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Dialectical Reasoning and Developing Responsive Models Toward Political Ecology

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Honors Thesis

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Department: Philosophy, Political Science

Advisor: Patrick Ahern, Ph.D.

April 2021

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Abstract

In this thesis, I seek out the modes of thought that we have developed for making sense of the world and elucidate how the logic of domination and reduction of reason to a calculative tool has led to the climate crisis. Throughout my research, I look for models to overcome mechanized thought and find two useful remedies that will require time and effort to implement: critical self-reflection and storytelling skills. Self-reflection involves dialectically thinking or considering alternative approaches to how we understand the world rather than accepting the standard norms for thinking and using them without question. Storytelling involves the skills of communicating and also of listening to other persons, which include human persons and nonhuman persons like plants and animals. All of this is aimed at implementing a novel form of political ecology – a politics built around ecological intelligences and the democratic deliberations of all persons from all understandings of the world.

Dedicated to my family (that includes the nonhuman members:)

Acknowledgements:

Thank you first and foremost to Dr. Ahern for being such a great mentor and a monumental figure in my academic development. I am still not so sure that without his help I would have ever moved on from the first reading for this project. I have had Dr. Ahern for multiple courses, and he has always been a conscientious teacher and gracious professor.

I'd also like to thank my family. Without the privilege of a space for my work to flourish at home and the support of loved ones, this work would never have been finished. My mom especially had to listen to me foment for months about my ideas, and she always listened to me despite what nonsense I espoused.



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Preface

My honors thesis project started out with the glib conjecture that life is an endless cycle of filling your car with gas and using that gas. While that sentiment does partially capture my frustration with our economic framework, the content of this project was actually precipitated by thoughts I had while commuting home after class a year ago. Swerving between lanes and generally trying to beat rush hour, before ultimately getting caught up in the nightmare of a traffic jam, I started thinking about how much nicer it would be to have good public transit and infrastructure. Why do we put so little value in infrastructure that would not only create jobs, but also clean the smog from our atmosphere? Then, I thought about the people in Los Angeles who notoriously suffer through traffic. There is a general understanding among the electorate that clean and useful infrastructure would be a good investment, so what is holding us back?

A few months later I woke up to a number of texts from my mom who was upset about the death of some baby birds. The mother bird was shrieking, clearly in pain from the loss, and this impacted my mom in a pretty visceral way. I asked her what had happened and apparently the death of these baby birds was brought upon by the beautification of the building my mom worked at – those birds happened to build their nest in a tree near the side of the building, which posed the threat of bird excretions winding up on the window. The boss at this place asked for the nest to be knocked out of the tree so that the building – an accounting wing of a healthcare facility – could remain pretty and pure. My mom's boss came to understand the bird's nest as a nuisance that

interfered with his business's efficiency and reasoned out that the most effective way to progress his work was to get rid of that obstacle.

These anecdotes may seem tangential judging by the title, but the underlying issues at the core of the stories are what I want to address with this project. The false projection of one's own narrow framework for the world onto groups of people so as to mischaracterize or neglect other lives is a widespread phenomenon that, as we will see, is actually encouraged by the institutions we have developed post-Enlightenment. With the climate crisis ramping up in intensity and now an existential countdown clock in New York, people do seem to be noticing the severity of our mistakes after decades of scientists trying to warn us, but is it too late?¹ I do not ask this question as an environmental scientist who wonders if we can reverse the effects of climate change; I ask as a frustrated stakeholder in various communities who recognizes that we have been here before. We are stuck fighting against a system of institutionalized power and money that, as we will see, rears its ugly head every time profits are endangered. This institutionalized power came when asbestos was questioned, it was there when tobacco turned out to be dangerous, and it is here now. I ask if it is too late to unwind the intricate webbing of mechanized thought that a globalized industrial society has trapped us in because without doing that first, the climate crisis is not something we can ever respond to.

Throughout the research process for my project, I had one idea in mind: how can I explain the progression of our exploitation of the environment up to this point? I used this

¹ Moynihan, Colin, "A New York Clock That Told Time Now Tells the Time Remaining," *New York Times*, September 20, 2020, <https://www.nytimes.com/2020/09/20/arts/design/climate-clock-metronome-nyc.html>.

mindset as I read, and I tried to conduct research that answered that question honestly. I utilize the terms objectivity and subjectivity throughout my work - particularly as I set up the philosophical discussion in a few pages - but I will refer to the terms in the Frankfurt tradition, often trying to find a balance between subject and object. Objectivity is commonly understood as having a detached, independent relationship with the given circumstances of a problem, so it cannot be influenced by the context or characteristics of the subject. Typically, objectivity is understood as such when found through a formalized scientific method, or through the research of a social scientist observing the social world without intervening. It is the external, objective world that is constantly changing. Objectivity is touted as the end-all be-all for epistemic endeavors, which has led to the domination of objective reason. Subjectivity is about experience and is colloquially known as biased or partisan reasoning. Subjectivities occur in multitudes and it is easy to understand why. Nobody in the world experiences only one subjectivity – it is more likely that we all experience so many that we simply cannot count them all, and there will never be a perfect way to describe them all (for example, I experience the world as a student, a brother, a son, a friend to my pet companions, a white cis man, et cetera). Subjectivity and objectivity are usually split up, as the domination of objective reasoning leads people to preclude any bit of subjective thought for fear of the discrediting moniker “biased.” However, those familiar with the discourse on these concepts will know that the two are actually meant to work in tandem, per Kant’s famous (or infamous) transcendental idealism. While the idealist model of understanding subject and object is problematic in that it tends to emphasize the ideal over the material (the subjective understanding over objective conditions of the world) it works for mere explanatory

purposes. Ruth Groff, in *Subject and Object*, explains that “otherwise formless sensuous content (i.e. pure object) is rationally synthesized, *a priori*, into unified, spacio-temporally located objects of experience, bound by relations of cause and effect.”² In effect, the pure object is filtered through our consciousness (subjectivity), which is why the two cannot feasibly be separated.

The final term I would like to explain in this prelude is persona, or being as a person. My understanding of having a persona is much more general than the standard, anthropocentric concept. My understanding also transcends the legal definitions of personhood since, in general, personhood is associated with the legal recognition of one’s persona. In this project, I will argue that the recognition of nonhuman plants and animals as persons with developed personas and all the same individuality construed of collective individuals as humans is integral to overcoming the domination of nature and human persons. Extending this concept of what we recognize as a person widens the pool of individuals that must be consulted in deliberative activities, such as policymaking and community building. In this project, “person” will refer to any living thing that is worthy of at least some rights, respect as intrinsically valuable, or otherwise ought to be morally exempt from commodification. This does mean that your family dog is a person, just as the endangered turtles and perpetually poached giraffes of the world are. I am a person, you are a person, Harambe was a person, the iconic redwood trees in California are people, and even the blades of grass in your yard are people. Some thinkers take it further and consider all things - including conventionally understood nonliving abiotic entities – to be “prepositions” or “actants,” but that concept is still out of reach for me theoretically

² Groff Ruth, *Subject and Object*, 149.

and intellectually. I am also unsure of its efficacy, practically speaking, because simply identifying nonhuman living beings as people is lamented as radical or unsound, so for now we will carry on with the assumption that nonhuman plants and animals are to be recognized as persons as human animals are.

With basic terms defined and the stories framed, it is now time to explore how the modes of thought humans have cultivated post-Enlightenment have led us to this social and ecological moment of crisis. With this project, I intend to show how the purported separation of subject and object – ideal and material – by influential thinkers has turned reason into a one-dimensional tool for technological progression. It is this restrictive and narrow use of reason that has engendered the rise of industrial society which, in turn, has transformed humanity into a one-dimensional mass of laborers. Transnational and compartmentalized economic structures have further stripped humans of the ability to experience and share with other persons. In developing responsive models toward political ecology, we can attempt to break the divisions of industrial society and turn back to the local for education and storytelling.

Subject and Object

An examination into how human and industrial society have developed the incessant need to exploit nature and one another will necessarily have to start with a description of how subject and object work together. The two have been the ire of thinkers throughout history because innumerable intellectuals have attempted to disarticulate the two from each other and observe them as unwound, autonomous concepts. Upon this purported separation, philosophers have then built models of thinking that invariably lead to a contradiction or the domination of either objective or subjective reasoning with destructive ramifications. So, as mentioned earlier, it is integral to the discussion of environmental exploitation that we remember subject and object cannot be extricated from one another; the two will always and forever be conjoined through the fluctuation of the objective world and the brain's process of interpreting those fluctuations. The constant tension between the objective world's ever-changing nature and the brain's constant interpreting of the world is what I call the *process of subject and object* in order to keep the concept more accessible.

Kant called this process transcendental idealism, however this idealist model, as mentioned earlier, tends to be undialectical in the ways it emphasizes the subject. The subject and object distinction can be reflected in the ideal and material distinction as well; the material world consists of the objective external conditions of the world, such as environment, sociopolitical, and socioeconomic status while the ideal world exists in abstraction. For an idealist, practical concerns are not as important as the human

perception of the objective world and how that perception relates to the ideals one adheres to. In many ways, subject/object and ideal/material are paralleled because, despite many attempts to do so, the respective pairs cannot be separated. Objective conditions give important context to one's ideals, and vice versa; separating them can lead to absolutist modes of thinking similar to instances where objectivity or subjectivity come to dominate one another. Dominating materialists may raise the redistribution of objective conditions to a value in itself and devolve into authoritarian modes of controlling material. Dominating idealists may raise an idealized ecology as a value in itself and devolve into misanthropic and dangerous conceptions of eco-fascism or varying extremities of the deep ecology movement which fail to see humans as individuals who are indeed part of nature.

