of some solutions to climate change (Hulme, 2009; McCright, 2007). On the inverse, there appears to be a strong positive correlation among US citizens ($N = 1036$) between certainty that anthropogenic climate change is occurring with levels of trust in scientists, $\beta = .424$, $p < .001$ (Hmielowski, Feldman, Myers, Leiserowitz, & Maiback, 2014, p. 877). All of this is to say, alongside factors of climate action are factors of discourse and

ideology. It is not simple enough to presume that all children and all populations merely need to learn about climate change and with that knowledge will take whatever actions are necessary as though they are freely willing agents with an inviolable ability to choose. Regardless of "overwhelming scientific evidence" (UNICEF, 2015, p. 9) the conditions of climate action are much broader and more complex.

Life, Neoliberty, and the Pursuit of Capitalness

References to "freedom" and "liberty" and "free will" are so common in our contemporary context they lean toward cliché. While a historical trace of these concept is far beyond the scope of this project, I would note their prevalence in the foundations of the French Revolution to the liberal democracies of today (see: Ozouf, 1997). Such tropes of freedom have been further entrenched in the neoliberal context to nigh axiomatic levels. Briefly stated, neoliberalism is a political economic theory and practice that centers human wellbeing on the freedom of business, free markets, free trade, and freely acquired private property (Harvey, 2005). Paradigmatic in spread, neoliberalism harnesses the population through expert systems, spatial practices, and market forces (Ong, 2006, p. 6). Alongside this, it reifies the notion that every individual maintains the competency and potentiality to make choices, and that these choices largely determine the outcome of their lives. Such neoliberal "freedoms" can be found in every fired employee told it is their fault for getting sick, every failing student told it is their fault for working two jobs on a school night, every senior with lung cancer told it is their fault for living near a coal-fired power plant. That is, the ability to act is not as simple as individual choice. Here, between the desire to act and the ability to act are questions of agency and efficacy.

Agency might be understood in a rhetorical sense as "the capacity for words and actions to be intelligible and forceful, and to create effects through their formal and stylistic conventions" (Rand, 2008, p. 297). Expanding on this are numerous psychological models, such as "locus of control," which measures the degree to which people believe their own behavior does or does not effect change (Lefcourt, 2016), and "self-efficacy theory," which focuses on the judgements people have about the skills they possess (Bandura, 1977). In general, research on childhood agency has tended to deemphasize the constitutive aspects of global processes and social relationships (Ansell, 2014; Tisdall & Punch, 2012). However, rhetorical theory demonstrates that while agency is expressed by individuals, it is also communal and participatory (Campbell, 2005). Agency emerges through the interplay of self and others as dialogic and intersubjective (Bakhtin, 1984), not as a harmonious blend of indistinct voices, but rather "a system of interrelationships between distinct voices" (McCallum, 1999, p. 29). Adding further complexity are myriad biases, discourses, desires, needs, systems, institutions, ideologies, expectations, forces, power structures, and so on. An ebbing and flowing "assemblage" of human, nonhuman, material, and immaterial forces also affects and effects action (Bennett, 2005, p. 453).

For climate change, the question is therefore not merely what judgments people have about their capacity and potentiality to effect change, but the various paradigms, ideologies, and discourses that cohere and condensate from out of the amorphous ebb and flow of rhetorical influence. To that end, rather than the terminology "agency" or "self-efficacy," I predominately utilize "efficacy" within this project. This is for several reasons. Aside from the connotative issues of "agency" also referring to corporate

institutions, “efficacy” hones in more closely on the potentiality for subject actors to effect change fruitfully. Similarly, while “agency” evokes “agents” (bringing to focus subject actors) the term “efficacy” evokes “effects” (bringing to focus the potentiality to effect change). In addition, whereas “self-efficacy” is explicitly about attitudinal orientations regarding the self, “efficacy” permits a broader and more dynamic usage within more rhetorical critical contexts.

Subsequently, while the terms are largely synonymous, I feel “efficacy” permits a more precise highlight of key differences in how different trajectories of action are situated for various subject positions. This is of particular importance in discussing not merely agency, but in how agency is communicated, constructed, framed – and not merely in regards to the self, but in how various ideologies communicate, construct, and frame it. For children, a tangible example of this can even be seen in rhetorics of environmental change. For example, Cox (2013) identifies efforts to change policy, especially at the local level, as the most effective action for publics to make in response to environmental issues (p. 27). In contrast, Brick (1995) suggests that publics should “rely less on regulatory coercion and more on market-based programs and local initiatives” (p. 203). However, both civil engagement (e.g., voting) and market-based solutions (e.g., buying and selling) are highly restricted from children across much of our global society. Regardless if young people accept the scientific consensus on anthropogenic climate change, their ability to act on that information faces clear limitations, especially within the efficacies of neoliberalism.

Although young people themselves are subject actors with their own efficacies and experiences, "childhood" as a concept is wrapped in ideology (Ansell, 2014). Across developed and developing nations, a particular model of "childhood" has seen broad global universalization alongside the emergence of international child protection standards (Honwana & de Boeck, 2005). This model predominately aligns with the neoliberal model, which situates children "towards independence rather than interdependence, towards school-based rather than work-based learning, and separates them from the wider world of politics, economy, and society" (Wells, 2009, p.4). The neoliberal model of childhood sees broad acceptance throughout much of our globalized society (Honwana & de Boeck, 2005), and finds reification through education systems worldwide (Ansell, 2015). Yet, it is largely incongruous with the experiences of many children across developing and developed nations (Ansell, 2005). Those children within subjectivities outside of the essentialized neoliberal norm are often positioned as aberrations (Ansell, 2005). For instance, children who struggle with normative models of pedagogy may be considered "problem children" regardless of any actual deviance or ineptitude. Such "delinquents" may spend afternoons displaced from their classrooms in the confinement of detention alongside bullies, even if their only "crime" is having difficulty waking up at 7:00am, sitting in hard wooden chairs for hours at a time. Worse, from merely experiencing incongruities with the neoliberal model, these children may be given lower grade point averages, which can impact their vocational, scholastic, lifestyle, and economic possibilities far into the future. The situated efficacy of such children is clearly not equivalent to those able to perform well within normative neoliberal pedagogical models, even into adulthood.

Contributing further to questions of childhood efficacy, neoliberalism others, excludes, and disempowers children in general. In particular, most democratic nations in the world today do not extend formal participation in the political process to anyone under the age of eighteen (Banaji, 2008). This categorization tends to code those under eighteen as "minors" (i.e., "the minority") to separate them from those eighteen and older (i.e., "the majority"). A broad explication of the potential reasons for this is beyond the scope of this project. That said, at least in the United States, the age of majority was reduced from 21 to 18 as a direct result of the ratification of the 26th Amendment to the US Constitution in 1971. This occurred largely in response to political pressures regarding the rights of drafted youth during the Vietnam War (Benson & Morley, 2019). In other words, the US age of adulthood is established to begin at 18 mostly because the Selective Service Act of 1948 required boys to sign up for the military draft at that age. Moreover, a major reason draft-eligible teenagers finally gained the rights and privileges of adulthood in 1971 is predominately due to the political pressures of a social movement of disenfranchised youth. Consequently, not only is "childhood" wrapped in discursive ideology, but it can be challenged, and has been challenged – even by those whose efficacy it diminishes. This is of particular importance to questions of childhood efficacy.

Speaking to this, rhetorical scholarship has highlighted similar sites of othering and exclusion and how they can be transformed into sites of resistance. For example, these include subjectivities of race (e.g., Glaude, 2016), sexual orientation (e.g., West, 2010), gender (e.g., Cloud, 2009), the environmentally disenfranchised (e.g., Pezzullo, 2001), the socioeconomically disenfranchised (DeLuca, Lawson & Sun, 2012), species (e.g., Wolfe, 2012), and many others. That said, little research in social movement

rhetoric has centered on children specifically, especially in regards to environmental issues like climate change. Likewise, the bulk of research on environmental engagement principally centers on adults (Ostman, 2014). Contrasting this, however, threads of inquiry across various disciplinary boundaries within the social sciences have looked into questions of children and environmental change. These include child psychology and social work (E.g., Gharabaghi & Anderson-Nathe, 2019), human geography (e.g., Cutter-Mackenzie & Rousell, 2018), environmental education (e.g., Williams, McEwen & Quinn, 2017), environmental sociology, policy, and global change (MacDonald, et al., 2013), and children and nature studies (Mitchell, Haynes, Hall, Choong & Oven, 2008). With this in mind, it seems pertinent to expand on the unique situatedness of children from an interdisciplinary perspective that invites both critical humanistic and scientific perspectives.

The Halcyon Days of Youth

Children are embodied beings, affected by both natural and social forces (Ansell, 2009, p. 199). That is, childhood is a lived occurrence by living children, who themselves make choices and participate in their own reconstructions of their own childhoods while in the midst of dynamic and shifting physiological, cognitive, psychological, emotional, and other changes (Prout & James, 1990). To elaborate, while the human species tends to undergo physiological, cognitive, and psychological changes throughout their lives, the most prominent occur during the pubertal maturation period (Lerner & Steinberg, 2004; Spear, 2000). From a biological perspective, this period signifies many distinct yet briefly overlapping processes, but typically begins with changes to the hypothalamic-pituitary-adrenal axis between the ages of six and ten (Dorn, 2006) and proceeds until typically

between 20-to-25 years of age with a peak in adrenal androgens (Worthman & Stallings, 1997), grey matter synaptic pruning (Giedd, 2008; Rubia, Overmeyer, & Taylor, et al., 2000), and myelination of the prefrontal cortex (Sowell, et al., 2003). Along this period of change and maturation, what is commonly understood to be "puberty" tends to occur between the ages of 8 and 15, beginning with an activation of the hypothalamic-pituitary-gonadal axis and resulting in the biological ability to procreate (Dorn, 2006).

My purpose in citing medical language here is largely to convey the great specificity with which medical science understands the neurocognitive changes occurring in the early years of human development. Among these, the most significant epochal periods would appear to occur around the ages of 6-to-10, 8-to-15, and 20-to-25. More than contribute to mere physiological changes, these biochemical alterations can influence behavior, perception, affect, and cognition (Blakemore, Burnett, & Dahl, 2010; Dahl & Gunnar, 2009). This is absolutely not to imply a reductionist understanding of childhood, but rather to direct attention to the embodied, material, biological components that contribute to the subjectivity, efficacy, and communicative worlds of children. Alongside myriad other factors, these contribute to their perception, understanding, affect, and positionality with the environment.

In particular, Kellert (2002) found that young children (roughly under 6-years-of-age) tend to lean toward more utilitarian, dominionistic, and negativistic values for nature (p. 132). Whereas older children (roughly over 12-years-of-age), tend toward more abstract, conceptual, and ethical values for nature (p. 135). Informed by this, older children may thus better comprehend the abstract concepts of climate change and its

implications within abstract ethical frameworks. Such would likely contribute to understanding *what* climate change is; however, the ability to understand abstract concepts and ethical frameworks is, in a manner of speaking, merely one piece of the puzzle. As mentioned previously, at least for the United States population, certainty that climate change is occurring finds a strong correlation with trust in scientists (Hmielowski, et al, 2014). Such "trust" would thus also imply relationality, rhetoric, and ideological discourse– and this is merely in the context of didactic knowledge and "statements of fact." As mentioned prior, even with over 50-years of empirical observations that climate change is occurring, we are still "failing miserably" to do anything about it (see: Milman, 2018). Most the US adult population (66%) does not even occasionally discuss it (see: Howe, 2016). This is to say, efficacy depends on more than understanding and comprehension. Similarly, it would appear that climate action relies on more than climate knowledge.

Contrasting the positionality of older children, in middle childhood (roughly between ages 6-to-12) young people instead lean toward scientific and aesthetic values and feelings of responsibility for nature (Kellert, 2002, p. 133). As this implies, while those in middle childhood may not be as equipped to grasp the abstractions of climate research, they may however find greater rhetoricity from the scientific and aesthetic aspects of climate change discourse, and especially within a framework of responsibility. In other words, whereas in the older years of childhood people tend to focus more on the "whats" of nature, during these years many will conversely focus more on the "whys" of nature, and especially along values resonating with science and aesthetic. This is of particular relevance to questions of childhood efficacy regarding climate change. In

addition to the scientific values anchoring the issue (see: UNICEF, 2015; Hmielowski, et al, 2014), media representations tend to be the main source of information about climate change for most people (Schafer & Schilichting, 2014, p. 153). Further, children themselves encounter a plethora of identity-influencing media regarding the environment, which contribute toward their ethics, worldviews, and knowledge (Kellert, 2002), and can learn ecological information from fictional narratives just as easily as they can from educational non-fiction texts (Ganea, 2011). Moreover, children around the ages of 6-to-12 tend to find symbolic portrayals of nature more meaningful than direct contacts (Kellert, 2002, p.132). As an aside, it would thus appear that by way of medical and social science, we are brought back to rhetoric.

Whereas the factors of public engagement with climate change seem broader than mere scientific knowledge, but contend with ideology and discourse, it seems especially relevant that children aged 6-to-12 tend to lean toward the symbolic, and especially during a time of development with lifelong implications. Accentuating this, climate change differs from other environmental issues due to its hypermediation – that is, it is encountered primarily through its mediated, symbolic, forms. To elaborate, Bolter and Grusin (1999) describe "hypermediacy" as a logic that "multiplies the signs of mediation" (p.34). Extending the concept, DeLuca and Peeples (2002) delineate the "public screen" as "a scene of hypermediacy" (p. 188), a "constant current of images and words… abetted by the technologies of television, film, photography, and the internet" (p. 190). This is especially useful in describing how "media produce culture, but they are also the primal scene upon which culture is produced and enacted" (p. 189). In other words, "media produce the public sphere and public screen as primal scenes of Being,"

and thus can open spaces "from which epistemologies and ontologies emerge" (p. 189). I would, however, offer the following augmentation. Particularly, climate change is hypermediated in a qualitatively different manner than most other discourses, and that this distinction is vital to questions of climate efficacy and children.

Explicatively, whereas other environmental issues (such as mountaintop removal strip mining, air and water pollution, biodiversity loss, ocean acidification, etc.) can be encountered and engaged directly, climate change is largely beyond such encounters. That is, to experience the climate changing *directly* one would need to experience the entire 5.1×108 km^2 area of the planet for all 31,536,000 seconds out of the year with the sensitivity to notice this year's average being a fraction of a degree warmer than the previous year's average. Such a task if far too abstract for unmediated human ability. Climate is not weather; it must be "translated" and "interpreted" in more accessible forms.

This distinction means that our experience and understanding of climate change, how climate change happened, and solutions to climate change are ultimately conditioned upon climatology experts. And further, that our experience and engagement with climate change is nested behind multiple layers of mediation within the public screen (e.g., animated films, news media, websites, etc.). Yet, as Fisher (1984) outlines, expert disseminated knowledge (which he places in an epistemology he refers to as the rational world paradigm) finds resistance with people who instead find meaning through narrative and personal experience (which he places in an epistemology he refers to as the narrative world paradigm). Campbell and Kay (2014) likewise find that many people deny climate

change merely because the proposed solutions are unsatisfactory to other forms of knowledge. So too, very cold winters and snowy seasons are a major factor in convincing people that climate change is definitively not occurring (Zaval, Keenan, Johnson, & Weber, 2014). An illustration of this might be found in the case of US Senator Bob Inhofe throwing a snowball in congress as evidence that the climate is not warming (see: Bump, 2015). For Inhofe, and many others, it might therefore be surmised that the direct phenomenological experience of a cold winter is more credible to their ideological and epistemological frameworks than climatologists mediating slight permutations in average annual global temperature.

As mentioned, however, those in middle childhood tend to find symbolic portrayals of nature more meaningful than direct contacts (Kellert, 2002, p.132). Subsequently, it might be inferred that during these years, children would likewise find the hypermediacy of climate change as more meaningful than phenomenological encounters with the weather. With this in mind, it seems relevant that when Senator Inhofe's granddaughter questioned him about his misunderstanding of climate change, she does not question his denial or his infamous snowball toss in congress, but his very understanding. Specifically, Inhofe describes his granddaughter asking him, "Popi, why is it you don't understand global warming?" to which he responds with, "the stuff that they teach our kids nowadays, they are brainwashed – you have to un-brainwash them when they get out" ("The Eric Metaxas Show" as quoted in Cama, 2016). In this account, neither Inhofe nor his granddaughter appear to presume the other merely read the climatological data and came to divergent conclusions; rather, it seems their conflict occurs along dissimilar paradigmatic ideologies. Expressly, the question posed by

Inhofe's granddaughter presupposes that her grandfather understands the world through logic, reason, and scientific values. This is similar to an ideological framework that Fisher (1984) calls the "rational world paradigm." Within this paradigm, it would thus follow that the reason Inhofe rejects climate change is because he simply does not understand it. On the other hand, Inhofe's perspective presupposes that his granddaughter was subjected to manipulation by antagonists in positions of power. This similarly evokes Fisher's (1984) "narrative world paradigm." Within this paradigm, it narratively coheres that the young child "believes" in climate change because powerful scientists and teachers tricked her, and therefore he can save his granddaughter by "un-brainwashing" her. Such a variance directs us to consider what other paradigmatic frameworks appear in climate discourse.

Environmental Myriad

Amidst the multiplicity of values, paradigms, and ideologies ebbing and flowing in our contemporary discourse, Brulle, et al. (2007) have identified eleven (11) predominant framings of environmentalism. Briefly, these include: (a) "Wildlife Management," which seeks to sustain wild animal populations primarily for hunting and fishing; (b) "Conservation," which strives for the greatest environmental good for the longest period of time for the most amount of people; (c) "Preservation," which seeks to protect wild spaces set apart from human activity; (d) "Reform Environmentalism," which largely centers the sciences and a correlative interrelatedness between human social health and ecosystem health; (e) "Environmental Health," which strives to eliminate or reduce human exposure to toxic pollutants; (f) "Environmental Justice," which focuses upon the social conditions that contribute to the environmental

exploitation of marginalized communities; (g) “Ecofeminism,” which views environmental exploitation as the result of hierarchical binaries and patriarchal systems; (h) “Eco-Spiritualism,” which argues that nature is a creative gift from a divine being to humanity and thus necessitates a moral obligation of care; (i) “Green,” which positions environmental degradation (and other societal problems, poverty, war, and oppression) as a result of neoliberal capitalism; (j) “Deep Ecology,” which identifies humans as merely one member of an intrinsically valuable ecological community; (k) and “Animal Rights,” which argues that humans should not suffer other animals unless absolutely necessary (p. 200).

As frames describe paradigmatic trends among various discourses, it is important to note they do not tend to be expressed or experienced in a dichotomous manner. It may therefore be fruitful to understand such paradigms, ideologies, epistemologies, ontologies, and values along a metaphor of liquids rather than solids. That is, rather than stacked side by side like concrete blocks, they ebb and flow, blend and separate, precipitate and dissolve. Continuing with this metaphor, it would seem that some frames blend like water and ethanol (e.g., Ecofeminism and Environmental Justice) while others separate like water and oil (e.g., Wildlife Management and Animal Rights). Yet, within the fluidity of discourse, such frames can still be observed and described along their defining traits. With that said, similar delineations to Brulle, et al.’s (2007) eleven environmental frames can be seen across climate discourse. While they may appear to cohere along certain “blends,” however, this does not preclude other “mixtures” from appearing. As such, the following schema should be read more descriptive than prescriptive.

In regards to climate discourse, the Reform, Conservation, Health, and Management frames can be seen among predominate governmental and scientific sources. Speaking to this, such "official" and "authoritative" sources tend to feature key portrayals of experts, a centering of the physical sciences, and a demonstrated link between ecosystem health and human health (e.g., EPA, 2016; NASA, 2016; National Geographic, 2016; UNIPCC, 2016; and USGCRP, 2016). Additionally, these sources tend to propose the solution to climate change as sustainable resources management, such as reducing the emissions of greenhouse gasses and carbon sequestration (e.g., Conservation International, 2016; EPA, 2016; National Geographic, 2016; USGCRP, 2016). Alongside this, the rationale for responding to climate change is often presented through its negative effects on human health and wellbeing, especially upon marginalized communities, the elderly, children, and those in coastal regions (e.g., Centers for Disease Control and Protection, 2016; The White House Office of the Press Secretary, 2016; National Resources Defense Council, 2015).

Redolent with this frameset, National Geographic (2016) presents the following "six reasons" why the public should care about climate change: (a) "Extreme weather … [which] has the potential to devastate and impact peoples' lives and property across the globe on an increasingly serious scale;" (b) "Your water supply;" (c) "Your health;" (d) "Your natural heritage;" (e) "Your sports," which will leave "your favorite fishing grounds seriously depleted of essential ingredients;" (f) and "Your forests … whether you rely on forests to make a living, or simply enjoy our nation's forests for recreation" (p.1). Alongside an overt centering of individualized human values, it is especially elucidating that even the extirpation of aquatic life was listed under "sports" instead of

"biodiversity." As this suggests, it would appear that for climate change, the Reform, Conservation, Health, and Management frameworks are oriented toward anthropocentrism.

Adding to this, Climate Justice, Ecofeminist, and Green frames can be seen among various discourses of resistance, especially critical academic sources, civil rights organizations, and counter publics in popular discourse. Of these, the Climate Justice frame focuses upon the disproportionate effects of climate change on marginalized communities, seeking an end to such injustice. For example, NAACP (2019) notes how climate change "has a disproportionate impact on communities of color and low income communities in the United States and around the world" (p. 1). Similar statements can be found in Samson, Berteaux, McGill, and Humphries (2011) and Ki-moon (2009). The Ecofeminist frame likewise focuses upon injustice, but builds upon it to express climate change as the result of androcentric concepts and binary hierarchical relationships of abuse (e.g., Gaard, 2015; Whiteside, and Cohen, 2011; Mnoya, 2016; Coulton, 2015; Alcid, 2013). In particular, Gaard (2015) explicates how "feminist analyses are well positioned to address … structural inequalities in climate crises and to unmask the gendered character of first-world overconsumption" (p. 20). Along a related trajectory, the Green frame asserts that many of the roots of climate injustice can be traced back to neoliberal capitalism (e.g., Docena, 2016; Ware, 2014, Dawson, 2010). While appearing along a more resistance oriented coherence, the Climate Justice, Ecofeminist, and Green frames likewise tend to be expressed in anthropocentric terms. If we are to stop climate change it is ultimately because it would benefit us.

Somewhere between anthropocentrism and ecocentrism are a number of marginal frameworks. While future research could detail their frequency with greater precision, the following frames seem to largely emerge within topically aligned discourses and find less predominance among the bulk of both popular and resistance discourse. For instance, it would seem unlikely to hear the United Nations make a declaration that the human species is morally obligated to care for the planet because it is a gift from a divine being. Similarly, how many major NGOs – or even environmental justice organizations – make veganism (or meat reduction) a core component to climate action? With that said, the marginality of these discourses is itself of particular note, especially when considering they are not as anthropocentric as the above frames. While somewhat tangential to the overview here, I explore one possible reason for this in my concluding chapter.

Continuing with an overview of environmental frames in climate discourse, Preservation leans somewhat toward ecocentric values in arguing for areas of protected wilderness separate from human development. To that end, it found early contrast with the Conservationist frame in debates between John Muir and Gifford Pinchot, the "fathers" of the two positions. Whereas Muir valued certain spaces for their inherent spiritual value, Gifford defined nature in terms of resource value (Meyer, 1997). That said, as a broader environmental discourse Preservation tends to emphasize how the "inherent value" of wilderness is itself valuable to humans in terms of retreat, relaxation, inspiration, and exploration (see: Brulle, et al., 2007; Meyer, 1997). A few examples of this frame might be seen in how Long and Biber (2014), Mark (2014), and the United States Forest Service (Cole & Boutcher, 2008) present arguments for the value of wilderness in regards to climate change. As a point of contrast, however, I depart from

Brulle, et al. (2007) with this particular delineation. This disagreement largely is largely due to how John Muir himself emphasized the inherent spiritual and transcendental value of nature, not merely the intangible anthropocentric values of wilderness (like inspiration, relaxation, exploration, etc.). For example, Muir (1911) writes how "the very stones seem talkative, sympathetic, brotherly. No wonder when we consider that we all have the same Father and Mother" (p.319). Although humanity often does find meaning in such value, Muir identified this value *a priori* to human valuation. Aspects of this orientation are maintained in how the Preservation frame foregrounds the inherent value of nature; however, when providing a rationale for an anthropocentric audience, the frame ultimately utilizes anthropocentric values. Subsequently, rather than Preservationism merely typifying a kind of defense of wilderness because humans find it beautiful, the frame signifies an intermingling of ecocentrism and anthropocentrism together. For climate change, this framework might therefore be seen in emphases on the effects of climate change on ecosystems (e.g., biodiversity loss, ocean acidification), yet which then focus on anthropocentric values in expressing why humans should care (e.g., losing possible undiscovered medicines in the rainforest).

As with Preservationism, the Eco-Spiritual, Animal Rights, and Deep Ecology frames likewise lean toward ecocentrism and likewise appear marginal in popular discourse. For climate change, Eco-Spiritualism portrays climate change as a divine moral issue. This frame can be seen across numerous religious practices, including Protestant Christianity (e.g., Operation Noah, 2016), Catholicism (e.g., Francis, 2015), Eastern Orthodoxy (e.g., Bartholomew, 2009), Islam (e.g., Islamic Foundation for Ecology and Environmental Sciences, 2015), Hinduism (e.g., Hindu Declaration on

Climate Change, 2015), traditional indigenous spiritualism (e.g., Arvol Looking Horse, 2015) and many others (see: The Forum for Ecology and Religion at Yale, 2016). Frequently common in this perspective is an emphasis on the inherent value of nature as it originates from the divine. For instance, Francis (2015) states, "there is the recognition that God created the world, writing into it an order and a dynamism that human beings have no right to ignore " (Francis, 2015, p. 161). From this theological foundation, he invites humanity to "dare to turn what is happening to the world into our own personal suffering and thus to discover what each of us can do about it" (p. 16). In a matter of speaking, rather than mere "anthropocentrism" or "ecocentrism," the Eco-Spiritual frame is mindful of a sort of "theo-centrism," from which various anthropocentric and ecocentric values then emerge.

The Animal Rights paradigm largely foregrounds the contributions of industrial animal agriculture on climate change and the effects of climate change on nonhuman animal life. In this regard it leans more toward ecocentrism than many of the frames discussed thus far. Notable examples include various nonprofit organizations (PETA, 2016; Vegan Outreach, 2016), the United Nations Food and Agricultural Organization (UNFAO, 2006), and documentary film (Cowspiracy, 2014). This framework is similar to Preservationism in that it also situates an inherent value of nature, but differs in two substantial ways. Firstly, Animal Rights largely bases its claims of inherent value on an ethical and moral foundation rather than human inspiration (e.g., Wolfe, 2012; Potter, 2011; Goodall, 2009; Singer, 1975). Secondly, the frame then relies upon ethics and morality to articulate its rationale for action. For instance, Bekoff (2007) concludes, "we owe it to all individual animals … we must make kind and humane choices" (Bekoff,

2007, p. 166). Here, rather than be subsumed by anthropocentric Conservationism and presuppose human utility in discussions of value, the rationale for action is plainly and unapologetically presented as an ethical and moral necessity.

Along a similar trajectory, Deep Ecology situates the planet and its many species as having an inherent value, but goes further in positioning humanity as merely one part of an ecology of ecologies. While I expand on this framework further in the next chapter, the term "deep ecology" originates with Naess (1973), who articulates the necessity for ecological wisdoms and for "a philosophy of ecological harmony" (p. 99). In regards to the marginalization of the more ecocentric environmentalisms, Baard (2015) finds that the deep ecology frame is all but missing from the debate over how humanity should respond to the climate crisis (p. 42). However, he emphasizes how a turn to a Deep Ecology frame can help recenter a "reflection and deliberation on fundamental values and action, which can prove influential in … maintaining a long-term balance with nature" (Baard, 2015, p. 42). This is due to several considerations, including: practical relevancy, systematic analysis of norms and values, anti-consumerism, biodiversity, moderate interference with surroundings, intrinsic values, holistic considerations, and long term perspectives (p. 42).

Alongside these various framings of environmentalism, the notion of children and efficacy more precisely remains. The years of middle childhood bring with them a particularly unique set of circumstances in regards to efficacy, environmental discourse, and especially climate change communication. On the one hand, children are faced with "no greater, growing threat" than climate change (UNICEF, 2015, p.6), and may find a

greater salience for the scientific, aesthetic, and hypermediated aspects of climate discourse while approaching the issue from within a responsibility of care (see: Kellert, 2002); however, they are largely disempowered from responding to this threat due to a neoliberal model of childhood that relegates them to passivity (see: Wells, 2009). In addition, the years of middle childhood are a "critical period in the development of the self and in the individual's relationship to the natural world" (Sobel, 1993, p. 159). During this period, childrens tend to experience singular formative moments that imprint for life and serve to influence future values (Stegner, 1962, p. 21). Consequently, the manner in which climate discourse frames childhood efficacy may have lasting effects. Further, considering that global society has ultimately failed to adequately respond to the climate crisis (Milman, 2018), an inquiry into these framings of efficacy in particular may glean fruitful directions for our own empowerment.

Coordinates of Inquiry

Climate change research has been a prolific topic among environmental communication scholarship. Among the diverse methodologies, approaches, and research paradigms within the field, a few recent trends can be observed. These include an emphases on the following. Firstly, understanding the mechanisms and tensions among the ideological framings of various counter publics, especially regarding climate skepticism and denial (e.g., Dixon, Bullock & Adams, 2019; Pepermans & Maeseele, 2014; Ward & van Vuuren, 2013; Nerlich, Forsyth, & Clark, 2012; Beattie, Sale, & McGuire, 2011; Maibech, Nisbet, Baldwin, Akerlof, & Diao, 2010; Hulme, 2009; Nisbet, 2009; Carvalho, 2007; Antilla, 2005; Lassen, Horsbol, Bonnen, & Pederson, 2001). Secondly, investigating questions of public participation, social movement, and climate

change response (e.g., Bailey, Giangola, & Boykoff, 2014; Jaspal, Nerlich, & Cinnirella, 2014; Jaspal, Nerlich, & Koteyko, 2013; Endres, Sprain, & Peterson, 2009; Hulme, 2009; Lassen, Horsbol, Bonnen, & Pederson, 2001). Thirdly, exploring fatalistic frames and fear appeals on questions of agency (e.g., Reser & Bradley, 2017; Breakwell, 2010; Foust & Murphy, 2009; Agyeman, Doppelt, Lynn, & Hatic, 2007). This project follows along a similar trajectory of research looking into questions of agency/efficacy, publics, paradigms, and ideological frames; however, it makes a departure in focusing specifically on children.

Alongside this, and as I have briefly mentioned, extant research on children and the environment has predominately utilized a social scientific approach. From this methodological orientation, research has investigated topics such as: (a) child health and ethics (e.g., Ward, 2012; Cantor, et al., 2010; Bixler, et al., 1994); (b) children and animals (e.g., Ganea, 2011; Fawcett, 2002; Kellert, 1985; Budoff, 1960); (c) children and the outdoors (e.g., Sobel, 1993; Rejeski, 1992; Bixler, et al., 1994; Balling & Falk, 1982; Lynch, 1977); (d) media influences on childhood development (e.g., Kellert, 2002; Greenfield, 1994; Kaplan, 1992; Goldschmidt, 1990; Heft, 1988); (e) and children as agents of environmental change (e.g., Gharabaghi & Anderson-Nathe, 2019; Cutter-Mackenzie & Rousell, 2018; Williams, McEwen, & Quinn, 2017; MacDonald, et al., 2013; Mitchell, Haynes, Hall, Choong, & Oven, 2008). However, research from within social scientific methodologies have rarely approached questions of children and climate change discourse within contexts of agency/efficacy, publics, power, and frames. In this manner, I seek to interject into an underdeveloped gap of communication studies

scholarship, as well as offer a rhetorical critical perspective to questions of children, the environment, and climate action.

Across the Fields

Although this project might be considered majorly within the subfield of rhetorical criticism, multidisciplinary citations are necessary to broach the aforementioned gaps apparent within this intersection. Nevertheless, as Olausson and Berglez (2014) have argued, "well-designed interdisciplinary research is vital if media research is to … ultimately make a difference in the handling of climate change" (p. 254). Smith and Lindenfeld (2014) similarly direct us to consider how "the complex problems related to climate change can only be addressed through the integration of both social and biophysical components" (p. 192). With that said, there are clear differences in the paradigms and focuses underlying the two approaches (e.g., whether "truth" exists, if it can be perceived, the influence of language on methodology and description, what counts as evidence, the contextualizing or universalizing of knowledge, etc.). Attempts at reconciling these differences have occurred from both critical/constructivist and scientific/post-positivist perspectives. For instance, actor-network-theory (e.g., Latour, 2005) emphasizes the "network" of relationships between all material and semiotic factors in society. Contrasting this is consilience (e.g., Wilson, 1998), which emphasizes that all fields of inquiry can be unified under a common knowledge rooted in an orderly universe with orderly laws.

While it is beyond the scope of this project to explicate these two approaches to great depth, they especially differ in their paradigmatic orientation. In particular, actor-

network-theory is explicitly constructivist in its eschewing of universalized knowledge, focusing instead on the "network" of interrelations that contextualize knowledge (see: Latour, 2005). On the other hand, consilience is overtly centered on elevating the universalization of knowledge. Thus, although both approaches invite contrary epistemologies within their frameworks, it would appear these invitations occur through a kind of subsumption to their own axioms. Wilson (1998) even addresses this conflict in stating that "a few professional philosophers" will present an "indictment" against his "unification agenda" as "*conflation, simplism, ontological reductionism"* [emphasis the author's], to which he responds, "guilty, guilty, guilty. Now let us move on" (p. 11).

From such a terse brushing aside of major fields of academic study we are thus brought back to Senator Inhofe's hasty dismissal of his granddaughter over climate change. This is to say, rather than invite alternative paradigms toward a cooperative search for understanding, both ultimately reify the paradigmatic oppositions that underlie the schisms between them. Consequently, to utilize either actor-network-theory or consilience as a theoretical approach in implementing multidisciplinary scholarship at the intersection of children, climate change, efficacy, media, and social change would imply a rejection of the axiomatic foundations underlying segments of this multidisciplinary intersection. For instance, the knowledge of climate change itself relies upon the post-positivistic, essentialist, quantitative, and universalizing scholarship of climatology. It would feel dishonest for me to appropriate their climatological findings while denouncing the methodological approach that resulted in those findings. Inversely, understanding children as a marginalized population resisting neoliberal disempowerment relies upon constructivist, humanistic, rhetorical, and critical scholarship. It would thus likewise feel

dishonest for me to utilize a rhetorical critical and cultural studies perspective while subsuming critical methodologies under a contrary research paradigm. I therefore approach with the paradox at arm's length – not to ignore the differences and problematics in this intersection, but to invite seemingly oppositional paradigms to say what they have to say for the benefit of this endeavor. Such a perspective takes up the call by Smith and Lindenfeld (2014) and Olausson and Berglez (2014) for environmental communication research on climate change to seek more interdisciplinary avenues.

Across the Screens

As for climate change discourse and its hypermediation in public screens, it would seem that there are spaces in communication studies and media scholarship where humanistic and social scientific research predominately find a level of agreement regarding the persuadability of media. In particular, from at least the 1990s, scholars within the social science perspective have generally held that "childhood" is constituted by a milieu of biological, social, cultural, material, and immaterial factors, including media (Ansell, 2014). Moreover, Roberts, Foehr, Rideout and Brodie (1999) state in their analysis of media exposure on children, "hundreds of empirical studies conducted over the past half century leave little doubt that, given exposure, media content can and does influence youngsters' beliefs, attitudes, and behaviors" (p. 1). So too, critical scholars have long since explicated the influence of the symbolic on human understandings of the world (Cox, 2013; DeLuca & Peeples, 2002; Rehling, 2002; McKerrow, 1989; Baudrillard, 1972; Burke, 1973; 1969; 1950). This is especially salient in regards to narrative. For instance, Fisher (1987) and Barthes (1974) explicate how stories and narratives help people make sense of information, structuring the meaningfulness of their

lives. Similarly, McCallum (1999) notes how the question in children's fiction "is not whether the subject exists, but what kind of subject it is and what are the conditions of its coming into being" (p. 4).