Keeping these similarities in mind, let us return to subject and object. These two must be proportioned and reciprocal, which Adorno speaks to when he says, "the two meanings [subject and object] have reciprocal need of each other; one is scarcely to be grasped without the other," because it is through a subjective experience that we understand the objective world.³ The implications of this concept will make themselves clear later on in when analyzing the development of a reified consciousness. Even defining one without the other is impossible, which is why the process they are both apart of is more useful to discuss.

The process of subject and object occurs too quickly for us to ever be aware of, resulting in the elusiveness of the separation of that process into individual parts. The separation cannot be hypostasized, that is, it cannot be thought of in any mode other than

³ Ibid., 151.

in abstraction. The objective world is constantly changing, and our minds keep pace by interpreting the objective world far faster than we can consciously understand.⁴ It is due to this process that humans are unable to actually view the world objectively, despite what traditional wisdom might espouse. We interpret the world through our personal interests, experiences, or other filters subject to our individual existence – all knowledge is a *personalized* knowledge. This is also why the tension between the material and ideal is important. Personalized knowledge has a role in the direction of both material conditions and ideal models of understanding the world. As we will see, objectivity can be manipulated and employed to restrain the questioning of authority – whether that authority is employing it for nefarious purposes or because it is the scientific imperative is rather irrelevant given the results – because ‘objectivity’ is constructed by that authority. Any attempt to separate objectivity and subjectivity is an attempt to separate the human condition, which is why it cannot be done. Let us think about an example of this, but in terms of material and ideal again since cotemporary Western discourse revolves around material conditions and their conceptual implications. Recently concerns about overfishing have entered into the zeitgeist, and for good reason, but critics of the fishing industry fail to think dialectically about the economic dependency of some small-scale ventures or fish-reliant communities. Some fishing communities who rely on fishing for subsistence and economic independence may not be as easily amenable to cutting fish entirely out of their diet – the material conditions of their situation must be considered. At the same time, we cannot romanticize communities that rely on fishing and neglect the ideal of sustainable practices. This is where the tension is integral because

⁴ Ibid., 152.

without tension, people could reject fishing communities as barbaric or romanticize them and effectively make them invulnerable to good-faith criticisms. Rather, I implore people to criticize the actors who have an excess of material resources and understand the virtues of sustainable practices yet neglect to enact them. In this case, the target of criticism for the domination of nature would be the industrial behemoths who scrape the sea floor and cast not even an ephemeral glance to the havoc they wreak upon the Earth.

Humans have created and cultivated systems to understand the world, known as “coercive development” to Adorno, and the separation of objectivity and subjectivity would require reaching back into the frameworks we have always used and separating every subjectivity used to construct that framework from the objective world from which it was perceived – an impossible task that would require not only an omnipotent entity, but an omniscient one with the ability to identify and characterize every subjectivity of historical figures and narratives.⁵ Due to the implausibility of crafting truly “objective” frameworks for understanding the world, emphasis must be given to countering the frameworks that do exist in perpetuity. A tension between modes of thinking so that the dominant framework for understanding must constantly defend itself from alternatives lest it be replaced. Leaning into subjectivities is not bad - it is actually beneficial since each subjectivity can be used to challenge the dominant way of thinking - so long as the tension between subject and object is sustained over time.

Due to the process of subject and object, engaging in scientific discovery cannot be an objective endeavor because our coercive development has relegated any possible faculty capable of viewing situations ‘neutrally’ completely impotent. Since we interpret

⁵ Ibid., 152.

the objective world through our filter too quickly to be conscious of it, every interpretation is imbued with preference, historical experience, and personal bias. Scientific processes are full of value-judgments which are presented as value-neutral, but, whether through purposeful manipulation or unconscious subjective influence, these processes tend to reinforce hegemonic interests. This influence of hegemonic interests can manifest in many ways, but one significant manifestation is in what kinds of questions people ask, and for what reasons people ask those questions. One example lies in the study of economics: The Western economist's idea of objectivity stems largely from a position related to classical economic liberalism and a faith in the power of market forces to correct monetary and societal issues, so when conducting research for public policy this person is working within an atmosphere that values market economics. While raising market freedom itself to the status of a value has its own epistemic problems, I find that a more interesting example of economic questions being skewed by nonobjective values falls in how economists attempt to predict the future fluctuations of market behavior and the economy in general. Market research has a tendency to envisage uncertainty and risk in economic problems as something we can control or mitigate, a phenomenon known as riscophrenia.⁶ Economists then starts to take up research on markets in an environment that self-perpetuates: economists perceive a market that can rectify inaccuracies now while modeling for future scenarios in strictly economic terms that may or may not actually reflect the conditions present in the world. This example is not meant as an indictment of all economists, but merely one example of how established

⁶ Jerónimo Helena Mateus, "Riscophrenia and 'animal spirits': clarifying the notions of risk and uncertainty in environmental problems," *Scientele Studia, São Paulo*, 60.

epistemological processes are created with value judgments that are in fact not objective and cannot account for all people all the time.

Perhaps we should not treat scientific research as objective, but rather present it with the epistemological framework used made clear. Without doing so, Adorno warns that we risk engaging in “antisubjectivist, scientifically objective identitarian thought known as reductionism,” a process of reducing epistemological goals down to the instrumental goals that satiate each party’s self-interests.⁷ To give another example, let us pretend scientists are discussing the production of an Avian Flu vaccine. Due to the institutionalized restrictions of science and each scientist’s subconscious biases, the method of producing such a vaccine is subject to the whims of political, economic, or societal restraints rather than purely scientific ones, and all this without mentioning that scientific frameworks have their own flaws. This must not always undermine scientific discovery, but if a company’s main reason for producing a vaccine is to sell it for profit, then the research put forward will be tinted as questions are asked about how to increase profits rather than questions about the efficacy of said vaccine in producing antibodies and providing immunities. When we put non-epistemic values in the full view of the public, good-faith debates on science (or economics) could ensue without a hegemonic voice touting its “objectively true” authority over research to eclipse all the other ways of finding knowledge that exist. In effect, alternate ways of finding knowledge, of answering questions, or, in keeping with the previous example, of crafting vaccines can be brought to light and deliberations taken up in good faith. What is this hegemonic way of conducting science based on though, and what necessarily makes it illogical?

⁷ Groff, Ruth, *Subject and Object*, 157.

Western metaphysicians have focused on the thinking individual as the existent subject with the ability to rationalize phenomenon around them for centuries. Descartes made this rationalizing famous through the methodical doubt he used to arrive at the (simplified) conclusion “I think, therefore I am.” Descartes’s appeal to existence lies in the fact that he has a mind that is thinking, and that is merely all he knows. He still is unsure of a body containing that mind, or anything outside of that mind save for one other existent thing, which is his idea of god. Through this god, he knows that at least his mind exists. This rationalism is much more consequential than we give it credit for, however, because it set into motion the unprecedented domination of reason and Western civilization that has propagated the insatiable need for technological advancement that continues unabated today. This appeal to a god who has been extracted from any Earthly entanglement causes Western thinkers to look at Earth through the lens of objective rationalism which effectively spurns the epistemologies of other communities. For example, in *Power and Place*, David Wildcat argues that Indigenous ways of understanding the world involve both religious or spiritual customs, and also knowledge gained from experiencing the world, or a “continuum of experience.”⁸ This experience is fundamental to Indigenous epistemologies for, among many reasons, there are portions of the planet where religious experiences exist, and spiritual connection is “emergent from a place,” rather than in “abstract theologies and metaphysical systems.”⁹ For Wildcat, “Descartes initiates a modern tradition of experiential agnosticism – that is, experience as unknowable – in Western thought,” and this is the central issue with separating

⁸ Wildcat, “The Schizophrenic Nature of Western Metaphysics,” *Power and Place: Indian Education in American*, 49.

⁹ *Ibid.*, 49

subjectivity and objectivity: it leads to the view that experience is unknowable and, therefore, unattainable.¹⁰ This is not to say that Indigenous ways of understanding are better or that Indigenous communities are somehow invulnerable to criticism when it comes to environmental ethics. Stereotypes like these are undialectical and cause hegemonic groups to once again view alternative ways of thinking as one-dimensional without the nuances that bring together material and ideal understandings of the world. Rather, Indigenous knowledge is one other mode of knowledge that can provide a tension between it and the dominant mode of thought, creating a dialectical relationship with balances so that the roots of domination have a harder time taking hold.

Descartes is not the only Western thinker who contributes to the idea that experience is inferior to reasoned judgement, because Hume comes to the same conclusion even though he starts from a vastly different place. Again, Wildcat highlights the problem with Western metaphysics when he concludes that “Hume’s thought is fatally flawed by the reduction of experience to impressions of objects and their more vague relations.”¹¹ Both of these Western methods follow a path that culminates in the inability to experience other persons, whether they be human or nonhuman. The harm done by Western metaphysicians lies in the implications their thought processes yield, namely the tendency to dominate and root out alternate modes of thought until the objective world stops being interpreted by people and instead becomes a canvass onto which those engrossed in this dominant mode of thinking project their subjective conceptualizations of the world.

¹⁰ Ibid., 50.

¹¹ Ibid., 51.

The separation of object and subject that I have outlined above culminates here in a projection of that framework for rationalization onto the objective world. In our fear of the world, we tend to rationalize the objective world so extremely that we reduce it into parts that can be manipulated and controlled. We cast each item in the world as it is when we perceive it; we freeze the subjectivities of other persons and lock them out from ourselves. This is what develops a reified consciousness, the idea that we turn subjectivity into a concrete thing rather than an *experiential process*, and lock that process out. Keep in mind the process of subject and object: the objective world is in constant motion, never for a moment resting, and our minds interpret that motion endlessly, without rest. In reification, we render ourselves immobile and preclude any experience of other subjectivities. The mind is then separated from the objective world (*I think, therefore I am*), and “the mind will then usurp the place of something absolutely independent – which it is not; its claim of independence heralds the claim of domination.”¹² The development of a reified consciousness is where the most destructive ideologies of domination set in, and is precisely why Wildcat cites Descartes’s and Hume’s relegation of experience to a realm beyond human understanding as the primary reason for the schizophrenic nature of Western metaphysics. In attempting to understand and experience the objective world, Western metaphysicians have constructed conceptual frameworks that render people incapable of experiencing external existents. Western metaphysics has been transformed into a way of thinking that is contradictory and forces a reckoning called reification.