With this in mind, Schafer and Schlichting (2014) describe how television and film are "a main source of information about climate change" for many people (p.155), and yet scholarship on climate change communication has predominately focused on print media (p. 151). From this, they recommend future environmental communication research focus more on visual forms of media. Considering that in our digital landscape children aged six-to-twelve may be viewing countless varieties of media in myriad combinations, McGee's (1990) fragmentary thesis offers a methodological framework from which to interject. In particular, he observes how our highly mediated culture does not have singular completed discrete texts, but rather "fragments of 'information' that constitute our context" (p. 287). Moreover, whereas contemporary discourse is so massive and amorphous, a fragmentary perspective is not only an option, but is necessary (p. 288). Considering he wrote this in 1990, how much more nearly 30-years later with the ubiquitous spread of the internet, tablet computers, smartphones, and screens within screens?

As such, in this project I offer a rhetorical analysis of how climate discourse frames efficacy for children by way of key "fragments" of media – animated films featuring catastrophic environmental crises and protagonists coded as children. With this in mind, my analysis is thus guided by two primary questions. Firstly, how does climate change and environmental discourse frame the efficacy of children? Secondly, what

might adults glean from this in regards to their own efficacy, especially in the context of climate action? Other points of inquiry include questions such as the following. What are the films "telling us" about climate action? What epistemological and ontological assumptions emerge? Are the films' protagonists empowered or disempowered in resolving the narrative (and environmental) conflict? Who are the antagonists? Is science and/or other cultural ways of knowing featured, and if so, how? What are key themes in resolving the major conflict? What narrative and rhetorical tropes appear? Lastly, what might be inferred by the films' rhetoricity on questions of climate action, social movement, counter publics, and resistance?

To respond to these questions, I utilize an iterative methodology that seeks to observe prominent motifs, tropes, and other discursive patterns in animated film, paying special attention to how efficacy is situated for child-coded protagonists. I begin this process by reviewing several itemized lists of "top" children's animated films (e.g., Rotten Tomatoes, 2018) and environmental films (e.g., Common Sense Media, 2018; Gunther, 2011), seeking to identify movies with the following: (a) broad reception; (b) resonance with climate discourse; (c) similarities across numerous audio-visual and narrative elements; (d) and plots resonant with various environmental representations, Brulle, et al. [2007] as a guide). With the objects of inquiry selected, I then stagger the analysis film-by-film. In particular, with each movie, I first watch in a somewhat normative manner, seeking to observe the productions as a whole in the comfort of my living room. Then, I review each particular film again while taking largely deductive observational notes scene-by-scene. This is done by using a simple three-column system. In the first column I transcribe the dialog verbatim. In the second column I note various

audio-visual elements (e.g., camera angles, colors, foregrounding, points-of-view, etc.). Lastly, in the third column I make observational notes (e.g., potential patterns, emerging themes, substantial moments relating to efficacy, portrayed epistemologies, etc.). Once this is accomplished, I then list various observed patterns, summarize key points of identification, how the protagonists and antagonists are portrayed, how the plot is resolved and by whom, and so forth. From these observations, I then chart how each film appears to frame efficacy. This inductive process is especially informed by the aforementioned literature on climate change, environmental frames, the situatedness of children, neoliberalism, etcetera. Serving as a kind of rhetorical wayfinding, my analysis continues by navigating climate discourse and climate action more broadly, using these frames as constellations (or nodal points) from which similar patterns and tropologies in efficacy can be observed across the discursive milieu.

With these things in mind, I have identified three animated films as representing distinct and nuanced framings of efficacy in response to environmental catastrophe. Although these are not precise representational matches to climate change, they are important analogs to environmental catastrophe strongly resonant with climate change. These include: (a) *Happy Feet* (Miller, 2006), whose child-coded penguin protagonist ultimately convinces scientists to save his community from starvation due to overfishing; (b) *WALL-E* (Stanton, 2008), which situates its child-coded robotic protagonist to focus on romance while adults go back to the land to help cultivate a postapocalyptic earth; (c) and *Moana* (Clements & Musker, 2016), which tells a story of a young girl who restores a broken relationship with the abused earth, and thereby saving her village and the ecological community directly.

More than resonate with various framings of efficacy, these films offer good media representations of environment for family audiences in the United States (and possibly globally). Speaking to this, *Happy Feet*'s box office sales total $198,000,317 in the US and $384,335,608 globally (Box Office Mojo, 2019a). In its opening weekend, it topped sales as the number one film across 3,804 theaters (Box Office Mojo, 2019a). Further, the director of *Happy Feet* (George Miller) won Best Animated Feature in the 2006 Academy Awards (Box Office Mojo, 2019b). Among prominent reviews, Peter Bradshaw (2006) from Guardian Magazine noted that the film "offers a sucrose-enriched upgrade to the documentary *March of the Penguins*." In other words, rather than merely playful children's film, *Happy Feet* is a sweeter and more palatable version of an environmental documentary. Alongside this reading, The Hollywood Reporter describes how *Happy Feet* (and its sequel *Happy Feet 2*) portrays "global warming" as "a big problem for penguins and the rest of the planet" (Bond, 2011). While this speaks to the overall salience of the film in regards to media representations of climate change, it should be highlighted that *Happy Feet* contains no explicit connection to climate change in its plot (which is about overfishing the Antarctic). That said, such an overt connection in popular media between an animated children's film about overfishing and climate change contributes to the salient analog between plots of environmental catastrophe and climate discourse.

In regards to the popularity of the animated film *WALL-E,* box office sales total $223,808,164 in the United States and $533,281,433 worldwide (Box Office Mojo, 2019c). During its opening weekend, the film was the number one grossing film across 3,992 theaters (Box Office Mojo, 2019c). The director (Andrew Stanton) won the 2008

Academy Award for Best Animated Feature (Box Office Mojo, 2019d). Of notable reviews, Byrnes (2008) calls *WALL-E* a "genuine masterpiece." Greenlees (2017) similarly titles her review of the film as "Why *WALL-E* is the Best Environmental Film of the last Decade." Likewise, Williams (2008) describes *WALL-E* as "a sci-fi trifecta: a vision of the future, a tale for our times, and a blast from the past." Speaking to this past, present, and future, Calhoun (2011) notes how *WALL-E* is a "very beautiful film from the worst approximations of the future we're shaping for our planet" (p. 1). In describing this future, he notes how the film portrays the earth as a "lifeless, rust-coloured, dusty landscape of urban desolation" (p. 1), and where the only surviving humans live on a "self-sufficient spaceship," where they are "waited on by robots" (p. 1). These future humans are portrayed as "fat, sedentary, greedy and unpleasant" (p.1). With such a trajectory for ours and the planet's future, Greenlees (2017) associates the film's portrayal of earth with how "we agonize over climate change." As this suggests, *WALL-E* likewise speaks to the salience of the film in regards to climate discourse.

With similar success to the previous two films, *Moana's* box office sales total $248,757,044 in the United States and $643,331,111 globally (Box Office Mojo, 2019e). During its opening weekend it ranked as the number one film across 3,875 theaters (Box Office Mojo, 2019e). While not winning, it was nominated for best Animated Feature in the 2016 Academy Awards (Box Office Mojo, 2019f). Among movie critics, Orr (2016) calls *Moana* "an absolute delight, a lush, exuberant quest fable full of big musical numbers and featuring perhaps the most stunning visuals of any Disney film to date." So too, Burrell (2016) attests that the film "is without a doubt one of the strongest Disney offerings of recent years." Alongside this, Rampell (2016) describes *Moana* as a "parable

about climate change and indigenous rights," wherein the protagonist saves her "endangered isle from environmental devastation." Although the main plot references a spreading corruption, Rampell (2016) proposes that flames of the "fiery" antagonist Te Kā "represent global warming." Such a reading speaks to the resonance of *Moana's* environmental themes to questions of climate discourse.

In charting efficacy across the three films, it should be noted that *Happy Feet* and *WALL-E* were released in 2006 and 2008 respectably, whereas *Moana* premiered nearly a decade later in 2016. From a cursory glance, this temporal differentiation may seem to incur methodological concern; however, the changing historical context of the early twenty-first century may instead contribute toward *Moana's* more broadly egalitarian narrative and largely positive reception. To elaborate further, a number of social movements, acts of resistance, and political changes occurred in the decade spanning the films. For instance, numerous protests occurred between 2013 and 2016 regarding tar sands oil pipelines (such as Keystone XL and Dakota Access Pipeline) cutting through the lands of indigenous peoples (see: Indigenous Environmental Network, 2019). Similarly, the group Black Lives Matter began its campaigns and direct actions against systemic racism in 2013 (Black Lives Matter, 2019). Likewise, in 2015 the Supreme Court of the United States (SCOTUS) ruled in Obergefell v. Hodges that the Fourteenth Amendment of the US Constitution requires US States to license and recognize marriages between same sex couples (SCOTUS, 2015). These may signify a shift in the "Overton Window," a term describing a range of what societies generally consider to be political norms and violations of those norms and how they are challenged and altered (see: Lehman, 2010).

Succinctly summarized, the changes in US political discourse occurring in the 2010s may have helped to permit a movie like *Moana* to even be published by a major motion picture studio (viz. Disney). Contributing further to such a reading, when a similar animated feature (*Nausicaä of the Valley of the Wind*, Miyazaki, 1984) was localized for US audiences in 1985, New World Pictures reduced the narrative's feminine, environmental, and restorational themes and renamed it *Warriors of the Wind* (see: Healy, 2016). In addition, although Studio Ghibli worked with Disney to release an uncut version in the US in 2005 (see: Healy, 2016), the translation choices still ultimately obfuscate the animistic themes in the original Japanese, coding the heroine Nausicaä as a Christ-figure who saves humanity rather than a young girl who restores a broken relationship with nature (Ogihara-Schuck, 2014, p.101).

Converse to this, *Moana* overtly emphasizes such nature-oriented restoration, even making it explicit in a Blu-ray special feature. In a section entitled "You don't own the land, the land owns you," one of the film's directors (Musker) describes how "the whole movie, in some ways, is about restoring the balance that came out of someone not respecting nature." Reaffirming how this sentiment connects to various peoples in Polynesia, the featurette "Voices from the Island" also invites numerous individuals from Fiji, Samoa, Tahiti and New Zealand to speak about the production. Comprised of anthropologists, linguists, fishermen, cultural advisors, and navigators, they represent the "Oceanic Story Trust," a group assembled in partnership with Disney to ensure *Moana* was resonate alongside indigenous Polynesian cultures and stories. Subsequently, the decade that stretches between the three films of analysis may provide a glimpse into shifting social norms regarding framings of efficacy in US popular media. While these

elements are obfuscated in both the 1984 and 2005 English translations of *Nausicaä of the Valley of the Wind*, the 2016 production *Moana* largely embraces them, and thus proffers child audiences in the United States a glimpse into a different kind of story.

In considering how presentations of efficacy compare and contrast across these films, it is important to highlight how all three similarly: (a) emerge as contemporary environmental children's films; (b) situate their protagonists with bildungsroman motifs; (c) explore the interplay between identity and community; (d) contend with questions of place, home, exile, and belonging; (e) feature interrelations between science, technology, culture, and religion; (f) foreground existential environmental calamities; and (g) demonstrate solutions to those calamities. In spite of these similarities, however, the precise manner in which efficacy is framed differs substantially.

Across the Pages

Informed by the above, and in order to better ascertain the nuance and topography of the aforementioned complexities in this research trajectory, in Chapter Two I delineate three dominant framings of efficacy that I see functioning within climate discourse. These are Scientistic Messianism, Neoluddic Asceticism, and Reconciliatory Ecophronesis. Of these, Scientistic Messianism centers the solutions to climate change in the scientistic hope of a caricature of science and messianic technologies to save the planet for us. Alongside this, religion, spiritualism, and cultural ways of knowing find themselves displaced and mocked. Child subject positions are disempowered to the task of merely petitioning priestly scientists to save the planet and convincing others to do similar. In contrast, Neoluddic Asceticism foregrounds the solutions to climate change in

democratic, grassroots, absconsion of technological overreliance and resistance to logics of power. From this, the framework proffers a trajectory toward affective, relational, and communal values, and the return to "back to the land" agrarian simplicity. Children, however, are similarly disempowered to the task of focusing on their social relationships while adults lead the way. Reconciliatory Ecophronesis, on the other hand, opens efficacy to a broad diversity of subject positions through the orientation of a trajectory toward ecological wellness. Through this framework, previously dichotomized and schismed discourses are invited to participate through a kind of "eco-postcolonial" systems thinking. From this groundwork, the frame rearticulates notions of "logic/science/technology" and "affect/culture/mythoi" toward a broadly equipping efficacy where even children are invited to restore a relationship with the wounded earth.

I follow this schema with a rhetorical analysis of the animated films *Happy Feet, WALL-E,* and *Moana* as metonymously discursive fragments of these frames, with further elaborations on key rhetorical implications on children and climate change at the end of each chapter. Specifically, in Chapter Three, I demonstrate how *Happy Feet* (and Scientistic Messianism) center the culpability for environmental catastrophe in consumerism. This is especially seen in how the film portrays human overfishing as the primary culprit to penguin starvation. From this, science denial is pejoratively framed through the subversion and displacement of the spiritual leaders Noah and Lovelace. In contrast, the protagonist Mumble demonstrates an empirical and scientific inquisitiveness, which ultimately warrants him the excitingly passive task of getting a scientist to complete his hero's journey for him. To that end, this chapter demonstrates how Scientistic Messianism ultimately relegates the efficacy for children (and non-

science “laity”) to the heedless passivity of dancing around and tapping their feet in messianic expectation.

In Chapter Four, I analyze how Neoluddic Asceticism emerges through the efficacy framings of the animated film *WALL-E.* Expressly stated, this is evident in how the film centers the restoration of ecological health away from technological and programmatic logics of control (signified by the characters Shelby Forthright and AUTO) and toward the return of humanity to the subjectivities of life (as evident in the characters WALL-E, EVE, and Captain McCrea). This includes the relinquishing of technological overreliance and returning to agrarian simplicity.

In Chapter Five, I observe how *Moana* departs from the framings of childhood efficacy in the previously reviewed films of *Happy Feet* (which has its protagonist Mumble petition scientists to mitigate environmental catastrophe) and *WALL-E* (which has its protagonist WALL-E focus on romance while the planet heals itself). Conversely, *Moana* ultimately composes the solution to ecological catastrophe as reconciling with the planet, conveys the meaningfulness of this through mythoi, and positions a young girl as the primary agent of change. That is, for *Moana*, a child – even a young girl – can save the planet. Yet, even more important for the protagonist, she can save her home, return her people to the science and art of voyaging, and ultimately restore the harmonious relationship between her community, the land, and the ocean

Lastly, in Chapter Six, I reflect on these frameworks in light of the disempowerment of children and ourselves in our neoliberal context, and end on possibilities for a more empowered trajectory. Taken together, this research seeks to offer

a detailed nuance to our understanding of how efficacy is communicated to children regarding an issue of catastrophic importance for their future. It is my personal hope that this analysis will also result in future pedagogical developments – that we might gain insights into healthier, more emancipatory, and more empowering avenues of climate action, framings of efficacy, and conceptualizations of public action, for both children and ourselves.

CHAPTER TWO: EFFICACY FRAMES

As explicated in the previous chapter, climate change discourse is more complex than a simple bifurcation between the "scientifically literate" on one side, and uninformed "climate deniers" on the other. When accounting for the situatedness of children, their neoliberal disempowerment, as well as various ideological, psychological, and political factors, the complexities seem to multiply. With that said, amidst these myriad factors emerge particular framings of efficacy. As posited by Burke (1984), it is from frames where we "derive our vocabularies for the charting of human motives" and thus "a program of action," especially in how we understand ourselves and judge others (p. 92). Similarly, Entman (1993) describes how frames "promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation" (p. 52). By way of metaphor, frameworks might thus be understood as scaffoldings upon which meaningfulness is constructed. They serve to position information in relationship to other information, structuring how various beliefs, values, knowledges, and so forth connect into meaningful forms. Alongside this, the media effects of frames can affect how audiences understand an issue (Scheufele, 1999) and can play a role in cultivating public action (Pan & Kosicki, 2001). This is of particular importance for climate change discourse.

With this in mind, environmentalism can be seen manifesting through eleven different ideological frames (see: Brulle, et al., 2007). As I have delineated, climate

action likewise appears along this series, yet cohering predominately within three discursive constellations. To briefly recall, these include: (a) Reform, Conservation, Health, and Management frames (coalescing around "official" and "authoritative" sources); (b) Climate Justice, Ecofeminist, and Green frames (coalescing around discourses of resistance); (c) and Eco-Spiritual, Animal Rights, and Deep Ecology frames (coalescing around discourses of morality). However, frames can resonate more or less with different experiences, subjectivities, and positionalities, which can thus affect how they are perceived by various audiences (see: Benford & Snow, 2000; Pan & Kosicki, 2001). For example, within "Reform" environmentalism, the available options for a child to speak toward or affect governmental regulations are quite different than those of the local mayor, governor, political action committee, businesses, renowned scientists, celebrities, wealthy citizens, and so on. Even within these categories, children may find their opportunities affected by income disparities, education disparities, racism, class, physiological conditions, religious bias, gender bias, bigotry, or even their parents. Similarly, various climate response *actions* appear across a multiplicity of positions. For instance, regulatory solutions are proposed by both governments (e.g., United Nations Framework Convention on Climate Change [UNFCCC], 2016) and justice organizations (e.g., The Climate Coalition, 2019). So too, neoliberal market-based solutions find support by both businesses (e.g., Tesla, 2019) and protestors (e.g., People's Climate Movement, 2019).

Consequently, it is pertinent to develop further on how key framings of climate action situate different subject positions with various efficacies – empowering some and disempowering others. To that end, in this chapter I explicate three predominate efficacy

frames emergent in climate discourse. Embarking by way of the aforementioned "constellations" of environmental ideologies, these efficacies likewise appear to resonate mostly within authoritative, resistant, and moral discourses of climate action. I have delineated these as: (a) Scientistic Messianism; (b) Neoluddic Asceticism; (c) and Reconciliatory Ecophronesis. As their nomenclature suggests, each frame signifies a predominate mode and method of climate action. Broadly speaking, the frames thus respond to the climate crisis by centering the following respectably: (a) a kind of messianic hope in science and technology; (b) absconding from various technologies and products so as to turn toward neoluddic simplicity; (c) or reconciling a diversity of broken relationships (such as between humanity and the planet) by way of indwelled phronetic wisdoms and ecological values. Needless to say, this series does not represent the full breadth of efficacies emerging around the issue of climate change, nor does it purport dichotomous boundaries between responses. Rather, it seeks to chart how children and other key subject positions are predominately situated to respond in climate discourse, especially in accordance with authoritative, resistant, and moral discourses of climate action. As follows, I explicate these framings of efficacy in more detail.

Scientistic Messianism

Briefly summarized, Scientistic Messianism constitutes the solutions to climate change and ecological disaster through emerging technological developments and religious tropes that ultimately position a scientistic image of scientists as saviors of the

world[1]. This largely occurs through the ideological displacement of religion with science, the divine with the cosmos, and priests with scientists. Subsequently, it should be stated that this framework weaves the subjectivity of "scientists" and concepts of "science" within a paradigm of scientism, and thus does not tend to represent or reflect embodied scientists themselves. Instead, Scientistic Messianism situates scientists as a kind of secular "priesthood." This is especially evident through its underlying religious tropology. Expressly, within this frame both priests and scientists (a) have privileged access to highly esoteric forms of knowledge (theology / science), (b) about a hypermediated "true reality" (the divine / the cosmos), (c) and serve as intermediaries with that knowledge (sermons / lectures), (d) by interceding (praying / petitioning), (e) on behalf of the public (laity / non-scientists), (f) for the salvation of the world (through Jesus Christ / through technology), (g) from what would otherwise be eschatological catastrophe (hellfire / climate change). In regards to efficacy, Scientistic Messianism thus positions scientists as the central figures in responding to the climate crisis. This appears to be the case for both regulatory and market-based technological solutions (e.g., solar power tax incentives, limitations on greenhouse gas emissions, energy-efficient lightbulbs, etc.). Moreover, the framework ultimately disempowers children to merely placing their hope in science, calling on scientists, or becoming scientists themselves.

To elaborate further, Scientistic Messianism's displacement of religion predominately appears through its composition of *doxa* and *praxis*. In an Aristotelean sense, "*doxa*" refers to common presuppositional beliefs that serve as a point of reference

[1] Although my outline of "Scientistic Messianism" is precisely focused on framings of efficacy, numerous authors have referred to the ideological hope in science and technology as a kind of "messianism" (e.g., Aviram & Richardson, 2004; Loscalzo, 1996; Pena, 1983).

from which other discourses are understood (Eggs & McElholm, 2002). Through such a conceptualization, the framework's "*doxa*" would thus refer to its constitutive epistemologies, ontologies, axioms, heuristics, and so forth (e.g., empiricism, positivism, etc.). Alongside this, however, are the aforementioned tropological elements that scaffold the framework with religious themes. Subsequently, it is worth augmenting "*doxa*" with its religious connotation. In particular, "*doxa*" appears within Christian theology to refer to the proper (orthodox) and universal (catholic) beliefs from which *praxis* emerges (Ware, 1993). From such a positionality, it is precisely "proper" beliefs (orthodoxy) that would lead to "proper" actions (orthopraxy) (see: Ware, 1993). As this suggests, Scientistic Messianism thereby situates scientism and its presuppositions as an orthodoxy from which orthopraxic efficacy then follows.

Nevertheless, the ideologies, paradigms, discourses (etc.) that are incongruent with the established and authoritative *doxa* are consequently framed as "heterodox" ("other belief"). Within this model, heterodoxy may or may not lead to a similar *orthopraxy* (see: Ware, 1993). However, those teachings or beliefs that are explicitly contrary to orthodoxy may be outright declared "heresy" (from αἵρεσις [*hairesis*]). Throughout the history of Christianity, those who have taught such "heresies" have often been excommunicated as "heretics." It is thus worth highlighting that the direct translation of the biblical Greek word αἵρεσις (*hairesis*) means "a self-chosen opinion" (see: Strong, 1890). In other words, efficacy is framed to emerge from authoritatively established "truths." When an individual chooses their own beliefs in opposition to those established as authoritative, the hierarchical power structure responds with reprimand, othering, and ostracization. A somewhat famous example of this is when the Catholic

Church tried and convicted Galileo Galilei for heresy, and subsequently prevented him from teaching or defending his ideas about an infinite universe and movable earth (see: Martinez, 2018).

Similar is evident in Scientistic Messianism, where cultural, ideological, subjective "beliefs" are framed as heterodox to a scientistic orthodoxy. Those oppositional to "science" are thusly reprimanded, othered, and ostracized for their self-chosen opinion – their heresy. A particularly salient example of this can be found in Sokal and Bricmont's (1998) *Fashionable Nonsense: Postmodern Intellectuals' Abuse of Science.* Here, the authors lambast scholars such as Lacan (p. 18), Latour (p. 124), Baudrillard (p.147), Deleuze (p.154), and Guattari (p. 154) for their "abuse" (p.4), "charlatanism" (p. 5), and "faulty reasoning" (p. 15). More broadly, they state "as a matter of logic" that "the humanities and social sciences" either align with the "abuses," or they do not. If they do, "it would be justified" to denounce them all (p. xii). If they do not, the inquisitors determine that "there is simply no reason to criticize one scholar for what another in the same field says" (p. xii). For the broader fields themselves, Sokal and Bricmont's (1998) stated goal is to "stimulate a critical attitude, not merely towards certain individuals, but towards a part of the intelligentsia (both in the United States and in Europe)," which they claim "has tolerated and even encouraged this type of discourse" (p. 6).

To this, I would first direct attention to the (ahem) *scientistic abuse of philosophy* evident in the text. Even here, Sokal and Bricmont's (1998) "matter of logic" (p. xii) itself seems to rely upon formal and informal logical fallacies. In particular, while Sokal

and Bricmont (1998) begin their syllogistic comparison by juxtaposing (a) "the humanities and social sciences" and (b) abuses they denounce in their book (p. xii), their conclusion shifts into claims about individual scholars with implications for academia a few pages later. By way of formal propositional logic, it is as if the authors are stating: $\forall(p \,\&\, a) \rightarrow q \mid \forall(p \,\&\, \sim a) \rightarrow (r \,\&\, (\sim c \,\&\, o)) \mid \therefore i(u \,\&\, e) \,\&\, c.$ In other words, if [all {∀}] the humanities and social sciences (*p*) are abusive (*a*) then they ought to be denounced (*q*); if they (*p*) are not abusive (~*a*) then individuals (*r*) should not be criticized (~*c*) for what other individuals do (o); therefore a segment of the intelligentsia (*i*) throughout a specific country (*u*) and continent (*e*) should be criticized (*c*). It is fairly ostensible how the conclusion does not follow from the premises. Expressly stated, their "matter of logic" contains a formal logical fallacy itself, and is therefore not logically valid. Beyond this, their claims further rest upon informal fallacies, the most apparent being a False Dilemma. Such *you're-either-with-us-or-against-us* rhetoric evokes a tropology of hierarchical religious orthodoxy condemning "heretics" and their "heretical" teachings. Contributing even further to this are terms like "abuse" and "charlatanism" and "nonsense."

My point here is not to lambast Sokal and Bricmont (1998), nor to throw their entire critique aside forthwith. If it needs to be said, a number of the issues they raise in the text are quite similar to those I mention in Chapter One and Chapter Six regarding children and climate change. For example, the authors reflect briefly on how critiques of injustice could benefit from empirical science (see: pp. 202-205), and likewise on how science could benefit from critical scholarship (see: p. 233). However, Sokal and Bricmont (1998) go beyond a mere defense of science and scientific principles to making

clearly ideological accusations, insults, and mockeries. Particularly, they claim postmodernism contains "deliberately obscure discourses," which engender "intellectual dishonesty," "poison a part of intellectual life…" (p. 207), and contribute to "a waste of time in the human sciences," "a cultural confusion that favors obscurantism," and "a weakening of the political left" (p. 206). Due to the scope of this project, I will avoid countering each of these in detail; however, I would reiterate their claim that "there is simply no reason to criticize one scholar for what another in the same field says" (p. xii). Yet, terms and phrases like "deliberately," "dishonesty," "poison" and "a waste of time" imply aspects of choice, agency, and efficacy – and thereby foreground subject actors and their subjectivities. In other words, the rhetoricity of their diction functions to generalize many scholars – and quite negatively. Further, this occurs precisely through a linkage of *doxa* with *praxis* and an othering, rejecting, ostracizing tone.

With that said, my purpose in highlighting Sokal and Bricmont (1998) is to thus illuminate the rhetorical and ideological foundation of their critique – and thereby direct attention to the religious tropology it evokes. Within such a framework, it would appear that to threaten the scientistic orthodoxy of "science" is to commit scholastic heresy. Why this matters for climate change can be seen in a predominate sentiment in climate discourse against those who reject or deny the claims of science. For instance, the Climate Reality Project (2015) claims: "Climate change deniers have a lot in common with your crazy uncle. When they open their mouths, sometimes all you can do is laugh" (p. 1). In addition to such mocking and ridicule, the manner in which Scientistic Messianism situates *doxa* and *praxis* may have an even greater implication on climate action, and especially in regards to children.

Among scholarship on *praxis* (e.g., Fritz Haug, 2007; Arendt, 1958; Gramsci, 1930; Heidegger, 1927), Schrag (2003) offers a particularly succinct conceptualization of *praxis* as a communicatively entwined manner of engaging the world (p.21). For Scientistic Messianism, this occurs predominately through a religious tropology similar to liturgical Christianity. As seen in both the Roman Catholic High Mass (The Catholic Church, 2011) and Eastern Orthodox Divine Liturgy (Tomaras, 1974), the laity engages with the supernatural mostly through a particular orthopraxis. Among the actions prescribed include petitioning priests while priests administer the saving work of sacraments. Considering such a positionality, it is not surprising that trust in religious experts is a foundational aspect of Christian belief (see: Maher, Sever, & Pichler, 2006, p.35). In parallel, Scientistic Messianism situates the non-expert public to petition scientists while scientists save the world from climate change. And likewise, the certainty that many people have in whether or not climate change is occurring depends mostly on their trust in scientists (Hmielowski, et al., 2014, p. 866).

Such an association of trust in individuals and the assurance in an environmental phenomenon also speaks to the broad dominance of Scientistic Messianism in climate change discourse. For instance, the article by Hmielowski, et al. (2014) itself evokes the orthopraxy of Scientistic Messianism. This can especially be seen in how the implications section relegates efficacy between scientists and non-scientists. In particular, the authors suggest for: (a) the public to use trust in scientists as a "cognitive heuristic to make judgements" about climate change (p. 878); (b) other scholars to be inspired by the results and find other mediating variables (p. 879); (c) and "mainstream news media" to continue highlighting scientists "as a trustworthy source of information on climate

change" (p. 879). In addition, the title, "An attack on science?" associates a lack of trust in scientists with a battle metaphor. This implies that such trust is so central to climate discourse that to challenge it is not merely to be a critic or express doubts, but to be an enemy – i.e., a heretic.

In a more practical sense, elements of Scientistic Messianism may be evident in the hope some people express in scientific and technological developments solving the climate crisis for us. The appeal is certainly apparent as the frame largely removes the sense of both urgency and culpability. That is, within such a framing of efficacy it is not so much "our fault" that climate change is a problem, but rather that scientists haven't figured it out yet. To that end, it may be children who bear the weight of being the emerging technological saviors. A particularly salient example of this can be found in the online parenting article, "Nine Young Inventors Who May Just Save the World" (Savedge, 2014). While the title may seem hyperbolic, Savedge (2014) begins, "just when I start to worry about the fate of the world, along comes a new generation of innovators who are making big changes in the way things are done." A few of these "big changes" include: (a) a mechanism of putting a protein from bioluminescent algae into windows so as to "light homes without the use of electricity;" (b) "fishing line recycling bins" made of old tennis ball containers, which are given to anglers with a tutorial on how not to litter; (c) a calculator to determine "how much wetland is needed to keep waterways clean in threatened areas;" (d) and a battery that uses carbon dioxide "and other waste materials" so as to provide "a low-cost alternative to electricity in developing countries." While these projects demonstrate innovative thinking among the "young

inventors," it is notable how they tend to center around neoliberal market-based solutions that essentially allow adults to continue their resource-laden lifestyles unfettered.

With this in mind, although Scientistic Messianism centers a hopefulness for the future, it ultimately affirms humanity's use of the earth's resources. We can drive as much as we want (as long as we buy more sustainable cars). We can eat whatever and as much we want (as long as it's grown more sustainably and/or locally). We can outsource labor to developing nations (as long as we plant a few trees afterwards). We can consume electricity for any manner of absurdities (as long as we acquire it with solar and wind). With the hope that "scientists" will save the world for us, we merely have to petition them, support them, spread the scientistic good news, and wait for the techno-messiah to arrive. In a manner of speaking, Scientistic Messianism thus infantilizes non-scientist publics alongside children themselves while elevating "scientists" to be the parents of society. We can go out and enjoy life. They will provide for us, care for us, give us toys, teach us what is true, and let us know what needs to be done. Our responsibility is therefore to simply do as they say, and to petition them if we need their help. However, if the current generation of scientists cannot offer what we need (in this case, a solution to climate change that fits our lifestyle), we are offered the hope that perhaps tomorrow's scientists can – meaning, today's children.

Expressly stated, Scientistic Messianism actualizes the hope of adults for emerging technologies by offloading the responsibility of developing those technologies onto the shoulders of the young. This occurs, however, alongside the reinstantiation of the aforementioned neoliberal model of childhood that ultimately relegates children to

passivity (see: Wells, 2009). Subsequently, within such a framework children may find their efficacy largely restricted from participating in climate action – both within their own neoliberal disempowerment, as well as with adults as an infantilized laity. With this, however, is the weight of a misdirected responsibility for them to grow up to produce technologies to save the planet, yet largely so their parents and grandparents won't have to change. Further, Scientistic Messianism proffers to children the opportunity to become scientists themselves, but situates this trajectory as the most empowered course. For those children better suited for (or who simply prefer) the arts, poetry, humanities, video game design, construction, drama, and so on, there is little recourse but to support the work of scientists. Similarly, for those children who wish to pursue a vocation in STEM (science, technology, engineering, math), yet are faced with bigotry, racism, poverty, incongruities with the neoliberal model of childhood, classism, sexism, and a plethora of other obstacles, there is little recourse but to support the work of scientists. Amid such tensions, children within families that profess a particular religion or spirituality may find other obstacles as the *doxa* and *praxis* of scientism competes with their own cultural ways of knowing, doing, and communicating. I elaborate on these tensions in greater detail in my review of *Happy Feet* in Chapter Three, where the protagonist Mumble attempts to save his community from ecological catastrophe amidst similar challenges and expectations.

Neoluddic Asceticism

In a point of contrast with Scientistic Messianism, Neoluddic Asceticism responds to the climate crisis through a resistance to authoritarian logics of control, including neoliberal capitalism and technological overreliance. Solutions to environmental crises

are thus proffered to occur through an "ascetic" relinquishing of products and practices deemed as harmful, and embracing instead the affective and social, collaborative grassroots efforts, and especially a kind of "Luddic" back-to-the-land agrarianism. Luddite ideology, as DeLuca (1999) explicates, perceives "industrial progress as a catastrophic storm threatening to wreck their jobs, communities, and culture, and leave a pile of debris" (Thompson, 1964, as quoted in DeLuca, 1999, p.158). To that end, Neoluddic Asceticism thus emerges predominately along discourses of resistance, and especially those resistant to consumerism, technological overreliance, and neoliberal capitalism.

Similarly, and as mentioned prior, this framework seems especially resonant with Brulle, et al.'s (2007) Justice, Ecofeminist, and Green frames. While coalescing around discourses of resistance, Neoluddic Asceticism largely situates efficacy toward community organizing, grassroots efforts, and broadly cooperative participation. For climate change, this may appear along proposed changes in lifestyle (e.g., bicycling instead of driving, reducing meat consumption, "simplifying" our lives, moving to the countryside, etc.) or in systemic changes (e.g., calling for the end of industrial coal production, seeking a change in how society uses technology, ending environmental racism, pushing for greater restrictions on industry, designing more resilient and egalitarian cities, growing food closer to where it's consumed, etc.).

The central mechanism by which the goals of Neoluddic Asceticism are proffered tends toward the framing of an antagonistic battle between oppressors and oppressed. In a manner of speaking, Neoluddic Asceticism calls for those under the regime of the

powerful to cast off their chains and join a resistance for a more emancipatory and egalitarian world (including systemic "chains" such as capitalism or patriarchy, or specific "chains" such as cheeseburgers, smartphones, and automobiles). To elaborate further, I turn toward environmental justice and rhetorical critical scholarship. In particular, Cathcart (1978) describes rhetorics of confrontation in social movements, wherein a kind of "agonistic ritual" (p. 81) functions to dramatize "the complete alienation of the confronter" (p. 82). Similarly, Scott and Smith (1969) describe how confrontational protests shriek "kill-or-be-killed" (p. 8). For climate change, this may manifest in the struggle for justice groups to call for the complete abolishment of non-renewable energy. For instance, Friends of the Earth International (2018) refers to the "climate emergency," calling it an "onslaught" of "climate-wrecking" by "dirty energy." They note how they are "resisting new oil exploration" and are "fighting fracking." Additionally, they mention how their "member groups around the world" are "helping to sound the alarm," and to which they are "mobilizing for an urgent … and ambitious response" (p.1).

Alongside such metaphors of war, Friends of Earth International (2018) emphasizes a "collective opportunity" to raise "our voices" and refers to "member groups" (i.e., other "friends"). To elucidate such with-us-or-against-us rhetoric, Cathcart (1978) explicates how "without the act of confrontation a movement would not be able to identify its true believers" (p. 83). As the phrasing "true believers" suggests, such conflictual discourses tend to signify a similar identifying cohesion for the in-group and antagonistic othering and destruction of the out-group. As Gregg (1971) observes, "the rhetoric of attack becomes at the same time a rhetoric of ego-building" (p. 48).

Considering that transgressive subjectivities and agencies generate interpretive positions to interrogate dominant cultural discourses and practices (McCallum, 1999, p.101), such sites of resistance may appear to offer an empowering framework from which to critique the power structures leading to climate change. Similarly, whereas sites of transgression presuppose a particular subject position with "identity as a subject" (as positioned by societal context) and "identity as an agent" (as positioned from a site of transgression) (McCallum, 1999, p.119), it is therefore conditions of denied subjectivity to which subjects can transgress where their agency is expressed and their sense of identity is dialogically produced.

Within such a framework, children are largely situated with similar efficacies of resistance. Since children themselves desire increased self-efficacy and autonomous identities (Daddis, 2011), and tend to resist and contend with the political views of their elders (Warren & Wicks, 2011), they may find the ability to resist an appealing notion, especially in response to climate-denying parents. This may especially be the case for children in families within what Koerner and Fitzpatrick (2006) identify as a "protective" communications pattern (where children experience little conversation with their parents but feel a high expectation of conformity). Similarly, environmentalist children themselves are significantly more likely than non-environmentalist children "to agree that people should speak up when they disagree with their government" (Nelms, Allen, Craig, & Riggs, 2017, p. 546). That said, many children may find difficulty in driving out to Washington DC to join a large climate protest or choose to eat a vegan diet if their parents are not supportive. To that end, children within this framework may ultimately be an afterthought, encouraged to resist but largely waiting until they come of age.

In its resistant and oppositional framework, Neoluddic Asceticism may target the causes of climate change directly (the industries contributing most toward the increase in greenhouse gas emissions), and in a manner that is highly empowering for many subject positions (inviting coalitions of wide and diverse groups of people). However, such discourses of resistance may also target science itself – and has. Exceptionally, many critical scholars have denounced science, and for decades (e.g., Denzin & Lincoln, 2013; Di Chiro, 2007; Latour, 1988; Brummett, 1976; Scott & Smith, 1976). In particular, Di Chiro (2007) states that some environmental organizations embrace a "double consciousness of both the progressive and destructive powers of technoscience by refusing to dismiss the modern sciences as inevitably entangled with the controlling interests of powerful corporations and national governments" (p. 251). Here, environmental organizations that cooperate with science are framed as having a "double consciousness" (i.e., doublethink). The possibility that they simply disagree about scientists being "inevitably entangled with the controlling interests of the powerful" does not appear to be considered. Rather, "technoscience" is framed as "destructive," and therefore must be "dismissed." The possibility for a middle-space does not appear to be permitted within such melodramatic oppositions. Although scientism (and behaviorism, reductionism, etc.) present clear problematics, such confrontational rhetoric poses several questions related to climatology. Is climate science entangled with the controlling interests of the powerful? How do we "mobilize" a "climate resistance" movement against the very thing that informs us that climate change exists? How do children? Similarly, whereas Neoluddic Asceticism proffers efficacy through resisting systems of power and abstaining of technological overreliance, what resistance and abstention is

possible for children? I elaborate on these and similar tensions in Chapter Four's analysis of *WALL-E*.

Reconciliatory Ecophronesis

In contrast with both Scientistic Messianism and Neoluddic Asceticism, Reconciliatory Ecophronesis ultimately situates environmental problems as a disharmony in the relationships humans share with the planet itself. It thus positions the solutions to resolving such disharmony as the reconciliation of humans with the ecologies wherein they dwell and interconnect. From this, the framework ultimately composes efficacy through a holistic, harmonious, rhizomatic, interdisciplinary, and diverse craft that invites sciences and cultures, logics and affects, technologies and arts, systems and mythoi, to work toward a more harmonious orientation and dwelling of life and its ecologies. For climate change, this might resonate with the simple reorientations that begin with a child saving a small bird from drowning, or from an environmental planner redesigning cities to be more environmentally holistic. That is, wherein every individual belongs to an ecology, every individual affects that ecology.

Elaborating further, as the terms "reconciliatory" and "ecophronesis" allude, the framework is grounded not merely in ecological science (i.e., episteme) but in ecological wisdoms (i.e., phronesis); it is not merely directed toward ecological action (i.e., praxis) but ecological craft (i.e., techne). The need for these reorientations is articulated by Naess (1973), who identifies that the "facts" and "logics" of ecological science alone are poorly equipped to describe or provide guidance in precisely how humans should be ecological (p. 99). To elucidate his point, one might consider the difficulty climatologists seem to

have faced in convincing people to change their lifestyles by way of charts and graphs and fear appeals. A central question that might therefore be asked is how the *meaningfulness* of climate change is conveyed. How should it be?

In his germinal work, Naess (1973) refers to the need for "wisdom" (p.99) and "diversity" (p. 96) in environmental discourse, directing attention toward the value of "ecosophy" or "ecological philosophy" (see: p. 99). From this, he describes an ecosophy termed "deep ecology," which emphasizes: (a) ecocentric values (p. 95); (b) the situating of humans as merely part of a relationally connected biosphere (p. 95); (c) egalitarian social values and celebrations of diversity (p. 96); (d) systems thinking (p. 97); (e) decentralization (p. 98); (f) and positions against pollution and resource depletion (p. 97). Such a framework is especially pertinent considering that deep ecology is largely absent from the climate change conversation, even in spite of it offering potential avenues for mitigation (Baard, 2015).

With this in mind, it might be said that Reconciliatory Ecophronesis evokes a multiplicity of rhetorics, mythoi, and praxes that are resonate (but not necessarily equivalent) with the broad topography of "deep ecology" discourse. I would however augment Naess (1973) and suggest not philosophy, but rhetoric as the prime art to muse the questions of meaning making. Similarly, rather than "ecological philosophy" I would instead emphasize "ecological wisdom" – or more precisely "ecological wisdoms" to better account for a diversity of (especially indigenous) ways of knowing. To that end, instead of "ecosophy" I extend the term "ecophronesis."

To briefly elaborate, for Aristotle, knowledge included both teachable facts (*episteme*), and perception (*nous*). Together, these constitute what has traditionally been translated as wisdom (*sophia*). However, Aristotle builds upon *sophia* to also include the practice of reflection toward an ultimate telos of flourishing (*eudemonia*). This practical and mindful wisdom (*phronesis*) differs in that it hinges upon experience (see: Irwin, 1999). Expanding from this, for Heidegger, *phronesis* is one of the three dispositions of *Dasein* (dwelling), and regards an orientation of care in and toward the world (Volpi, 2007). From this schema, "ecological philosophy" might be understood more in terms of *sophia* and environmental ethics, whereas "ecological wisdom" evokes *phronesis* and an immediacy of care best described as environmental morality.

Expanding further, morality might be understood as a "fabric that holds together a complicated tapestry of social relationships" (Bekoff, 2007, p. 88). It is how we "know" the right course of action when a small child falls in a river is to immediately jump in the river to save them. To Aristotle, such moral knowledge was contingent upon *noesis,* often translated into contemporary English as "intuition." Briefly, "*noesis*" or "the nous" is a way of knowing distinct from both perception and emotion (Long, 1998). Aristotle considered it alongside but distinct from *logos*, yet connected to *phronesis* in its requirement of direct experience. Moreover, Aristotle describes the role of *noesis* in moral agency, describing it as that which is directed at the sources from which we discern the purpose of an action when thinking about that action (Sachs, 2002, p. 114). In a way, *noesis* might be considered a kind of empathetic heuristic, a knowledge known through experience.

If Aristotle is correct in his assertion, *noesis* cannot be taught didactically, nor can it be known through logic. If such *moral* knowledge is to be taught at all, I would proffer it occurs in the storied sharing of experiences, the *catharsis* that is the empathy occurring between the fictional and the embodied. If one cannot experience directly, they might find experience in and through mythoi – story. In a matter of speaking, stories offer the threads from which our moral tapestries are sewn. From this, Reconciliatory Ecophronesis urges us to ask what environmental moralities (or "moral heuristics") are conveyed through the mythoi concurrent with various positions, ideologies, frameworks, epistemologies, texts, films, and so forth. Moreover, we are invited to ask how and in what ways these "moralities" are inclusive or exclusive, healing or harming, opening or enclosing – and to who.

With this in mind, Reconciliatory Ecophronesis might therefore be said to be a refolding of deep ecology (and the empirical and critical) with the *phronetic* wisdoms often conveyed through storytelling traditions, as well as *reconciliatory* moralities expressed through an immediacy of care. Subsequently, although I have outlined the framework here by calling back to Aristotle, Reconciliatory Ecophronesis relies explicitly upon indigenous and feminine discourses. That is, rather than a kind of appropriation of indigenous ways of knowing, the frame signifies a refolding – an invitation for voices once silenced to sit and commune at the table of knowing and doing. Speaking to this, Shiva (2015) describes the ancient traditions of the Suquamish, detailing how "all things are connected like the blood which unites our family" (p.1). Similarly, Carson (1962) frames the earth as a wounded woman, crying out in pain against its technological abuser (see: Killingsworth & Palmer, 1995, p. 49). Consequently, Reconciliatory Ecophronesis

resonates more strongly with postcolonial and ecofeminist "ecological wisdoms" – such as those seen in Vandana Shiva (2015) and Rachael Carson (1962) – than with other developments.

By way of contrast, Barry and Frankland (2002) claim that a central principle of deep ecology is found in advocating for population controls. In a harsh critique of this, however, Shiva (2015) notes how such perspectives ultimately target the world's poorest as the principal causes of environmental degradation. As she elaborates: "the largest pressure on resources does not come from the large numbers of the poor, but from the wasteful production systems, long distance trade, and overconsumption in the First World" (p.52).

In a similar manner, although the ecosophic developments of Guattari (and Deleuze) do offer numerous insights (e.g., rhizomatic discourse, autopoesis, etc., in Deleuze & Guattari, 1988), Reconciliatory Ecophronesis finds incongruity with the emphasis that "ecology must stop being associated with the image of a small nature-loving minority" (Guattari, 2008, p. 35). Converse to this, the very notion of *reconciling* with nature is itself predicated on loving nature. To that end, Reconciliatory Ecophronesis is very overtly in the realm of "nature-lovers" who empathetically (and precisely not *autopoietically*) identify the earth as a woman crying out in pain toward her abuser (e.g., Carson, 1962; the film *Moana*, etc.). Such a storied immediacy of care speaks to the frame's broad ecocentrism, wherein the perceived boundary between the human and non-human is blurred.

Alongside this, comparable ecocentric principles can be seen in recent environmental scholarship. For example, DeLuca (2007) notes how "wilderness is the ground of our being," where "we do not so much live in an environment as dwell in wilderness" (p. 43). Likewise, Jamieson (2007) describes how "we are nature and nature is us" (p. 98). So too, Rickert (2013) observes "the world is a participant in the ongoing event of human being-in-the-world, not as a stage or backdrop to what human beings do and say" (p. 199). A comparable decentering of anthropos is likewise seen across other recent works regarding the environment (e.g., Bekoff, 2007; de Waal, 2009; Rickert, 2013; Wolfe, 2012; Wilson, 2014). That said, the broad adherence of such decentering may typify an emerging posthumanist or poststructuralist turn; however, alongside these more recent works are a multiplicity of voices across myriad cultural expressions.

In particular, "indigenous cultures worldwide have understood and experienced life as a continuum between human and nonhuman species and between present, past, and future generations" (Shiva, 2015). Similarly, the Catholic monk Thomas Merton (1961) describes the world and time as a cosmic dance, saying "we are in the midst of it, and it is in the midst of us" (p. 297). So too, Fyodor Dostoevsky (1821) writes that "all is like an ocean, all flows and connects" (p. 319). Likewise, ancient Daoism saw little barrier between the human and nature, focusing instead on "the place of all things in the vast, ever-changing cosmic flow" (Anderson & Raphals, 2006, p. 286). Broad and myriad, ripples of such inclusivity have ebbed across scientific, religious, and critical scholarship to distant shores yet uncited. However, to subsume these voices under a mere poststructuralist critique of binary oppositions is silence them. Instead, such deeply ecological conceptualizations of the world are not merely a possibly next step in the

environmentalist movement, but also a reaching back, not merely an erudite advancement in western philosophy but also a grounding in a multiplicity of cultural stories – precisely alongside and with empiricism and science as well as criticism and resistance. The manner in which this is accomplished is explored further in my analysis of *Moana* in Chapter Four, with further considerations in Chapter Six.

With this in mind, it should be noted that throughout this explication I have rarely mentioned any tangible solutions resonant with Reconciliatory Ecophronesis. Other authors in harmony with these and related principles have done so (e.g., Northcott, 2015; Heinberg, 2011; Shiva, 2015; Jordan, 2003; Berry 2002). Future research might also begin to explore these steps in greater detail. Rather than an oversight, however, the primary reason for this stems from this project's central focus on efficacy rather than action. That said, as for the question of *what* Reconciliatory Ecophronesis extends as the solutions to climate change, one might similarly ask what should be done to save their own mother from abuse. The answer? *Whatever is necessary.* Such a moral foundation is not to open *praxis* to destructive or violent actions, nor to reify potential abuses of "moralizing," but instead to invite the *nous* back to conversations of climate action. To be able to answer the question of "Why should we stop climate change?" with both empirical data and discourses of resistance – yes – but also with the moral resolve to say "because it is right."

From the schema outlaid in this chapter, it is my hope that we might better grasp the efficacy frameworks at work in climate discourse. As I now turn to analyze how Scientistic Messianism occurs in *Happy Feet,* how Neoluddic Asceticism occurs in

WALL-E, and how Reconciliatory Ecophronesis occurs in *Moana,* it is my hope that we might glean something about *why* children (and adults) may or may not strive for climate action, and *how* we might orient ourselves toward a more empowering trajectory.

CHAPTER THREE: HAPPY FEET

As McCallum (1999) explicates in her detailed analysis of agency and identity in children's fiction, symbolic representations of subjectivity reflect "ideological assumptions about relations between individual, and between individuals, societies, and the world" (p. 7). Such a sentiment resonates with rhetorical analysis regarding symbolic representations of the environment in popular media (e.g., Cambpell, 2014; Corbett, 2006; DeLuca, 1999; Foss, 1996; Lemoni, Lefkaditou, Stamou, Schizas & Stamou, 2013; Meister & Japp, 2002; Rowley & Johnson, 2016; Senda-Cook, 2013). If presentations of animals in movies "tell us far more about our own culture than they do about captive or performing animals" (Wilson, 1992, p. 13), what is such a framing of *Happy Feet's* penguins telling us about efficacy and climate change? A cursory glance of *Happy Feet's* myriad animals, accents, dialects, and song genres suggest a global and inclusive feel within its overt environmentalist message. Likewise, Edelstein (2006) of New York Magazine describes the plot with a satirical jab as "subversive pinko propaganda," wherein "the penguins in the movie are going hungry, and it falls to the hero, Mumble, to deliver a message to the world to respect the penguins' ecosystem." Such a sentiment is echoed by Pike (2012), who compares *Happy Feet* to "*Odysseus* with feathers … an epic journey, told in an immersive, highly resolved visual tale" (p. 103) that "offers a safe role model for children, albeit one distanced from contemporary reality" (p. 105). I largely

disagree, and explicate throughout this chapter how the film's subjectivities, interrelations, and narrative themes foster a hegemonic and disempowering frame.

In short, as I demonstrate in this chapter, *Happy Feet* relegates efficacy regarding the solutions to environmental catastrophe primarily to science and scientists, while disempowering other subject positions, ways of knowing, and ways of doing. I begin this analysis through a focus of the major points of identification in the film, including the emperor penguin community (to which the protagonist Mumble and antagonist Noah belong) and the Adélie penguin community (to which the characters Lovelace and the Amigos belong). From there, and with the previous chapter's schema in mind, I expand on how the interrelations of these characters contextualize efficacy within a framework redolent of Scientistic Messianism. Finally, whereas this framework ultimately disempowers *Happy Feet's* child-coded protagonist to merely getting the attention of scientists, I then reflect on potential implications for child audiences

Expressly, *Happy Feet* seemingly presents the protagonist Mumble with great amounts of efficacy as he accepts his eccentricities in a heteroglossiac world, challenges positions of power, and saves his people from catastrophic population collapse. However, as the ending reveals, Mumble does not bring about the narrative closure to save his community from ecological catastrophe, but rather scientists do, arriving suddenly in the last scene of the film. The protagonist himself merely has the power to get their attention. Subsequently, whereas Mumble offers child audiences a key *coming-of-age* point of identification within a quest to save their communities from ecological disaster, they

watch as he becomes little more than a puppet, serving merely as a signpost to the operative saviors and agents of the film: a scientistic caricature of human scientists.

Many Voices, Many Songs

From a cursory overview, *Happy Feet* is an animated musical ballad about: (a) Mumble, a young emperor penguin who sets out to discover the reasons behind imminent ecological catastrophe (a diminishing food supply that threatens mass starvation); (b) his attempts to convince others in his community (the emperor penguins), those nearby (Adélie penguins), those in positions of power (Noah and Lovelace); (c) his eventual attempt to solve the ecological crisis by convincing humans to stop overfishing the region (e.g., "I'm going to stop them from taking our fish!"); and (d) his learning to communicate with scientists so that they would save his community from collapse. This is to say, in many ways *Happy Feet* is about communicative activity and how that communicative activity epistemologically understands, ontologically positions, and efficaciously engages ecological collapse.

Speaking to such a reading, occurring alongside *Happy Feet's* primary plotline is Mumble's unique situatedness as a songless tap dancer in a society where the ability to sing is *to be.* This is especially apparent in the scene where Mumble's first teacher, Miss Viola, instructs her classroom that "a penguin without a heartsong is hardly a penguin at all." With such an othered positionality, Mumble's story emerges from the film's threat of ecological collapse as a bildungsroman – a coming-of-age tale about the protagonist's sense of self and being. As the film's protagonist, Mumble serves as the chief point of identification for young environmentalist viewers, who themselves are trying to "save the

planet" amidst questions of who they are in society, and the pressures and antagonistic positions of parents, grandparents, religious leaders, teachers, and peers. As such children watch, Mumble's story speaks to their story, his challenges speak to their challenges, and his victories speak to their victories.

Through its *coming-of-age* secondary quest, *Happy Feet* further centers its protagonist Mumble as the paramount point of identification for child viewers, themselves seeking to define "who they are" (see: McCallum, 1999, p. 4). Interweaving the narrative's focus on avoiding ecological catastrophe (in this case, mass starvation) the film's secondary plot focalizes Mumble's: (a) alienation, dehumanization (depenguinization), and material exile at the hand of Noah, the emperor penguin society's high priest (and the film's primary antagonist); (b) progression from mimicking the conflict aversion of his father (Memphis) to enacting the conflict resolution of his friends (the "Amigos"); and (c) social growth from awkward wallflower unable to get romantic affection from Gloria (his love interest) to a trendsetter and movement leader that "gets the girl." With the primary and secondary plots taken together, the film interweaves notions of solving environmental crises with notions of communication, subjectivity, efficacy, being, and becoming. In so doing, *Happy Feet* conflates the question of what Mumble can *do* especially with who Mumble *is* and how his subjectivity comes to be in relation to his contextualizing communities and others. Through these relations, the film suggests to child audiences something about their own communities and contexts, such as their parents, grandparents, friends at school, teachers, and religious leaders. Informing this, the film situates Mumble in two primary social contexts: the emperor penguin society (with Noah), and the Adélie penguin society (with Lovelace).

Emperors

Serving as the introductory contextualization point for the protagonist (and likewise many child viewers), *Happy Feet* focalizes the emperor penguin society through a myriad presentation of voices, accents, song genres that signify a diverse multiplicity, but under a common tongue (e.g., Broadcast English [Mumble]; Southern American English [Memphis]; and African American Vernacular English [Seymour]). This is to say, the film situates Mumble in a heteroglossia: the stratification of language along dialects, behaviors, discourses, efficacies, powers, and publics (see: Bakhtin, 1981). However, amidst such heteroglossiac diversity, the precise stratification of their language and other stylistic elements reveals the emperor penguin community's hierarchical power structure, highly regulatory order, and Catholic-esque religious tropology. Redolent of this, whereas the community features a division of labor and vocational roles (e.g., schoolteachers, tutors, schoolchildren, fishing workers, priests, rulers), the hierarchy of those roles feature distinctions in dialect and accent. For example, the film codes the penguins speaking Southern American English as working class (e.g., Memphis refers to his fishing duties as going to work), but features those in positions of power with British accents (e.g., Miss Viola, the schoolteacher, speaks British English; the ruling elders speak Scottish English). Further, in addition to mere Scottish English, the high religious elder (Noah) speaks with terms like "thy" and "thou," evoking a "King James" idiom (i.e., a traditional, biblical, ancient manner of speaking).

With a name evoking the Christian biblical character who saved all human and animal life from apocalyptic catastrophe (see: Genesis 6, New Revised Standard Version), *Happy Feet* further positions Noah with elements coding his subjectivity as not

merely a priest, but an anti-science priest. These elements include: (a) terminology (e.g., Noah uses terms like "backsliding," "repent," "devout,"); (b) song genre and ritual (e.g., liturgical chant); (c) epistemology (e.g., the hypermediated is framed as divine and is accessed through religious means); (d) expressions of power (e.g., hierarchical, exclusive, theocratic); (e) critiques of empirical science (e.g., Noah denies humans exist); (f) and professed trajectories of efficacy (e.g., Noah tells Mumble that ecological disaster was caused by "backsliding," but can be ameliorated through prayer and repentance). In addition, Noah is physically differentiated from the rest of the society as thin and elderly (the only elderly penguin in the film), and is often raised above the community on hills and cliffs. Likewise, his close circle of ruling elders are uniquely large and bulky, with a shape reminiscent the large flowing robes of Roman Catholic cardinals. This is to say, the protagonist's contextualizing point of "home" is with a highly ordered, hierarchical, exclusive, authoritative religious society with a neocolonial stratification of power, a set of spiritual traditions evoking Catholicism, and a rejection of science for traditional ways of knowing. Particularly, Noah claims to know that the penguin god Guin, "taketh away" their food supply precisely because Mumble's dancing "brought the scarcity."

Alongside this representation, *Happy Feet* situates Noah and the emperor's religious traditions as the film's primary antagonists (i.e., audiences are encouraged to see such traditions as "bad"). Especially designating such a reading, the emperor penguins and Noah prevent Mumble from "graduating" to sexual maturity, proclaim he is "hardly a penguin at all," and say his tap dancing is the cause of ecological catastrophe. Audiences are therefore implored to consider institutionalized religion, highly regulatory

order, social control, and traditional ways of knowing as antagonistic to themselves and to solving environmental crises (climate solutions), and thus to look elsewhere for help.

Others

Featured on the Antarctic continent (as compared to the ice sheet), the Adélie penguin community situates Mumble during most of the film's second act. Unlike the film's emperor penguin community, with its strict religious governance and hierarchy, specialized labor, and multiplicity of idiolects and accents, *Happy Feet* positions the Adélie penguins as a point of contrast and narrative foil to the emperor penguins, as nonhierarchical, unordered, and speaking with a largely unified dialect (Chicano English). There is one exception to this, however. The Adélie penguins seek guidance of a foreign southern rockhopper penguin known as Lovelace, who speaks in a manner reminiscent of an overtly romantic smooth jazz radio host and a charismatic black Southern Baptist preacher (i.e., two stereotypical Black voices).

While redolent of the film's religious tropology, the Adélie penguin's "religion" is distinct from the liturgical, biopolitical, hierarchical, British/American (i.e., neocolonial and "white"), monotheistic religion of the protagonist's home. While the Adélie penguins have no clear institutional religion, they refer to Lovelace explicitly as "guru." As Mlecko (1982) outlines, a "guru" is a Hindu term for a uniquely empowered dispeller of all kinds of ignorance, who is "himself a locus for worship" and "the immediate, incarnate, exemplar in life" (p. 33). This is especially pertinent to the film's epistemological themes, and how it frames knowledge dissemination, access, and acquisition. Notably, the Amigos refer to Lovelace as having "the answer to everything,"

due to his exemplary ability to communicate with "mystic beings." *Happy Feet* reinforces this subject position in having Lovelace reveal himself as the narrator (i.e., the film's authorial voice). The "guru" does this by speaking directly with the audience, saying: "You heard the voice, now you're about to meet the one and only Lovelace." By breaking the fourth wall, Lovelace demonstrates his access to hypermediated knowledge. This is to say, he "knows" this is just a production on a stage for an audience, and further, is informing the audience that it is a story and that he knows it is a story.

The Adélie community is marked as Mumble's first experience of a culture away from home. It follows, then, that since *Happy Feet* signifies the traditions of "home" and institutionalized religion as antagonistic, that Mumble would find his friends among a foiled community reflecting the undeveloped "noble savage" (see: Ellingson, 2001) who can dispel ignorance (see: Mlecko, 1982). While Mumble's closest family, friends, religious leaders, and teachers rejected and denied his efficacy, identity, and ways of knowing, his first encounter with Adélie strangers are of comradery, acceptance, and friendship. In particular, a group of Adélie penguins named "the Amigos" immediately respond to Mumble's tap dancing with fascination and delight, wanting only to see more of it and try it out for themselves. In so doing, they quickly become his best friends, eventual followers, and sidekicks. While such representations initially appear supportive of diverse and marginalized communities, such a notion is subverted when the Amigos and Lovelace forgo their traditions because of the white-coded *emperor's* (Mumble's) search for empirical truth.

To elaborate, during the film's second act, Mumble and the Amigos are almost trapped underwater by a large sinking construction crane. After the escape sequence, Mumble asks his Adélie friends what the crane was, and ponders if it's connected to the looming ecological disaster (the loss of fish). They don't know, brushing the question off with: "How should we know? We're penguins. Very little penguins." But when Mumble continues to express his desire to know the truth, Ramon (the Amigo "leader"), says (with quick interjected responses by Mumble noted here with parentheticals): "You want answers?" ("Yeah.") "That's all you need?" ("Yeah.") "Nothing else?" ("No."). "Then this is very easy! You go see Lovelace!" When Mumble inquires who Lovelace is, the Amigos respond, "Lovelace is the guru! He got the answer to everything. Everything." Here, the film positions Mumble toward a search for truth, and suggests Lovelace may be a potential source. When they reach Lovelace, the "guru" speaks of an encounter with "mystic beings." To this, Mumble then asks a series of empirical questions (e.g., "Did they have front-ways eyes? Did they probe you? Strap you down?"), and Lovelace responds by ending the conversation. Later, when Mumble and the Amigos return to Lovelace, the "guru" admits that he could not speak to "mystic beings" after all. In response, viewers watch as one of the Amigos says of his religion, ways of knowing, and understanding in the world, that "it's all a lie." So too, by the third act, Lovelace explicitly says he is "formerly known as guru" and promises to tell Mumble's story for years to come (hence his role as narrator). Consequently, while Mumble's empiricism differs from Noah and the emperor society's liturgical paradigm, he nevertheless appears as a colonizer amongst his Adélie friends.

Emerging from such a rhetoricity, *Happy Feet's* coding of the emperor and Adélie penguin communities thereby informs child viewers that religious leaders are predominately antagonists to ecological solutions, and that their religious friends are ultimately wrong about their ways of knowing. In place of these, the film centers the search for empirical truth, and does so through a religious tropology evoking Scientistic Messianism.

The Siren of Science

As outlined in Chapter Two, Scientistic Messianism constitutes the solutions to climate change and ecological disaster upon a religious tropological scaffolding that positions an ideological caricature of scientists as saviors of the world. Expressly stated, within this efficacy frame, both priests and scientists: (a) have privileged access to highly esoteric forms of knowledge (theology / science), (b) about a hypermediated "true reality" (the divine / the cosmos), (c) and serve as intermediaries with that knowledge (sermons / lectures). Further, in terms of efficacy, they: (d) intercede (pray / petition), (e) on behalf of the public (laity / non-scientists), (f) for the world's salvation (from sin / from climate change), (g) and especially by way of a messiah (Jesus / technology). As this parallel suggests, the efficacy framings of Scientistic Messianism predominately occurs through a scientistic displacement of the divine with the cosmos, religion with "science," and spiritual leaders with a caricature of scientists.

Subsequently, although science in practice offers a broad swath of contributions toward human and animal thriving, this precise ideological framing displaces religion with a scientistic conceptualization of science. In this manner, it subverts many of the

values that science offers to cultivate, especially the efficacy of non-scientist publics and children. This is a key distinction, especially when considering the unique relationship environmentalists maintain with science (e.g., relying upon climatology to understand what climate change is, relying upon toxicity reports to understand what might be poisoning a community, and so forth). A particularly salient example of this more invitational perspective of the scientific fields can be seen in the turn toward "citizen science," which invites the non-scientist public to broad participation in conducting empirical research (e.g., Mueller & Tippins, 2011; Brossard, Lewenstein, & Bonney, 2005). In a similar manner, over 3,000 scientists recently signed a letter in support of protestors at a climate change demonstration occurring in April 2019 (Ott, 2019).

Mentioned prior, Scientistic Messianism's displacement of religion with scientism is particularly notable through its particular *doxa* and *praxis*. To summarize, the framework composes "science" along a religious tropology similar to liturgical Christianity – as proper belief (orthodoxy) from which proper action (orthopraxis) emerges (see: Ware, 1993). In so doing, Scientistic Messianism codes epistemological and ontological paradigms – and their situated efficacies – as orthodox (i.e., correct), heterodox (i.e., incongruous), or heretical (i.e., dangerously incorrect and thusly forbidden). From this, the framework largely situates efficacy for (child and adult) non-scientists as the "proper" action of trusting and supporting scientists, learning the esoteric language of science, and evangelizing others to trust and support scientists within a scientistic ideology. Accordingly, many within this paradigm may simply resign themselves to waiting for their priestly scientists and deaconate engineers to discover and invent the technologies necessary to save the day. With this said, Scientistic Messianism

predominately disempowers children to merely getting the attention of adults, performing a liturgy for priestly scientists, and convincing their similarly and differently speaking friends to do the same. Alongside this may be the weight of becoming the "chosen one" themselves (i.e., becoming the scientist or engineer who can save the world); however, even this potentiality seems to acquiesce to frame's own caricatured scientistic orthopraxis, as well as the aforementioned neoliberal model of childhood. As I outline in the following section, this is precisely what appears in *Happy Feet*.

Informed by this schema, I now turn to examine how *Happy Feet* constitutes efficacy within the efficacy framework of Scientistic Messianism. While evident along a wide breath of discursive, narrative, stylistic, and ideological elements, my analysis centers its focus upon the following key touchstones. These include how the framework: (a) establishes efficacy as communicative; (b) subverts the communicative ability of traditional religious ways of knowing; (c) displaces religion with science; and (d) limits the efficacy of non-scientists. An analysis of such an epistemological relegation may thus also provide an explanation for how, as Edelstein (2006) describes, some "social conservatives have attacked [the film's] underlying message." That message, at least according to Bond (2011), is perceived by "conservatives" as "left-wing propaganda aimed at their kids" about climate change (p. 1). Considering that Happy Feet is about overfishing this reaction is of particular note in regards to how Scientistic Messianism situates science through an ideological framework that displaces religion and other ways of knowing.

Penguin Praxis

From *Happy Feet's* opening scenes to its finale, the power to act and effect change emerges as communicative activity – the power to speak. While manifesting throughout the film, this rhetorical pattern initially appears in the emperor penguin society's conflation of falling in love and producing offspring with singing the right songs (e.g., Memphis and Norma Jean's song, Gloria's refusal to date anyone whose song doesn't vibe with hers, Mumble and Gloria's eventual pairing after she hears his tap dancing) and the liturgical summoning of the penguin god Guin (who appears to flow from the songful energies of Noah and the chanting males). This is to say, in the world of *Happy Feet,* to get something done you have to communicate in the proper manner. Mumble's journey, in many ways, is then constructed as the protagonist's quest to do just that: communicate.

Highlighting a peak in Mumble's quest to communicate and be heard, the protagonist first encounters humans (played by live action actors) in a scene near the end of the film. Finding himself in a penguin exhibit in a zoo (by unknown characters), Mumble attempts to ask humans why they are decimating the emperor penguin's food supply ("Am I not making myself clear? I'm speaking plain penguin. Don't you understand? You're stealing our fish!"). Signifying his struggle to be heard, the camera focalizes the zoo-going humans playing on their cell phones and having conversations, hearing nothing from Mumble but unintelligible gibberish. From this, Mumble's frustration builds and he pleads to the crowd, "Please, anyone. Talk to me. For pity's sake. You're stealing our f-i-s," and then, in place of the letter "h" the camera instantly

focalizes with the humans on the other side of the glass so that the audio is no longer the voice of the actor Elijah Wood but a series of squawks.

The breakdown of communication in the above scene functions to evoke environmentalist frustrations over the attempts to call attention to ecological problems (e.g., "The climate is changing!" "Rivers are catching fire!" "The tap water is making me sick!"), which may feel like a penguin squawking gibberish if the world's only response is apathy and distraction. The point of identification with Mumble is thus strengthened, we empathize with his failure to be understood, and in the following scenes we likewise receive a narrative catharsis when he is finally heard. In particular, Mumble bridges the language barrier between penguins and humans by tap dancing. While in the zoo enclosure, Mumble sees and hears a young red-haired girl (played by a live actor) tapping on the glass, and it appears to awaken something within him. He taps back in a manner similar to scripted call-and-response, and the young child phenomenologically experiences the aberration of a penguin dancing and runs to get an adult. The adult then likewise sees the aberration and gets someone else, who gets someone else, and so forth, until scientists are called. In the scenes that follow, it is the scientists who then save the day. Thus, the cardinal point of efficacy through which the protagonist finds empowerment is the communicative ability to grab the attention of scientists. As outlined previously, such a relegation of efficacy is redolent Scientistic Messianism.

Subverted Songs

As noted prior, *Happy Feet* structures efficacy as communicative ability, especially in how it relegates the protagonist's quest to merely getting the attention of

scientists. While such an orientation evokes Scientistic Messianism itself, the film further instantiates this rhetorical pattern in how it subverts the communicative ability of its portrayals of religion. In examining the traditions of Noah and Lovelace more closely, this section highlights how *Happy Feet* subverts the communicative efficacy (praxis) of religion, portraying it as ineffectual regarding solutions to ecological catastrophe, and therefore frames such unscientific beliefs as unorthodox and worthy of mockery. In so doing, the film largely reifies Scientistic Messianism.

As mentioned prior, Noah and the emperor penguins evoke an ordered, hierarchical, institutional, Christian-esque religious tropology. Likewise, their efficacy regarding ecological risk emerges alongside religiously coded communicative activity. Signifying this, Noah and the male emperor penguins perform a liturgical call-and-response in an effort to keep themselves and their eggs warm during the wintery onslaught from the long night. Found in the Roman Catholic High Mass (The Catholic Church, 2011) and Eastern Orthodox Divine Liturgy (Tomaras, 1974), the call-and-response is a liturgical style wherein a priest exclaims a short prescripted phrase and the congregation "replies" by reading a prescripted reply together. In the call-and-response in *Happy Feet's* prologue, Noah boldly exclaims, "Make a huddle!" and the entirety of the male penguin denizens respond in unison: "Share the cold!" Again, Noah says "Make a huddle!" and they respond "Warm thy egg!" The efficacy of this religiously coded call-and-response therefore emerges as a prayer to survive ecological risk (of freezing to death).

The communicative potentiality and capability of the emperor penguin call-and-response is further revealed in the next scene. Noah exclaims, "Raise your voices brothers, give praise to the Great Guin, who puts songs in our hearts and fish in our bellies!" In response to the unified chant, a wispy glowing light reminiscent of the aurora borealis rises from the altar-esque hill where Noah is standing. The light takes an ethereal form of a giant ghostly emperor penguin who then opens his arms akimbo while the penguin males continue to chant indeterminate words in a Byzantine style. This is to say, for Noah and the emperor penguins, the hypermediated god Guin can be evoked into the phenomenological through a liturgical and monophonic call-and-response. Perhaps more importantly, to them this communicative activity reifies the ontological understanding of the source of their heartsongs ("songs in our hearts"), source of their food ("fish in our bellies"), and efficaciously results in the warmth to survive the long night ("share the cold," "warm thy egg"). It should be highlighted, therefore, that to the emperor penguins, their god is real, can be summoned, provides understanding, and effects change. This is especially pertinent considering that by the end of the film, it is not Guin who saves them, but scientists.