¹² Groff, Ruth, *Subject and Object*, 152.

Reification prompts us to engage in phenomenism, which itself perpetuates a machine-like mode of thinking that discourages independent thought. Phenomenism is the idea that all knowledge is construed to be attained from material objects, but in reality, it is our own interpretation of sense-data, or the impression an object reflects to our senses. This once again highlights the need to understand the process of subjectivity and objectivity working in tandem. Phenomenism, as Adorno explains, helps the subject bring itself to objectivity and gives the illusion of freedom from objectivity.¹³ In projecting the subject to control the external world, we have “ceased in our era of subjective impotence to pose as absolutization of the subject,” so we are stuck engaging in phenomenism without knowing that we have actually been trafficking in the authoritarian machinations of objective supremacy.¹⁴ No longer are we responsive to the objective world because we are projecting subjective interests onto it that are delineated by a cultural or industrial hegemon (i.e. industrial society’s use of objectivity).

In simpler terms, reification is a reaction to a fear of the objective world that pervaded Enlightenment models of thought. Reification precludes experience from other people or existents, which includes nonhuman natures. This will be a major feature of the next section, but post Enlightenment, reason became a tool, a calculative process through which humans could manipulate the objective world and learn from it to control it. Humans use science to control the wild world in order to live safely. This is by no means all bad – we live in warm homes now, we can develop vaccines for pandemics, we have laptops and phones. It is when we use reason to justify and perpetuate reification that it becomes dangerous, because reason itself is reduced to that aforementioned calculative

¹³ Ibid., 157.

¹⁴ Ibid., 157.

process; there is no dialectical tension between all the uses of reason because there is only one use of reason, and that use fails to consider the material conditions of marginalized persons in the human and nonhuman world.

Reason

The employment of reason as a tool for achieving ends can be fruitful, and this is evidenced by the world we inhabit as a direct consequence of rationalism. I want to stress that despite my ruminations about the negative consequences of reason, especially instrumental reason, it is still a necessary tool for humans. Without it we could hardly live as long as we do, the quality of life globally would be much worse, and who knows if the principle of Mutually Assured Destruction would have stopped any more atomic destruction. However, just as with objectivity and subjectivity, utilizing reason without ever engaging in critical self-reflection is just as dangerous, if not more so, than never having developed rationality at all. Those engaged with the Manhattan project would likely issue the same warning.

In school most students, myself included, are taught that the Enlightenment was an almost utopian state of affairs in which humans overcame the restrictions of the church and embarked on a new journey to self-actualization through reason and science. Perhaps this way of teaching the Enlightenment makes sense given the purpose of schools in the hyper-technological regime we live in, but many thinkers challenge this understanding of the Enlightenment with claims that reason has led to exploitation. Among these thinkers are Horkheimer, Adorno, and Marcuse, whose ideas I will tie to the ecological crisis we face today, much in the same way that they tied their own ideas to rampant violence, war, and the oppression of people.

The first principle of the Enlightenment that Horkheimer and Adorno sought to challenge came in *Dialectic of Enlightenment*, wherein they argue that the Enlightenment sought to disenchant the world, leading to “the human mind, which overcomes superstition, [holding] sway over a disenchanted nature.”¹⁵ Their argument here is that humans used reason not to understand the world better, as we have been taught, but to understand how best to conquer it. This mode of thinking is known as *instrumental reasoning* (also *mechanized* or *calculative* reasoning) and serves as the second component of the psyche that has led to the climate crisis. Science soon became a model for developing new technologies to conquer nature, but technological innovation is problematic as an epistemic value; technology helps create methods for exploitation of nature, and eventually of one another when it gets raised to a value in itself.¹⁶ Most unfortunate is the fact that the Enlightenment, in rationalizing the misuse of technology to conquer the world, also “extinguished any trace of its own self-consciousness,” and thus created a self-perpetuating machine of exploitation.¹⁷ Consider it today with phone companies like Apple or car companies like Ford: both have mastered their respective trades, yet every year they continue to develop and innovate, to put out “this year’s model.” Apple is on the iPhone 11 or 12 by now, while Ford releases a new truck each year. There is no need for this anymore; the iPhone 7 does exactly what is needed for making calls and connecting people; the Ford truck from 2007 still gets people from point A to point B. Why continue? Profit may be one answer, but my answer is simply for innovation’s sake. Again, this is not all bad. For instance, cars are much more eco-

¹⁵ Horkheimer, Max and Theodor Adorno, *Dialectic of Enlightenment*, 4.

¹⁶ *Ibid.*, 4.

¹⁷ *Ibid.*, 4.

friendly today because of innovation, but in those cases the innovation was a tool to achieve a new car model that had other values in mind, namely environmental consciousness. Profit would not come if we, the consumers, were not so enchanted by each new innovation. Now the iPhone tracks you at all times and can be used against you should you decide to engage in illicit affairs, or if you decide to fight for your rights in China, or if you support the opposition leader in Russia, or if you... the slope is slippery for technological innovations.

The Enlightenment has led simultaneously to “the extirpation of animism,” or, in effect, the rights-holding status of inanimate objects and nonhuman persons.¹⁸ Prior to any sort of objectification of human persons, destroying animism set the foundations for the disastrous effects of reification. Remember that reification begins once a person loses their ability to experience other persons. Recognizing another as a moral entity is part of experiencing them; this is the reason why recognition plays such a big role in social movements. Acknowledgement of a problem is the first step to solving it, but without acknowledgement, experience is lost. Horkheimer and Adorno recognize the effects of reification on nature, saying that “on their way toward modern science, human beings have discarded meaning,” virtually guaranteeing the destruction of symbolic and spiritual places.¹⁹ Meaning is replaced by formula, methods, efficiency – tools of calculative reasoning that value commodification and probability (see *riscophrenia*).

Finally, what comes from the Enlightenment is a rationalizing force that has stripped nature of its charm and reinforces itself with a false self-awareness. In this way, the Enlightenment is totalitarian; reason reaches into all crevices of life and

¹⁸ Ibid., 5.

¹⁹ Ibid., 6.

counterarguments to its methods can be rationalized away while those positing the counterarguments are placated with the feeling that they called out the system and it responded.²⁰ This Enlightenment force is summed up by Horkheimer as the eclipse of reason; hegemony utilizes reason as the dominator, the ruler, the authoritarian technocrat, the force unto which no true criticism can be leveled.

Instrumental reason's reign does not end merely at the domination of nature though, because domination and innovation become the ends in a society ruled by reason, even if this is not consciously realized. Industrial society turns what once may have been considered irrational – the exploitation and overconsumption of Earth and the subjugation of humankind – into the only rational step forward. Horkheimer says “domination of nature involves the domination of man,” because he saw this logical next step.²¹ In *Eclipse of Reason*, he outlines the commodification of nature, explaining that nature's structures are seen as messy when they do not correspond to human uses, and argues that “domination becomes internalized for domination's sake,” much like technological innovation becomes internalized for its own sake.²² Consider how corporations – who are largely in control of the world's capital and technology – behave around nature and, by extension, human beings. Fossil fuel companies have sewn into our minds the need for nonrenewable fuel sources and the jobs extracting those sources so much so that we see fields as obstructions to pipelines. In producing an excess of energy for American homes, these companies uproot pristine nature with hefty cultural and social significance to

²⁰ Ibid., 6.

²¹ Horkheimer, Max, *Eclipse of Reason*, 93.

²² Ibid., 93.

Native American communities and do so using violent force if necessary.²³ Industrial society's oppression of nature turns the oppression of those Native groups who value the nature into a rational process that is necessary for bringing oil to everyone else.

Situating the rationality of a system built around Western values and metaphysics follows a similar logical tract as the positioning of objectivity as the universal standard of knowledge. Recall the way hegemonic powers use their understanding of objective truths to dominate the discourse in all disciplines, from the sciences to economics. When those same hegemonic powers, such as international fossil fuel corporations and other such profit-driven organizations with deep ties to the government, set the debate on an issue within their own terms and their own description of what rationality is, then culture becomes dominated by the interests of those powerful, hegemonic entities. Herbert Marcuse called the amalgam of these hegemonic groups the *industrial society*, which is a society driven by technological innovation and the use of technology to enable mass production.²⁴ In an industrial society, mass production serves as the end and human persons and nonhuman persons alike become means, or pawns. Technological rationalism is used to raise efficiency as a value, justifying any means through which efficiency models can be improved. Adorno too was wary of what this meant for people, saying "if the exchange form is the standard social structure, its rationality constitutes people."²⁵ By expanding Adorno's concept of personhood to the one I propose, it becomes clear that validation as a person comes only from the fruits of one's labor or the market value of

²³ Petroski, William, "Report: Military-Style Tactics Used Against Dakota Access Pipeline Protestors," Des Moines Register, May 27, 2017, <https://www.desmoinesregister.com/story/news/politics/2017/05/28/report-military-style-tactics-used-against-dakota-access-pipeline-protesters/351734001/>.

²⁴ Marcuse, Herbert, *One-Dimensional Man*, xli.

²⁵ Groff, Ruth, *Subject and Object*, 154.

one's being exploited. Thus, all pursuits, even epistemological ones, become tainted by the interests of the industrial society and seek validation through commodification. By this, I mean that an epistemological discovery, a material object, and even a person's life derive value through how they can be packaged, manipulated for sale, or otherwise employed in the acquisition of capital and profit.