Whereas *Happy Feet* positions Noah and his religious traditions as fairly efficacious in the opening prologue, it also situates their communicative framework as antagonistic to Mumble's quest to understand and solve the environmental risk of mass starvation. This is seen in second act when Noah blames Mumble for the diminishing food supply ("you offend the Great Guin…you invite him to withhold his bounty"). Noah explains the reason for such offence is because the protagonist's dancing is a "disorder," "aberration," and "backsliding," from the emperor penguin "ancient wisdoms" (i.e., old

knowledge). In other words, Noah explains the ontology underlying the emperor penguin society by referencing abstract hypermediated knowledge (e.g., "ancient wisdoms" and the thoughts and preferences of the god Guin) to make a claim about the causal efficacy behind the risk of ecological collapse (i.e., the penguin god Guin withholds food as a punitive measure against the emperor penguins because of Mumble's dancing).

For Noah, the solution to ecological catastrophe is simple: exile Mumble and prohibit dancing. However, with such a treatment of its characters, the film ends in coding Noah's religion as a caricatured mockery of itself. For instance, even within the emperor's religious framework, no one prays to Guin to save them, no one suggests that the ancient wisdoms could provide an avenue to engaging the humans' overfishing, and no one suggests that maybe Guin himself sent Mumble to reach the scientists. After all, whereas Guin "puts songs in [their] hearts" and "fish in [their] bellies," it is precisely Mumble's heartsong that convinces the scientists to convince the world to stop overfishing. The only thing preventing such a framing of the events is that none of the penguins mention it. Instead, *Happy Feet* situates the old knowledge of the emperor penguins as useful only to antagonize Mumble and make silly claims about dancing feet causing starvation. In so doing, Scientistic Messianism situates religion as a mockery practically begging to be subverted and replaced. This occurs not only for the faith of Noah (which evokes a caricature of Catholicism), but also for the faith of Lovelace (which evokes a caricature of indigenous spiritualism).

As reviewed prior, the Adélie penguin society emerges from a religious tropology denoting a mystical polytheism, and finds its center in the subject position of Lovelace,

who the film initially orients as having exceptional access to hypermediated knowledge in his ability to communicate with "mystic beings". From this discursive foundation, *Happy Feet* establishes efficacy regarding ecological risk in a similar manner to the emperor penguins, as communicative activity. This is especially evident in the film's second act, when Mumble and the Amigos seek Lovelace to uncover the mysteries of human technology (the large red crane) in hopes it would provide a lead in the protagonist's search for the causes of the diminishing food supply (or rather "who is stealing all the fish"). In this scene, Lovelace tells of his communicative capacity to intermediate with hypermediated mystic beings ("I hear them! They speak through me!"), and the protagonist learns that the Adélie society is similar to the emperor society in how they structure such intermediation.

Juxtaposed with the emperor penguin's call-and-response, the "divine" intermediation of Lovelace and the Adélie penguins likewise occurs through a back and forth script. To elaborate this interrelation, Lovelace begins by calling to the supplicant, "The devotion, please." The petitioner then responds by tossing a pebble in front of Lovelace and bows. Lovelace then calls out the next act: "And now, your question." The penguin again responds, "Señor Lovelace, my wife has disappeared. Is she alive?" Lovelace then sings the question (to the mystic beings) while several female Adélie penguins raise their hands and chant an "Oo-oooOOooooo" in support. Similar to the emperor penguin's liturgy, each iteration of their "dialog" is scripted, and the entire exchange is liturgical in its prescripted ordering and mannerism; however, Lovelace's following communicative act foils the Byzantine chant of the emperor penguins with an unordered spiritualism. Occurring at the end of his prayer, Lovelace looks to the sky and

appears to have a seizure while uttering a series of nonsensical garbles. Such a performance may allude to "glossolalia," the indecipherable utterings that Pentecostal Christians believe to be a spiritual language that only angels and god can understand (Grudem, 1994), and therefore stands in contrast to the ordered liturgy and ancient wisdoms of the emperor penguins.

Just as *Happy Feet* situates the "ancient wisdoms" of Noah and the emperor penguins as ineffective silliness, so too does it associate Lovelace as a fool and the Adelie's spiritualism as nonsense. The film predominantly signifies this through Lovelace's divination artifact. In the aforementioned scenes, the embodied narrator and knower of "everything" refers to an artifact around his neck as the "sacred talisman" that grants his unique abilities, and that it was "bestowed" on him "by the mystic beings." However, audiences clearly and immediately see that his sacred artifact is nothing more than the plastic rings from a six-pack of beverage cans. Not only is Lovelace unable to speak to "mystic beings" to help solve the mysteries of environmental problems, he mistakes the products of another environmental problem (garbage) as something sacred. Moreover, when penguins ask him about more tangible questions (such as the aforementioned petitioner looking for his missing wife), Lovelace transitions their pathos into adoration for himself. Such extravagant public displays of praise are indicative of cults of personality, especially when alongside systematic falsification (see: Popan, 2015). In this manner, the film signifies Lovelace as a charlatan, ridicules spiritualistic religious traditions as nonsensical misunderstandings, and situates them both with the danger and manipulation of cults of personality. Consequently, the rhetoricity of *Happy*

Feet's mockery of Lovelace and Noah demonstrate how Scientistic Messianism further subverts the *doxa* and *praxis* of religion in the film.

Displaced Doxa

As I have discussed, *Happy Feet* is redolent the efficacy framework of Scientistic Messianism in how it subverts the religious knowledge and communicative ability represented in the subject positions of Noah and Lovelace. Consequently, the film situates religion as ineffectual at understanding how the world works and ineffectual in finding solutions to emerging ecological problems. When considering the religious hierarchy of orthopraxy emerging from orthodoxy (Ware, 1993), then within such a framework an ineffectual *praxis* implies an ineffectual *doxa*. From this subverted communicative rhetorical foundation, *Happy Feet* positions science to displace religion, especially in regards to understanding and finding solutions to environmental problems. In particular, this displacement is evident in the film's portrayed communicative capability of religion and science to do the following: (a) intermediate with hypermediated knowledge in order to generate ontological understandings, and (b) intercede for the laity public in a manner that can effect change, especially vis-à-vis understanding and ameliorating ecological catastrophe. Principally, this occurs with Lovelace and Noah.

To elaborate on Lovelace's displacement, after Mumble is exiled by Noah, he and the Amigos seek out the guru to "figure out what's happening to the fish." When they arrive, however, Lovelace is alone and choking on the plastic "sacred talisman" around his neck. This is to say, the "guru," narrator, preacher, oracle, the one who speaks with

and serves as a mouthpiece for mystic beings, is silenced, literally, by an artifact of human technology. Rather than have Mumble's wit and logic convince Lovelace to quit his charade, or have Lovelace change himself and seek to return to a right relationship with the Adélie society, *Happy Feet* instead tells a story where the discarded remains of human technology lead to the guru's downfall and displacement. From the "efficacy" of the six-pack rings, one of the Amigos sighs, "It's all a lie," and a few scenes later Lovelace announces he is "formerly known as guru." Instead, he decides to evangelize Mumble's gospel ("I'll be tellin' your story Happy Feet"). As mentioned prior, however, "Mumble's story" is ultimately about the protagonist trotting a little spectacle to woo a scientist into convincing the world governments to ban fishing. Consequently, whether or not Lovelace is a reliable narrator, audiences watch him forsake a 'foolish' religion that considers environmentally detrimental garbage as a holy artifact and become an evangelist for seeking scientists.

Noah's displacement ultimately occurs in the final moments of the film. Signifying *Happy Feet's* juxtaposition of religion and science, and its relegation of efficacy as a praxis of communicative ability, in the final scene the emperor penguins engage in a song battle. To elaborate, after the previously reviewed zoo scene, Mumble returns to the emperor penguin lands with a backpack-sized GPS strapped to his back. When asked about the device, Mumble notes that the scientists placed it there to track him and all the emperor penguins should dance for them whenever they arrive (I guess, because, penguins aren't worth protecting from starvation if only a few can impress scientists?). Wanting to stop such "jiggery joggery," Noah exclaims to the elder priests to "Call on the wisdoms!" and they intervene against Mumble with a unified monophonic

liturgical chant. At this juncture, where the emperor penguins once sang with a diversity of song genres, there is now only two: Noah's liturgy and Mumble's dance - the liturgy calling upon Guin and the "wisdoms," the dance calling upon scientists.

With the two groups dichotomized into two ideologies, the penguin god Guin – who appeared in the film's introductory liturgy scene – does not appear. Instead, a red helicopter and its scientists arrive. In response, the emperor penguins turn to dance for them in unison, forgoing their former traditions, religions, and song genres. Noah as well forsakes his liturgical chant and starts dancing and shouting "huh! hah! woo!" The film's religious antagonist and all his traditional wisdoms are thus defeated. The spectacle is complete. The scientists are amused. A brief live-action montage then follows, revealing that the true heroes of the film, human scientists, were able to communicate with and convince global governments to enact laws to prevent corporations from overfishing the waters. Starvation averted. Life continues.

Demonstrated by *Happy Feet's* finale, the aforementioned battle is thus between the communicative efficacy of a priest calling upon a god and the communicative efficacy of a dancing penguin calling upon scientists – both trying to save their community from ecological collapse. When juxtaposed together, *Happy Feet's* opening and ending scenes act as comparative bookends. In place of Noah leading a liturgy that results in the summoning of Guin ("who puts songs in [their] hearts and fish in [their] bellies") there is Mumble leading a dance that results in the summoning of scientists (who go on, in essence, to put fish in their bellies). From this comparison, by the end of the film it is clear that the "correct belief" (orthodoxy) is that humans overfished the

waters, mystic beings don't exist, and to get anything done we have to get the attention of scientists and show them our support (orthopraxy). In so doing, *Happy Feet* displaces the *doxa* and *praxis* of religion with Scientistic Messianism's scientistic portrayal of science.

Dance Penguins Dance

In 2017, eleven years after *Happy Feet's* premiere, a population of Adélie penguins experienced a "catastrophic breeding failure" where all but two infants from the 18,000 breeding pairs starved to death. Four years prior the same colony experienced the death of every infant from all 20,196 breeding pairs (World Wildlife Fund [WWF], 2017a). And they weren't the only ones. Also in 2017, a polar bear slowly starved to death. Not unusual in these days of a warming world, but a wildlife photographer from Sea Legacy recorded the bear and its baggy skin as it slowly starving to death (Gibbens, 2017). Along with this image, the photojournalist noted his reason was "to convey a larger message about how a warming climate has deadly consequences," and so that the bear would not "die in vain" (Gibbens, 2017). With his own little *tap dance* to the world, the bear was thus eternalized in the public screen as an image event for climate action (see: DeLuca, 1999). It's not a recent trend either. In 2009, just three years after *Happy Feet* was released, The United Nations released a study observing how over 80% of the world's sealife has died because of overfishing (UN Food and Agriculture Organization, 2009). The Canadian Press (2009) summarized the report in a press release, explaining that "Dolphins, sharks and other large marine species around the world are going hungry as they seek out dwindling supplies of the small, overlooked species they feed on" (The Canadian Press, 2009). In response to such news, what can we do? What can children do?

In regards to efficacy, the WWF article (2017a) provides a link at the bottom of the page. It reads, "adopt a penguin" (p.1). Clicking the link brings viewers to a donation page noting that "penguins are increasingly vulnerable to threats like climate change" and offers an "adoption kit" consisting of a few informational documents, magazine, bag, a penguin sticker, a stuffed toy penguin, and an "adoption certificate" (WWF, 2017b). The page also notes that "your donation could help" and lists numerous WWF goals such as "conserve Antarctic biodiversity", "Raise awareness of the threats of climate change we all face", and "Fund our other essential work in Australia and around the world" (WWF, 2017b). Explicatively, the only apparent avenue of efficacy the webpage provides its readers is: (a) donating monies to help the penguins through "funding" the scientists ("our work"); (b) teaching more people why the scientist's work is vital ("raise awareness"); and (c) "adopting" a penguin (meaning to get a "toy penguin" and a "certificate" with your donation to help the scientists). In routing efficacy to scientists – to mediate the issue and serving as intermediary in solving the issue – the article suggests that while the public has failed, the market has failed, and government has failed, there's no need to fear because scientists will save the day, but you, dear public, can trust them and support them. Informed by this chapter's review, such a relegation of efficacy is similar to the scientistic *praxis* as seen in *Happy Feet.* With that said, my criticisms are not weighed against the WWF in melodramatic fashion. Contrarily, I will fully disclose my deep appreciation to the organization. Rather, my intent is to focus deeply on the relegation of efficacy apparent in Scientistic Messianism so that children – and all of us – might more effectively mitigate climate change, as well as prevent penguins and bears and dolphins from starving to death.

Inspired by the themes discussed throughout this chapter, I would like to summarize Scientistic Messianism's scientistic relegation of efficacy by citing not a scientist or scholar or expert, but a poet. Wendell Berry (2000) writes, "legitimate faith in scientific methodology seems to veer off into a kind of religious faith in the power of science to know all things and solve all problems, whereupon the scientist may become an evangelist and go forth to save the world" (p. 18). As I have demonstrated throughout this chapter, such universalizing orthodoxy ("to know all") and orthopraxy (to "solve all") emerges in *Happy Feet* through the story of a penguin protagonist trying to save his community from ecological catastrophe. This scientistic framework leaves children, and the rest of the nonscientific community, the efficacy of merely supporting scientists and getting others to support scientists while relaxing in the hope that one day a scientist savior will solve the problems for us. To purposefully wax poetic in my concluding thought, it is as if Scientistic Messianism calls to us:

> Dance a little dance,
>
> Sing a little song,
>
> Science will save you,
>
> It won't be too long.

But what if it doesn't? Or what if it's not enough? What if in response to such a framework we do resolve ourselves to dancing and singing and finding hope in our apathy? What would such a world look like? These questions are redolent of the efficacy frame apparent in the children's film *Wall-E,* which presents a postapocalyptic future of death, decay, and delightful disempowerment.

CHAPTER FOUR: WALL-E

WALL-E begins with a focalization of a planet, brown and dusty, ruined by desertification, mountains of garbage, and is seemingly void of biodiversity. Scenes of the Milky Way, Solar System, and Earth function to establish the film's setting as our home planet rather than an alien landscape, while numerous ruins of human technology denote a distant future where human civilization has all but decayed. From such a rhetoricity, it is clear early on that *WALL-E* is situated as a postapocalyptic tale, an increasingly popular cautionary genre about the world's cataclysm (see: Yeung & Zhang, 2014). In other words, the film invites audiences to perceive the protagonist's home as a future possibility of their own – a possibility of Earth's future. Evoking a similar sentiment, the prominent movie critic Calhoun (2011) describes *WALL-E* as "a very beautiful film from the worst approximations of the future we're shaping for our planet." Such "approximations" are unveiled in the first moments of *WALL-E's* narrative.

Audiences see the ruins of skyscrapers, wind turbines, nuclear cooling towers, electric power lines, smokestacks, and crumbling highways all overburdened with garbage. These, the technologies of business, industry, and the decayed remains of a society built upon consumption immediately situate the film with environmentalist concerns for an impending ecological catastrophe. This catastrophe thusly targets the waste and overconsumption generated by rampant consumer-driven technological development as a primary concern. In juxtaposition, *WALL-E* conveys quickly that

notions of energy generation are not a problem. Especially signifying this, the electronic billboard advertisements around the desolate cityscape continue to shimmer and shine and speak even 700-years after the catastrophe.

Of the glowing rectangles speckling the postapocalyptic landscape, *WALL-E* employs several to foreground an expository review of the causes of the devastation, as well as their society's majority response. These billboard messages: (a) convey the cause of ecological devastation as consumer waste (e.g., "too much garbage," "the mess"); (b) reveal an environmental positionality that situates nature as an unlimited resource (e.g., "plenty of space out in space," and entire fleet of starliners "leaving each day"); (c) encourages a public efficacy of unworried apathy and hedonism (e.g., "we'll clean up the mess while you're away," "waited-on twenty-four hours a day," "non-stop entertainment, "there's no need to walk"); (d) and promotes trust in technological development (e.g., "fully automated crew," "all-access hoverchairs," and the starliners themselves). These technological advancements speak to a framing of efficacy redolent Scientistic Messianism (i.e., don't worry, here's what to do, you can trust us, the experts will do the heavy lifting, relax and have fun, and support our effort).

Alongside their expository stage-setting, the adverts also open a window into WALL-E's conditions of apocalyptic collapse from the perspective of its corporate voice of power, Shelby Forthright, "global CEO of BNL." Whereas the societal collapse occurred 700 years prior to the events of the film, Shelby signifies a kind of digital ghost of the past, still effecting his corporate power through the conditions of the main plot. Considering that postapocalyptic narratives center upon questions of human mortality and

human resilience (Yeung & Zhang, 2014), *WALL-E* therefore centers its postapocalyptic narrative upon the question of what kind of mortality and resilience will result from logics of control, technological overreliance, and neoliberal consumerist capitalism, and responds by offering an alternative. Especially signified by Captain McCrea's declaration ("I don't want to survive! I want to live!"), the film constructs a world where concerns of "mortality" are not about biological life (i.e., "to survive") but a vibrancy of life (i.e., "to live"). From this, questions of "resilience" are structured not as humanity's ability to live in spite of and amidst ecological devastation (as their survival is never at risk) but rather their ability to be relational and cooperative – and especially relational and cooperative alongside and with technology and nature – to "return to the land" so to speak. Such is in contrast with the paradigmatic foundation of Scientistic Messianism, and directs us toward *WALL-E's* alternative construction of agency in regards to ecological catastrophe. While authorial intensions do not always align with the rhetoricity of a text, *WALL-E*'s writer and director (Andrew Stanton) himself advances this critique, explicating how his ultimate vision for the film was that "irrational love defeats the world's programming" (Basham, 2006), a notion exemplified in WALL-E and EVE, "two robots that are trying to go above their basest directives, literally their programming, to experience love" (Basham, 2006). While Stanton does not specify what "the world's programming" is, his emphasis on "irrational love" stands in opposition to systems and logics of power, and thus and offers an avenue for an alternative framing for the conditions leading to and healing from ecological catastrophe. As informed by the schema in Chapter Two, this efficacy framing of resistance is indicative of Neoluddic Asceticism.

To explicate these themes in greater detail, I now turn to outline major points of identification in *WALL-E*. Of these, the film's protagonist (and titular character) WALL-E predominately evokes a humanlike subjectivity, whereas its antagonist AUTO conveys an unforgiving commitment to logics of power. The humans of the film, denizens of the starship Axiom, present such a reliance to technology themselves that they appear more robotic than human. After, I review the efficacy framings of Neoluddic Asceticism, and then demonstrate how *WALL-E's* principle narrative arc situates efficacy as a similar resistance. Finally, I reflect on possible implications of this framework for children and environmental audiences more broadly.

Human Subjects and Subjective Robots

Throughout *WALL-E's* introductory scenes, the only apparent "life" is that of the still-functioning digital screens of the former metropolis, the robotic protagonist WALL-E, a tiny cockroach, and the sprout of a tiny plant. These forces present all that remains of life on the planet: (a) the digital ghost of humanity; (b) technology; (c) and nature. As key points of identification in the film, these forces present predominant (though bifurcated and perhaps artificially dichotomized) "forces" in our own world. As for humanity itself, *WALL-E* reveals a remnant of our species ran away from ecological catastrophe aboard an intergalactic cruise ship ("the Axiom") in order to live in luxury in the hopes that corporate sponsored technologies would make the planet habitable again. In the film's second act, the humans aboard the Axiom are revealed to be hyperbolically slothful, overweight, and entranced by the digital screens projected mere centimeters from their faces. In a manner similar to a parent caring for a child, humanity's every need is met by the ship's robots (e.g., infants are cared for by robotic nurses, children are taught by

robotic teachers, adults are carried around by robotic chairs). Even the most prominent human character, Captain McCrea, begins the film performing no real actions except "controlling" the Axiom by pushing large colorful buttons the way an infant might press buttons on a plastic toy.

When read alongside their complete care by robots, their tendency to continually drink from extra-large plastic beverage containers the way infants suck on pacifiers, and their tendency to lounge back in their hoverchairs like infants lay backwards in strollers, the humans of the Axiom appear infantilized. Exceptionally, even the clothing style of WALL-E's humans is reminiscent to an infant onesie. For child audiences, who themselves desire increased self-efficacy and autonomous identities (Daddis, 2011), the notion of an adult society still being treated as "babies" may likely code their portrayal as not merely apathetic, but outright pathetic. Speaking to audience reactions, prominent film critic Calhoun (2011) notes how *WALL-E's* humans are portrayed as "fat, sedentary, greedy and unpleasant" (p.1). To that end, it's easy to imagine the sense of disgust and annoyance in a child, who just spent that morning demanding to his father that he can brush his own teeth, then watching a team of robots brush Captain McCrea's hair and teeth, clothe him, and push him around the ship's bridge. From this, although *WALL-E* received an average rating of four out of five stars by over 150 child reviewers, it is no surprise a few audiences still found *WALL-E* boring (see: Common Sense Media, 2019; Snow, 2008). As seen in a movie review web forum for children, one particular fourteen-year-old said the film "became bland when they entered the human world" (Common Sense Media, 2019). Similarly, a ten-year-old even said they "fell asleep half way through" (Common Sense Media, 2019).

For adult audiences, who may themselves welcome the notion of robotic servants to clean for them, cook for them, and make them coffee, or who see infantilized adults as representing an oppositional sub culture (instead of themselves), *WALL-E* offers another point of reference through Shelby Forthright (the "global" CEO of BNL). *WALL-E* initially informs audiences about the whereabouts of humanity by a BNL advertisement featuring Shelby Forthright. For child audiences, Shelby appears around the age of their own parents and teachers, and speaks with similar code-switched cheeriness and simplicity in explaining complex situations (e.g., "space is the final fun-tier!"). Unlike the cartoon humans later in the film, Shelby is played by a live actor (Fred Willard), and speaks directly to the audience in his numerous transmissions (including an advertisement about the Axiom, a press release about humans temporarily leaving earth, and a corporate memo about the plan not working). Similar to Lovelace's breaking of the fourth wall in *Happy Feet,* Shelby's stylistic elements give him a transcendent quality to the main narrative, while pulling the audience into *WALL-E's* discursive space. Both child and adult audiences are invited to associate Shelby with similar transmissions outside of the film: advertisements of new technology, press releases of grand governmental plans, and post hoc memos of inept bosses passed down the corporate ladder. Each of these subject positions represent various positions of power that tell us what to do and how to do it.

Enforcing Shelby's edicts on the Axiom is the robotic antagonist AUTO. As the embodiment of the ship's autopilot, AUTO appears as a futuristic command wheel reminiscent of the steering mechanism of an antiquated sailing vessel (i.e., he controls the ship). Colored silver-grey, black, and white, and with a large central red 'eye', AUTO

emerges from various ceiling tiles along a long retractable boom arm. In combination with his dystopian mythos and robotic voice, AUTO's characterization alludes to two robotic antagonists in popular culture: HAL 9000 from Kubrick's (1968) *2001: A Space Odyssey* (with glowing red 'eye') and GLaDOS from Swift's (2007) *Portal* (with similar coloration, general shape, and boom attachment). Both HAL 9000 and GLaDOS are known for their calm, psychopathic, and Machiavellian personas, and for their reliance on pure logic to make decisions (see: Falstein, 2018; White, 2011). It's notable that such an amalgamation of references works across generations, with the HAL 9000 reference coming from a movie 40 years prior to *WALL-E*, and the GLaDOS allusion coming from only one year prior. Consequently, AUTO's subjectivity likely reaches out to the existing knowledge, associating the robotic antagonist of *WALL-E* as one to whom the protagonists rely upon to survive, but whose commitments to psychopathic levels of pure logic lead to human characters (and audiences) finding them antagonistic.

In contrast to the pure logic and authoritarian subject positions of Shelby and AUTO, the technological characters of WALL-E, EVE, and the "Rogue Robots" present child audiences with fumbling, emotional, humanlike beings with whom to identify. In particular, the central protagonist and title character himself, WALL-E, emerges as a foil to both the apathetic humans and purely rational AUTO. In the opening scenes of the film, WALL-E is shown working in humanlike manner, dutifully cleaning up garbage during the day, getting distracted by interesting objects, showing empathy when almost killing an insect, making the occasional mistake, and returning home in the evening. Solidifying this characterization, he even removes the treads from his wheels similar to human might remove their shoes after an exhausting day of labor, goes to sleep, and

wakes up incredibly groggy (needing to replenish his energy with solar panels). More than mere monotonous labor, whereas the humans of the Axiom don't even brush their own teeth, the film highlights WALL-E's resourcefulness by showing him repairing his own tread and eye when they are damaged. Further, instead of a "robotic" personality, WALL-E is highly emotional (e.g., his vocalizations are emotive, he reflectively touches his hands together when watching a romantic comedy, and his chief concern throughout the film is to have a romance with EVE). Consequently, in spite of his lack of language and robotic state of being, WALL-E is in many ways the most humanlike character in the film, and thus entices audiences to empathize with his struggle, laugh at his fumbling slapstick, hum along with his gleeful singing, and cheer him on in his narrative journey.

WALL-E's other technological protagonists, EVE and the Rogue Robots, demonstrate similar humanlike qualities as WALL-E does, but largely insofar as to highlight, reflect, and intensify the humanlike subjectivity of the title character, and largely as a result of their interactions with him. For example, EVE initially appears emotionless, tireless, and without empathy – even firing her laser gun at the same insect that WALL-E was shown caring for a scene earlier. However, through her interactions with WALL-E, she becomes an emotional being herself (e.g., she befriends the insect after WALL-E defends it from her laser, laughs at WALL-E's slapstick, fears for his life, falls in love with him, mourns him when it appears as though he died, and happily embraces him when he comes back to life). Likewise, the Rogue Robots begin as mere malfunctioning machines, with various parts not working as intended (e.g., a robotic floor buffer spinning out of control, a robotic umbrella opening arbitrarily). However, they take on more humanlike qualities after WALL-E inadvertently frees them from their

holding facility. In this scene, WALL-E attempts to free EVE from the facility by tugging on her restraints, accidentally fires her laser gun, and fortuitously hits a control panel that results in shutting down all the retention center's force fields, which then permits the captives to escape. From this very human-like mistake, the Rogue Robots become more humanlike as well (e.g., PR-T puts makeup on another bot, the paint-roller bot shakes in fear when a SECUR-T unit appears, and collectively they become fellow rebels in the resistance against AUTO's authoritarian regime).

Overtly apparent in the film's portrayal of humanity as infantile (particularly in their reliance on technology), and the orientation of its antagonists toward logic and protagonists toward emotion, *WALL-E's* narrative suggests an overt challenge to the efficacy framings of Scientistic Messianism. It is as if the film declares: if you treat the public like infants, don't be surprised if they act like infants! Stand up from your technological strollers and robotic caretakers and save yourselves from environmental devastation! Till the land with your own hands! Return to agrarian simplicity! As informed by the previous chapter, this is to suggest that *WALL-E* ultimately composes efficacy in accord with Neoluddic Asceticism.

Back to the Land

As I have previously explicated, Neoluddic Asceticism frames the efficacy to respond to environmental catastrophe (such as climate change) through a resistance to logics of control, a relinquishing of consumeristic technological overreliance, and a return to agrarian simplicity. From this, the framework elevates "subjectivistic" values over "objectivistic" values (e.g., emotion over logic, communal relationships over

hierarchies of control, etc.). As I will highlight in this section, *WALL-E's* postapocalyptic and dystopian narrative frames efficacy in a manner similar to Neoluddic Asceticism.

WALL-E does this by associating its antagonists with several key prototypical attributes of Scientistic Messianism as it is appears to function alongside neoliberal capitalism. It then proceeds to counteract these through oppositional ontologies, epistemologies, and efficacies through its protagonists. Specifically, the film pejoratively codes hierarchically stratified power and order, its salvific role through technology, and the mechanisms in which it relegates agency away from the "laity" public. Alongside this, however, *WALL-E* also critiques the consumerist habits predominate within neoliberal capitalism. From this dual-oriented critique, the film thus shines a light on the subsumption of the efficacies of Scientistic Messianism as they occur within the power structures of neoliberal capitalism. That is, regardless if science and technology will "save us," the neoliberal apparatus by which that "salvation" occurs will likely proffer this salvation through the ideologies of capitalism, which – as *WALL-E's* postapocalyptic motif portrays – ends with ecological catastrophe and infantilizing technological subservience. In contrast, the narrative offers Neoluddic Asceticism, which emerges in the film as diverse, non-hierarchical, and co-participatory relational cooperation and agrarian simplicity.

A Scientistic Mess

Neoluddic Asceticism emerges in *WALL-E* predominately through protagonist subjectivities and acts of resistance in opposition with antagonist subjectivities and acts of control. Considering sites of transgression presuppose a particular subject position

with “identity as a subject” (as positioned by societal context) and “identity as an agent” (as positioned from a site of transgression) (McCallum, 1999, p.119), it is therefore conditions of denied subjectivity to which subjects can transgress where their efficacy is expressed and their subject position is dialogically produced. To that end, I begin this analysis by way of the antagonistic sites of control from which the protagonists offer transgressive resistance.

As reviewed at length, Scientistic Messianism relegates the power to know (i.e., *doxa*) and act (i.e., *praxis*) primarily along hierarchical logics of power, to whom the laity (or “layman”) public are relegated to trust, support, and follow. *WALL-E* focalizes a similar stratification with the antagonist leadership (Shelby Forthright and AUTO) in a site of caretaking power, to whom others must obey, yet from whom they receive care for their survival. At the other end of this hierarchy are the Axiom’s humans, cared for as infants, yet obediently performing every action the “experts” suggest, and the ship’s robots, obediently acting according to their “directives,” and only moving where colored lines on the floor say to move. Demonstrating this hierarchy in action, in one of the scenes where the robots and autochairs are shown moving only on colored lines, an advertisement appears on all the screens throughout the commons area. Displaying a muscular man in a power pose, the ad notes, “Attention Axiom shoppers, try blue; it’s the new red!” Immediately following the advertisement, and acting as without consideration, the cartoonishly rotund human passengers of the Axiom reach down and press a button on their autochairs, transforming their red leotards into blue leotards. This scene focalizes the apparent robotic behavior of the humans, who merely do what they are told to do from up the hierarchical ladder.

In a similar manner, the mediated videos from which Shelby appears signify various positions of power that tell us what to do and how to do it (e.g., an advertisement for the Axiom, a press release mimicking a US Presidential State of the Union Address, and an internal memo instructing ship autopilots what do to). While these representations alone suggest Shelby's metonymous representation of stratified authority, such a reading is exacerbated by his disembodied and hypermediated, presence in the film. To elaborate, as he died 700 years before the plot begins, his entire presence in the film is conveyed through his digital ghost. This includes his knowledge dissemination (via digital advertisements) and action (via AUTO). Consequently, whereas *WALL-E* foregrounds AUTO as the most prominent antagonist, AUTO is merely "obeying orders;" Shelby's technological ghost gives the command. This is especially notable when Captain McCrea and AUTO debate over returning to Earth. In this scene, McCrea pleads with AUTO, arguing that Shelby's claim that the Earth is inhabitable is clearly no longer the case, and concludes that the Axiom should return to Earth. AUTO responds to Captain McCrea's pleas with "Sir, orders are 'Do not return to Earth'" while an image of Shelby is just out of focus behind him. The stylistic elements function to visually remind the audience precisely whose orders it was: the hypermediated ghost of Shelby Forthright. As informed by the previous chapters, this schema is redolent Scientistic Messianism's orientation of the hypermediated with an intermediary (e.g., science to scientists / religion to priests). Emerging from such a rhetoricity, *WALL-E* therefore situates Shelby as a metonymous, hypermediated, dis-embodiment of systemic authority and rule setting that persists and exists through and via corporate technology. This intertwining of technology

and corporate governance presents a major problematic in the film world's majority response to ecological catastrophe.

While Shelby's orders serve as the locus of the primary obstacle the protagonists must overcome (via AUTO), the film's subversion of his authority is evident even within his first moments on screen. Shortly after *WALL-E* introduces audiences to its portrayal of a postapocalyptic earth and its fumbling, personable, robotic title character, an expository commercial plays on holographic digital screens within the otherwise devastated cityscape. This transmission explains why the calamity occurred, but does so as a commercial to the people roughly 700 years before the main plot begins. Set to the tune of joyfully triumphant music, and appearing with visuals reminiscent of contemporary *As-Seen-On-TV* product placements, the advertisement's spoken audio is as follows:

> Too much garbage in your face? There's plenty of space out in space! BNL starliners leaving each day. We'll clean up the mess while you're away! The jewel of the BNL fleet, the Axiom! Spend your five year cruise in style, waited on twenty-four hours a day by our fully automated crew, while your captain and autopilot chart a course for non-stop entertainment, fine dining, and with our all-access hoverchairs, even grandma can join the fun! There's no need to walk!

The commercial ends with the appearance of Shelby Forthright himself, who happily states, "Because of BNL, space is the final fun-tier!" Conspicuously, this statement associates the impending apocalypse with an allusion to *Star Trek* (Roddenberry, 1966)

(whose theme begins, “Space, the final frontier…”). Contributing to this, the spoken audio begins with a rhyme scene redolent prototypical advertising jingles, and is conveyed alongside uplifting music. Thus, it’s as if the advertisement makes an invitation to *its* target audience (the humans from 700 years prior) that the impending apocalyptic cataclysm will be romp with the adventure of the popular 1980s/90s science fiction series – just a lot more “fun.”

In its critical lens, Neoluddic Asceticism exposes the entrenching subservience to power apparent in technological overreliance, and how this overreliance can ultimately ensnare a population to corporate ideologies. Expressly, whereas WALL-E’s humans rely upon the Axiom to survive, they consequently must obey the commands of the BNL Chief Executive Officer to survive, even 700-years after he gave those commands. Moreover, this subsumption is oft to occur through playful appearing advertisements. In contrast to such technological grotesquery and manipulative power dynamics, *WALL-E’s* clear point of departure is found in the relational and subjective attributes of its protagonists, and ultimately in the social actions that bring about the film’s narrative conclusion, a tossing off of corporate and technological overreliance and returning to agrarian simplicity. Centered upon its title character, WALL-E, these values counteract logics of power, including Scientistic Messianism’s elevation of reason and its imbalanced stratification of knowledge and agency between the erudite and laity publics. In doing so, *WALL-E* offers a point of contrast resonant with Neoluddic Asceticism, which embraces and interweaves: (a) interrelational emotion (in resistance to reason and order); and (b) diffuse and cooperational efficacy (in resistance to erudite knowledge and hierarchical efficacy). As this suggests, the “problem” in the film is subsequently not

technology itself (e.g., the key protagonist and titular character is himself a robot), but rather how technology is used.

Cultivating Relationship

As mentioned, Neoluddic Asceticism elevates the importance of subjectivity and relationship. To that end, in contrast to the infantile and seemingly robotic humans of the Axiom, the robotic WALL-E is in many ways the most emotional and humanlike character in the film. Of the numerous elements that signify this, he works a day-job, is tired in the evenings, sleeps, is groggy in the mornings, watches television just to enjoy it, collects things that are notable, builds things (e.g., his shelter), repairs things (e.g., his eye component), displays fear (e.g., of dust storms), displays concern for EVE (e.g., keeping her out of the rain), displays empathy for the weak (e.g., worrying over accidentally killing an insect), falls in love (with Eve), is silly (e.g., making his eyes go up and down for EVE), makes mistakes (e.g., constantly tripping, fumbling, stumbling), and desires physical contact (e.g.. to hold hands with EVE). By way of contrast, the film's humans are predominately shown lounging in their infantesque hoverchairs staring at digital screens dangled in front of their eyes the way parents pacify their babies with colorful mobiles. A few scenes show them talking with others through video chat, but they do not appear to have any face-to-face conversations (except for John and Mary, but only after encountering WALL-E on the promenade). WALL-E, on the other hand, is first portrayed in the film alongside and interacting with the insect, feeling empathy for it, being tickled by it, and showing concern for it. As this juxtaposition suggests, even at the narrative's onset, whereas the humans merely survived in technological isolation, WALL-E lived in biological community.

In addition to *WALL-E* composing its title character as an emotional being, it further contrasts "cold" rationality and logics of control by giving him a kind of "chaotic" subjectivity befitting the mistakes of biological creatures. Suggesting this, WALL-E is somehow the only robot to survive on Earth, even though he is frequently falling over, tripping, damaging various parts, and making a fool of himself. Comedic in tone, the protagonist appears to survive in spite of his fortitude, not because of it. Further, as logic and reason are often understood alongside language, it is of particular note that the purely logical AUTO can vocalize, present arguments, and hold conversations, but the protagonist himself cannot say anything but two words: his name, and EVE (which he mispronounces). The film even focalizes this inability to speak through a back-and-forth with EVE, where she says "*Ee-v"* and he replies "*Ee-vah*" over and over. The foregrounding of such "irrationality" can also be seen in how *WALL-E* situates the more advanced robot EVE. Although EVE can fly, break the sound barrier, shoot highly destructive lasers, and is programmed for the sole purpose of finding evidence of life on Earth, she is shown to completely ignore the significance of a *living* insect. Briefly, in EVE's search for life on earth, she shoots a living insect with her laser blaster, is unable to find the green plant that WALL-E had already found and placed in his collection (and without the programming to do so), and perhaps most absurd of all, apparently does not look outside the city center to see the (as revealed in the final scene) plethora of vegetation growing on the hillsides nearby. Other "irrationalities" include the sprout growing from inside a closed refrigerator (without sunlight), robots imputing commands by pressing buttons (instead of transmitting signals), and AUTO sending EVE units to search for life on earth in spite of not having any inclination to return to earth.

Beyond the mere minutia of a science fiction postapocalyptic calling for a suspension of disbelief, these elements contribute to *WALL-E's* overwhelming centering of emotion and decentering of reason. Moreover, it challenges the expert-centered efficacies at work in Scientistic Messianism. In contrast to *Happy Feet's* empirically-driven protagonist and priestly scientists, *WALL-E* features a world ripe with mistakes and absurdities, and demonstrates how love-driven protagonists are able to navigate it through and with their own mistakes and absurdities. In addition, the film highlights the interconnecting and communal aspects of such mistake-laden emotional subjectivities. Briefly, in the film's conclusion when WALL-E and EVE are holding hands and staring at each other, the Rogue Robot community humorously walks into the background, see that the couple are having an intimate moment, and then quickly rush off stage like friends accidentally stumbling upon two lovers. While such a moment certainly contributes to a humanlike reading of EVE and the Rogue Robots themselves, their interactions ultimately serve to focalize WALL-E with a social, empathetic, affective, humanlike subjectivity (i.e., that WALL-E is a being worth giving privacy to – something we humans even rarely give to our pets and other non-human animals). This, too, evokes the elevation of subjectivity and relationality in Neoluddic Asceticism.

WALL-E's emphasis on community is further developed in precisely how it composes the spread of emotion. This is especially notable in EVE and the Rogue Robots becoming more emotional after their interactions with WALL-E. In addition, however, the film focalizes this spread through numerous other characters, such as the door guardian to the reprogramming ward, the cleaning robot M-O, and the humans Mary and John. To elaborate further, when AUTO's security assistant GO-4 is taking EVE to the

reprogramming ward, they first approach a large robotic guardian typing away carefully at a command console. The guardian approves GO-4 and EVE, but as they pass it notices WALL-E secretly hanging on to the cart in hiding. Instead of sounding an alarm or raising suspicion, however, it peers at WALL-E with its large red dome-shaped eye reminiscent of a security camera. WALL-E simply waves. The door guardian then looks down at its arm-like extensions and 'waves' the button-pressing mechanism like hands. The introspection is clear, and finds fruition when a few scenes later WALL-E and EVE crash through the door to escape, and the door guardian merely "waves" happily at WALL-E, seemingly enamored by its newfound relational ability and sense of self.

Likewise, M-O initially goes about the ship along the aforementioned directional lines seeking only to clean. This subjectivity changes when it tries cleaning what appears to be dirt and soil off of WALL-E. In a bit of subtly irony, the film focalizes M-O perceiving the dirt and soil as a "foreign contaminant," which is to say M-O's logical programming identifies the mix of organic and inorganic material associated with biological life as a dangerous material needing to be scrubbed away. This positionality is altered, however, through the protagonist's interaction. To elaborate, upon seeing WALL-E acting aberratively, M-O realizes it is not constrained by the lines on the floor, and leaves them, breaking free of a portion of its programming. When it then tries cleaning the dirt and soil from WALL-E, the comedic protagonist rubs dirt on M-O's face in an act clearly written to produce humor in the audience, and as if to highlight this is not a dangerous "contaminant" at all. Furthermore, although M-O continues to attempt to clean WALL-E throughout the film (and thus continually restates the ironic labelling of soil as dangerous contaminant), it eventually joins EVE in trying to rescue him later in

the film, assists in getting the plant (which it also sees as a "foreign contaminant") to the Axiom's life sensor, and eventually joins in with the other Rogue Robot community.

Exceptionally, even the human characters Mary and John do not appear to display empathy nor community until WALL-E jostles them with his aberrative activity, knocking them out of their autochairs – to which they *see* the promenade for the first time (e.g., "I didn't know we had a pool"), interact with each other (e.g., their flirty hello and introduction to one another), and experience a change in identity (as noted by their clothes changing color upon leaving the autochairs). Consequently, *WALL-E* composes a relational process that begins with an intersubjective and aberrative interaction, which results in a change in perception, self-awareness, and identity, which then results in intersubjective relationship and community alongside and with other others. It follows therefore, that for *WALL-E,* efficacy likewise flows primarily from cooperation, not the dissemination of orders, nor along a stratification of efficacy that empowers the erudite while disempowering the public. This speaks to the cultural, sociological, subjective, democratic, participatory, social movement orientation in the efficacy framings of Neoluddic Asceticism.

Elaborating further on *WALL-E's* efficacies of resistance, the plot finds its narrative conclusion precisely because of a public participatory event that stands in contrast to the efficacies of the antagonists. To highlight this contrast of efficacy, earlier in the film, the antagonist Shelby Forthright disseminated his decisions as "global CEO of BNL" throughout the institution's hierarchy and (as inferred by the media segment's appearance to a US Presidential State of the Union Address) throughout the civic sphere.

Likewise, AUTO then took Shelby's decision and enforced it upon everyone aboard The Axiom. In a stark point of contrast, however, the protagonists express their agency not through erudite knowledge, stratified hierarchies, or logic, but precisely emotion, relationship, and cooperative participation.

To expand, the protagonists' efficacy diverges through a different coding of the role of the "leader." This is to say, the salvation of the Axiom and its peoples is not a leader-centered task: WALL-E doesn't care about the Axiom (he just wants to hold EVE's hand); EVE doesn't particularly care about the Axiom (she just wants to get WALL-E back to Earth to repair him); the humans John and Mary are oblivious to the major events (they are just experiencing the world for the first time); AUTO tries to prevent the ship from returning (because of 700-year-old orders); and Captain McCrea, while desiring the ship's return, attempts to do so using the axiomatic logics that caused the problem in the first place. In regards to the latter, *WALL-E* foregrounds the failure of "pure" logic through Captain McCrea's attempt to reason with AUTO one-on-one. During this logical battle between the ship's captain and the autopilot, AUTO merely responds to the Captain's empirical evidence (e.g., "Look at this plant. Green and growing. It's living proof") and reasoned explanations (e.g., "things have changed," and "I don't want to survive; I want to live!") with merely simple dismissal (e.g., "Irrelevant, Captain") and appeals to greater logic (e.g., "I must follow my directive"). Demonstrably, Captain McCrea's attempt at logic fails. Instead, the ship's captain gives up on arguing and merely plays the role of the diversion, deciding to distract AUTO while WALL-E, EVE, M-O, PR-T, and the other Rogue Robots carry, fling, and bounce the plant to the Axiom's sensor. As the robots work together to do so, each has a role in participating

(e.g., blocking the SECUR-T bots, handing the plant off to the next bot, etc.). In addition, their motives have little to do with helping humans return to earth, or because of some erudite hierarchical logic, but rather out of emotional love and concern for WALL-E (so he could be repaired with the spare parts in his shelter on Earth). As such a positionality implies, *WALL-E's* technological protagonists are therefore not positioned as humanity's technological messiahs, arriving due to some logical plea or erudite development. Rather, in a manner resonant with Neoluddic Asceticism, the film positions the efficacy that leads to surviving environmental collapse and returning to ecological wholeness as a relational, emotional, cooperational, and participatory act of resistance.

Neoluddic Asceticism finds special highlight near the narrative's end, when Captain McCrea and the humans of the Axiom walk out from the ship and onto the Earth, and with the non-hierarchical cooperation with the robots, take the time to plant the sprout that allowed them to return, an act symbolizing the return of agriculture, and the return of civilization. Contributing further to this motif, when Captain McCrea first searches the Axiom's database to begin his path of education, he searches for "farming" (not "ecology" or "cultivation" or "wilderness" or "plant life"). So, too, the characters refer to the sprout as "Plant" specifically throughout the film (and thus evoke the act of planting). Likewise, WALL-E first finds the "Plant" in a refrigerator, signifying that this is likely the sprout of an old food source. In this manner, *WALL-E* centers the efficacy toward ecological wholeness as a while male adult captain in a position of power (Captain McCrea) absconding from technological overreliance with the help of a diverse community in order to (literally) go back to the land in order to return to the green-thumb simplicities of farming. As this suggests, in spite of Neoluddic Asceticism providing a

discourse of resistance against the logics of power within the film, *WALL-E* ultimately ends in reifying a similar axiomatic logic of power that it critiques. The most highly educated person in the community and ship's commanding officer places "Plant" into the soil and teaches the rest of the denizens about farming. His logics now become their logics, and the hierarchies of control begin anew. In addition, *WALL-E's* treatment of "Plant" nevertheless conveys a similar objectification of nature as the antagonistic force that caused the narrative's ecological collapse – the anthropocentric notion that life on earth is to serve humanity, to be made into commodity. Perhaps it is no surprise, therefore, that the child-coded protagonists end the film focused only on their relationships. WALL-E and EVE hold hands and frolic around the growing landscape as a montage shows the start of a new civilization in a stylistic series of painterly vignettes. Subsequently, while Neoluddic Asceticism proffers adults the opportunity to throw off their technological chains and go back to the land, it offers children the opportunities of romance (i.e., to make strides toward becoming adults).

Absent Treehuggers

Although *WALL-E* offers a relational, community-driven, participatory efficacy evoking Neoluddic Asceticism, it falls short of providing much of an empowering framework for children or marginalized adults. Instead, the film ends by reifying similar neoliberal capitalist axioms that it sets out to critique, and thus relegates the environment toward commodity and children to passivity. To that end, *WALL-E* doesn't appear to raise much concern for environmental devastation regarding the planet itself, but rather how that devastation affects us. It shows no polar bears starving to death, nor the remains of whales who suffocated on plastic bags, nor the final tree of the Amazon getting razed to

grow corn for cattle feed. Exceptionally, in spite of the film's focus on restoring relationships, not a single character demonstrates concern, grief, contrition, repentance, or love for Earth, nor seek Earth's forgiveness. In fact, the closest the film gets to constructing such a rhetoricity is when WALL-E shows concern for the insect after haphazardly running over it with his treads or when he tries to protect it from EVE. However, such communal and empathetic moments are mitigated when the protagonist then proceeds to haphazardly abuse the creature over and over by neglectfully running over it with his treads – at least until he then completely abandons it while chasing after romance on a rocketship. Consequently, in regards to the film's treatment of the environment itself, we see very little of what Carson's ethic identifies as nature's cry of pain to its technological abuser (see: Killingsworth & Palmer, 1995, p. 49). For *WALL-E*, nature is mostly silent regarding such abuse – a background stage upon which the forces of humanity and technology play.

Likewise, the central form of nature in the film – "Plant" – is given the role and agency to be little more than a McGuffin to drive the plot, and is valued by even the protagonists only for its use. For example, upon seeing the sprout for the first time, WALL-E picks it from its ecological home and puts it in an old shoe inside his shelter (where it would have eventually died. Similarly, EVE captures it for no reason other than for other computers on the Axiom to verify it was real (something she could have easily been programmed to do without risking its death). By the end of the narrative "Plant" is desired by the antagonist AUTO merely to destroy it, is desired by WALL-E to make EVE happy, is desired by EVE and the Rogue Robots as merely a key to get the Axiom back to Earth so they could repair WALL-E, and is ultimately *planted* by Captain

McCrea during the final scenes in an act fulfilling its nominal purpose. Consequently, amidst *WALL-E's* focalization of relationship in its final scenes (e.g., the Rogue Robots showing concern for WALL-E, EVE and WALL-E showing intimacy) the Earth is restored to – not a healed relationship – but a logic of control, a resource, a thing to be used. As this suggests, by the end of the film, *WALL-E* departs from Carson (1962), who typifies such "control" over nature as "born of the Neanderthal age of biology and philosophy, when it was supposed that nature exists for the convenience of man" (p. 261). Instead, we are left with a similar anthropocentric conservationist ethic that has failed to do much of anything about climate change in half-a-century (see: Milman, 2018). For a child viewer, it is easy to imagine how *WALL-E*'s (or Neoluddic Asceticism's) framing of the environment as a resource could lead to them feeling as though planting a garden is the best "relationship" they could have with the earth (perhaps a few could even grow up to pastorally monocrop Bt-corn in fields of former rainforest).

In addition, although most characters respond to WALL-E's aberrative behavior with the emergence of affect, subjectivity, and sociability (e.g., EVE, M-O, BURN-E, PR-T, the Rogue Robots, WALL-A, the door guardian, John and Mary, Captain McCrea) a point of departure is found in the antagonists (Shelby Forthright, AUTO, GO-4, and the SECUR-T units). For these characters, it would appear that *WALL-E* presents them with no such opportunity. Rather than proffer them reconciliation, affect, or sociability, the film situates its antagonists as melodramatically static caricatures who can only be "defeated" when the protagonists kill them. Signifying this, everything GO-4 and the SECUR-T units do is instructed by AUTO, and everything AUTO does is instructed by

Shelby Forthright, and this hierarchy never changes until their deaths. They are in many ways an assemblage of controlling logics manifest, and may be presumed to "represent" the inability of such structures to change; however, breaking free from this assemblage is not impossible within *WALL-E's* universe (as evidenced by the numerous other BNL robots doing so). In addition, it may appear that unlike most other characters, these four are administrators and enforcers, yet Captain McCrea himself is the chief administrator on the Axiom (i.e., the captain) and EVE is built to be a greater enforcer than any other character (viz. the only character with a weapon), yet both of them find emotion and relational healing by the film's end. The implication is that there is nothing *narratively* unique about these four. Rather, *WALL-E's* relegation of its antagonists as exceptions to its focus on healing relationships appears to be largely arbitrary. They are killed, not because it makes the most narrative sense, but because they are antagonists.

By way of contrast, child audiences could have watched WALL-E, EVE, and Captain McCrea reach out to AUTO similarly to WALL-E reaching out to most every other robot, or they could have seen AUTO decide to repair his wounded relationship with the passengers. Instead, the film shows children a frustrated Captain McCrea violently attack an unfeeling AUTO in order to turn him off. While such an act may seem as dispassionate as turning off a toaster, WALL-E spends nearly the entire story convincing us that robots can feel, and then stylizes AUTO's "shutdown" with his body going limp and the light fading from his eye. As these elements suggest, to the narrative, AUTO's death is very much a real death – as it is with most SECUR-T units (who the protagonists knock over, shoot, and short circuit), GO-4 (who explodes with cathartic

satisfaction), and even Shelby Forthright (who, while not receiving a death onscreen, can be safely assumed to be dead considering his videos are from 700 years into the past).

Needless to say, a narrative desiring the death of its antagonists is not a rare occurrence. From Darth Sidious in *Star Wars* (Marquand, 1983) to Scar in *The Lion King* (Allers & Minkoff, 1994) to Sharptooth in *The Land Before Time* (Bluth, 1988), to even begin to cite the prevalence of this trope would likely triple the size of this chapter. Unsurprisingly, humans have been killing each other since the dawn of agrarian sedentism (Kelly, 2005), and have continued era upon era to today. There is such a catharsis in "identifying and destroying the enemy" that its presence can even be found in more discursive forms in the rhetorics of social change. We especially see it described as such in early rhetorical scholarship, such as when Scott and Smith (1969) describe how confrontational protest "shrieks kill-or-be-killed" (p. 8), or when Cathcart (1978) explicates how "without the act of confrontation a movement would not be able to identify its true believers" (p. 83). As the phrasing "true believers" suggests, such conflictual discourses tend to signify a similar identifying cohesion for the *in* group and antagonistic othering and destruction of the *out* group. Particularly demonstrating this, Gregg (1971) observes how "the rhetoric of attack becomes at the same time a rhetoric of ego-building" (p. 48). While such discursivities tend to be less bloody than the tribal wars of agrarian sedentism, they reflect a similar tropology through what Cathcart (1978) explicates as "agonistic ritual" (p. 81), which "dramatizes the complete alienation of the confronter" (p. 82).

Granted, from McGee (1980; 1983) to McKerrow (2018), scholarly critiques of these early interpretive lenses have been prolific; however, they have largely tended to problematize methodological aspects such as systemization and structuralism. As it were, even with the field's Habermasean "critical turn" (see: McGee, 1983; Cox & Foust, 2009), emphasis has largely remained on oppositions of counter publics (e.g., Palczewski, 2001; DeLuca & Peeples, 2002; Bruner, 2005). This is not to equate or conflate systematized and counter public scholarship, but rather to observe the presuppositional breadth of confrontational antagonism/agonism, especially as it occurs amidst the discourses of social change. Typifying this, whereas Palczewski and Harr-Lagin (2018) emphasize a "more fluid understanding of power" (p. 144) that "ebbs and flows in multiple directions" (p.144) and "occurs not only via conflict with an establishment" (p.145), they still emphasize "publics confronting each other" (p. 145).

Rather than a mere interpretive lens, Schwarze (2006) takes a tactical approach, noting how "the tendency of melodrama to polarize the social landscape…can serve to enrich public understanding of the interests at stake in environmental controversies" (p. 268) through the framing of "situations as confrontations between the virtuous and the villainous" (p. 269). Within such a narrative framework, the CEO who exploits people in a developing nation in order to extract oil at higher profits is not merely another human being with whom we disagree, but a villain. So too, apparently, Shelby Forthright, AUTO, and our elderly next door neighbor who votes Republican. Consequently, whether a tribalistic act of physical warfare or a metaphorical "rite of the kill" (Scott & Smith, 1969), a similar presuppositional framework grounds them both. Considering this belief's expansive discursive breadth and broad normative acceptance, it appears to

emerge axiomatic: [*the other is an enemy who must be killed*]. Yet, an often overlooked result of melodramatic framings is that they go multiple directions, and what environmentalists therefore risk when polarizing people with alternative ideas is that the people with alternative ideas might feel the need and necessity to polarize them as well. Such tends to happen when one tribe calls another tribe their enemy, as it has since agrarian sedentism.

If "the enemy is obvious" (Scott & Smith, 1969 p. 8) for a Prius-driving vegan blogger, it is just as obvious for the pickup-driving Evangelical laborer. Unfortunately, it may be just as "obvious" for their children, especially when efficacy is framed as the restoration of relationship sans people who think differently. Luckily for the farmer's kid, and unfortunately for environmentalists who care about climate change, melodrama tends to, as Schwarze (2006) acclaims, "bring emotion into the foreground, complicating public discourse that takes a purely scientific and technical approach" (p. 272). While this certainly speaks to *WALL-E's* aforementioned privileging of emotion and relationship over scientism and control, it unfortunately stacks the cards against climate discourse, which has tended to rely mostly on a scientific and technological paradigm. With this in mind, are we honestly surprised when those who deny anthropogenic climate change end up angrily identifying climate scientists, progressives, and environmentalism as the "enemy" (e.g., Inhofe, 2013)? Is this not, too, an axiomatic logic of control? Perhaps another way is possible.

Common Ground

As mentioned, while both *Happy Feet* and *WALL-E* are animated children's films on issues of the environment, the way they demonstrate efficacious action tells child audiences very different things about how to act in regards to ecological problems. For example, as these paradigmatic frameworks speak to climate change, *Happy Feet's* Scientistic Messianism invites children to mock climate deniers, proselytize their friends to the gospel of scientism, and ultimately support, trust, and have faith in priestly scientists to figure out how to ameliorate climate change. Contrasting this, *WALL-E's* Neoluddic Asceticism invites children to focus on emotions and relationships, collaborate with friends, and resist parties and institutions of control, so that a wise use of the planet's resources will allow the climate to return to nominal conditions. Neither seems to equip children with much efficacy in addressing environmental issues directly. Instead, the films largely invite their child audiences to join one of two camps – essentially to support logic and scientism while the erudite work toward a "wiser" use of the planet's resources *or* to support emotion and culture while grassroots efforts work toward a "wiser" use of the planet's resources. In either case, *Happy Feet* and *WALL-E* both contribute to a false dichotomy between logic/science and emotion/culture, and do so through a narrative that articulates anthropocentric constructions of the planet as a resource and background stage.

On the question of childhood agency, both films agree on what the non-adults should be *most* concerned about – becoming adults (i.e., their own emerging sexuality). Signifying this, *Happy Feet* spends much of the first and second act foregrounding Mumble and Gloria's relationship (e.g., hatching together, going to school together,

swimming together, Mumble feeling rejected by Gloria, Mumble trying to impress Gloria, etc.) and centers its denouement on the two finally getting to be together. Likewise, *WALL-E* gives its title character (WALL-E) a singular prominent desire to romance EVE, and drives the plot forward largely toward this end. Explicatively, although *Happy Feet* and *WALL-E* are both environmental children's films, their central environmental concerns are at most secondary for their protagonists, and even then advance an anthropocentric framing of nature as a resource. This, too, speaks to the framing of the planet within the paradigmatic frameworks of Scientistic Messianism and Neoluddic Asceticism.

Whether priestly scientists invent more sustainable technologies or convince governments to be more sustainable, or whether grassroots collectives reduce their consumption of non-sustainable products or resist non-sustainable institutions of power, the Scientistic Messianism in *Happy Feet* and Neoluddic Asceticism in *WALL-E* remain centered upon the same telos. Namely, prompting the (adult) civil sphere to use the planet's resources more sustainably. A worthwhile goal to be certain, and likely necessary if we are to stay the tide of our warming world. However, such a utilitarian "wise use" framing of the planet relies upon a civil sphere wherein we have given our children minimal power and voice. It should not surprise us, therefore, that Mumble's attempt to "stop [humans] from taking all the fish" results in him returning to dance and mate with Gloria while scientists prompt world governments to regulate fishing. Likewise, it should not surprise us when EVE's attempt at getting the "plant" to Captain McCrea results in her and WALL-E simply holding hands while Captain McCrea ushers in a new civilization of sustainable agriculture. After all, if "the environment" is a

resource, what efficacy would children hope to muster in order to convince civil society to acquire and use it more responsibly?

Consequently, the aforementioned frameworks contribute to a rhetoricity that – to use an analogy – is like parents (environmentalists) telling a room full of hungry children (society) to share an increasingly shrinking box of cookies (Earth), and that being an adult means learning to share (sustainable resource use), so grow up and learn to share (be sustainable), or grow up and help us force others to share (support regulations). Considering this, whether the "parents" are priestly scientists (via Scientistic Messianism) or a grassroots collective (via Neoluddic Asceticism) seems moot. The net result still frames Earth little different than a box of cookies, frames adults little different than children being told "no," and frames children themselves as outside the room waiting to be invited. Considering how untenable this situation sounds, it is not surprising that the usual outcome is the chaotic room and mess of cookies known as the "tragedy of the commons" (see: Hardin, 1968). Yet, it is important to highlight that, as Shiva (2015) suggests, "what has been called the tragedy of the commons is, in fact, the tragedy of privatization" (p. 49). The commons cannot be privatized, for it is common, and thus "implies the reality of cooperative management and ownership" (p. 48). From such an alternative framing of the environment emerges an alternative framing of efficacy. In going from anthropocentrism to ecocentrism, the relationality at work in Neoluddic Asceticism find expansion to even plants, non-human animals, the planet, and the cosmos. Such a relationality likewise extends beyond the axiomatic logics at work in even Neoluddic Asceticism.

For children, such a "relational" framing of efficacy may offer a high degree of accessibility, and perhaps even more-so than for adults. As Carson (1998) notes in regards to children and nature, "it is not half so important to know as to feel" (p. 56). Beyond mere sentimentality, this orientation is found in studies of children and the environment across numerous disciplines. For example, Kellert (2002) found that children aged six-to-twelve are more likely to find wildlife as "independent and autonomous, possessing feelings and interests apart from [their own] needs and concerns" (p.133) and that "the child's relation to nature offers a directness and focus often lacking in human relationships" (p. 128). Likewise, the primatologists Verbeek and de Waal (2002) found that emotions "mediate learning about and from nature" (p. 20) and "are mostly likely shared by the young of human and nonhuman primates alike" (p. 21). Moreover, researchers have found long-term orientational and educational results from early emotion-based relationships between children and nature (Carson, 1988; Kellert, 2002; Coley, Solomon & Shafto, 2002).

In regards to social change, the "effectiveness" of such a reconciliatory and relational paradigm may be further illumined by Palczewski and Harr-Lagin (2017), who identify how "social change occurs not only via conflict with an establishment" (p. 145). Yet, wherein they direct attention to "multiple publics rather than a single establishment" (p. 145), I feel their emphasis on "a more fluid understanding of power" (p. 145) is even more equipping when applied to ideologies, frameworks, paradigms, and axioms. This trajectory follows what Foust (2017) identifies as an interpretation of social change that refuses "the nomenclature of establishment versus movement" (p. 65) and which "could go further in opening the terrain of struggle to any number of collectives in contest" (p.

66). From this, I now turn to highlight how the animated children's film *Moana* frames efficacy as ecocentric, broadly relational, diverse, reconciliatory, and which blurs the structuralist lines of "friend" and "enemy," of "human" and "nature," of "logic" and "emotion." From such a framing of efficacy all members of the ecological community are likewise empowered to take part, even children and the historically marginalized. As mentioned prior, I have delineated this framework as Reconciliatory Ecophronesis.

CHAPTER FIVE: MOANA

Over the previous two chapters, I have outlined how *Happy Feet* and *WALL-E* construct vastly different paradigmatic frameworks of efficacy within their narratives. In particular, *Happy Feet* emphasizes a scientistic logic over emotion, culture, and religion and centers agency toward a unified appeal to priest-like scientists, who themselves are tasked to saving the planet (i.e., Scientistic Messianism). Conversely, *WALL-E* emphasizes emotion, relationship, and culture over reason, scientism, and technology, and centers agency toward collaborative grassroots efforts that resist non-sustainable institutions of control while the planet heals itself (i.e., Neoluddic Asceticism). As I concluded in the previous chapter, however, whether scientists convince world governments to restrict fishing in the Antarctic (as in *Happy Feet*) or a grassroots collective rejects consumerism and certain technologies in order to return to the 'simple life' of sustainable agriculture (as in *WALL-E*), both ultimately rely upon a similar axiomatic conceptualization (viz. the planet is a resource) and target a similar environmental telos (viz. the sustainable use of that resource). Yet, the primary structures that regulate the use of these resources are largely inaccessible to children within our contemporary societies. Recalling the discussion from the first chapter, children are not permitted much ability to participate in the market (the economic sphere) or vote (the civil sphere). Consequently, it would seem that discursive frameworks that identify the planet primarily as a resource would thus find difficulty in articulating the role of

children in using those resources more sustainably. It is here we find a possible core problematic in climate change discourse, and a possible avenue toward understanding a foundational and axiomatic factor in questions of public efficacy and action.

To briefly reiterate, consider how both *Happy Feet* and *WALL-E* situate their child characters away from the efficacy of "saving the planet" and toward the task of convincing empowered adults to do the real work (e.g., Mumble dancing for the scientists, EVE getting the plant to Captain McCrea). Within such frameworks, the only thing seemingly left for children to do is to pursue romance so that they might grow up and become adults themselves (e.g., Mumble pursuing Gloria, WALL-E pursuing EVE). Moreover, the adult characters appear to face a similar positionality although they are already "grown up." That is, both films constrain the efficacy of their non-expert adult characters to merely supportive roles – yet only insofar as those characters are able to participate in romance or express their sexuality (e.g., Memphis, Lovelace, John, Mary). Ultimately, it would seem that in framing the planet as a resource, Scientistic Messianism and Neoluddic Asceticism bother end in relegating the most efficacy in solving environmental problems to the subject positions they deem most capable of leading the population to a more sustainable use of resources. For children, and non-expert adults, what's left is merely supporting those positions, and getting others to support those positions. Informed by this, we have to ask – If the "experts" are already aware of the problem, along with most everyone else, who is left to tell? What is left to do? It would seem that if efficacy is a matter of supporting scientists or other adult leaders, the bulk of the work has been done. It is no surprise, therefore, that 66% of the United States

population does not even occasionally discuss climate change (Howe, Mildenberger, Marlon, & Leiserowitz, 2016).

Considering this, and as I explicate further in this chapter, a transition away from resource-based conceptualizations of the planet to relationally-based conceptualizations may permit and proffer a more highly efficacious and empowered public regarding climate change, even for children. To accomplish this analysis, I review the animated children's film *Moana,* which centers a relational view of the earth and asks us to consider the possibilities of reconciliation. That said, it should be noted that a similar framing of efficacy can be found in other animated films, such as the widely popular 1984 Studio Ghibli film *Nausicaä of the Valley of the Wind*. Both of these films find inspiration from Pacific cultures (Polynesia and Japan respectably), and have similar storylines where empowered young girls find a way to reconcile with nature in spite of the discouragement and misunderstanding of adults. However, between the two, *Moana* is more similar the other films in this project (e.g., it is computer animated, performed in English, contains musical elements, and was produced in the same decade) and appears to have a more predominate presence in popular culture. Speaking to the latter, *Nausicaä of the Valley of the Wind's* box office sales totaled ¥1.48B when it was released in Japan (equivalent to $5.97M in 1984 or $13.79M when adjusted to 2016 inflation) (see: Kano, 2006) and $1.72M globally ($3.97M adjusted to 2016 inflation) (see: Box Office Mojo, 2019g). In comparison, *Moana* grossed $248.76M in the United States and $394.57M globally. Alongside this, according to review aggregation site Rotten Tomatoes, *Nausicaä* received an average critic rating of 88% (of 16 reviews), whereas *Moana* received an average critic rating of 95% (of 266 reviews) (see: Rotten Tomatoes, 2019a;

2019b). Similarly, in a list of the "50 Best Animated Films of All Time," popular magazine Business Insider ranks *Moana* as number fourteen, but does not even list *Nausicaä* (Lynch, 2018).

Speaking more to the reception of *Moana* itself, the prominent The Atlantic movie critic Orr (2016) describes the film as "an absolute delight, a lush, exuberant quest fable full of big musical numbers and featuring perhaps the most stunning visuals of any Disney film to date" (p. 1) As for the titular heroine, he notes how she is proportioned like a young girl rather than "a saucer-eyed, wasp-waisted Barbie" as typical of Disney princesses (p. 1). Further, audiences can "scan the ocean horizon in every direction without spotting anything that remotely resembles a love interest" (p. 1). Rampell (2016) speaks of *Moana's* "empowering feminist message" and highlight on "how indigenous peoples are among those most impacted by global warming" (p. 1). Further, he mentions how the film "presents an environmental, indigenous vision via mass entertainment for children of all ages."

As for what this "vision" entails and how it scaffolds efficacy, through this chapter I present an analysis of *Moana* and Reconciliatory Ecophronesis. This is accomplished through a focus of: (a) the dominant points of identification and narrative touchstones of the film (in the section "The Meaningfulness of Story"); (b) an analysis of Reconciliatory Ecophronesis and its rhetoricity in *Moana* (in the section "The Art of Dwelling"), and (c) an elaboration of the possible implications a relational, ecophronetic, and reconciliatory framework may have for climate change discourse and efficacy.

Converse to anthropocentric conceptualizations of the planet as a mere backdrop or resource, *Moana* instead positions the earth into relationship with human and non-human animal life, and conveys the meaningfulness of this relationship through story. The film thus offers a point of departure from the resource-prioritized environmentalisms as seen in *Happy Feet* (Scientistic Messianism) and *WALL-E* (Neoluddic Asceticism). Moreover, Moana puts her emotion and empathy to action, and does so through observation, logic, critical thinking, tool creation, and use. This differs from Scientistic Messianism in *Happy Feet* (which elevates science and displaces cultural ways of knowing) and the Neoluddic Asceticism in *WALL-E* (which elevates emotion and displaces technology). Instead, *Moana* offers a holistic framework where the knowings and doings of science and spiritualism, logic and emotion, technology and storytelling function together to bring about environmental change. The praxis of which is possible through observation and technological use, the meaningfulness of which is garnered through story as the reconciliation of a wounded relationship, and the efficacy of which is accessible to even children.

The Meaningfulness of Story

Moana is an animated musical about Moana, a young Polynesian woman who sets out to save her island community (Motunui) from ecological catastrophe (an encroaching "darkness" that threatens to kill all life). Toward this end, she initially attempts to convince those with power to do what is necessary to avert the disaster. Most prominently, these are Chief Tui (her father and leader of Motunui) and Maui (a demigod with a magical staff-sized fishhook that allows him to transform into any animal). Unfortunately, neither shows much interest in helping, and instead actively hinders her

quest out of a rejection of the traditional beliefs undergirding her reasons to go. Notably, Chief Tui forbids Moana to leave their island out of denial that anything is wrong and a rejection of their lineage as seafarers. Maui, on the other hand, obstructs her directly, berates her, and causes her to doubt her faith and doubt herself. Conversely, much of Moana's motivation and ideological support stems from her grandmother (Gramma Tala), who empowers the young girl to make choices for herself, and presents her with a rich spiritual and storytelling tradition – including a relational and spiritual personification of the water (The Ocean) and land (Te Fiti).

As Moana discovers, her grandmother was correct, the ocean and land themselves are relational and have agency, her choices do matter, and she herself can affect the world intersubjectively with a multiplicity of others. Accordingly, whereas Moana's appeals to men in positions of power ultimately fail (e.g., her father refuses her to leave the island, Maui refuses to help her), the protagonist herself sees the problem underlying the ecological catastrophe (a damaged relationship between the people and the land) and does so through an interweaving of direct experience, empirical observation, and spiritual narrative tradition. The protagonist then uses a combination of logic, emotion, technology, culture, and quite literally herself (her emotions, words, and body) to ameliorate the cause of the environmental problem (by healing the damaged relationship). It is here the film ends in an exceptional solution to its narrative problem. In a twist ending, *Moana* reveals that the *final boss*, a gigantic lava monster known as Te Kā, is merely the relationally wounded mother island herself, Te Fiti. As such, once Moana is able to reconcile with Te Fiti, the relationship between the people and the land is thus restored, and life returns to the islands. Afterward, Moana then returns to Motunui and

teaches her people how to sail and wayfind as their ancestors had done a millennium prior.

Emerging from this narrative, *Moana* foregrounds a broad ecology of relationships and subject positions. Moana herself appears somewhat similarly to other Disney princesses (e.g., being the daughter of a prominent ruling family, having animal sidekicks, etc.). However, the film itself hangs a lantern on this inversion of the trope when Maui calls her "princess," to which Moana responds "I am not a princess. I am the daughter of the village chief." Other principle characters include Moana's family (the spiritual Gramma Tala and positivist Chief Tui), Moana's friends (the supportive divine Ocean and industrial demigod Maui), Moana's earth mother (the providing and forgiving Te Fiti), and Moana's ancestors (the inspiring and spectral Motunui voyagers). In addition, there is Moana's pet (her dog-like piggie named Pua), and her other animal friends (the protected chicken Heihei, and a saved baby sea turtle). Furthermore, there are the film's antagonists, Moana's potential killers (the armed and armored Kakamora) and her potential captor (the wealth-obsessed Tamatoa).