Technological progression is the centerpiece of the economic apparatus we find ourselves in, with so much adoration for and awe inspired by innovation that we have begun to fetishize technology. The fetishization of technology latches onto our inability to experience other persons and the validation we seek from industrial society to create a culture that propagates exploitation and extraction. Facing the fact of exploitation is much too hard, and the intellectual labor required to reflect critically on our actions can be compartmentalized. Rather than think about the impacts a job we complete might have on the environment, laborers can recline at home and watch a program on television that helps them escape from it all, just enough to get up in the morning and do it all again. Industrial society operates in an atmosphere of *realpolitik*, that is, of practical effects and bottom-line satiation (if such a thing exists) as opposed to precedent, moral philosophy, or ethical constraints. These abstractions are irrational to venture capitalists, who see themselves as cutthroat business operatives in a cutthroat world. And the most effective way to outmaneuver the competition is to have better technology, "willing" "human capital," and principles that need not fret over hypostatization because they crystallize with quarterly reports, projections, and investor confidence (see *riscophrenia*).

Again, technological innovation is necessary and can be a good thing, but when we begin to fetishize technology while simultaneously developing a reified consciousness

and failing to critically self-reflect, we start to dabble in totalitarianism, brutalization, and ecocide. Valorizing means to progression without ever contemplating or criticizing the resulting objective conditions is the path toward ideologies of destruction. In his essay “Education After Auschwitz” Adorno illustrates the consequences of fetishization by examining our relapse into barbarism during the Holocaust. He worries that subjects of industrial society fail to find “where the threshold lies between a rational relationship to technology and the overvaluation that finally leads to the point where one who cleverly devises a train system that brings the victims to Auschwitz as quickly and smoothly as possible forgets what happens to them when they get there.”²⁶ In essence, the person who developed the train systems was blinded by their need to advance the technology of trains and became detached from the context in which the trains were being used; the person who lays the pipe for oil transportation is blinded by the company’s need to use technology to power industry and is detached from the harm caused to sacred land and Native American populations. When technological progress is raised as a value itself, without dialectical thought to counteract, we set a course from the domination of nature (which we seek to overcome as an obstacle to progress) toward the domination of one another. Technology and reification corrupt absolutely.

Industrial society, and by proxy the fetishization of technology, shares a parallel with the Enlightenment as well: both are totalitarian. Totalitarian in this sense does not refer to a malevolent dictator who seeks power, but rather the objectifying effects of industrial society on individuals and nonhegemonic organizations. Critical reasoning skills, which are necessary for emancipation, are reduced to calculative processes for

²⁶ Adorno, Theodor, *Critical Models: Interventions and Catchwords*, 200.

propagating the status quo and totalized by virtue of their employment only for deriving monetary value from something. Similar to the Enlightenment's rationalizing force, industrial society's calculative reasoning structures permeate modes of thinking in all areas of life and absorb criticism through a purported self-awareness. For example of this false self-awareness, an Uber Eats commercial during the super bowl this year espoused platitudes about eating local while saying it would never manipulate consumers with shameless appeals to emotion (i.e., using a cute baby while advocating for local eating) or appeals to celebrity (i.e., employing Cardi B and the Wayne's World stars in the commercial), thereby showing the public that corporations are self-aware of their manipulation and the tropes used to push products. However, they are doing exactly what they said they would not do: manipulating people into purchasing local food by selling their services as a productive and moral imperative during a pandemic. In pretending they are being critical of industrial society's manipulations, they are defending themselves from criticism and even convincing consumers that they, UberEats, share the interests of consumers. Uber Eats is trying to be on our team, not the industry's, yet they utilize the pandemic and moral implications of eating out to sell their services.

Industrial Society is also totalitarianism in the way it decides who can question its practices. Only those who will profit from criticism have the platforms readily available to marshal critiques in effective and broadly appealing ways. The people with those platforms, however, are propped up by the agents of industrial society. Hence, a commercial for Uber Eats can critique industry giants like itself for how they advertise, without fear of losing profit or power. Legislators are free to critique corporations, but the consequences of public shaming could range from the loss of a significant donation base

to facing a well-funded opponent during the next election. As Marcuse says, society used to be antagonistic to the state, but now the two work in tandem while corporate interests can placate individuals with false self-awareness and shallow social justice platitudes.²⁷ The power of the negative - conceptualizations of alternative ways of living and modes of thinking - is integral to keeping dominating powers in check.

The second function of industrial society that creates a totalitarian atmosphere is the encouragement of phenomenalism and commodification over critical thinking. Mechanized reasoning replaces individual thought, and we engage in a phenomenalist-type relationship with technology, believing it can help us make sense of the world when in actuality it acts as an extension of whoever created that technology. Marcuse argues that “the surrender of thought, hope, and fear to the decisions of the powers that be,” is a consequence of industrial society’s imprisonment of independent thought.²⁸ In relinquishing our independent reasoning faculties we accept at face value the campaigns of corporations who claim to be shifting toward greener operations. Greenwashing is a term used to denote a corporation or organization promoting itself as environmentally friendly without actually engaging in environmentally friendly actions or processes.²⁹ This concept is possible because of how reason freezes independent thought in an industrial society; we can either conclude they are indeed shifting to eco-friendly alternatives because they truly care, or because it helps increase revenues, but regardless we, for the most part, take hegemonic organizations at their word. As we will see later, the best way to break the imprisonment of independent thought is critical self-reflection.

²⁷ Marcuse, Herbert, *One-Dimensional Man*, xlv.

²⁸ *Ibid.*, xlv.

²⁹ Barry, John and E. Geene Frankland, *International Encyclopedia of Environmental Politics*, 253.

Finally, the production of needs is the last key to industrial society's totalitarian operations. The best way to keep people doing jobs and simultaneously keeping their concerns private is to instill in them a need for products that they can only purchase through the money they are paid at work. This is the cycle of labor, and it serves as a muzzle on the minds and mouths of laborers. In "The Ontology of Production," David Lachterman identifies the twofold "telos of production," which are the continuous elaboration of new needs and the realization of an agent's own identity as inextricably tied to the products they are told they need.³⁰ Lachterman's insight highlights how industrial society perpetuates itself quite keenly: by tying products to identity, "production not only supplies a material for the need, but it also supplies a need for the material," and ensures a tight control over consumers and laborers alike.³¹ The power of reification is not insignificant here either as it enables consumers to view the products they purchase, as well as the persons in their way, as means to use or obstacles to get through. Reification is perpetuated by the industrial society because it mechanizes our own individual reasoning and cuts down independent thought at the source. Paradoxically, it is also labor that Lachterman identifies as the source of emancipation, but the use of reason for that labor is manipulated and turned into a tool just as laborers are. It is through this quite ingenious arrangement that industrial society can continue exploiting labor, people, and nature without being held to account.

Industrial society totalizes how we think, why we work, how we work, and the ways we use payment from our work. Through the production of needs, laborers accept

³⁰ Lachterman, David, "The Ontology of Production in Marx: The Paradox of Labor and the Enigma of *Praxis*," 6.

³¹ *Ibid.*, 7.

the interests of industrial society as their own, a realignment of interests that Marcuse blames on the culture industry. Realigning our own self-interests and manipulating modes of thought are how industrial society seizes total control. In this economic apparatus, it is irrational to think of any object as intrinsically valuable; it is irrational to eschew monetary gain and savings accounts; even critiquing corporations beyond a certain point becomes irrational. Independence is irrational, unless it parallels corporate visions, and by virtue of that ultimatum it is not true emancipation. This is what I mean by totalitarian.

Industrial society is totalitarian, self-perpetuating, and wholly beholden to hyper-technological production. But in what ways does this relate to the climate crisis. Instrumental reason is the underlying mode of thinking that leads corporations, governments, and individuals to destroy the environment, but it is the totalitarianism of hyper-technological regimes that restrain any counters to the exploitation of Earth. It may have been possible to mitigate most of the dangers of the climate crisis in the 1990s when it first went mainstream to the public, and it likewise may have been possible in the early 2000s with the Al Gore's and John Kerry's of the political scene. Even when the climate crisis was unrecognizable, only alluded to by the prescience of authors like Rachel Carson and Aldo Leopold, political ecology and conservation efforts could have been given credence enough to effect some systematic changes to our production habits. These things never happened though, and not because single individuals will not save us, but because calculative reason has eclipsed the possibility for massive, coalition-building, grass roots movements. Calculative reason has eclipsed reason for any other use. The instrumentalization of reason has led to its being conceptualized as a tool for

technological progression, not for independent thought. The domination of reason has led to the domination of nature and the domination of human people.

Uncritical Models

Industrial society has become so dominant and capitalists so effective at pursuing their interests that laborers and noncapital-owning people have adopted their employers' or company owner's reasoning and mindsets as their own. When I say laborers and noncapital-owning people, I am essentially talking about any person who is not a venture capitalist or otherwise has no stakes in capital or elite corporate business interests. This group of people is the vast majority of the world, consisting of myself and likely anybody who reads this. Laborers are considered means, valued by what they produce for society, but they are also considered means in the way they are divided, their tasks obfuscated. This obfuscation is a phenomenon Marx wrote about as alienation, and one I will examine through the language of compartmentalization. I choose compartmentalization because it elicits images of division, of boxes and compartments that are used to keep specific items separate from one another. The term can be understood in Frantz Fanon's work when he talks about the structures of colonialism, but I will use it to discuss the ways in which industrial society separates people from one another, from their own self-interests, from the environment, and even from time and history.³² Industrial society also utilizes compartmentalized structures to obfuscate liability in legal settings and avoid responsibility. Compartmentalization is problematic in the way it strips people – particularly laborers – of their ability to experience other persons. Industrial society

³² Fanon, Frantz, *The Wretched of the Earth*, 3.

employs a strict principle of compartmentalization that serves two effective purposes: the perpetuation of industrial society and the obstruction and smearing of liability claims.

A self-perpetuating entity is a sufficiently rational one; human self-preservation has been highly regarded as one constant principle throughout our history, and survival to ensure reproduction is how biologists summarize the purpose of nonhuman person's lives. Self-perpetuation of societal constructs necessarily precipitates restraints on questioning that society but doing so without subtlety is ineffectual. In the aforementioned section I discussed the totalitarianism of industrial society, and this totalitarianism exists for the interests of industrial society, among those being its interest in self-preservation. In this section, we will see how the compartmentalization of labor helps keep the technological regime's motors churning.

It seems as though specialization and the industrial revolution were naturally evolved out of the human timeline, an inevitable teleological destination for productivism. Whether or not this is where labor should have ended up is irrelevant because now our workers are indeed specialized. There are those "renaissance" people, the jack-of-all-trades' types, but in professional contexts the typical worker is relegated solely to the position reflected on their paystubs. Then, we find identity in the roles we perform, and the roles start to seep into social and personal life. Marx understood civil society to be "class society in which individuals and social groups are personifications of the categories of capital," which is exactly how we divide ourselves today.³³ This is the first compartmentalization of industrial society: human people are no longer people for

³³ O'Connor, James, *Natural Causes: Essays in Ecological Marxism*, 153.

who they are and how they produce value; they are people solely for how they produce value.

In order to ensure the continued and stable production of value, industrial society has to keep us coming back to work without questioning why work exists when there are no means to ownership of the fruits of said labor. External factors that are unrelated to work influence the productive conditions of labor in ways that “may or may not be compatible with the reproductions of these conditions,” so industrial society must find a way to distract us from those factors.³⁴ This is where Lachterman’s insight is again so useful. He discussed the way production builds a system in which the second a “need is satisfied (which implies the action of satisfying and the acquisition of an instrument), new needs are made,” and requires further acquisition of funds to satisfy the next set of needs.³⁵ Laborers are forced into a self-perpetuating cycle of work and consumption that cannot come to an end, but each of these cycles are individual, that is, our imprisonment in work and consumption is lonely and imperturbable. Again, in *One-Dimensional Man*, Marcuse argues that liberation depends on the consciousness of servitude, but consciousness is “always hampered by the predominance of needs and satisfactions which, to a great extent, have become the individual’s own.”³⁶ As an aside, the loneliness of this cycle is one of the reasons the culture industry is wildly successful. It enables people to connect with the idea of other people while performing the life they wish to project, or finding a “euphoria in unhappiness,” as Marcuse would say.³⁷

³⁴ Ibid., 148.

³⁵ Lachterman, David, “The Ontology of Production in Marx: The Paradox of Labor and the Enigma of *Praxis*,” 6.

³⁶ Marcuse, Herbert, *One-Dimensional Man*, 7.

³⁷ Ibid., 5.

Compartmentalization of labor and restriction of external factors combine to ensure industrial society's dominance over laborers.

The second compartmentalization of industrial society happens in the workplace and its results are compounded onto those of the first compartmentalization: because the laborer has lost any urgency to revolt against their entrapment in the system (focusing on satisfying personal interests instead), they become blind to the impact of their labor on other persons and the environment. First, this happens through alienation. Laborers no longer follow the production of an object all the way through, for they are sat on a production line where they focus on one single task. Assembly line production is compartmentalization; one worker adds the nails, another welds, another adds tires - whatever the job, one person adds their piece onto a larger whole. The digital age takes compartmentalization to another level because now workers can produce massive items without ever leaving their desk to see one another. Work is digitized, monitored, and divided. If a laborer does not know, or care, where the final product goes or what it does, they are blind to their impact on the world. If a laborer at a desk in an office building never happens to step foot on a job site where exploitation occurs, they will be further alienated, knowing the business of their employers only in abstraction. Individualization is emphasized in all we do, and it starts at work. The American Dream requires a car for independent travel, an office space for independent work, a private home with picket fences for independent life, and adherence to corporate dogma for 'independent' thought. Land, too, becomes an abstraction. It is a space, an area to be used and exhausted, verses being a place, as Wildcat mentions, from which power emerges.³⁸

³⁸ Wildcat, "The Schizophrenic Nature of Western Metaphysics," *Power and Place: Indian Education in American*, 49.

Consider the Dakota Access Pipeline. Laborers who lay the pipeline, or those doing the actual extraction of Earthly materials from the Earth, do not experience the entire process. Pipeline constructors dig up Earth, put the apparatus in, and move on (I am simplifying the job, but in effect this is what has been accomplished). Nowhere in the process are they personally extracting oil or gas, carrying it to a car, and burning that fuel. Likewise, this person is not around to see the emissions of that burned fuel, and then cannot follow it into the atmosphere where it contributes to rising temperatures. The person extracting resources is similarly bound to their job *without realizing what happens to those resources* afterward. Notice the parallel to Adorno here: “one who cleverly devises a train system that brings the victims to Auschwitz as quickly and smoothly as possible *forgets about what happens to them* there.”³⁹ Mechanized reasoning compels us to finish our job for the money or the technology without thinking through how the job impacts life.

Perhaps the mutually beneficial relationships built around mechanized reasoning, fetishization, and industrial society are crystallizing now, but for clarity’s sake let us survey the work so far: mechanized reasoning without dialectical reflection encourages reification which in turn allows industry to capture a hegemonic status and subdue the working masses who lose the ability to experience one another. With narrowed interests and the paralysis of laborers, industrial society is free to tear down the environment and consume until it eventually swallows itself up whole.

With the self-perpetuation of industrial society through compartmentalization examined, it would be prudent to explore how corporations and those leading the

³⁹ Adorno, Theodor, *Critical Models: Interventions and Catchwords*, 200.

exploitation of nature slip out of punishment with such ease. They also use compartmentalization as a defense against liability. Corporations are so sprawling and full of intricately moving parts that it can be difficult to pin down exactly where responsibility lies. This is paralleled in the way gaseous emissions behave in the atmosphere; they cannot be traced to a company or person. In separating themselves from the actual destructive labor, venture capitalists are exempt from experiencing the destruction they are the architects of while also exempt from the intellectual labor of dialectically thinking through their actions, and the legal troubles associated with destruction and exploitation. We have seen corporations use this playbook numerous times, and even politicians and political parties are staging insurrections or overthrows in this fashion to reflect any blame once the tables turn. The asbestos, tobacco, lead, and now fossil fuel industries – all willing contributors to the Product Defense Industry (PDI) – avoided penalty while knowingly harming people for decades. Unfortunately, even if legal action is eventually undertaken and successfully punishes the fossil fuel industry for its exploitation and destruction, the methodical thinking processes outlined in the preceding twenty pages will continue on unabated, as will the delayed effects of the climate crises that have yet to reveal themselves.

The PDI is an amalgam of lawyers, think tanks, PR firms, and the like which dedicate themselves to the protection of industry while downplaying the environmental or social impact of those industries.⁴⁰ The PDI is an abstraction, meant to include any group that weaponizes its assets to protect industry interests. The machinations of the PDI include using the compartmentalization of labor and industry apparatuses to dodge legal

⁴⁰ Shearer, Christine, *Kivalina: A Climate Change Story*, 17.

ramifications. For example, in 1989 a federal court prohibited an EPA ban on asbestos, citing insufficient evidence to legally necessitate an outright ban under the Toxic Substances Control Act, despite a decade of research proving the negative health impacts of asbestos.⁴¹ The prohibition followed decades of misinformation campaigns propagated by the asbestos industry, the same way the tobacco industry did, who admitted in an internal memo that “doubt is our product,” not tobacco.⁴²

Due to the difficulty of tracing responsibility, industries often discredit lawsuits “by sowing doubt concerning the intentions of plaintiffs,” and purposefully obfuscating facts to bolster their arguments.⁴³ Laws exist in the mind as much as in textbooks through our “legal consciousness” and “industries have used their influence to reshape our legal consciousness” to serve their own purposes while “conflating corporate freedom with individual freedom.”⁴⁴ In fact, the trails of responsibility are so smeared that when an Indigenous town in Alaska called Kivalina filed suit against twenty-four fossil fuel companies, the companies split themselves into three sub-industries (power, oil, and coal) and filed motions to dismiss individually in an attempt to undermine the lawsuit.⁴⁵ Kivalina, Alaska, which has been deteriorating due to sea level rise and ice melting for decades causing them to relocate elsewhere at the cost of approximately \$400 million dollars (in 2014 USD), was denied legal standing to sue despite a separate court in Connecticut that gave another lawsuit legal standing within the same year. While denying that Kivalina had any legal standing to sue, Judge Sandra Armstrong of the Northern

⁴¹ Ibid., 22.

⁴² Ibid., 28.

⁴³ Ibid., 36.

⁴⁴ Ibid., 36.

⁴⁵ Ibid., 119.

District Court of California argued that “global warming is too ubiquitous to be ‘fairly traceable’ to the defendant’s emissions, as required for legal standing,” effectively stripping Kivalina of its sovereignty and power to protect itself from industrial excesses.⁴⁶

Further court decisions rejected a secondary claim of responsibility of industries who engage in disinformation campaigns based on technicalities which consider liability for communications to fall under a separate entity from the corporation that exploits the Earth itself. These technicalities are ridiculous, and clearly show the favoritism for and influence of industrial society. Emboldening this point is a statistic from 1910 showing that the Supreme Court heard 288 14th amendment cases addressing corporate rights, while hearing only a paltry 19 addressing the rights of Black people in the United States.⁴⁷ Corporations have convinced us and the legal system that they deserve the title of “person” more than humans and nonhuman people do.