With such a breadth of subject positions, the film offers a narrative topography through the opening scenes. Briefly*, Moana* begins by foregrounding a short ecological story about the world and our relationship with it. As told by Gramma Tala, this story explains how the world began covered only in water, until a "mother island" (named Te Fiti) emerged with the power to "create life itself," and who "shared [her heart] with the world." However, others sought to possess the "great power of creation" by attempting to steal Te Fiti's "heart" (symbolized in the film as a small green gem). Eventually, a

demigod named Maui used his "magical fish hook" (a tool giving him the ability to change form) to take her heart, but was quickly struck down by Te Kā, "a demon of earth and fire." This resulted in Maui losing Te Fiti's heart to the ocean, where both Te Kā and the "demons of the deep" (including Tamatoa and the Kakamora) have continued to search. Without her heart, Te Fiti gave birth to a "terrible darkness" that will "drain life from island after island" until the entire population is "devoured by the bloodthirsty jaws of inescapable death." While haunting, Gramma Tala ends on a hopeful note that someone will save them all by finding "the *heart*" and restoring it to Te Fiti. As audiences quickly discover, that someone is Moana. Further, whereas Moana is "chosen" because she first reconciled with the ocean, the film similarly tells audiences they too can be "chosen" if they first choose to reconcile with the planet.

Considering that Gramma Tala told the introductory story to the children of her village (Motunui), it thus symbolizes her and their relational positionality as storyteller and audience. She is not presenting a list of facts to a disembodied "other," but is telling a story to specific others (in this particular case, several children of Motunui). For Gramma Tala, and for the establishing scene of the film, storytelling is inherently relational. It is important to highlight, therefore, that stylistic features in the opening scene extend this relationality from the characters themselves to bringing *Moana*'s viewers into a relational orientation with the narrative. This is especially signified in the illustrative opening (which alludes the style of children's books) and the low-angle, fourth-wall-breaking, first-person perspective of the initial reveal of Gramma Tala (which positions the film's viewers amongst the children of Motunui). Consequently, from the opening scenes of the film, *Moana* invites audiences to resonate with Gramma Tala in a manner similar to their

own grandparents' storytelling traditions and cultural mythoi – especially as such storytellers attempt to explain the cosmos and humanity's place in it. In other words, we are invited to see our grandparents in *Gramma* Tala, as well as ourselves in the village's children. Alongside the film's broad relational ecology, audiences are thus invited to perceive animals and the planet as subject actors worth saving, the disputes of their own grandparents and parents as reconcilable, and war-like violence and wealth accumulation as monstrous. Moreover, the film welcomes children themselves to take center-stage in finding and performing the solutions to environmental crisis. Central throughout, the film invites us to consider the relationships we hold with others (human and non-human), the planet, our histories, ways of knowing, and ways of doing, and does so through emphasis on the meaningfulness of story. Taken together, and as I will now highlight, these elements evoke the Reconciliatory Ecophronetic efficacy frame.

The Art of Dwelling

As outlined prior, Reconciliatory Ecophronesis is an efficacy framework that ultimately employs *mythoi* and meaningfulness to situate environmental problems as a disharmony in the relationships humans share with the planet. It therefore positions the solutions to resolving this disharmony as the reconciliation of humans with the ecologies with which they dwell and interconnect. To that end, the "ecophronetic" augments notions of meaningfulness and mythoi with a phenomenological, embodied, "hands-on," *indwelled* epistemology and orienting compass. Rather than advance a sort of 'unbiased' description, the phronetic underpinnings of the framework make clear ethical claims toward harmony, and is thus biased toward reconciliation with that harmony. This "reconciliation" manifests practically across myriad practices toward a telos of

sustainable human thriving and the harmony of the entire biome. As such, the frame evokes a subset of rhetorics that are resonate with paradigms such as Naess's (1973) deep ecology and Shiva's (2015) earth democracy, yet focuses more specifically on meaningfulness and efficacy.

To elaborate further, and as the terms "reconciliatory" and "ecophronesis" allude, the framework is grounded not merely in ecological science (i.e., *episteme*) but in ecological wisdom (i.e., *phronesis*). Likewise, it is not merely directed toward ecological action (i.e., *praxis*) but ecological craft (i.e., *techne*). Consequently, this framework contrasts both Scientistic Messianism (which displaces cultural wisdoms with scientistic logics) and the Neoluddic Asceticism (which displaces scientistic logics with relational affects). Instead of such binaries, Reconciliatory Ecophronesis composes efficacy through a holistic, harmonious, rhizomatic, interdisciplinary, and diverse craft that invites sciences and cultures, logics and affects, technologies and arts, systems and stories, individuals and publics to work toward a more harmonious orientation and relational dwelling of life and its ecologies.

Emerging from this diversity, science is thus situated as the art of participatory and communal observation – a compliment, not a master, to other epistemologies, ontologies, and methodologies. Likewise, technology is positioned as a craft rooted in that art – a compliment, not a master, to other efficacies and ways of doing. Thus, Reconciliatory Ecophronesis offers an alternative to the oppositional binaries established in the scientism of the Scientistic Messianism (which has colonized the realm of mythoi to messianize technology) and the luddism of Neoluddic Asceticism (which has

extirpated the craft of technology and art of science). Instead, science and technology are dethroned from their rhetorical imperialism, but not executed or extirpated; rather, they are proffered their historic niche among the framework's discursive ecology. Consequently, with the realm of meaningfulness de-colonized, culture and mythoi once again are permitted to frolic in the fields of knowing and doing, and may do so alongside science (as an art of observation) as well as technology (as an ethically bounded craft of tool making and use). That is, within this framework, the 'relationship' of science and culture is also reconciled. Subsequently, Reconciliatory Ecophronesis sutures the chasm of efficacy that exclusionary frameworks have wrought.

From its emphases on ecological (i.e., systems) perspectives, formerly schismed and agonistic subjectivities, paradigms, and perspectives are invited to contribute toward a vibrant and diverse ecological whole. Science is thus welcomed alongside spiritualism, the concerns of non-humans alongside humans, and the individual alongside the community within a complex ecology of ecologies. Whereas everyone dwells in an ecology, belongs to a community, and is a member of the earthly biome, everyone thus has the ability to dwell more wisely, catalyze locally, and live more deeply. Whether the subject spends afternoons studying climatology or watching squirrels scamper across tree trunks, they connect into ecologies of ecologies and communities of communities, locally, globally, and digitally. A child may thus "reconcile" with their backyard, the local pond, a tree near the park. Further still, this is valued by the frame as a necessary and valuable step – not merely a distraction while 'world changers' go off to change the world. Instead, children are invited to contribute as part of a community, together with technologies and sciences and religions, all in a rhizomatic, non-hierarchical, democratic,

confluence of phronetic indwelled subjectivities. Hence, within this framework, everyone from shamans to scientists, authors to politicians, the traditionally marginalized to the traditionally privileged, belong, are affected by, and can affect change – and are invited to do so. As we see in *Moana*, so too can a young girl from Polynesia, and even when kings and gods resist her.

As the following section will outline, *Moana* composes the solutions to environmental crises in a manner suggesting a Reconciliatory Ecophronetic framing of efficacy. Signifying this, the film foregrounds an indwelled ecological systems perspective that: (a) concelebrates cultural mythoi, empirical observation, and technology together; (b) situates the natural environment with subjectivity and inherent value; (c) identifies the culpability for environmental degradation in the neocolonial acquisition and consumption of the commons irrespective of this inherent value; (d) centers the solution to environmental degradation as the restoration of a harmonious relationship between individuals, communities, and the planet. For climate change, such efficacy is widely participatory, empowering a diversity of peoples, populations, and children. Moreover, Reconciliatory Ecophronesis does what Scientistic Messianism and Neoluddic Asceticism ultimately fail to do, target the axiomatic causes of climate change *directly,* and in a manner that invites an ecology of discourses to the table.

Science and Storytelling

Interwoven throughout *Moana* are various elements highlighting the meaningfulness of cultural stories. A few notable examples include the exposition as told by Gramma Tala (explaining the cause of environmental crisis), Maui's tattoos

(highlighting his contributions in the world), and Moana's vision of her ancestors in the cave (demonstrating their cultural identity). Alongside this is a representation of empirical observation and technological aptitude, such as when Moana uses astronomical wayfinding and seafaring to chart a path to Te Fiti. As can be presumed by this, the protagonist seems to find little conflict between culture and science. However, as I have reviewed at length in the previous chapters on *Happy Feet* and *WALL-E,* such conflict is highly represented throughout our contemporary culture. Particularly, the scientism of Scientistic Messianism purports to displace the epistemological and ontological role of culture and religion, whereas Neoluddic Asceticism seeks to distance itself from the empirical rationality and technological imagination of science. Such an oppositional binary likewise appears in *Moana* in the protagonist's mentors, Chief Tui and Gramma Tala.

To explicate, while the film begins with Gramma Tala using storytelling and spiritualism to explain the world, she is eventually interrupted by Chief Tui. In silencing his aging mother, the patriarch informs the children that "there is no darkness, there are no monsters," and "there is nothing beyond the reef but storm and rough sea." While Chief Tui is ultimately trying to comfort the children (who had just screamed at the notion of monsters), these statements contribute to his epistemological positivism and rejection of his grandmother's (and ancestor's) mythoi. For Tui, knowledge is primarily centered on the physical and tangible (e.g., "consider the coconuts, the trunks and the leaves, the island gives us what we need"). Likewise, Tui primarily situates agency as rejecting the fanciful (e.g., "in time you'll learn just as I did,"), and instead following order (e.g., "we have one rule … a rule that keeps us safe,") and duty (e.g., "you will

stand on this peak and place a stone on this mountain, like I did, like my father did, and his father, and every chief there has ever been.").

In some ways, Chief Tui thus calls to mind the attitude of many a positivist in rejection of religious traditions and mythoi. Meanwhile, grey-haired, smiling, highly religious, and somewhat goofy, Gramma Tala evokes many a child viewer's own grandmothers, and perchance the spiritual stories many an elder has used to explain the world. It is notable therefore that Gramma Tala refers to herself as "the village crazy lady" when her spiritualism and mythoi are overtly juxtaposed with Chief Tui's positivism. Certainly, one can imagine a child in the audience seeing Chief Tui and being reminded of their rational and science-minded father or teacher referring to religious and spiritual ways of understanding as the ramblings of some "crazy lady."

Expressly, these sorts of ad hominem insults are frequently used to ridicule (often religious) climate-deniers for questioning science. For example, the Climate Reality Project (2015) claims: "Climate change deniers have a lot in common with your crazy uncle. When they open their mouths, sometimes all you can do is laugh" (p. 1). Similarly, the science popularizer Neil deGrasse Tyson (2012), released the following statement to the general public on Twitter, "I'm often asked whether I believe in Global Warming. I now just reply with the question: 'Do you believe in Gravity?'" (p. 1). He is inferring, of course, that climate deniers must be so unintelligent that they would equally question the whether or not apples fall toward the earth or away from it. Likewise, there is the previously outlined children's film *Happy Feet,* wherein the cultural ontologies of Noah and Lovelace are belittled and displaced, and so forth. For much of climate change

discourse, it appears that a common response to those who would question science is ridicule and mockery.

On the other side of the proverbial coin, science likewise frequently finds itself the target of critique (e.g., Aronowitz, 1988; Freedman, 1992; Jensen, 2004; Numbers, 2006; Roach, 2017). Egan (1997) explicates, this clash between the sciences and humanities signifies a resuscitation of what Plato saw as a quarrel between philosophy and poetry (p. 116). To that end, the more "poetic" field of rhetoric has certainly problematized aspects of material and empirical science (e.g., Brummett, 1976; Lessl, 2002; Scott, 1976), whereas the more "philosophical" realms of science have inversely problematized aspects of humanistic inquiry (e.g., Sokal & Bricmont, 1998). While the reasons for such disputes are not without cause, when attached to the structuralism and melodrama redolent our modernist and tribalistic zeitgeist, the "poet" (and humanities scholar, priest, dervish, mystic, storyteller, relativist) and the "philosopher" (and scientist, engineer, economist, mathematician, empiricist, positivist) go from positions of respectful disagreement (or appreciative nuance of inquiry) to THE ENEMY – in bold capital war-born letters.

If I may *wax poetic*, with such a melodramatic bedrock, it follows that those on either side would discard the knowledge and practices of the other, even if just to avoid being mistaken for a deserter or traitor to their side. Regardless of intention, Plato's quarrel (and Plato's dualism) is thus resurrected and reified again and again. It would seem that, with all the persistence of Dawkins's meme and all the hiddenness of Derrida's trace, we are ever haunted by this, our dark Lazarus – where even the simple

observations of climate science or the personable stories of planet earth have become anathema to those we call "opposition." Yet, with its poststructuralist reorientation and ecological imagination, Reconciliatory Ecophronesis emerges in *Moana* with a different approach toward science and culture, philosophy and poetry, the empirical and the rhetorical.

This is especially notable when the young protagonist holds up her hand as a metric to observe empirical patterns in the stars so as to chart a course toward the mythos-informed Te Fiti. Rather than mere casual observation, however, her wayfinding methodology is "peer reviewed" when Maui adjusts her hand slightly so that she might ascertain the data more accurately. That is, rather than mere empirical observation, the science of astronomical wayfinding emerges in the film as the art of observation – with method, history, and instruction. This science of astronomical wayfinding is conveyed alongside and through Moana's cultural history as the practice of her ancestors, who appear to her as mystical apparitions near the film's end. Instead of causing epistemological conflict, however, the two function together seamlessly toward the resolution of the plot. In so doing, *Moana* leaves behind the culturally bifurcated opposition between science and storytelling, and moves toward a systems praxis that embraces elements of both. This is accomplished, not through ignoring the tensions between them, but through an ecological perspective wherein the discourses function alongside and with one another.

Prior to elaborating further, it should be reiterated that this approach is constitutive the interweaving of how the film situates: (a) environmental value, (b)

antagonisms to that value, and (c) the agency to restore that value. Subsequently, a brief elaboration of these would proffer a more thorough explication of how the film seeks to reconcile science and storytelling. I now turn to explore these threads, beginning with how *Moana* implements mythoi to situate the environment with inherent value by coding it with subjectivity and in relationship with life and our technologies.

Ecological Being

As mentioned prior, a central principle of Reconciliatory Ecophronesis can be found in framing the natural environment with inherent value. Typifying this, Shiva (2015) begins her delineation of the "Earth Democracy" paradigm by citing a speech attributed to Chief Seattle of the Suquamish tribe. Within this homily, Chief Seattle implores that "every part of this earth is sacred" (p.1). In using a term often reserved for the divine, Chief Seattle signifies the level of value he associates with the planet – that is, something holy, set apart, to be venerated and treated with the utmost respect and care. In providing a framework for how this valuation occurs, he emphasizes "every clearing and humming insect is holy in the memory and experience of my people" and "the sap which courses through the trees carries the memories of the red man" (p.1). That is, nature's inherent value emerges and finds its meaningfulness through its deeply rooted and historical relationality. Moreover, in this speech Chief Seattle highlights not merely a fleeting or cursory relationship, but instead denotes how "all things are connected like the blood which unites our family" (p.1). With emphasis on the uniting, caring, altruistic primacy of a familial love, Chief Seattle demonstrates with ease why people should care for the planet. That is, because to care for the earth is to care for one's family, which he encapsulates as sharing a unifying "blood" (i.e., we are made of the same substance and

born of the same ancestor) As Shiva (2015) outlines in response, “Earth Democracy is the awareness of these connections and of the rights and responsibilities that flow from them” (p.1). Subsequently, while “Earth Democracy” resonates with environmental postcolonial and justice literature (e.g., Taylor, 2017, 2007; Wenz, 2007; Jamieson, 2007), it is rooted deeply in an ecocentric wilderness environmentalism. Such an ethic shifts away from anthropocentrism to instead foregrounding wilderness as “the ground of our being” (DeLuca, 2007, p. 43).

Similarly, the story-rich world of *Moana* codes various natural elements with personable, animistic subjectivities, and likewise situates them into relationship with inherent value. Of particular note, the ocean has: (a) personality (e.g., it playfully swirls Moana’s hair when she was an infant, gives her a “high five,” and sprays Maui as if to tease him); (b) agency (e.g., it responds to Moana’s request for help by bringing her to Maui’s island, and pushes Moana back on her raft when she falls over); (c) and exists in relationship with others (e.g., Moana affirms “the ocean is my friend,” and Maui describes how the ocean loved how Moana’s people settled on various islands because it “connected ‘em all”). Likewise, Te Fiti (the “mother island”) has: (a) personality (e.g., she gets angry when Maui betrays her in stealing the “heart,” holds her forehead against Moana’s when Moana consoles her, looks at Maui with a perturbed stare when he starts trying to explain his actions, and smiles when he gives a heartfelt apology); (b) agency (e.g., overtly attacks Moana and Maui as Te Kā, gives Maui a replacement magical fishhook after his apology, and repairs Moana’s raft); (c) and exists in relationship with others (e.g., she is called the *mother* island, and has the capability of being betrayed and reconciled). As such, the film’s personification of the water and land stand in converse to

anthropocentric framings of "nature" as a mere backdrop or resource, and instead positions the planet into relationship with human and non-human animal life, and with a specific relational history.

From such a relational foundation, the meaningfulness of the Te Kā (lit. *the burning one*) takes on a greater salience. Rather than a "monster," or merely the enraged personification of the land, Te Kā emerges as the betrayed form of Te Fiti. Such a subjectivity can only be understood through the orientational "beginning, middle, and end" that story provides. That is, betrayal implies an existing positive relationship from which betrayal can occur. For Te Fiti, that existing relationship was as the "mother" island who shared her "heart" and "life" with the world, and "freely." The world's human and non-human life are thus situated as children supported by their life-giving parent. Consequently, *Moana* frames its environmental catastrophe as not merely the harming of a personified earth, but moreover through their cultural mythos as children betraying their mother.

Alongside this, *Moana's* primary environmental crisis (a pervasively spreading ash-like darkness and decay) is especially centered as the result of the actions of Maui. Initially revealed in Gramma Tala's background tale, the "demigod" Maui (a large, abundantly muscular man with tattoos and shoulder-length curly hair) caused the ecological crisis by stealing the "Heart of Te Fiti". Contributing to the meaningfulness of this act, the visuals during the opening scenes demonstrate Maui extracting a shining green stone (the "Heart") from the rock with his large "magical fishhook" in a manner similar to a pickaxe. While the gem is metaphorically referred to throughout *Moana* as a

"heart" (apropos of the film's relational themes), the opening visuals demonstrate its loss quite clearly as resource extraction. Maui overtly *mines* the shining green gemstone with his fishhook. In addition, this device allows him to transform into other beings (giving him the powers of flight, submersion, heat resistance, etc.). Expressly, Maui and his fishhook evoke humanity's use of technology in a manner that transcends place and ecology (allowing us flight, submersion, heat resistance, resource extraction, and so forth). By way of contrast, Moana uses more "natural" technologies like wooden sailing vessels, clothing made of fibers, a wooden oar, and so forth. Maui's technology, on the other hand, evokes a supernatural magic that conflates technology and spirituality in a manner evoking Scientistic Messianism (e.g., the hook is a tool, weapon, and can instantly transform Maui into other animals).

Rounding out this framing, throughout much of the narrative Maui has an unhealthy dependency on technology for his identity and subjectivity (e.g., "I'm not Maui without [my hook]," "Without my hook, I am nothing") and appears vainglorious. While his introductory song (titled "Your Welcome") certainly contributes to such vainglory, foremost is his constant fixation on his comically-large muscles (even to the degree of talking to them). Alongside technology, the film subsequently codes Maui's subject position with elements of vanity, obsession, and hypermasculinity. Through such a reading, *Moana* thus identifies a vain, obsessed, hypermasculine form of technological use and resource acquisition as that which led to the environmental crisis – and orients this through the meaningfulness of story as *betrayal.* However, this is not portrayed in melodramatic fashion. Notably, Moana learns how to sail and wayfind from Maui, and even befriends him.

With Te Kā signifying the rage of the betrayed earth and Maui evoking an industrialized technological hubris, *Moana's* treatment of the environment calls to mind the deep ecology of Rachael Carson, whose ethic highlights nature's cry of pain to its technological abuser (see: Killingsworth & Palmer, 1995, p. 49). In a similar manner, Te Kā represents Te Fiti's *cry of pain* toward her own technological abuser – and moreover, that of a betrayed mother toward her abusive children. In this way, the screams of the earth are exacerbated in emotional and empathetic weight. So too, therefore, the depth of meaning when Maui asks Te Fiti for forgiveness at the end of the film, and when Te Fiti grants it. This said, it is not "technology" itself that the narrative positions as betrayal, nor is "technology" that Te Fiti forgives. This is important to highlight because neither *Moana* nor Reconciliatory Ecophronesis identifies technology itself as the cause or catalyst of environmental crisis. By way of contrast, *Moana* is not a story about (for example) a diabolical wizard who wages technological destruction upon a community of anthropomorphized trees until an unlikely band of Luddic farmers convince other anthropomorphized trees to help kill their abusers (i.e., *The Lord of the Rings*).

Rather than a similar Luddic narrative of nature's victory over technology, *Moana* frames a *moral* use of technology as something to be valued and sought. For example, the film ends with Te Fiti giving Maui a new magic fishhook and with Moana teaching the entire village of Motunui the technological craft of seafaring – acts of connectivity and sharing of the commons. This too calls to mind Rachel Carson, who "does not deny the possibility of technical solutions to environmental problems, [but hopes] rather to reunite the moral, the aesthetic, and the technical imagination of humankind" (Killingsworth & Palmer, 1995, p. 47). Similarly, Moana is able to rescue Te Fiti precisely through the

reunification of technology (e.g., seafaring), aesthetic (e.g., mythoi, music), and morality (e.g., her empathy for the betrayed mother). For example, in the scene before the final confrontation with Te Kā, Moana repairs her tattered ship and wayfinds a path back by holding her hand out to measure the distance of stars between her forefinger and thumb (just as Maui taught her). She finds encouragement to do so through an ethereal vision of her grandmother and ancestors while she sings "… I am everything I've learned and more… I know the way" (in accordance with her grandmother's teachings about choice and efficacy). Further, the protagonist does this because, as she sings, "I am the girl who loves her island, the girl who loves the sea" (something she knows from a call "inside" herself). Conversely, the film situates the *immoral* use of technology – and the betrayal of the earth mother – as the harmful consumption and selfish enclosure of the commons.

It is largely in this intersection where the subjectivity and value of Te Fiti coalesces, especially as she signifies a metonymous embodiment the planet. Whereas such meaningfulness is conveyed through the mythoi of a mother island and her interrelatedness with living beings and their technology, her abusive betrayers likewise take form through metaphorical embodiment. Subsequently, a glimpse into how *Moana* ultimately situates these "abusers" as the causes of environmental degradation will further illuminate the values emerging in the film. While Maui's extraction of the heart gemstone certainly corresponds to such betrayal, *Moana* finds this antagonism more intensely in the Kakamora and Tamatoa – referred to by Gramma Tala as the "demons of the deep" from the "realm of monsters."

Monsters

Outlined in this section, *Moana* largely foregrounds neocolonial commoditization and enclosure as antagonistic to environmental health. Moreover, as evidenced by the narrative's aforementioned framing of Te Fiti as family, these antagonisms are subsequently coded as not just unethical, but immoral – a *betrayal* of the earth mother. Such an orientation is typical Reconciliatory Ecophronesis. For example, Shiva (2015) writes with a similar affective and *poetic* boldness in articulating how "colonialism created and continues to leave behind it a trail of devastation and destruction," and which "robs from nature" (p. 26). In tracing neoliberal commoditization to the "enclosures" of imperialism, she describes how the reified imperialist paradigm "violently imposes the monoculture of greed and consumerism on all societies" (p.101), and seeks to legitimize "exclusion and ecocide and genocide" (p. 100). So too *Moana's* relegation of The Kakamora and Tamatoa.

Called by Gramma Tala as "demons" from "the realm of monsters," the primary antagonists of *Moana* are the Kakamora (small unintelligible seafarers wearing coconuts as armor) and Tamatoa (a gigantic coconut crab covered in shiny objects). Appearing in the film's second act, both attempt to steal the "Heart of Te Fiti" from the protagonist, adorn themselves with the dead bodies of animals (e.g., shells, bones, teeth), and as I discuss, function in the narrative to signify colonialism and rampant resource consumption.

To explicate, the Kakamora first arrive in the film on three enormous ships covered with large sails, bones, and drums in an attempt to acquire the Heart of Te Fiti

from Moana. All that is visible of their bodies are their pink arms and legs. They adorn themselves with coconut shells painted with angry faces and various parts of animal bodies (e.g., a shell, blowfish skin, and jawbone). Exceptionally, the Kakamora are the only characters in the film to use tools of war - spears, clubs, swords, and blow darts. Some of these weapons likewise contain parts of animal bodies (e.g., shark teeth, carved bone). In regards to behavior and motive, the Kakamora's characterization in the film is largely static. The adornment of animal bodies and weapons of war signify them as a culture of death, whereas their enormous and overburdened ships evoke a semblance of avarice and gluttonous overconsumption (e.g., the ships are gargantuan, top-heavy, covered in bones, appearing only to pursue the protagonist, capture Hei Hei, etc.). They appear on screen only to take and as a force to be survived.

While their name likely eludes to the Kakamora of Makira Samoan legend (see: Fox & Drew, 1915), and while criticisms of their portrayal have been levied for their poor cultural representation (e.g., Sternberg, 2017), the aforementioned aspects of their characterization and subjectivity offer an alternative perspective. Speaking to this, the representation of the Kakamora in *Moana* certainly differs from the Kakamora in Makira legend. Notably, the Makira's Kakamora were largely harmless forest dwellers who lived in caves and trees (Fox & Drew, 1915). While *Moana's* Kakamora can certainly be seen as misrepresentation in this regard, it is important to highlight how categorically and qualitatively distinct the two are.

In contrast with the Makira legend, *Moana's* Kakamora appear in the film as pink skinned, fully armored and armed with weapons, slaughter animals haphazardly, drum

their drums of war, sail in giant ships covered in giant sails, speak a language unintelligible to the Polynesian protagonist, violently acquire, and violently seek to acquire. Informed by this, and by way of the film's overt Polynesian themes, the Kakamora emerge as a nightmarish vision of the Spanish Conquistadors, themselves pink skinned, wearing armor, armed with weapons, violently acquiring and seeking to acquire (see: Burney, 1803). Moreover, *Moana's* use of the Makira legend of the "Kakamora" serve as guideposts toward such a reading, and serve as an elegy of the Makira's fate. In particular, the pink-skinned Spanish Conquistadors colonized the Makira in 1568, arriving on their giant ships with armor and weapons of war, and violently acquiring the Makira's land and food (see: Spate, 1979). Furthermore, whereas the historical Conquistadors displaced the name of the island "Makira" with that of a Spanish legend ("San Cristobal") and deemed the island's residents as savages, *Moana* inverts this by representing the Conquistadors as warmongering monstrosities and displaces their name with a Makira legend ("Kakamora"). In this way, *Moana's* Kakamora signify the Conquistadors, but without granting them their self-given title (lit. "the conquerors"). To that end, as they are unable to even catch a young girl, colonize her tiny raft, or even acquire the gemstone she carries, *Moana's* Kakamora may signify imperialism, colonialism, and the "Conquistadors," but they are certainly not *conquerors.*

Contributing further to this motif, *Moana* characterizes "Tamatoa" in a similar manner. The antagonist is first encountered by Moana and Maui when the team enter the "Realm of Monsters" in the film's second act. While this realm is overtly stylized in a manner reminiscent of a neon coral aquarium illuminated with a blacklight, numerous visual elements call to mind the industry of a modern city. Firstly, the protagonists travel

to the realm by climbing a large manufactured tower (i.e., a stone skyscraper) and leaping into the center through a spiraling portal (which in common movie visual parlance indicates travel to another realm, plane, dimension, or time). Furthermore, the "realm" itself is dark but highlighted with bright neon lights (similar to a city at night); bats with many eyes scream as they fly overhead (like a nightmarish version of fighter jets); geysers fire (appearing like industrial smoke and steam); and a gigantic monster with growths on its back and obscured legs lumbers in the distance (like a nightmarish steamship). Finally, in contrast with the rest of the film, most of the creatures in the Realm of Monsters is in competition with everything else to consume as much as possible (like a nightmarish version of a neo-imperialistic and consumeristic capitalist society). Notable examples of this consumption includes a giant frog-like creature who attempts to eat Moana, a giant plant-like creature that eats the giant frog, and the screaming bats (who also attempt to eat Moana). Dominant in this consuming society is Tamatoa, a gigantic coconut crab who is shown eating several dozen fish in a single gulp, and who – by his own account – devoured his grandmother. When read in light of Gramma Tala's coding as the spiritual "village crazy lady," we are invited to consider how neoimperial consumption might devour religion and culture and family.

If the Realm of Monsters signifies a nightmarish vision of neoliberal capitalism and neo-imperialistic consumerism, then Tamatoa is their king. Living in a cave of acquired wealth, the antagonist's shell is an armor of anything "shiny" – metal, the bodies dead animals, flotsam – and all appearing in the neon spectacle as mounds and mounds of gold. Moreover, the gargantuan crab revels in his avarice in performing a song and dance called "Shiny" about his desire for "everything that glimmers." In dressing himself in

anything shimmering, even the bodies of the dead, Tamatoa exclaims how he "will sparkle like a wealthy woman's neck." Remarkably, however, none of the women in the film are portrayed to appear wealthy (at least financially). Instead, the image brings to mind the women of aristocratic Europe – a demographic largely absent from the film. The only exception to this is when Moana first attempts to distract Tamatoa by wearing two bright pink shells, which evoke the dress and hennin of a fifteenth century French princess. Furthermore, Tamatoa's song includes other European references, such as the French phrase "C'est la vie mon ami" and "send your armies but they'll never be enough." Needless to say, Moana's community is never shown having an army, much less "armies." Rather, the general tropology of the song "Shiny" evokes aristocratic France and its colonizing military (itself shiny with metal armor). It is worth highlighting, therefore, that one of the numerous Polynesian island nations attacked by France in the Franco-Tahitian War was the Kingdom of Raiatea, ruled by one King Tamatoa IV (see: Matsuda, 2005). Consequently, in a similar manner to the Kakamora signifying the Conquistadors (renamed with a Makiran name), "Tamatoa" evokes French colonizers (renamed with a Raiatean name).

Taken together, the Kakamora and Tamatoa contribute to a motif that centers a nightmarish version of imperialism as the film's dominant antagonistic force – a gluttonous and avaricious devouring of resources, peoples, and lands. Alongside this, the aforementioned audiovisual elements in the Realm of Monsters accentuate this motif with allusions to industrialism, consumerism, and neoliberal capitalism. Typifying the uncanny and grotesque intersection of these ideologies, the Realm of Monsters ultimately targets its ravenousness upon the female body of the protagonist. Signifying this, most

every monster Moana encounters tries to consume her (e.g., the frog-like monster, the many-eyed bats, a four-armed humanoid creature, and Tamatoa himself). In contrast, no monsters are shown attempting to eat Maui – even though his own figure plays into masculine sexual ideals (e.g., his height, squared jaw, an absurdly large muscular frame). Moreover, Maui tells Moana to initially get Tamatoa's attention by dressing up as "bait" (rather than, for example, "create a distraction"). Juxtaposed with this overt food-laden term, Moana is then shown wearing two bright pink shells that give her the appearance of a fifteenth century princess.

While this scene likely offers many orchards of fruitful analysis, it highlights the degree of consumption and commoditization that is associated with *Moana's* antagonists. Expressly, the film portrays the Realm of Monsters as ravenous even to the point of wearing the bodies of the consumed, of hoarding anything shiny, and even toward a young girl, and young girl of color. When viewed in light of the similarities between Moana and Te Fiti, these scenes further contribute to the film's deep ecology and ecofeminist motif. Whereas the "monsters" grasp after Moana and the gemstone around her neck in the film's second act, near the end of the story audience members see the female figure of Te Fiti calmed as the gemstone is returned to a similar location on her chest. Through such a juxtaposition of the female form and the earth mother, *Moana* directs us to consider the ecofeminist admonishment and exhortation that the ideologies that have commodified and consumed women and people of color also commodify and consume the planet (see: Taylor, 2017; see: Shiva, 2015).

In light of such a *betrayal* of our earth mother, it follows that the monster Tamatoa, who attempts to consume Moana, first reveals to her that he literally consumed his own grandmother. So too the monsters that devour the earth have also devoured its women, its peoples, is lands. While manifestations of this "monster" have reified with a multiplicity of forms and names, Shiva (2015) identifies them as "enclosures of the commons" (p.16), and explicates how "what has been called the tragedy of the commons is, in fact, the tragedy of privatization" (p. 49). At an intersection of environmentalism, social justice, and ecofeminism, she explicates how the "transformation of commons into commodities" deprives "politically weaker groups their right to survival" and "robs from nature its right to self-renewal" (p. 26). For *Moana,* Tamatoa sought to "enclose" the protagonist (quite literally by eating her) as well as the gemstone (the "Heart of Te Fiti"). Moana's own right to survival was thus diminished in favor of Tamatoa's hunger, as was nature's right to self-renewal (since the "heart" is that which held the power to create life).

Such consumption at the expense of life and sustainability is framed by Shiva (2015) as indicative of "cultures of death" (p. 99). Underlying these tends to be the "destruction of diversity and pluralism through the construction of exclusivist identity" (p. 99). With a trace of the colonial enclosures of the imperial era, neocolonial enclosures rooted in a similar exclusivity still war upon peoples, publics, subcultures, and ecologies (see: pp. 98-99). These exclusions "give rise to the culture wars, crusades, and jihads of our times" (p. 99). This too appears in the character of Tamatoa, who devours massive amounts of sealife while giving only the rationale that "fish are dumb, dumb, dumb, they chase anything that glitters, beginners." In saying this, Tamatoa is inferring that he can

kill and eat (i.e. enclose) massive amounts of fish because he is of an exclusive quality of intelligence.

To the antagonist Tamatoa, it is *the fish's fault* for following shimmering light into his mouth. However, the faulty construction of such exclusivity is made blatantly clear in that Tamatoa himself chases anything that glitters. First and foremost, the giant crab sings about the unintelligence of fish for pursuing the shimmering in a song about how obsessed he is with anything "shiny." Moreover, Tamatoa only loses his upper hand over Moana and Maui when Moana distracts him with a rock covered in "shiny" bioluminescent algae. This is to say, though he infers exclusivity as a rationale to enclose and consume the fish, Tamatoa is himself similar to them in pursuing "anything that glitters." The only exclusivity to his identity is that which he constructed. Nearing allegory, such a characterization is even reinforced by his own body – adorned in a self-constructed shell of shiny objects. Yet, underneath Tamatoa's glimmering artifice is merely a large coconut crab, an iteration of marine life not too unlike the fish he mocks. Though his rhetoric of exclusion attempts dichotomy, the fish and Tamatoa are of the same kind. So too the indigenous tribes the imperial colonialists called "savages," the women that slavers called "property," and – as informed by this story's metaphor and mythos – the living ecologies that we have called "natural resources."

More indicative of the binary logics of machines than the limitless variance of ecology, such dichotomies are highly antagonistic to the ecological (and systems) perspective found in deep ecology frameworks. As Shiva (2015) argues, such binary exclusivity tends to "construct the world in mutually exclusive categories, thus banishing

multiplicity and pluralism, as well as relationships and connectedness" (p. 100). Further, it gives a foundation for "legitimizing exclusion and ecocide and genocide" (p. 100). It is no surprise therefore, that *Moana* situates the imperialist, neocolonialist, and exclusionist Kakamora and Tamatoa as its central antagonists. It is also not surprising that this is precisely the *betrayal* that Maui apologizes to Te Fiti for. In extracting the Heart of Te Fiti, Maui enclosed the commons, and did so because he wanted to give humans "the power to create life." Yet, as Gramma Tala articulates in the film's exposition, Te Fiti had already shared this power with the world freely. Thus, Maui's enclosure was rooted in an act of exclusion. That is, to take away the power to create life from everything *but* humans. This inversion of taking (from the commons) to giving (to the exclusive) is also outlined by Shiva (2015), who describes how "a trajectory of exclusion is presented as improving the lives of the underprivileged, even though upheaval and displacement is often the result" (p. 44).