Compartmentalized models are uncritical. That is, they reject counterarguments, reflection, and questioning. In fact, they disallow any of it from the outset, crafting a population of laborers who are alienated from their own life’s passions, other laborers, the environment, even time and history. Compartmentalization rejects any notion of historical inequities by looking at people and events in a vacuum. For example, that Judge who took away Kivalina’s legal standing ignored the legal precedent set by the court case in Connecticut, failed to take into account historical brutalization of Indigenous peoples, and overlooked any sense of time that would be pertinent to a community facing the risk of sinking into the ocean. Compartmentalized models

⁴⁶ Ibid., 122.

⁴⁷ Ibid., 38.

encourage reification and mechanized thought, thereby discouraging independent thought and individual freedoms. This is not to say a flee into the wholly individual or environmental is any better; only a mindset that values critical self-reflection will provide a suitable replacement. And, as Horkheimer makes clear, “the sole way of assisting nature is to unshackle [...] independent thought.”⁴⁸ The domination of humans closely follows the domination of nature, and since industrial society dominates through controlling how people think, emancipation can come only from unshackling our thought processes.

Subject and object, instrumental reason, and compartmentalization: all these discussions are necessary to understand the underlying forces of our climate crisis, but none of them certify absolutes. The domination of objectivity does not validate a domination of subjectivity; instrumental reason’s fall from grace is not a stamp of approval to purge it from the collective consciousness; alienation and hyper-individualization should by no means be counterbalanced with a reactionary flee toward collectivism. Rather, the path forward is marked by a constant intellectual struggle between these absolutes, a continuous dialectical game of tug-of-rope in which we fight off reification and purposefully engage in consultative activities that open us up to new experiences. Unshackling independent thought will not happen overnight, however. As I mentioned, the impact of environmental degradation will only intensify in the coming decades, regardless of whether we revolutionize our mechanized capitalistic tendencies or not. About mitigating the climate crisis, I am not so sanguine; but I do have a hope in the revolutionary power of storytelling, of critical self-reflection, and of our untapped ability

⁴⁸ Horkheimer, Max, *Eclipse of Reason*, 127.

to learn from nature around us. There is something idealistic and promising about grassroots movement-building that brings, for me, the abstract and existential dread of the climate crisis to a crystallized focal point defined by hope.

Differentiated Storytelling

Differentiation involves a progression from the one to the many, from simplicity to complexity, or homogenous to heterogenous; it is a model for education and storytelling that could help individuals and collectives reflect critically and work through the dominating ideologies they struggle with. Storytelling is a cultural, social, and even philosophical act in which a person tells a story that has been passed down or that they have personally experienced. Storytelling can be done through many different mediums, but the important part of it lies in the process of exchanging experiences so that listeners may live vicariously through the shared language. Storytelling can be a powerful exercise in reflection, with stories that are both valuable intrinsically but also for the function they can serve. In differentiating, a storyteller can augment the force of their narratives because they can cultivate a wide array of listeners as well as traders who have their own experiences to exchange. To counteract the harm of compartmentalization and mechanized thought, differentiated storytelling is integral. Critical self-reflection in an environment conducive to innumerable epistemologies can help people develop their own critical models and engage in dialectical thinking, while storytelling facilitates the swift exchange of ideas, methods, and, of course, stories.

Let us start with the first step toward a gift economy of stories: differentiated learning. In liberating marginalized epistemologies from the restrictions of objective research, an educational system can encourage interdisciplinarity in studies.

Interdisciplinary study reflects the interconnectedness of the natural world in a striking

fashion. Consider how complex the web of ecology is: forest degradation in Brazil can impact global issues, like soy production in China; nuclear reactor malfunctions in Siberia can decrease the air quality of Western European nations.⁴⁹ If the world functions in this complicated yet beautiful way, why should the focus of our education utilize such a parochial scope? Our emphasis on narrow frameworks for learning and storytelling restrict valuable lessons that are offered freely by entities that cannot mold their stories into those frameworks. Robin Wall Kimmerer argues against the strictness of our epistemological systems, writing about stories from elders who agreed that the trees could speak to one another until “scientists decided long ago that plants were deaf and mute.”⁵⁰ This conclusion by scientists was drawn solely on the notion that a plant “lack[s] the mechanisms that an *animal* uses to speak,” effectively stripping plants of their storytelling power and any potential listeners of the ability to experience that plant and its subjectivity.⁵¹ In acknowledging that a plant has subjectivities, we acknowledge that plants can also be self-interested agents. For example, plants bend toward the sun and although this is a physiological phenomenon it shows that plants have ways of navigating the world. It is the false pretense of objectivity that sets humans on the path to developing a rationality for reification.

An education that works toward fully actualized self-critical skills also serves as the foundation for dismantling the oppressive ideologies that stem from undialectical thought. The patriarchy is one such oppressive regime that benefits from uncritical thought processes, and I will use it as a stand-in for ideologies that employ the logic of

⁴⁹ “The Global Impact of the Amazon Rainforest Fires,” Council on Foreign Relations, November 18, 2019, <https://www.cfr.org/event/global-impact-amazon-rainforest-fires>.

⁵⁰ Kimmerer, Robin Wall, *Braiding Sweetgrass*, 19.

⁵¹ *Ibid.*, 19.

domination to sustain themselves. The patriarchy espouses justifications for the maintenance of relationships built by an oppressor (men) to keep the oppressed (women) in subordination. Oppressive ideologies cultivate three conceptual frameworks that Karen Warren delineates in their logic of domination: value-hierarchical thinking, which validates oppressors who are “up” in the hierarchy; value dualisms or disjunctive pairs, which are essentially arbitrarily determined dichotomies of mutual exclusion with preferential status given to one disjunct by the oppressor (i.e., “reason” vs. “emotion,” in which “reason” is co-opted and preferred by the patriarchy); and the logic of domination, or the method of argumentation that leads to subordination.⁵² Each of these conceptual frameworks is self-perpetuating through the adoption of mechanized thought (see the pattern of all destructive ideologies; they encourage mechanized thought because independent thought is the bane of their survival). Advocates of a self-critical education, like Adorno, would argue that it is through spotlighting conceptual frameworks such as those Warren identifies that the intellectual labor of dialectical thinking can be done.

For Adorno, the “turn to the subject” is an important steppingstone toward combating an undialectical calculative reasoning. In turning to the subject, Adorno seeks an education that involves teaching the methods used by oppressors to allow them to justify their horrendous actions without turning undialectically or wholly over to the subject.⁵³ He believes fundamentally that the “only education that has any sense at all is an education toward critical self-reflection,” a powerful sentiment that, should it form the

⁵² Warren, Karen, “The Power and the Promise of Ecological Feminism,” *Readings in Ecology and Feminist Theology*, 174.

⁵³ Adorno, Theodor, *Critical Models: Interventions and Catchwords*, 192.

underlying philosophy of educational institutions, could ameliorate objective conditions through the deconstruction of oppressive regimes.⁵⁴

These ideologies of oppression are not merely created for the control of other humans, either. They have historically been aimed at “the societally weak,” or marginalized persons and communities who may have developed their own modes of thought that enable collective happiness yet disable effective defenses.⁵⁵ These societally weak include humans, of course, but also virtually every aspect of nonhuman nature one can think of. Those conceptual frameworks Warren mentioned are used to place nature so low on the hierarchy that the beautification of corporate buildings is deemed more important than the fragile lives of yet-unhatched baby birds. Perhaps this is why the ecofeminist movement has reconceived itself, according to Warren, as a “movement to end naturism,” which is the “domination or oppression of nonhuman nature.”⁵⁶ It is quite strikingly poetic to me that the counteragents to oppressive ideologies seek inclusion, not compartmentalization, in the movements they build to overcome mechanized thought. People and ideologies steeped in self-criticism and that encourage reinventions of themselves, like ecofeminism, cannot be eradicated by hyper-technological rationalism because they have overcome the rational to do (what they were taught is) the irrational: broad, diverse, grassroots coalition-building.

Critical self-reflection must be taught or passed down in schools or through storytelling because of the complexity in actually engaging with oneself and the systems within which one lives. It means reflection of practically everything; self-reflection in the

⁵⁴ Ibid., 192.

⁵⁵ Ibid., 192.

⁵⁶ Warren, Karren, “The Power and the Promise of Ecological Feminism,” *Readings in Ecology and Feminist Theology*, 178.

individual sense – perhaps through journaling and thinking through one’s actions and thought processes with a critical lens – and self-reflection in a broad, systematic sense. Combing through the aspects of our lives that seem automatic in order to find what thought processes we have adopted, and then combing through the institutions that exert influence over us and thinking of alternatives to these to build tension. How could my understanding of and relationship to this tree be different if I was not under the influence of a capitalist system that sees efficiency by any means possible as the main value? What would my life look like if I left this bird’s nest alone and put aside the interests of my company because actually having birds outside my window is pleasurable and brightens my mood?

A final aspect of education, possibly the primary reason for Adorno’s faith in it, is the effect it has on mitigating reification. An education of reflection can teach people how to open up their minds and try to experience the world through other subjectivities, rather than engaging with the world in a static way. Adorno’s primary concern is to avoid another Holocaust, but education can go further than that by helping us avoid more ecocidal atrocities, like the purging of forests for timber and bleaching of coral reefs for production. With increasing diligence, we can counteract the habits that seem rational and replace them with less destructive actions based on consultation with nature. According to Horkheimer, “the sole way of assisting nature is to unshackle its seeming opposite, independent thought,” an act that is possible and rational if tension between modes of thinking is always present to challenge the status quo.⁵⁷ To start, we should listen to the lessons already being taught.

⁵⁷ Horkheimer, Max, *Eclipse of Reason*, 127.