In spite of Tamatoa and Kakamora's aforementioned rhetoricity, it would be an oversimplification to say *Moana* thus signifies "industrialism," "colonialization," or "neoliberal capitalism" as the primary targets we should fight against in order to save the planet. On the contrary, the "monsters" are not the principal crises that the protagonists must overcome to bring resolution to the narrative. Rather, Moana and Maui quickly escape the Kakamora while their leader is accidentally hit with a blow dart and their three gigantic ships crash into each other. Likewise, Moana and Maui escape Tamatoa while he is flipped onto his back by a geyser, weighed down by his armor of shiny things. Consequently, while *Moana* situates its antagonists with elements of industrialism, colonialism, and capitalism, audiences are invited to consider them – not as forces that

must be defeated using the weapons and logics that the monsters themselves declare as necessary – but rather as bulking grotesqueries defeated by their own weight and obsessions, outwitted by the practical, observant, artistic, and adept protagonists.

The protagonists (and audiences) are thus invited, not to wage war upon the monsters directly, but to escape their grasp until they are crushed under the weight of their own gluttonous avarice. Moreover, the narrative itself reinforces this motif in that the prominence of the Kakamora and Tamatoa are likewise diminished halfway through the plot. They are mentioned, dealt with, and left behind. *Moana* then moves on to other questions, centering them into the narrative instead. These include the question of whether or not Moana will stop asking adults and men in power to save the planet and instead go save the planet herself, the question of whether or not Maui will face his mistakes and seek reconciliation, and the question of whether or not the environmental catastrophe can itself be "defeated" or if there is another way.

Reconciliation

In leaving behind the Kakamora and Tamatoa, *Moana* tells us that this is not yet another story about colonizers or capitalism. Since foregrounding something into a site of antagonism is still foregrounding it, the film goes beyond notions of what we should fight *against* in mitigating environmental catastrophe, and instead centers its focus on what we should strive *for*. Namely, the ecophronetic and reconciliatory task of restoring our broken relationship with the planet. In a similar manner, Shiva (2015) describes how "the violence of the dominant culture is reinforced by the violent responses of those whose lands and cultures are invaded … creating vicious cycles of violence (p. 97). However,

hope is offered through "a new way of seeing, in which everything is not at war with everything else" (p. 102). It is through this new way of seeing that *Moana* situates and frames efficacy regarding the solutions to environmental catastrophe. Moreover, this efficacy goes even beyond the solutions posed by Shiva (2015), to the even broader inclusivity of Reconciliatory Ecophronesis, wherein even a child can save the world. Although antagonistic responses are understandable considering the ferocity of some of the world's monsters, and at times may be warranted, this framework treats such as the exception rather than the rule. This is especially important for children, to whom the lesson of restoration is especially important when considering the brokenness of the world we're handing them.

First and foremost, there is ultimately no "war" in Moana, except the war Maui has with himself (between vanity and vulnerability), and the war Moana has with herself (between self-doubt and self-efficacy). The Kakamora and Tamatoa do attempt to battle, but Moana and Maui simply leave them behind as unimportant and forgettable obstacles. To the monsters' praxis – a praxis of enclosure and consumption and killing – it would be absurd to leave something unenclosed, unconsumed, and unkilled. Yet in doing so the pair delegitimize and deflate the monsters' importance. They avoid becoming monsters themselves.

Similarly, the plot initially sets up a final battle between the protagonists and the "lava monster" Te Kā; however, instead of defeating her in battle, Moana finds a different way forward, a way that escapes the cycles of violence, a way toward hope, a way toward reconciliation — but one that does not sacrifice her identity and culture.

Expressly, in the midst of the battle against Te Kā, Moana sees a spiral in Te Kā's chest, and notices the similarity it has to the spiral in the Heart of Te Fiti. With such a honed art of observation functioning together with the meaningfulness of mythoi, the young child sees the solution to the environmental decay threatening her islands and community. The child protagonist then reveals the gemstone to Te Kā, and commands (not requests) the ocean to open a path (lit. "let her come to me"). With the waters offering safe passage, the lava "monster" hulks and screams toward Moana, while Moana – bold, direct, unwavering – walks gently but firmly to meet her. All the while, Moana sings the following in a slow, resonate, and empathetic manner:

> I have crossed the horizon to find you, I know your name. They have stolen the heart inside you, but this does not define you. This is not who you are, who you truly are, Te Fiti.

In the final moments of the song, Te Kā's bright crimson lava cools to a dark black obsidian. The "monster" leans her face forward and Moana meets it. The two women press their foreheads together, and through empathy the audience too can see her pain subside. This "monster" was no monster, just the betrayed earth mother raging with her emotional wounds. It is then Moana – child of eight and woman of color – who then restores the Heart of Te Fiti by returning to Te Kā. With the earth mother made whole, life once again overflowed the land.

Rather than centering the death of "the enemy," *Moana* elevates forgiveness and the restoration of broken relationships as the cornerstone practices of environmental renewal. Such *reconciliation* goes beyond declarations of "resource use" or

"sustainability," and even beyond erudite notions of environmental ethics, to a more care-oriented environmental morality. The wolf ethologist Marc Bekoff (2007) describes how ethics is more "the contemplative study of rightness or fairness," whereas morality is like a "fabric that holds together a complicated tapestry of social relationships" (p.88). Such a distinction is important for even the sciences, because while nonhuman animals do not appear to be capable of ethics discourse, many social animals do demonstrate morality (Bekoff, 2007). To illustrate this distinction for the human animal, morality causes one to jump into a river to save a drowning child. Ethics surrounds the ensuing debates between whether or not the city council should install a fence between the playground and the river. Both are necessary, but a key difference – and why this difference is integral to questions of climate change – is that ethics is woven with logic, but morality is implicit, affective, limbic. For Moana*,* the motivation to save her world is more rooted in a limbic and affective immediacy than either central route reasoned arguments or peripheral route emotional appeals. To her, and from the perspective of Reconciliatory Ecophronesis, to reconcile the broken relationship with the planet is as apparent and affectively driven as the urge to save a drowning child.

Of prominent relevance to the question of agency and climate change, the implicit and affective emphasis of phronetic environmental morality is subsequently broadly inclusive of subject actors. Such accessibility to participate extends even to children. After all, there is no need to ask a scientist or political leader to heal a wounded relationship with a parent or a friend – a child can just go reconcile. Likewise, for *Moana*, the primary agent of change in bringing resolution to the environmental crisis is not the powerful demigod Maui – nor the armored and armed Kakamora, nor Tamatoa and his

shimmering wealth, nor the strong patriarch Chief Tui, nor even the wise elder and storyteller Gramma Tala – but a child, a girl, a person of color from a historically colonized land. Where other forces failed, the young Moana succeeded (and through an intersubjective effort of her own will, the teachings of her family and community, support from the spiritual and technological, divine and natural). Moreover, and perhaps of even greater relevance, the young child believes in herself to enact this change.

Speaking to the broad empowerment of Reconciliatory Ecophronesis, *Moana's* protagonist demonstrates the self-efficacy to actually and actively make the choice to save her world. Explicatively, in the moments before Moana goes to face Te Kā, she boldly sings, "I've delivered to us where we are" and "Come what may, I know the way." That is, Moana herself is the principal agent of change in this story, and she knows it. Furthermore, instead of the film lifting the protagonist up as some kind of 'chosen one' or other method of signifying *a priori* essentialism, fate, or divine choosing, it connects who Moana is with her education (e.g., "I am everything I've learned") and establishes her motivation for action as her own internal desire to act (e.g., "the call isn't out there at all, it's inside me"). Rather than signify hubris, however, this song connects her sense of empowerment, efficacy, and identity with the relationships she has with her family (e.g., "I am the daughter of the village chief"), extended community (e.g., "we are descended from voyagers"), and the planet (e.g., "I am a girl who loves my island," "the girl who loves the sea"). Such an emphasis on relationship is further highlighted in the visuals for this scene. For example, when Moana's ancestors surround her on glowing ethereal ships, and the chief ancestral voyager on the lead ship and Moana exchange affirmations. Similarly, when she expresses doubt in herself moments prior, the ghost of her

grandmother appears to encourage her. Consequently, *Moana* simultaneously grants its protagonist a high degree of self-efficacy, empowerment, and self-directed agency, while also eschewing neoliberal hubris and exclusivity. In other words, she saved her world – and not because she was fated or destined or powerful. Ultimately, what makes Moana special in this scene (and more broadly in the film itself) is not her birthright, but that she believes that she can actually make a difference, and then does so without waiting around for adults and experts to give her permission.

Exceptionally, *Moana* demonstrates this broadly inclusive empowerment and self-efficacy as early as the opening scenes. To explicate, the film's exposition segues to this vignette by showing a baby Moana, still in diapers and stumble-walking, leave her arguing grandmother and father and bumble toward the ocean. Near the water's edge, she sees a shiny pink conch slowly being ebbed back into the waves. She starts toward the pretty shell, but hears a commotion, turns, and notices a tiny baby sea turtle getting swarmed by hungry birds of prey. Demonstrating the choices now weighing upon the baby Moana, the 'camera' flashes between the conch and turtle in a first-person perspective. She can either acquire the shimmering shell of a dead conch or rescue a sea turtle from being killed and consumed. As we observe, the infant child feels empathy, makes a decision to act, then looks around, sees a leafy branch, grabs it, swats the birds away, and then holds it above the turtle as a shield while it waddles toward the ocean. Once the turtle enters the water, the song "An Innocent Warrior" begins to play in the background. A path opens into the ocean, inviting Moana forward. The water is held back as if by magic, permitting her (and the audience) to observe the myriad colors and vibrant life under the waves. We see the baby sea turtle swimming behind an adult turtle, giving

Moana a smile, a little spin, a wave with its flipper. A liquid form emerges from the water – the ocean personified. It greets the baby protagonist without speaking, playfully swirls her hair into a flower, and offers her the "Heart of Te Fiti."

Within this simple story-within-a-story, *Moana* demonstrates how Reconciliatory Ecophronesis composes efficacy throughout the film proper. First and foremost, baby Moana makes her decision only moments after intently listening to Gramma Tala's story about how Maui took the heart of Te Fiti (i.e., the meaningfulness of the decision is informed by her cultural stories). Such meaning is even intensified for Moana in how she stares wide-eyed at her grandmother – in a slow-zoom close-up – when Tala speaks of the "someone" that can finish the story and save them (conveying efficacy through narrative). To that end, the "innocent warrior" chooses to save the sea turtle (since even small components of nature have inherent value) instead of taking the shimmering shell (to enclose the commons in the pursuit of wealth). Putting the decision to action, the protagonist then looks around her environment to ascertain through critical thinking what to do (the art of empirical observation), which results in her using a leafy branch as a tool to protect the sea turtle while not directly harming the birds of prey (an ethically bounded craft of technology). Her efforts are then met with a dash of the fantastic, a calling back to Gramma Tala's story (wherein aspects of nature have subjectivity and value), and the sea turtle and ocean itself offer her gratitude (demonstrating reconciliation and attuning the events with meaning). Exceptionally, throughout the entire process, efficacy is unrestricted. Moana, a baby still in diapers and stumble-walking, was able to reconcile with the planet (choosing herself to do so within an assemblage of interconnecting forces).

Such a scene implores us, as audience members of *this* story, to consider that empathy has no age requirement. Furthermore, while the protagonist often says "the ocean chose me" throughout the narrative, in the aforementioned scene it is clear she chose the ocean first – to which the ocean merely reciprocated (viz. she saved the turtle before the ocean gave her the Heart of Te Fiti). This is as if to say, if someone wishes to be "nature's chosen one" all that's required is for them to choose nature first. Moreover, the background song ("An Innocent Warrior") further emphasizes a broad efficacy and turning inside-out of values. Expressly, it is *NOT* the civil leader, father, empiricist, patriarch (Chief Tui), *NOR* the wise elder, grandmother, religious, matriarch (Gramma Tala) who figures out how to regain the heart. Instead, while the two experts argue, it is an "innocent" (read: inexperienced, naive, unknowledgeable) child who wins the battle. This flips exceptionalism and meritocratic privilege on its figurative head. She is not "the" (definite article) innocent warrior, but "an" (indefinite article) innocent warrior. After all, if the solutions to environmental catastrophe are found in reconciling a wounded relationship, then most everyone in the earth community is able to take part, and should take part. The meaningfulness of which – reconciliation – emerges itself through this short vignette, a story of culture, a story of dwelling, a story of Reconciliatory Ecophronesis.

It is here I also return to the aforementioned tension between "poetry" (i.e., narrative, discourse, the cultural) and "philosophy" (i.e., positivism, science, the empirical). Through this opening vignette, *Moana* also demonstrates a point of resolve between these embattled ideologies. Stated briefly, in dwelling wisely at the shore (ecophronesis), Moana sees colorful coral and happy sea turtles underneath the waves

(converse to her father's claims of "storm" and "rough sea"); however, she employs reason and observation to solve the issue presented before her (affirming her father's positivist positionality). Furthermore, through her *indwelled* experience, she also discovers she doesn't need to petition demigods to affect change in the world, but rather she can herself (converse to her grandmother's story); however, the meaningfulness surrounding the issue is conveyed through a personified ocean offering the protagonist the "heart of Te Fiti" (affirming her grandmother's mythos). The issues between them are not ignored, but those issues do not prevent them from being concelebrated – similar to contrary niches within an ecology. Hence the reconciliatory effect of a phronetic deep ecology.

More importantly, and especially relevant to this project's inquiry, *Moana* emphasizes how this reconciliatory perspective can be taught. For example, in the film's first act, Moana expresses a desire to sail out into deep water in order to test her hypothesis that there would be a greater number of fish beyond the reef. When the young adventurer attempts to research this, however, her small raft capsizes and she mildly injures her foot on sharp coral. Feeling the pangs of defeat, Moana acquiesces. Nonetheless, Gramma Tala then seeks to encourage her, knowing that her community had long used the art of observation (e.g., astrological wayfinding) and craft of technology (e.g., shipbuilding). Yet, rather than simply telling the protagonist there were the ships of their ancestors in a nearby cave, Gramma Tala brings Moana to the cave's opening and says, "You've been told all our people's stories but one." As these stories emerge from a specific "people," they serve to further connect members of the community through a network of relationships, and these relationships convey knowledge. Exceptionally, it

isn't enough for Gramma Tala to instruct Moana with a list of empirical facts, or even have her granddaughter experience the state of the boats phenomenologically; rather, she wants Moana to learn of this information through a storied (and hypermediated) vision of her ancestors, and to learn this for herself through a phronetic encounter.

When Moana inquires what's in the cave, her grandmother says, "the answer to the question you keep asking yourself, 'Who are you meant to be?' Go inside, bang the drum, and find out." Especially pertinent, Gramma Tala does not hold Moana's hand through the cave and explain what everything is and why it's important. Rather, the village elder motivates the young Moana to phronetically experience this on her own. Thus, Moana enters the cave alone, climbs aboard one of the massive ships, bangs a large drum, and suddenly has a (hypermediated) vision of her ancestors singing in Tokelauan and Samoan (and English). In the vision Moana sees her ancestors using the craft of observation (astrological wayfinding), technology (seafaring on giant ships), and hears lyrics expressing relational stories (e.g., "we tell the stories of our elders in a never-ending chain"). Upon seeing the vision, Moana is connected into the storytelling tradition with her ancestors, and thus the meaningfulness of the ships is conveyed. Immediately, she runs from the cave with exuberant joy, shouting "We were voyagers! We were voyagers!" and boisterously asks her grandmother, "Why'd we stop!?" Considerably, with empirical and phenomenological knowledge interwoven with cultural narrative and hypermediated knowledge, Moana's reaction demonstrates how she does not merely *know* the information, she *feels* it. Is it any surprise she runs back to Gramma Tala to learn more? Imagine if people reacted similarly upon hearing about climate change.

A Different Way Forward

As I have discussed, *Moana* centers mythoi as a key notation from which the production of meaning occurs. Through such meaningfulness, environmental harm emerges as a betrayal of the earth mother. As might be inferred by the Realm of Monsters, and Maui's thievery and forgiveness, the narrative positions this "betrayal" with aspects of enclosure, industrialism, colonialism, commodification, and neo-imperial capitalism. Likewise, the film utilizes mythoi to frame the solutions to environmental harm as the reconciliation of a wounded relationship, and demonstrates its broad empowering efficacy in granting even a young child the agency to enact change. All of this said, however, *Moana* makes a point to convey that storytelling alone is not sufficient to solving the challenges of ecological crisis. Rather, the film turns the prospect of "reconciliation" even toward the polarization between the cultural and empirical, the emotional and rational, the mythic and scientific, the consumerist and harmonious, the erudite and innocent.

While inquiries of efficacy and motivation are certainly wrought with obfuscating complexities, *Moana* prompts us to consider the possibilities resulting from a seeming "intersubjectivity" between science and culture in regards to environmental questions. Perhaps more people would react similarly to Moana if climatology were permitted to respond to the "*what*" while storywriting, rhetoric, art, philosophy, theology, music, and dance were invited to tackle the "*why*." After all, Rachel Carson didn't help birth the modern environmental movement in the United States by simply listing the ppm of dichlorodiphenyltrichloroethane (DDT), hire a marketing agency to produce commercials of toxic apocalypse, and then refer to anyone who disagreed as "crazy." Instead, with

knowledge of the *what,* she sparked the *why* through an ecophronetic image of industry violently abusing the earth mother. Moreover, this "female scientist without a Ph.D. or an institutional affiliation, known only for her lyrical books on the sea" (Lear, 2002, p. xvii) accomplished something that a chemist (Wickenden, 1955), award-winning journalist (Longgood, 1960), and physician (Bicknell, 1960) were unable to do. Though all four of these authors wrote about the dangers of pesticides, it was precisely Carson (1962) and the activism *Silent Spring* germinated that ultimately influenced the deep ecology, environmental justice, and ecofeminist movements, the eventual U.S. moratorium on DDT, the U.S. environmental movement, and the creation of the U.S. Environmental Protection Agency (see: Hynes, 1989).

While a broad treatise on the philosophy of science is beyond the scope of this project, it is worth highlighting that the reconciliatory ecophronetic framing of science (as seen in *Moana*) calls back to the origins of the scientific method and practice as it emerged as natural philosophy – that is, as an art. It wasn't until 1833 that the term "scientist" was coined as a way to distinguish the practice from philosophy more broadly (see: Snyder, 2011). While the schism and specialization of the "natural philosophies" have certainly allowed for a more discrete study of finer and finer categories of phenomena, it is important to highlight that the giants whose shoulders we stand upon viewed science alongside and with the cultural arts, not against or above them. For that matter, Newton (1687) himself, inventor of calculus, thermodynamics, and who surmised "gravity" from observing apples falling from trees, titled his magnum opus *Philosophiæ Naturalis Principia Mathematica* (i.e., *Mathematical Principles of Natural Philosophy*). This is to say, the framing of science as the art of observation is more a refolding and

reorienting toward whence the practice emerged than a sort of attempt to equate, for example, climatology with amateur astrology.

Such a distinction is key, as Reconciliatory Ecophronesis likewise finds root in the ecosophic works of scientists such as Carson (1962), Naess (1973), and Shiva (2015). This is important to highlight, because framing the earth relationally is well beyond the orientations and attitudes of a few fringe activists. Take for example, the aforementioned speech attributed to Chief Seattle, where he expresses how "all things are connected like the blood which unites our family" (Shiva, 2015, p.1). In comparison is the Gaia hypothesis, which Sagan and Margulis (1993) outline as a framework that perceives the organic and non-organic qualities of the earth "as a single integrated system with properties more akin to systems of physiology than those of physics" (p.352). While written in a different style, the resonance with ancient beliefs is clear (see: p. 354). Yet, "Gaia theory" was formulated by an atmospheric chemist and technological inventor in Britain (p.353) and has been developed in *scientific* literature since the 1960s (p. 353). Consequently, it should be highlighted that this framework is converse to the concerns of scientists such as Sokal and Bricmont (1998) of the "epistemic relativism" of some postmodernists (see: p. xi). Likewise, it emerges as converse to the concerns of certain postmodernist theorists of the "reductionism" and "positivism" of scientists (see: Gehkre, 2009, p.82). Rather than slip into either, Reconciliatory Ecophronesis maintains the role of science in methodologically observing phenomena in the cosmos (i.e., questions of the *what*). It does however, restrain science from the colonization and incursion into ideology and discourse (i.e., questions of the *why*). From such a perspective, one may assert that

anthropogenic climate change is occurring, and all the while embrace the cultural mythoi that move and flow throughout the discursive world.

Several critiques are likely to surface in response to such an intersection. It is easy to imagine a continental philosopher offering a caution regarding how such a relegation of epistemology risks reinstantiating modernist power norms and exclusivity. Similarly, it is easy to imagine an empiricist questioning whether such a perspective would mean referring to the planet as "earth mother" should be considered as *real* as "a planetary body within a heliocentric orbit." These are important critiques, and important debates to be had. However, instead of slipping into disempowering forms of exclusivity and hyper-relativism, ecological phronesis is apt to disavow them as falsities and untruths. For *Moana* in particular, while the protagonist appears to hold a similar interdisciplinary and multivalenced orientation, she is yet able to reject both contrived myths and polemics of exclusivity. Evidencing this, Moana denies Gramma Tala's story-wrought emphasis on having Maui restore the heart, denies Tamatoa's ballad of the strong consuming the weak, denies Chief Tui's musical edict that she should stay on the island, and denies Maui's claim that she is too young to make a difference.

This is all to say, the acceptance of storytelling to generate meaning does not also necessitate the acceptance of every story, nor does the acceptance of empirical observation to make positive claims about the world necessitate the power of the few. Rather, a paradigmatic framework rooted in ecological phronesis would be quick to counter such disempowering tales for their overt violation of ecological axioms. Notably, Shiva (2015) calls out such contrivities herself, saying "Imperialism has always operated

under the pretense of making other cultures civilized while, in fact, destroying other cultures and robbing people of their humanity, diversity, and identity" (p. 97). Similarly, she exhorts us to consider how "imperialist globalization violently imposes the monoculture of greed and consumerism on all societies and calls it 'economic reform'" (p. 101). Needless to say, Vandana Shiva's role as a physicist does not mean she then seeks to reinstantiate power to the erudite few, nor does her role as a feminist open the production of culture to anyone with a soap box – the opposite of both, in fact.

While such an open-ended and dynamic framework seems wrought with unclarified and unsatisfactory delineations, I would turn back to *Moana* for a way forward. Expressly, near the beginning of the film when Chief Tui and Gramma Tala argue over the existence of monsters, the baby Moana stumble-walks to the shore and uses science and story to defeat the monsters waging violence upon the earth. By this I am not merely referring to the birds trying to eat the baby sea turtle, but the monsters of avarice, gluttony, and neoimperial enclosure. It would have been easy for her to ignore the baby sea turtle and acquire the shiny conch. In fact, both her grandmother and father would have likely defended her for it – and ten thousand viewers in online forums. After all, she is a baby, it is natural for raptors to eat turtles, and the conch could have been traded for several turtles. There are countless arguments and rationalities to defend her acquisition of the conch, and nothing but a child's love to explain her saving the turtle.

It is here where *Moana* proffers its brightest gleaming, and where the value of the Reconciliatory Ecophronetic efficacy frame is perhaps best clarified – in the love of a child for nature. Our debates, while important and valuable and needed, are at times best

set aside, not to devalue them or consider them unimportant, but because love is more important, more valuable, and more urgently needed. Rather than sentimentality, I would proffer that this framework invites us to perceive more closely the idea of meaningfulness in regards to efficacy (and especially self-efficacy). When protestors gather under the shadow of coal slurry silos, are they doing it because they want to ensure "green jobs"? When young teenagers choose a vegetarian diet, are they doing it because they want to reduce the parts-per-million of carbon atoms in the atmosphere? When an eleven-year-old convinces his neighborhood friends to stop killing fireflies, is it just "to have fun"? As for myself, while there are countless reasons and rationales that make caring for the earth a good idea, I primarily chose to participate in the above for something much simpler – a love for the mountains, love for animals, and love for the earth.

Beyond my personal motivations, elements of this efficacy frame can be seen and heard throughout the climate change public screen. For example, on 17 November 2018 when thousands of protestors shut down every major bridge in central London over governmental inaction over climate change, they did it to "save mother earth" (Queally, 2018). Likewise, as featured in the photographs of the event, one shows a man is on his knees with arms akimbo and eyes closed, a sign hanging from his neck with the words "save mother earth" (see: Queally, 2018). Similarly, on 30 November 2018 thousands of children marched in Sydney to protest Prime Minister Morrison over his inaction on climate change (CNN.com, 2018). In the midst of what seems to be the latest of a growing number of image events and civil actions, the child protestors held signs with phrases like, "STOP BURNING MY ANCESTORS" and "MOTHER NATURE DOES NOT NEED US! WE NEED MOTHER NATURE" (see: CNN.com, 2018). While such

phrases may not speak to logics of power and neo-imperial consumerism, they speak to the hearts of the impassioned. For those in power, the children had a different kind of sign: “Scott Morrison, you’re so full of shit the toilet is jealous” (see: CNN.com, 2018). Rather than a mere sophomoric banality, this statement illuminates a key aspect about the subjectivity of the child activists. Expressly, these children appear to have little interest in asking scientists to save the planet for them (a la *Happy Feet*) or in focusing on romance while adults struggle with those in power (a la *WALL-E*). Instead, with a dash of parrhesia they stand to the powerful like prophets, doing what so many of us have failed to do – embrace their own efficacy and profess that naked emperors have no clothes.

CHAPTER SIX: A PEACEABLE COMMONS

Mediated stories offer children unique playscapes. Beyond simple entertainment, they contribute to how children texture and scaffold their understandings and feelings and efficacies. Such imaginative tales contribute to the emotional salience children hold for the natural world (Kellert, 2002) and can pass along ecological knowledge as effectively as more didactic educational texts (Ganea, 2011). Moreover, such symbolic encounters "render more tolerable the challenging developmental dilemmas of conflict, need, control, and desire" (Kellert, 2002, p. 125). It might be said that such stories provide a kind of wayfinding and trailblazing to the discursive spaces of the developing mind. Indicative of various efficacy frames, they are like the maps and handbooks we reference in figuring out what things mean, where they can bring us, how we can get there, and who can lead the way onward. When children watch as scientists solve an environmental crisis because a protagonist penguin danced for them, such children might learn something about what is expected of them in the face of environmental crisis. So, too, when they watch a childlike robot pursue romance while the postapocalyptic planet recovers largely on its own. Yet, children might also learn something about their capabilities when they watch a young girl overcome the obstacles of doubting adults, antagonistic monsters, and her own insecurities all so she could heal a broken relationship with the wounded earth.

While more research is needed to ascertain the media effects of these, and other, narratives on childhood perceptions of efficacy, this rhetorical analysis serves as a kind of topographic map of at least three dominant efficacy frames ebbing and flowing in environmental and climate change discourses. Through the children's films *Happy Feet, WALL-E,* and *Moana,* we can gain a glimpse into how efficacy is framed in accordance with Scientistic Messianism, Neoluddic Asceticism, and Reconciliatory Ecophronesis. While all three frameworks center environmental goals, and all three seek a similarly sustainable future, this research has demonstrated how they structure efficacy in vastly different ways, especially for children. For this final chapter, I elaborate further on the ebbing and flowing of the efficacy frames within climate change discourse, discuss potential directions for the climate change movement, reflect on the apparent framings of efficacy in a child-led movement for climate justice, and finally end with the words of children themselves.

Wayfinding

As reviewed at length, *Happy Feet* (Scientistic Messianism) and *WALL-E* (Neoluddic Asceticism) demonstrate converse epistemological, ontological, and praxis orientations. This tends along a schema that proliferates a schism between what might be labeled the scientific, technological, and logical against what might be labeled the cultural, storied, and emotional. However, in spite of these dichotomous presuppositions, *Happy Feet* and *WALL-E* appear to situate their child protagonists with similar subjectivities. To elaborate, both Mumble and WALL-E: (a) are non-human; (b) have some aspect of their voices constrained; (c) have unique nonverbal communication abilities that impress on those around them, yet find their bodies silenced when they

attempt to engage environmental antagonists directly; (d) pine after specific female/feminine figures for romantic relationships; (e) achieve narrative catharsis by obtaining those romantic relationships; (f) and take a more passive role in the narrative closure of their films' environmental crises. As a point of contrast, *Moana* (Reconciliatory Ecophronesis) presents the "scientific" and "cultural" as constituent niches of a more harmonious discursive ecology, functioning together rather than in opposition. In addition, the protagonist is a young girl, has no indication of romantic interest, takes a central role in the narrative closure of her film's environmental crisis, and speaks freely and boldly to positions of power.

Unlike Moana, who finishes her movie as the hero, Mumble and WALL-E are relegated to passivity while adult characters already in positions of power ultimately finish the heroes' journey for them. If a central question in rhetorical studies scholarship is "who gets to speak" (see: Gehrke, 2009, p.165), it can be inferred that *Happy Feet* and *WALL-E* would respond with "not kids." In particular, in *Happy Feet,* Mumble fails to even get near the corporate trawlers overfishing the Antarctic, instead washing up on shore in complete passivity. Similarly, when WALL-E climbs up a trash chute and confronts AUTO, the antagonist simply shocks him to near-death and pushes him back down the trash chute. In stark contrast, the protagonist of *Moana* boldly engages the fiery monster Te Kā, raises her voice to song, returns the "heart" to Te Fiti, and effectively saves the world from environmental catastrophe.

This alignment between direct environmental action and the power to speak resonates with recent research looking at the communication orientation of children

identifying as environmentalists. Specifically, Nelms et al. (2017) found in a survey of children in United States households ($n = 705$) that environmentalist children were significantly more likely than non-environmentalist children to "agree that people should speak up when they disagree with their government ($F = 6.29$, $p < .01$)." Likewise, environmentalist children were significantly more likely than non-environmentalist children to agree that "being good citizens requires that you know about political issues, take action supporting your values, volunteer in your community, and vote in important elections ($F = 12.42$, $p < .001$)." Considering that children identifying as environmentalists view "speaking up" and "taking action" as appropriate civil response, we might ask why environmentalist children's films like *Happy Feet* and *WALL-E* seem to disempower their child-coded protagonists toward silence and inaction, whereas films like *Moana* present an empowering frame.

With this in mind, in the next section I implement a perspective rooted in Reconciliatory Ecophronesis in order to conduct an audit, an evaluation, a hypothesis regarding why our societies have largely failed to respond to the threat of a changing climate. As mentioned, this perspective describes a kind of postcolonial refolding of deep ecology. Subsequently, I augment concepts like colonizer and colonized, hybridity and mimicry, and etcetera, with a more ecologically centered metaphorical framework of ecosystems and biomes. Considering the diffuseness of immateriality, the hybridity of dispotifs, and the ebbing and flowing of multilayered and rhizomatic discourses and assemblages of discourses, it would seem an "ecosystem" offers a richer and more nuanced metaphorical framework than metaphorical concepts rooted in imperialization alone. This charting might thusly be seen in light of recent moves and recommendations

in postcolonial scholarship toward materialist criticism (e.g., Acheraiou, 2001; Parry, 2004). While launching off directly, I would note that several authors have provided detailed navigations of the works of Heidegger, Derrida, Foucault, Latour, Agamben, and Deleuze along similar moves (e.g., Wolfe, 2009; Acheraiou, 2011; Rickert, 2013).

From an *ecophronetic* and *reconciliatory* embarkation, in the next section I explicate how the disempowerment of children in Scientistic Messianism and Neoluddic Asceticism can be explained by the axiomatic divisions of the frames, which leave their paradigmatic niches open to the competitive exclusion (or colonization) of neoliberal ideology. This subsequently results in an oxymoronic praxis and passivity, and thus explains the general struggle of these frames to motivate publics toward climate action. Alongside this, if I may, we may also find a few pebbles in the path, potential wayfinding points in the trail toward climate justice. Here, as a space for reflection on possible implications of my research, I am not seeking to ask "Whose fault is it?" but rather "Why have we failed to motivate the populace?" and "What can we do better?" I believe children are currently, even as of the time of this writing, leading us toward that "better." My hope in this section is to therefore serve as a trail guide, connecting the paths from where we are to where they are, how where they are is qualitatively different, how we might join them in taking hold of our own efficacy in the journey to climate justice and restoring our relationship with the earth.

Musing a Trajectory

As mentioned, neoimperial enclosure leads to the "destruction of diversity and pluralism through the construction of exclusivist identity" (Shiva, 2015, p. 99). So too,

the enclosing iterations of Empire seeks only to divide, isolate, and segregate (Hardt & Negri, 2000, p. 399). Such divisions benefit imperialism (Shiva, 2015). On the other hand, "the complex problems related to climate change can only be addressed through the integration of both social and biophysical components" (Smith & Lindenfeld, 2014, p. 192). Likewise, "well-designed interdisciplinary research is vital if media research is to … ultimately make a difference in the handling of climate change" (Olausson & Berglez, 2014, p. 254). Following this line of thought, the struggle and limitation of Scientistic Messianism and Neoluddic Asceticism in motivating the public toward climate action may thus find explanation in the bifurcation of "science" and "culture" into schism. As I will demonstrate by way of an ecological perspective rooted in Reconciliatory Ecophronesis, the discordance resulting from this schism subsequently permits (or finds difficulty in preventing) the entrenchment and reification of a neoliberal model of agency, which ultimately situates a silencing of voices (and disempowerment) rather than a heralding of voices (and empowerment).

At the outset, however, it is important to highlight that these efficacy frames do not signify "the physical sciences" and "cultural studies" in some perfectly totalizing overlap; rather, they represent a particular set of assumptions around epistemology and how praxis occurs and how praxis is situated to occur. Additionally, as these frameworks do not presuppose a complete dichotomy, elements of one may be encountered alongside elements of the other, even mixed together, with various aspects expressed along varying degrees, and differing from one issue to the next. Finally, I would like to reiterate that my intent here is not to levy criticism upon "empirical" or "critical" paradigms, but to outline a possible rationale for why and how the totalizing exclusion and extirpation of scientific

or cultural ways of knowing appears to result in disempowerment regarding climate change.

The Lordship of Empiricism

Whereas Scientistic Messianism gives preeminence to "objective" realities of science over cultural ways of knowing, it ends in elevating its version of scientists to a kind of secular priesthood, uniquely capable of perceiving "objective reality." Much like Mumble in *Happy Feet,* Children (and the non-expert adult "laity") are thus tasked toward scientism – trusting scientists, petitioning scientists, spreading a gospel of science, and believing that science will produce the technologies that will save them.

It might be said that Scientistic Messianism thus signifies a broadening and colonializing of science, technology, and logic into the realms of culture, mythoi, and affect. In other words, in this framework we see "hyper-objectivism" (and positivism, reductionism, behaviorism) invade and colonize the epistemological and ontological ecosystem with a "lordship" of empiricism. In this way it functions as an invasive non-native species, extirpating mythoi, culture, and affect from their paradigmatic niches, harming discursive biodiversity, and leaving open the paradigmatic biome for the incursion of other invasives. For example, under this framework, the rocks and waters and plants of the earth are "objectively" and "empirically" nothing but unfeeling matter. Since it is "empirically" impossible to directly measure subjective states like suffering, then non-human animals are likewise considered as unfeeling objects. Consequently, with the extirpation of the subjective, the niches of ethics and morality and their stories experience a massive loss of "biodiversity." In place of ten thousand cultural stories,

there remain only a few. In place of broadly connecting empathies and affects, there remains only the psychopathy of "objectivity." Simply put, where once thrived deeply rooted and long developed narrative and cultural arts and practices, their defenses can now simply be swiped aside with the mere mumbled phrase, "it's all subjective anyway."

What remains is the empirical, but to the empirical the earth is but a collection of quarks and gluons. Without subjective ways of knowing to say otherwise, all it takes is for a powerful heuristic to then make a claim for their purpose – like a blight spreading through a population with low genetic diversity. Considering the broad dominance and hegemony of neoliberal capitalism, the claims of capital take hold, and the purpose and meaning of the earth is reduced to a collection of resources, valued only for their ability to produce capital. Their "story" becomes one of acquisition and sales. This becomes "common sense," and any cultural, affectual, or storied claim to the contrary can simply be tossed aside as mere "subjectivities." Consequently, the "ethic" of the planet becomes framed through the "ethic" of business. Whereas sustainable business models seek the perpetual life of a business, we see sustainable "wise use" resource models seeking the perpetual life of the planet. So too, whereas public corporations seek to increase dividends for their (especially wealthy) shareholders, we see wise use conservationism seeking the dividends of human life, human lifestyles, and human enjoyment for (especially wealthy) populations.