Storytelling is such a vital part of overcoming the compartmentalized society we exist in because it can bridge the gap between experiences, opening up alternative avenues to use in order to avoid reification. Storytelling involves more than merely a storyteller and their audience, however. The process of storytelling can be differentiated in order to offer stories to the widest swath of listeners possible and increase the likelihood that an exchange of experiences truly impacts another person's outlook on the world. Storytelling is also a deeply personal process, often requiring us to ruminate on the experiences we hear by ourselves. The work of critical self-reflection mentioned above necessarily involves listening to the stories people tell and fitting them into our conceptual frameworks. The great thing about stories is that they often times do not fit, forcing us to reinvent the patterns of our thought so that they can incorporate a worldview we may never have been exposed to before. The problem facing storytellers, therefore, is not simply finding a willing audience to engage with a story, but also an audience's ability to think independently and critically about how that story shapes their intellectual models.

Walter Benjamin wrote of storytelling as a grand avenue for reinvention, collaboration, and tradition that is sadly being overtaken by information and an unwillingness to deeply ponder what we listen to. Industrial society's dominance over our lives is pervasive and in the aforementioned production of needs, it keeps us working around the clock. When we go home, we try to relax and forget work by escaping to virtual worlds on the TV screen, which then influence our consumption habits and require more hours at work to pay for those habits. Because of this constant cycle, boredom is nearly nonexistent for a majority of us. The grind of work and life forces us to eschew

mental relaxation. Benjamin is worried by our lack of boredom, arguing that “boredom is the apogee of mental relaxation. Boredom is the dream bird that hatches the egg of experience,” and it is through boredom that we truly struggle with the experiences we are exposed to until some form of temporary reconciliation can occur.⁵⁸ Boredom may perhaps be another source of liberation since it can shatter the mechanization of thought imbued by industrial society. The tension then restarts when we listen again, replacing the constant force of industrial society with the constant struggle to grow and experience the world around us.

With our growing disdain or discomfort with the prospect of boredom, Benjamin is worried about the loss of storytelling and, by extension, the inability to experience. On the loss of storytelling, he reflects by mentioning that “it is as if something that seemed inalienable to us, the securest among our possessions, were taken from us; the ability to exchange experiences.”⁵⁹ Humans have been storytellers for our entire history, it is one of the seminal functions of our species. As stories left the oral tradition and official documentation began to take root, however, stories transitioned into information. While stories share tales of the miraculous and store wisdom that can be analyzed at every angle, information has to be short, sweet, and concrete because “it is indispensable for information to sound plausible.”⁶⁰ To me, this is yet another compartmentalization of the human condition; we no longer wish to be bothered with the immersive details of a story, rather we wish for the bullet points to take away from an event which can be parlayed into talking points for an agenda we wish to pursue. The commodification of everything

⁵⁸ Benjamin, Walter, “The Storyteller,” *The Novel: An Anthology of Criticism and Theory, 1900-2000*, 367.

⁵⁹ *Ibid.*, 362.

⁶⁰ *Ibid.*, 365.

begins with the instrumentalization of everything, so stories must be truncated into manageable chunks that can be quickly sold off before the next story hits since, as Benjamin says, the “modern man no longer works at what cannot be abbreviated.”⁶¹ The intellectual labor of dialectal thought is too taxing on the modern, overworked person who wishes simply to find a recess from their undervalued jobs. Mechanized thought is easier, not because of the laziness of people, but because of its aid to their survival.

Storytelling is important for its explanatory prowess as well. When we read statistics in the news of economic recessions or wars across the world, we are unable to understand the true suffering behind those numbers. Information forces us to view events in abstraction; an economic crisis becomes a question of inflation rates and monetary policy instead of focusing on the harm caused to families who cannot afford bread. Information allows us to cut out any consultative work that would allow for alleviation and eventual amelioration. This is another aspect of storytelling that is vital to the success of exchanging experiences. Consultation with various parties involves defining interests and laying out non-epistemic values that may inform each person’s worldviews going into a discussion. It also involves listening in good faith, listening with a purpose, and being conscientious to the values at play and the alternatives that exist which would facilitate compromises. For example, it would be quite easy to look at the jobs lost in a pipeline project that was cancelled and argue that one environmental win has now cost the temporary economic independence of thousands of families whose main source of income would come from that project until it is finished. Likewise, it would be easy to view the economic costs in abstraction, relegating the laborers to the amorphous mass

⁶¹ Ibid., 368.

called “industry” and calling every individual that is a part of that mass evil. The hard work of rumination occurs when one thinks of the alternatives to these two outcomes, because they are by no means mutually exclusive. Perhaps the cancellation of the project could be taken up with a new ecological twist – building safe, energy alternatives that would also provide jobs. Of course, that would entail training the workers, but job training will be necessary to avoid complete and utter climate destruction anyway. Of course, this hypothetical is merely that, but the implications of consultative processes like these are hefty.

Consultation follows a through line Benjamin wrote about closely, which is the concept of storytelling as “having counsel.” For Benjamin, “counsel woven into the fabric of real life is wisdom,” and to have counsel means that one is able to share and experience a story.⁶² One who is receptive to counsel is receptive “only to the extent that he allows his situation to speak.”⁶³ The language Benjamin uses seems to imply that a situation itself can share a message, but only if both parties allow for proper rumination, or an apogee as Benjamin calls it. For storytelling in an ecological world, however, the situation cannot be the only nonhuman existent with the ability and freedom to speak. Nonhuman persons, like plants and animals, must be given proper space for storytelling and the respect of a listening audience who sees it as a duty to receive the nonhuman person’s message and shape their worldviews around it. There will always exist the impossibility of experiencing others in full, but storytelling helps bring in that tension between how one perceives the world and how another does. I may not be able to

⁶² Ibid., 364.

⁶³ Ibid., 364.

completely experience you but listening to you can help me challenge and grow my own ways of understanding the world.

What does it mean to let nonhuman persons speak? Some laugh or mock this concept, but this is another issue to engage with in good faith. An existence of flourishing between all people –humans and nonhuman nature like plants, other animals, and even abiotic systems – will require an exchanging of experiences across borders that Westernized modes of thinking do not recognize as valid or useful. It is integral to our climate crisis though. Oppression and domination are not solely about biopower and labor. They involve suppressing storytellers and thereby suppressing peaceful relations. As Adorno says, “peace is the state of distinctness without domination, with the distinct participating in each other,” and participation exists through storytelling.⁶⁴ What would it look like to let those birds I wrote about in the beginning have a say about their nest being knocked out? I do not mean we should animate birds with human voices or treat them as puppets. My intention is to force a reckoning with our arrogance and violence against nature; would the birds consider their slaughter a worthy cause in the name of beautifying an accounting firm’s outside wall? If there is a tree standing in the way of a potential power line, perhaps the energy company’s policies should include a rumination period on the interests of the tree with proper consultation of specialists who are qualified to listen to the tree. Rather than chopping off its limbs, or the entire tree altogether, what would it look like to ponder the tree’s interests the same way we would another human? Would you attack a person sitting next to you at the library for being in the way of your laptop’s charger and the wall outlet, or would you seek an alternative solution?

⁶⁴ Groff, Ruth, *Subject and Object*, 153.

The ecofeminism Karen Warren writes about incorporates storytelling for four primary reasons, and I find those worth mentioning here because ecofeminism is a great intersectional, interdisciplinary challenge of the totalitarian industrial society. I will likely say it a few more times if I have not already said it enough, but the only appropriate approach to these destructive ideologies is one that seeks broad inclusion and experiences from around the world. Ecofeminism becomes intertwined with environmental ethics and recognizes that oppression begets oppression, so activists using Warren's conceptual frameworks will do the intellectual labor to extend support to other marginalized communities. So, the four reasons she mentions are as follows. First, narrative gives voice to sensitivities that are often lacking in traditional ethical studies which are sensitivities to understanding oneself as "fundamentally 'in relationship with' others, including the nonhuman environment."⁶⁵ This follows the line of thinking of a gift economy, which I will discuss more later, but the essence is that our interactions with other objects and other persons are the foundations for our relationships to ourselves and the world. Understanding ourselves in relationship with others logically forces any dominant ethical discourse, in this case Western discourse, to include different attitudes that are often overlooked, which is the second reason she believes storytelling is vital to an ecofeminist environmental ethic. Narrative also empowers moral agents who find themselves in situations, rather than those situations being imposed on them. Essentially, it is important for all moral agents to have their own voice and ethical meaning that is "emerging out of" their specific situation.⁶⁶ And finally, Warren mentions the

⁶⁵ Warren, Karen, "The Power and the Promise of Ecological Feminism," *Readings in Ecology and Feminist Theology*, 180.

⁶⁶ *Ibid.*, 181.

argumentative significance storytelling can equip moral agents with.⁶⁷ Similar to Benjamin, Warren understands that grounding abstraction through stories can be a powerful tool when trying to exchange experiences.

One can see how Warren's ecofeminism starts to help us make sense of what it means to listen to nonhuman persons speak. She emphasizes a rejection of the "arrogant eye," or a person who engages with other people as a conqueror because this person eschews consultative practices and only instrumentalizes for their own self-interests.⁶⁸ Instead, interactions should incorporate a "loving perception" of the other person.⁶⁹ This perception acknowledges and appreciates that there is a difference between the self and this other object, and in perceiving the other as other, we are expressing "love for one who/which is recognized from the outset as independent, dissimilar, different."⁷⁰ A loving perception of other persons and a care for the stories they tell will appreciate distinctions between persons without using those distinctions to justify the oppression of the other; a recognition of difference sparks mutual respect and curiosity for what the other has to say.

Indigenous lessons are invaluable to an understanding of nature as a willing participant in public discourse, at least they have been for me. *Braiding Sweetgrass* in particular, a book authored by Robin Wall Kimmerer, has opened my eyes up to the possibilities and the practicality of engaging fully with the natural world. Her stories connect to the idea of places through which meaning is derived when she recalls how "to our people, it [land] was everything: identity, the connection to our ancestors, the home

⁶⁷ Ibid., 181.