For climate change, the most that science can then respond with to this incursion is spoken in measurements, charts, and parts per million. Yet, without the defense of the cultural, affective, and storied arts, there is little to compete against the rhetoric of

neoliberal capitalism. Hence why in Scientistic Messianism what remains of craft is to therefore produce machines capable of more sustainable resource acquisition and use, what remains of action is investing into those technologies, and what remains of hope is to dream for those technologies. Moreover, without epistemological subjectivity, without rhetoric, without poetic imagination, the climate debate is reduced to erudite graphs and mathematical tables. So too, any potential solutions are left to the halls of the ivory tower, locked away from publics and their limbic drives (often by the paywalls of for-profit academic publishers). Additionally, under such an entrenchment of the object, the earth remains a background resource awaiting enclosure and capitalization. Speaking to a central question raised in the opening paragraph of Chapter One, the task of inspiring climate action then becomes reliant on educating the public about greenhouse gas levels in a mathematical language spoken of in parts per million. The framework must then attempt to convince people why they should care about such an abstraction without being able to say something so blatantly subjective as "it's ethically the right thing to do" – along with convincing people to buy more efficient technologies and support research and development of even newer technologies and all so the human population can use the earth's resources more efficiently.

Critical Exclusion

In a likewise bifurcated manner, Neoluddic Asceticism gives preeminence to "subjective" values over scientific ways of knowing, ending in the condemnation of science as a systemic and authoritarian effluence of power from which the public must be emancipated. Much like the protagonist in *WALL-E,* Children (and technology-burdened adults) are thus tasked toward the relational and romantic – returning "back to the land"

toward a pastoral "simple life," fleeing from gross technological advancement, eschewing consumerism, denouncing logics of control, valuing relationships and the relational. However, underlying this is a presuppositional orientation in support of the affective, cultural, and storied against the logical, scientific, and technological.

Within the providence of the subjective, "subjects" necessarily gain primacy over "objects." Without the discursive niches of science to provide insight into what is and is not ontologically true, then ontological truth becomes dependent upon the subjectivities of culture, affect, and mythoi. Subsequently, what is "true" tends to be contingent upon what is "human." For example, Brummet (1976) centers human language as that which "creates the meanings that are reality" (p. 38). Likewise, under the auspices of Neoluddic Asceticism, rocks and waters and plants and ecosystems tend to be considered "subjectively" and "biopolitically" little but a background stage of objects for real subjects with real affects like humanity and their social, sociocultural, political, and economic power dynamics. A trace of this perspective can be seen in Marx, who notes "where there exists a relationship, it exists for me: the animal does not enter into 'relations' with anything, it does not enter into any relation at all" (Tucker, 1978, p. 158). Conversely, beyond the clearly obvious relationship many adults and children share with cats and dogs, the social animals are by their very nature *social* – that's kind of the point. As primatologist Frans de Waal (2009) observes, "primates evolved to be community builders" (p. 198).

By way of an ecological metaphor, it might be said that "hyper-subjectivism" (and relativism) thus extirpates "objectivism" from the epistemological and ontological

ecosystem with the providence of a postmodern entrenching of the subject. In so doing, the framework limits discursive biodiversity, and thus leaves the paradigmatic biome vulnerable to the incursion of other more invasive discourses. Explicatively, with the postmodern dethroning of "objective truth," ontology and epistemology is made more contingent upon the experiences and interrelations of subjects. For example, Brummett (1976) articulates how truth is a product of socio-historical discourse, even claiming that "truth is agreement" (p. 34). Alongside this, the sites and situations best known through affect and empathy gain in importance. Thus, the framework centers a concern for more urgent "subjective" experiences of suffering, alienation, othering, marginalization, disempowerment, disenfranchisement, and so forth. Whereas subjectivity infers relationality, and relationality infers positionality, positionality thusly infers questions of power. Especially considering the discursive colonization wrought by the modern's decentering of the subject, such a postmodern "revolution" and "recentering" of the subject brings new life into the cultural, affective, and storied. However, in extirpating science and its niches of plausibility, verisimilitude, and their assertions, the ontological ecosystem is then ill prepared for an influx of competing ontologies and undergoes competitive exclusion. Briefly, this ecological concept explains how too much competition between species results in "more fit" species out performing "less fit" species to the degree the ecosystem experiences a massive loss of biodiversity (see: Adler, et al. 2007).

Without science to determine what is and is not materially "real," a multiplicity of truths then compete for dominance. With the entrenchment of the subject, those truths considered "more fit" by a particular individual subject then rise to dominance over any

truths considered “less fit.” Hence, recent trends toward preferring agreeable polarized news media over journalistic news, and the relegation of anything disagreeable as “fake news” (see: Marchi, 2012). Where once was deeply-rooted and well-established epistemological and ontological practices to defend against such untruths, their assertions and positive claims can now be simply be swiped aside with a mere, “that’s fake news.” Thus, in place of broadly reliable logics and theories, within this framework there remains only “subjectivity.” Hence, when science declares the “objective truth” of anthropogenic climate change, it is with ease and simplicity for anyone to deny it and in its place offer alternative ideas, and all without offering a modicum of evidence sans their own personal feelings. This too calls back to the central thesis reviewed in Chapter One. For example, prior to his rise to the presidency of the United States, Trump simply disagreed with climatological science, replacing it with a reality where climatologists were antagonists out to con the public and ruin the American economy (see: Cavuto, 2014).

Resonating with this neocolonial and ecological critique, Hardt and Negri (2000) describe how “the primacy of the concept of truth can be a powerful and necessary form of resistance” against imperial mystifications (p.155). Critiquing objective epistemology while under mystification therefore inevitably serves to “aid the mystificatory and repressive powers of the regime” (p.156). For climate change, the paradigms rooted in subjectivism tend to speak in critiques of power (e.g., against non-renewable industries). However, without the defense of the scientific, logical, and technological arts, there is little to compete with the ontological claims of the neocolonial invasives. Hence why in Neoluddic Asceticism what remains of efficacy can be understood as the reification of

such critique. Subsequently, hope within this frame is to dream for a pastoral relationship with the land (in critique of the industrial), technique is for a wise agrarian use of resources (in critique of industrial monocultures and monocropping), and action is to abstain from the "logics" and "technologies" of neoliberal capitalism (in critique of that capitalism). While such postmodern critique may benefit resistance movements with clearly defined boundaries, such as against toxics and mountaintop removal, the massive abstractions and diffusions of climate change tend to problematize this. As Hardt and Negri (2000) caution, "The structures and logics of power in the contemporary world are entirely immune to the 'liberatory' weapons of the postmodernist politics of difference" (p. 144).

Without epistemological objectivity, without empiricism, without material certainty, the truth and reality of anthropogenic climate change can simply be reframed as "fake news." So too, any critiques that are presented against corruption and power can simply be tossed aside as oppositional demagoguery rather than as authentic criticism. Additionally, under such an entrenchment of the subject, the earth remains a background resource awaiting enclosure and capitalization. The task of inspiring climate action then becomes reliant on convincing the populace that anthropogenic climate change is real without being able to say something so blatantly objective as "it's real" – along with convincing people to leave their cities and their technologies and to stop purchasing items and to return to an agrarian lifestyle and all so the human population can use the earth's resources more efficiently. Consequently, the "objective realities" of the earth are reduced to a collection of background resources, valued only for their ability to produce wealth. Their material "essence" thus becomes one of acquisition and sales. This

becomes “common sense,” and any scientific, logical, or technological claims to the contrary can simply be critiqued as a reification of power. While this may provide an emancipating and equipping foundation to those under the thumb of such power, the axiom may itself be colonized, inverting it to benefit of neoliberal capitalism and thereby reifying power (e.g., framing climate change as the con of scientist antagonists out to hurt the American public). For either Scientistic Messianism or Neoluddic Asceticism, to put it simply, if the earth is a collection of resources, what child – or even what adult – would feel motivated to help someone else get rich? What corporate board would feel motivated to reduce their company’s profits? Certainly there must be a better way.

Prior to beginning this research I had a few simple questions: What are we telling children about climate change? What are we exclaiming about who they are in the context of climate and environmental discourse? What are we asking of them? While these questions developed into more appropriately precise forms about framings of efficacy and animated films, these more general forms have served as guideposts to my inquiry. Now, after spending several years investigating these questions, I realize it had never occurred to me to ask the inverse: What are children telling us about climate change? What are they asking of us? Would we respond? Would we even listen?

A Child Shall Lead Them

The world has changed. As DeLuca and Brunner (2017) observe, “technologies transform conditions of possibilities” (p.234). This is no longer a world where children merely watch television programs and movies and have nowhere to talk about it. Instead, this is a world where the internet has made possible “new ways of being – including new

ways of enacting democracy across social media platforms" (p. 234). To that end, the internet has "created possibilities for new forms of social relations, economic practices, knowledge production, and sharing that threaten the assumptions and practices of capitalism" (p. 235). Children can easily talk about animated films while watching them, in real time, with people from around the world (including adults and scientists unaware). Here, they can share their experiences with one another and learn knowledges untaught and unconstrained by the reifications of neoimperial enclosure, knowledges such as "I have a voice" and "we are stronger together" and "another way is possible." For example, for every parent who comments to their children watching *Moana* with criticisms like "What is this hippy crap?," their children can discuss *Moana*, research environmental issues, study climate change, and all while ignoring their parents on the other side of the room. They can even respond by posting satirical images of "out of touch Boomers" with their diverse friends from around the planet, and all in secret and silence a few feet away from their criticizing parents.

In this way, such children transform their own living rooms into sites of resistance and reconciliation. DeLuca and Brunner (2017) describe similar hidden and overlapped virtual spaces as "wild public screens" (p. 233); however, in the context of environmental non-governmental organizations in China, they define these as "full of risk" and "without First Amendment guarantees" (p. 233). The online spaces of which I am speaking are different. Risk is minimized though multiple layers of anonymity, including VPNs (which mask national identity). Moreover, "First Amendment guarantees" are minimal concerns as these spaces are global and diffuse, like motes of a synaptic assemblage. It is here, from one of these diffuse communities, where a global gathering (known as "Earth

Strike") planned the following. Unlike the passivity of Scientistic Messianism (and *Happy Feet*) and Neoluddic Asceticism (and *WALL-E*), the efficacy demonstrated by the child activists is resonate with Reconciliatory Ecophronesis (and *Moana*).

To elaborate, throughout late 2018 and into 2019, hundreds of thousands of children from around the planet began a series a protests, walkouts, strikes, and other direct actions for climate justice. Of particular note, over 35,000 schoolchildren in Belgium chose to skip their classes to march for the climate (Wim Schepens, 2019). In Switzerland, over 20,000 schoolchildren and college students from fifteen cities took to the streets in solidarity (SWI, 2019). Not to be overshadowed, half a world away in Manitoba, Canada, dozens gathered at the steps of their provincial legislature (Billeck, 2019). Many around the world have demonstrated regularly on every Friday since. Joined by adults, multitudes more from myriad places gather and cohere with a singular purpose and idea – to save the planet from climate change. On that, one might wonder: What are they saying? Who are they speaking to? What are they seeking to accomplish? What notions of efficacy coalesce between their online posts and the picket lines? At first glance, these actions appear to utilize civil protest as a methodology to target changes in governmental policy. Thus, to some degree these protests resonate with the efficacy alignment of reform environmentalism (see: Brulle, et al. 2007). It may likewise appear that the children were gathering to do what our societies have often proffered for them – to ask those with power for a dispensation. After all, it is a valuable part of being an active and civilly engaged participant in the democratic process.

The children were certainly speaking up, but it was not to request help. The marchers were not asking leadership to save them from ecological catastrophe, nor were they advocating for green jobs or garnering support and trust for scientists and technological progress. Further, the activists were not performing at the request of a nonprofit organization seeking the viral marketability of a protest that includes children. Instead, it was precisely children who were leading the charge. This was not *Happy Feet* with a crowd of dancing protagonists displacing their cultural stories at the altar of logic and asking experts to save them. Nor was this *WALL-E*, with a white male captain leading the return to a wise use environmentalism and agrarian sentimentality with childlike protagonists mostly along for the ride. To the converse, these assemblies signify the ripples of a deeply ecological reconciliation. They are echoes of what we see in *Moana* – empowerment, diversity, inclusivity, reconciliation, a relational and anthropomorphized framing of the earth, courage to face problems head-on, parrhesia, the prophetic, a focus on solutions, embracing both science and mythoi, and rejecting exclusivity and gluttonous neoimperial enclosure. Such responds to the problematics laid out in Chapter One regarding the challenge to motivate the public to climate action, and demonstrates notable contributions Reconciliatory Ecophronesis can proffer outside this project.

To elaborate, a video of the gathering in Belgium (Wim Schepens, 2019) shows crowds of students holding picket signs in a diversity of languages (e.g., English, French, German, Dutch). Among the messages handwritten in reused cardboard are “Here we are now, planet savers,” and “I hope someday you will join us.” Invitational, inclusive, and diverse, the audience largely inferred by the signs are compatriots to the cause. Purpose

can be seen in other signs, such as "Act before it's too late," "There is no Planet B," and "Let's save our ball, before global warming fucks us all." While tinged with the locus of the irreparable, these statements obfuscate culpability and blame, focusing instead on positions of solution (e.g., "act," "save") and a unified identity (e.g., "us all"). Taken together, the messages signify neither a request to those in authority (like *Happy Feet*), nor a subversive recentering of the antagonist position (like *WALL-E*) – but a rallying cry (like *Moana*).

Intermingled and overlapping with the heralding signage, a few messages served to identify an antagonistic other; however, it is important to highlight that these signs were neither framed as requests, nor satire, nor subversions, but imperative commands. These include: "Stop the climassacre," "*Arrête de niquer ta mer*" [stop fucking/raping the ocean], and "*Arrêtez de niquer notre mère*" [stop fucking/raping our mother]. The use of expletives is especially poignant, especially when juxtaposed with the child activists holding the signs. Moreover, this particular expletive functions to anthropomorphize nature to the degree of framing environmental harm as sexual abuse. To that end, the metaphorical use of "our mother" reifies their relational positionality with the planet, and heightens the affective tone of the imperative command, evoking the ecocentrism, mythoi, and bold empowerment of Reconciliatory Ecophronesis. The orientation of this antagonism is further identified in signs such as "*Neem mijn mening mee in je dikke BMW*" [Take my perspective with you in your fat BMW], "There is no economy on a dead planet," and "*J'ai pas la thune pour aller vivre sur la lune*" [I do not have the money to live on the moon].

While the demonstration signage largely encourages potential members to join, it speaks to the antagonistic position from a place of reprimand. The children rebuke it directly and boldly from a position of power, and move onward (much like Moana resisting the Kakamora, Tamatoa, and Te Kā). The affective tone of their positionality is then reinforced with signs such as "*wij zijn teleurgesteld*" [we are disappointed], which serves to raise the subject position of the children to a point of evaluation and assessment. The calls-to-action for businesses and politicians are commands to stop harming – not requests to create green jobs, nor polemics describing the value of investing into green technology, nor blatant satirical condemnation – but a prophetic rebuke to change – to *reconcile.*

As more recent scholarship has observed, sites of resistance can divert power rather than oppose it (Palczewski & Harr-Lagin, 2017). Resonating with this, the children's climate initiative departs from more melodramatic framings of social movement and resistance. Here there is little tribalistic othering or obtuse mockery of "enemies." Instead of a kind of "rite of the kill" (Scott & Smith, 1969), there is empowered reprimand, sighed disappointment, and proffered rehabilitation. The demonstration thus largely centers environmentalist children to sites of parental authority and agonist adults to sites of juvenile immaturity and mischief. To use the popular aphorism, it flips power on its head. This is similar to how power is flipped in *Moana* when the young girl protagonist expresses disappointment with the demigod Maui for giving up, yet encourages him, and helps him reconcile with Te Fiti – also much like a parent would their own child.

Points of contrast with such efficacy may be seen in an alternative community organizing group known as The People's Climate Movement (PCM). As one of the larger groups working toward climate justice, PCM has organized "hundreds of thousands of climate-minded folks" and has since 2014 (People's Climate Movement, 2019a). From a cursory glance, Earth Strike and PCM appear to share an environmentalist ideology, seek a similar trajectory of mitigating climate change, and largely share similar values. Notably, PCM's "Our Platform" page mentions the need to "prioritize the well-being of people over profit, protect and strengthen front-line communities, mandate racial and cultural equity for those too often left out or left behind" (People's Climate Movement, 2019b). However, perhaps exemplifying their contrasted efficacy frame, PCM follows these items (in plain text) by emphasizing the need to "invest in institutions" with bold text (PeoplesClimate.org, 2019b). In addition, they list the following six strategies: (1) "investing in a 100% clean energy economy that will create millions of new jobs;" (2) ensuring that "communities hardest hit by natural and economic disasters" have "the opportunity to benefit from the billions of public and private investments being made;" (3) prioritizing access to "healthcare, community investments, housing, and job training;" (4) allowing workers the right to unionize in "every new job created;" (5) fight to ensure "every person has clean air to breathe, clean water to drink, and can live in a community and workplace free from environmental degradation;" (6) and that displaced employees should be offered subsidized incomes (People's Climate Movement, 2019b). Overall, the rhetoricity of the PCM platform appears highly aligned toward economic solutions, even to the degree where ensuring a healthy environment is listed fifth out of six goals. These are not "bad" goals; however, as outlined above, resource-based environmentalisms tend

to falter when articulating a rationale as to why people ought to care for the planet. If it needs to be said, this is not the environmentalism of Rachel Carson, nor does it appear to target the causes of climate change directly.

Converse to PCM's resource lens that abandons the storied frames of a wounded earth, the child-led organizing of Earth Strike foregrounds a deeply ecological (and Reconciliatory Ecophronetic) embracing of both the "objective" (e.g., the existence of climate change) and the "subjective" (e.g., framing the earth as our mother, and a being in need of rescue). Similarly, Earth Strike's methodology differs substantially from those of PCM. In addition to the aforementioned "rallying cry" demonstrations throughout 2019, Earth Strike's primary direct action is scheduled to begin in September, 2019. Their calendar describes their motivating platform: "On the anniversary of *Silent Spring*, the book that kick-started the environmentalist movement, we begin our General Strike to Save the Planet!" (Earth Strike, 2019a). This signifies a distinct and qualitative shift from predominate climate action. Further, the placement of the strike on the anniversary of the release of *Silent Spring* signifies the persistence of Rachel Carson's message, as well as a return to her ecofeminist, deep ecology, anthropomorphizing, storied environmentalism of care.

Rather than protests and marches to convince the wealthy and powerful to create green jobs, the community organizing of Earth Strike is precisely for a global general strike of all workers from all industries for as long as they can for as long as it takes, and for the explicit purpose of saving the planet. The rationale for this action is summarized succinctly: "71% of the world's global industrial greenhouse gas emissions come from

just 100 polluters. It is clear by now that the interests of big business do not drive the prosperity of the human race" (Earth Strike, 2019b). In a manner of speaking, such action targets a precise rooting of the imperializing weeds that have caused climate change. As they exclaim:

> Until the world's governments and businesses are held accountable to the people, we are refusing to participate in the system that fills their pockets. There will be no banking, no offices full of employees, no schools full of children, until our demands are met (Earth Strike, 2019b).

Such language is in stark contrast to the economic strategies of The People's Climate Movement. Here, the child-leaders of Earth Strike demand the following:

> (1) An immediate start on global co-operation to reverse the damage done to the Earth's climate, through unambiguous and binding agreements, by both world leaders and corporate entities, following IPCC projections of halving carbon net emissions by 2030 and zero net emissions by 2050;
>
> (2) International, unambiguous and binding commitments to halt the destruction of rainforests and other wildlife habitats;
>
> (3) International, unambiguous and binding agreements designed to hold corporations accountable for the greenhouse gases they produce (Earth Strike, 2019b).

With language that is neither vague nor complex, the child leadership of Earth Strike outline bold steps toward climate justice, and do so with academic precision. Further, such an empowered efficacy appears rooted in an ecological foundation that supports both scientific and cultural ways of knowing, much like *Moana* and Reconciliatory Ecophronesis. In particular, they define and establish material conditions by citing empirical studies by the United Nations "IPCC" Intergovernmental Panel on Climate Change, yet also refer to commitments toward "St. Paul's principles of activism" to texture these conditions with meaning (Earth Strike, 2019b). In a manner resonate with Reconciliatory Ecophronesis, an ecocentric preservationist care is also evident in Earth

Strike's demand for nations and corporations to stop destroying wildlife habitats. This directionality is enhanced in their focus on ecosystems and biomes precisely as the places where "wildlife" dwell (implying an ecocentric perspective that humans are not the only residents of this planet). When compared with the resource-focused environmentalism of the People's Climate Movement, this nuance takes on an even greater clarity, and illuminates the ecological harmony Earth Strike maintains with Rachel Carson.

With this in mind, at the demonstration in Belgium (Wim Schepens, 2019), one of the child-activists is holding a sign with an anthropomorphic earth looking sickly – the text reads, "Help, I'm sick." In contrast with discussions of sustainable resource use, here even the Earth is granted the agency to express its illness and cry out for empathy. Under this framing, the planet is framed not with the *mythoi* of a machine needing to be fixed, nor the *mythoi* of a garden needing to be tended, but with the *mythoi* of an ailing being needing wellness. Such a story-centered and moral immediacy of care further demonstrates what Reconciliatory Ecophronesis augments onto more general poststructuralist and posthumanist critiques of binary oppositions and hierarchies – the embracing of mythoi. This is not in opposition to logos (or empiricism or science), nor pathos (or resistance or criticism), but alongside them in a multiplicity, a hybridity, an ecology, a gathering of empowered demonstrators holding signs with myriad voices.

In such a manner the demonstration challenges the exclusions and extirpations of neoimperial enclosure, and resists the anthropocentric claims of neoliberal capitalism, and offers instead the inclusivity, diversity, and broad framing of efficacy indicative within Reconciliatory Ecophronesis. Consequently, the children's climate initiative might

better be understood as a transgressive "exodus" rather than a "battle" or "war." As Chaput and Hanan (2017) outline, exodus perpetuates a democratic common "that unites people and resources prior to their axiomatic capture and division by capital" (p. 260). Such a common "is defined through the emergent possibilities of collective labor power within a socially shared and valued material ecology" (p.261), and which maintains a commitment "to a transgressive mode of truth telling that even the fluid and flexible logic of neoliberalism cannot contain and manage" (p. 264). The underlying epistemological schema of Earth Strike resonates with such exodus. Much like *Moana,* the paradigm seeks not so much enemies to vanquish but a brokenness to reconcile. Rather than center experts with the expertise to fix the problem, or impassioned leaders fighting for emancipation, there is the widening of efficacy to all ecological members seeking to reconcile and cultivate right relationship. As the focus is upon deep reconciliation and relationship, it inherently resists the enclosures and divisions of neoliberal imperialism. This – if I may borrow a bit of the child activists' temerity – suggests a turning point in climate change praxis, and may shine a light toward a more empowered trajectory for climate activists of all ages and kinds.

In Chapter One I described that regardless of "overwhelming scientific evidence" (see: UNICEF, 2015, p. 9) the conditions of climate action are much broader and more complex. To that end, ours is a media space where audiences tend toward echo-chambers, preferring media that confirms their worldviews while claiming counter-attitudinal media as biased (Arban & Nabi, 2011). If this project were to offer a trajectory for the future, it might therefore be the suggestion that perhaps it is not the best strategy to throw politically-charged erudite messages about parts-per-million toward non-traditionally-

educated loggers and slate miners and then call them idiots when they disagree. Similarly, demonizing scientists and engineers may not be ideal when considering knowledge of climate change relies upon climatology. While it may be beneficial to both hope for sustainable technologies and simplify our lives, the divisions of Scientistic Messianism and Neoluddic Asceticism appear to be precisely aligned with the exclusions and otherings of imperialism.

Conversely, whereas group interrelations and conjecture inform group members as to the appropriateness of member actions (Hogg & Terry, 2000), perhaps climate messaging would benefit from expanding "group membership" around such antagonistic audiences, together with ourselves and the planet through Reconciliatory Ecophronesis. The process of doing this is myriad and full of its own complexities and difficulties; however, with discourses of science and resistance held in an ecological multiplicity together with a story-centered immediacy of care, both children and ourselves might find the paradigms and efficacy that can guide us toward environmental reconciliation and climate justice. This is not to suggest subservience but harmony, not unity but unification. Unity excludes diversity, while unification is an ever ongoing process that seeks order among pluralism, so as to recognize, manage, and sustain diversity (Prost, 2012, p.34). Unity allows for competitive exclusion and invasive heuristics to take root. Unification cultivates the hybridity of the commons, the diversity of the discursive. Unity is a monocrop susceptible to blight and sterility. Unification is an old growth forest, whose fertile soils can birth a thousand new beginnings.

Beyond *Happy Feet, WALL-E,* and *Moana* – and beyond other animated films, school curricula, video games, online videos, advertisements, conversations, and the assemblage of phenomenological, mediated, and hypermediated influences – we can look to the proverbial streets to gain a glimpse of the emergent efficacies cultivating empowerment amongst children. Moreover, in reflecting on such efficacies, we might glean potential directions for adults to find a similar sense of empowerment. This is not to abandon maturity, or embrace ignorance, but to look backwards into the halcyon and attempt an excavation into what we ourselves have abandoned in our path to adulthood. Perhaps they offer something we have lost. Perhaps with their hearts leading the way, together with our knowledge and skills and stories, we can all learn from one another, and set out for a new horizon.

Distant Cairns

I began this study seeking to investigate how climate change mass media tends to construct efficacy frames in regards to children. To that end, I discovered that Scientistic Messianism and Neoluddic Asceticism ultimately reify the divisions that permit imperialized capitalism and its disempowering efficacies to persist. On the other hand, Reconciliatory Ecophronesis demonstrates how a deeply ecological paradigm may offer a pathway toward more empowering axioms, paradigms, and efficacies. I leave this study remembering the stories of my own childhood, the video games where I played as displaced peasants who defeated the monsters and saved their worlds from catastrophe, the narratives of the squirrels and trees in the nearby woods, the tales my mother wove during warm summer evenings. I ponder how those stories may have cultivated my own

fields of efficacy, what other tropes and tales ebb and flow through our discursive spaces, and what stories are possible for tomorrow.

If there might be some distant cairn I could suggest for future research or practice regarding climate efficacy, it would likely resonate with this. If Pezzullo (2001) is correct in suggesting that "rhetorical invention might enable citizens to alter the sequence and meanings of those stories that frame their/our lives" (p. 18), then perhaps it is time to tell better stories. Perhaps it is time for climatologists to invite storytellers and communication scholars to the table. This does not mean after the studies have been completed (as though scholars were to merely replace marketing agencies), but instead to seek interdisciplinary and multidisciplinary teams from the ground up. The possibilities are as wide and varied as ecosystems themselves. Such teams may see scholars of the rhetorics of space and place partner with city planners, poets, and local citizens to research and design empowering, equitable, and environmentally just city spaces. Others may see teenage activists partner with biologists to uncover new strategies for resilience. Others may see artists, priests, and climate scientists hold a vigil for the earth in a city center. With these myriad partnerships are opportunities for innovative and perhaps yet unimagined possibilities for publishing and enacting research. It should be kept in mind, however, that paywalls privilege the wealthy, and both climate research and climate action needs the poor. Such interdisciplinary teams might thus find value in going outside the standardized for-profit publishing model that permits a few entrenched corporations to enclose and colonize academia. Reconciling the schisms in our scholarship will be no easy task. But then again, neither is what many of us ask of farmers and single mothers in regards to climate change.

With this in mind, this project's own methodology resonates with a similar "reconciliatory" multidisciplinary perspective. As mentioned prior, my rhetorical analysis of *Happy Feet, WALL-E,* and *Moana,* as well as the identification and development of the three frameworks (Scientistic Messianism, Neoluddic Asceticism, and Reconciliatory Ecophronesis) was conducted through an iterative process that embraced both deduction and induction. To highlight a possible methodological contribution to the field of rhetoric, this process finds inspiration, in part, in the deductive/inductive hybridity implemented by scientists such as Jane Goodall and Marc Bekoff in the field of ethology (see: Bekoff, 2007). In contrast with behaviorism (which seeks to describe only what is observed), animal ethologists largely accentuate their search for behavioral patterns with empathy, embracing logic, emotion, and morality in a kind of methodological multiplicity (see: Bekoff, 2007). If it needs to be said, children's movies and efficacy frames differ substantially from wolves and their social milieu. Yet, in a manner of speaking, although the precise methods may be as distant as the fields themselves, the "*mythoi*" of the methodologies find harmony. This research consequently offers a transposition of the spirit of ethological research into a rhetorical dialect.

Additionally, in reflecting on this project, it would seem that if there is one thing adults in general might learn from children about efficacy regarding climate change, it might be how to stop doubting ourselves, to stop fearing the unknown, to stop reifying antagonistic enclosures and divisions, to stop asking for permission to change the world. It might be instead to embrace the earth with the absurdities of love, to believe in ourselves and our abilities, to remember what it was like to be heroes and heroines, to rise up and defeat the monsters, to be Moana walking boldly at Te Kā. It means to stop

silencing voices, and to let others speak. It means to allow and encourage others to speak. It means to speak for those who cannot. With these things in mind, it seems fitting, therefore, to give the final words of this dissertation to a child.

To provide context, previously I mentioned a series of child-led climate demonstrations occurring in 2019, and a child-led community organizing group called Earth Strike. Of these, I briefly analyzed the signage appearing in a video of the child demonstration in Belgium. Of the many posters and prophetically reappropriated cardboard, the video (Wim Schepens, 2019) ends by foregrounding a young activist holding a sign that reads, "'We have run out of excuses and we are running out of time' – Greta Thunberg." The person quoted is not a scientist, a scholar, a community organizer, an entrepreneur, an author, an entertainer, or a stateswoman, but rather a fifteen-year-old girl from Sweden who carries the weights of Asperger's, Obsessive Compulsive Disorder, and Selective Mutism (see: Thunberg, 2018a). The quote itself is from a speech she presented to the 2018 United Nations Climate Change Conference (COP24). Here, this child who convinced her parents to eat a vegan diet (The Straits Times, 2018), does not petition the leaders of the world to save her, nor beg them to seek out sustainable technologies, but instead rises to the mantle of the prophetic and with parrhesia speaks truth to power. In this manner she is Moana walking boldly at Te Kā.

Rather than splinter Greta's words with citations or present it piecemeal with interpretive echoes, I momentarily bow to her voice, so that its tone, meter, and rhetoricity is left mostly undiminished. Whereas the genre of academic writing does not (yet) permit nested videos, her prosody, resonance, projection, and other elements of

spoken word are unfortunately left out. These, of course, may be experienced with a simple internet search, as many children are able to do in the quiet corners of mediated virtuality. With that said, the words of Greta Thunberg's (2018b) speech are as follows:

> I'm 15 years old, and I'm from Sweden. I speak on behalf of Climate Justice Now. Many people say that Sweden is just a small country and it doesn't matter what we do. But I've learned that you are never too small to make a difference. And if a few children can get headlines all over the world just by not going to school, then imagine what we could all do together if we really wanted to. But to do that we have to speak clearly, no matter how uncomfortable that may be.
>
> You only speak of a green eternal economic growth because you are too scared of being unpopular. You only talk about moving forward with the same bad ideas that got us into this mess, even when the only sensible thing to do is pull the emergency brake. You are not mature enough to tell it like it is. Even that burden you leave to us children.
>
> But I don't care about being popular. I care about climate justice and the living planet. Our civilization is being sacrificed for the opportunity of a very small number of people to continue making enormous amounts of money. Our biosphere is being sacrificed so that rich people in countries like mine can live in luxury. It is the sufferings of the many which pay for the luxuries of the few.
>
> In the year 2078 I will celebrate my 75th Birthday. If I have children maybe they will spend that day with me. Maybe they will ask me about you. Maybe they will ask why you didn't do anything while there still was time to act. You say you love your children above all else, and yet you are stealing their future in front of their very eyes. Until you start focusing on what needs to be done, rather than what is politically possible, there is no hope. We cannot solve a crisis without treating it as a crisis. We need to keep the fossil fuels in the ground, and we need to focus on equity. If the solutions within the system are so impossible to find then maybe we should change the system itself.
>
> We have not come here to beg world leaders to care. You have ignored us in the past and you will ignore us again. You have run out of excuses and we are running out of time. We have come here to let you know that change is coming whether you like it or not. The real power belongs to the people. Thank you.

To this, the room applauded, thousands of children from around the world began what is now called Earth Strike, and myriad other marches and protests from adults have cited

her. In addition, Greta's charge led to European Commission president Jean-Claude Juncker pledging 25% of the total European Union budget toward mitigating climate change, amounting to roughly €250,000,000,000 over seven years (see: Conley, 2019). As more continues to post and publish seemingly daily at the time of this writing, this is likely only the beginning.

Evident throughout is a framing of efficacy redolent Reconciliatory Ecophronesis. First and foremost, rather than identify the world as a collection of resources needing better management, Greta (or "Thunberg, 2018b") instead expresses care for "the living planet." Alongside this, she uses the scientific term "biosphere," yet speaks of it being "sacrificed." In accordance with the hypothesized theory above, this may indicate her paradigmatic "ecosystem" allows for a hybridity of epistemologies. And from this soil emerges vast fruits of empowerment and efficacy. With post-positive truth in one hand, and empathetic storied realities in the other, this student reprimands the world's leadership, and thereby flips power on its head. Instead of pandering to the antagonistic force that has caused climate change, she calls it out directly.

Yet, Greta does not request the United Nations to save her, or other children, or the planet. Where so many have been silenced, a child leads us to a vision of empowered efficacy. Where so many of us have focused on a praxis of persuasion, of convincing those in power to share that power, of pleading with colonizers to colonize a little nicer, of begging the hyper-rich to make less wealth than possible, Greta flips the script and informs. Similar to *Moana* when the protagonist tells Te Kā "I know who you are" and

returns the Heart of Te Fiti, here Greta holds a mirror up to the world's leadership and attempts to return the heart of democracy.

Likewise, Greta is not some kind of "chosen one" destined to save us. Instead, she "learned" how to "make a difference" from seeing "a few children get headlines all over the world just by not going to school" (Thunberg, 2018b). These "few children" may or may not refer to students who walked out of their classrooms a few months prior to perform the embodied rhetoric of "die ins" on the issue of gun violence (see: Zezima, 2018). Whoever Greta is referring to, it can be gleaned from her reference that efficacy can be learned and shared. On this point, my project returns to where it began on the question as to the framings of efficacy that children encounter in the media. While this has been situated largely from an investigative and analytical standpoint, analogous are questions of education. To that end, in looking closer at efficacy frames directed at children (who have their agency overtly restricted), we might gain insights into pedagogical strategies for children (so as to cultivate a greater sense of empowerment during youth) as well as adults (so as to suture our own adult disempowerment). Perhaps, therefore, an avenue toward motivating leaders and publics to climate action is not found solely in presentations of data, apocalyptic fear narratives, and getting them to trust scientists, but in storied retellings of mythoi from their own cultures about protagonists similar to them who themselves made lasting change. Such a "pedagogy" need not be oppositional or contrived, but reconciliatory and invitational.

To conclude, while future chapters of the climate story have yet to be written, there are many youth are rising to author their own pages. They cannot do this alone. We

are invited to join them. This is not a panacea, but merely one of many obstacles to navigate. Yet, if a child shall lead us toward the peaceable kingdom – or peaceable commons – of our era, it might include a few of these coordinates. Perhaps instead of begging those in power to stop abusing the earth, we can tell them why we are no longer going to let them. Perhaps we can return to that halcyon wonderment that embraces both science and song. Perhaps it is time to embrace our own efficacy, teach others how to embrace theirs, speak for those who cannot speak for themselves, and sing together with the earth for a more egalitarian, ecological, empowered horizon.

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