⁶⁸ Ibid., 182.

⁶⁹ Ibid., 182.

⁷⁰ Ibid., 182.

of our nonhuman kinfolk, our pharmacy, our library, the source of all that sustained us.”⁷¹ A life wherein nonhuman persons are valued as members of a community animates life to the fullest extent, whereas the alternative has us living in a world full of objects without moral agency and without any perceived self-actualized characteristics. Kimmerer retells the story of the Skywoman, who falls from the sky and is aided by the animals on her way down. She and the animals cultivate a mutually beneficial relationship, creating guides to help future humans construct their lives. The Skywoman’s story ended long ago, but “the plants will tell her story. We need to learn to listen.”⁷² Kimmerer shows me a world where there’s no meaningful distinction between humans and nonhumans; they live in harmony.

Listening to stories from plants inherently reduces the oppressive tendencies I have challenged throughout this project because the act itself is an act of vulnerability and, frankly, silliness. Deeply considering what a nonhuman person would say about one’s actions will feel awkward, and that is okay. This breakdown of arrogance, of colonialist ideology, is exactly what is needed to stem the tides of the climate crisis. As Kimmerer says, plants have “been on the Earth far longer than we have been, and have had time to figure things out.”⁷³ They can teach us by example, so where is the sense in rejecting this wisdom?⁷⁴

One of the lessons plants can teach is how to operate a gift economy. The currency of a gift economy is reciprocity, or a cultivation of relationships stemming from

⁷¹ Kimmerer, Robin Wall, *Braiding Sweetgrass*, 17.

⁷² *Ibid.*, 10.

⁷³ *Ibid.*, 9.

⁷⁴ *Ibid.*, 9.

the giving of a gift to another person.⁷⁵ When a tree gifts a human with an apple, that apple is not free of responsibility, nor is it free to be sold for a profit without undue service to the tree. That would be exploitation, and, without reciprocity, would reflect the placement of the tree into a hierarchy below the human. The gift of a tree's apple comes with the responsibility to care for that tree and treat it with the proper attention that it requires. That also means taking care of the land it calls home. This gift economy is reflective of the question of authorship in storytelling. The world is not given, but observed and fit into one's understanding, but cultivating a relationship with the storyteller creates tension rather than domination. Observing the tree, not to see if it is sprouting apples yet, but to see how it grows and functions is one way of listening to that tree share its stories. And in doing this listening, one can experience life as a listener, free from the need to oppress and subjugate while simultaneously free from the mechanized thought propagated by industrial society. Unlike a hyper-technological regime, the tree has no need to instrumentalize labor or control methods of thinking; trees enter into relationship with us bearing a loving perception and simply ask for the same in return.

One thought provoking section in *Braiding Sweetgrass* starts with a contemplation of hunting licenses and laws. Hunting sanctioned by the US government has rules and penalties delineated by human legislators, but nonhuman persons have rules too: the rules of "Mother Nature."⁷⁶ The providers in this situation (i.e., the hunted persons) are in control because if their rules are broken, they will stop reproducing. This will harm human persons more than the natural world in the long run. Knowing this, one can imagine plants and animals saying, "if you follow these rules, we will continue to

⁷⁵ Ibid., 28.

⁷⁶ Ibid., 184.

give our lives so that you may live,” and the penalties for breaking nature’s rules are not paltry fees; the penalties include the destruction of a source of nourishment and potential for a loving relationship.⁷⁷ Nature is not antithetical to humans, after all; they are one in the same. Historically, Western science has viewed interspecies interactions negatively, and we have justified setting “human beings outside of ‘nature,’” but this is purely nonsensical when broken out of a Western rationalist context.

This is not to say that learning from plants will end ideologies of domination. Likewise, I am not advocating that people learn an Indigenous way of understanding, because that too is one-dimensional. As mentioned earlier, stereotyping Indigenous communities in any way reduces their experiences both as stewards of the natural world, and as exploiters of it. Rather, I advocate for examining and adopting what works, while maintaining the constant tension throughout every new way of understanding the world. A plant’s understanding, an Indigenous understanding, a capitalist understanding, while all have good and bad ways of experiencing the world, are imperfect and not entirely transferable. Dialectical modes of thinking are necessary. It is about building responsive models for ecological living, models that change and grow as we learn from the world and the people in it. Responsive models, much like the process of subject and object, never stagnate; they shift, reorient, reconceive, break down, and rebuild perpetually.

Recognizing the personhood of all living entities would instill a respect for the body of the other. Rather than taking from plants as if they had no autonomy, humans could focus locally and consume only what they need. A local focus helps bring a gift economy to a focal point because relationships built within a community preclude

⁷⁷ Ibid., 184.

exploitation and mass production. A focus on profiteering and assembly lines alienates workers and owners of capital to the point where nonhuman persons are no longer seen as persons, and no longer heard as storytellers. This does not mean global connections are bad. In fact, global movements and cooperation of grassroots networks, such as Blockadia efforts which I will discuss later, are necessary for combatting ideologies of destruction and exploitation. Storytelling is meant to connect us to our immediate surroundings in a way that instrumental reason and labor corrupt. The primacy of other persons is what makes exchanging stories viable. The next time you are around nonhuman nature, think about what it would mean to listen attentively. Consider how your actions impact animals and plants – and even abiotic entities – the same way they would another human. It is not as radical as it may seem; the stories we tell in fantastical settings already consider talking to plants and animals, we just have to bring those into the collective consciousness.

Critical Political Ecology

The previous fifty pages can seem fairly abstract without any applicability to the real world, and that is where the work of critical political ecology comes in. Political ecology is traditionally a social science-heavy field, but I wish to redefine it with the ‘critical’ component because the field must be critical of itself to work through the subjugation of the environment hitherto. Political ecology is an interdisciplinary field that works to understand the relationships between political, economic, and social structures and the environment, and what often occurs is a separation of the ‘human-induced’ structures from the ‘nonhuman-induced’ (i.e., politics is not natural, economics can be extracted from environmental questions fundamentally, et cetera). As we have discussed, human and nonhuman entities are interconnected and cannot be separated, so studying the two must go hand-in-hand.

Political ecologists want to model governance based on traditional nonhuman natures and cut capitalism “at its roots.”⁷⁸ This is a concept that actually has currency in the academic world already, but at smaller scales. Paleontologists, for example, find value in their work for many reasons, but one is that the study of older - possibly unknown - species can help engineers develop new prosthetics or mechanisms for machinery like planes. Since making models based on previous species of animals is an accepted function in scientific inquiries, there is nothing to stop that same conceptual understanding of modeling from crossing over into political endeavors. Dimitrios

⁷⁸ Roussopoulos, Dimitrios, *Political Ecology: System Change, Not Climate Change*, 19.

Roussopoulos argues we can “redesign civilization based on ecological intelligence and need over greed,” which would require the cooperation of academics in social and natural scientific disciplines (i.e., economists, sociologists, geophysicists, biologists, etc.) as well as professionals like farmers who work and experience nature in other interesting ways. Ecological intelligence involves engaging with and listening to ecological systems that sustain eco-communities with tension and balance while crafting our governmental and economic systems to reflect those.

However, to be truly critical, a political ecology based on ecological intelligence must also consider the ways in which ecological intelligence could be detrimental to standard social norms. Ecologies still have food chains and pretending that humans can simply immerse themselves into the nonhuman world would be something akin to a neo-Malthusian solution. Constant tension must always exist, but right now there is no tension. Capitalism and industrial society have totalized thought processes and how we understand the natures around us, while also totalizing our responses or critiques. For example, some energy giants like Bob Murray will engage in frivolous lawsuits that are meant to silence critics through prohibitively expensive legal fees and years of being tied up in courtrooms over “slander” or “libel.”⁷⁹ These suits are called Strategic Lawsuits Against Public Participation, or SLAPP suits, and the goal is not to win a court victory, but to discourage average people or communities from speaking out against exploitative companies, like the coal company Bob Murray owns.⁸⁰ These weapons of totalization necessitate the first step in working toward a responsive political ecology that provides

⁷⁹ “Slapped: A Tool for Activists,” American Civil Liberties Union, May 15, 2014, <https://www.acluohio.org/slapped>.

⁸⁰ Ibid.

counterbalances to dominant ideologies and hegemons: identifying the system we are trapped in and working through the restraints on progress.

Breaking through industrial society's constraints will require a critical turn back to the local since compartmentalization is such a powerful tool when combined with a globalized economic scheme. Combatting the globalization of human systems is a seemingly impossible task, but it does not mean international relationships have to be completely eradicated. A slogan for movements based on political ecology is "hear the grass growing, think globally, act locally," which encapsulates the primary concern in the turn toward the local.⁸¹ Acting locally while keeping an eye on the global precedents being set can help counteract the uncritical processes of global economic hegemons. Consider how seemingly local environmental variables could impact variables in another part of the world, or global variables in general. For example, ocean currents, which act as "conveyor belts of cold and warm water," transport varying temperatures of water across the globe.⁸² Those varying temperatures can influence how local weather patterns change and keep temperatures from reaching into the extremes.⁸³ Ecological intelligence is guided by a different set of principles than economic liberalism because ecological intelligence intuitively has an understanding of self-criticism by nature of the implicit laws of overconsumption, while economic liberalism is on a never-ending quest to create technology that enables consumption when limits are met. Unsatiated, technologically driven quests of consumption violate ecological intelligence, thus shutting out an

⁸¹ Ibid., 99.

⁸² "How Does the Ocean Affect Climate and Weather on Land?" Ocean Exploration and Research, <https://oceanexplorer.noaa.gov/facts/climate.html>.

⁸³ Ibid.

extremely valuable way of knowing the world that humans are not well adapted to hearing.

Acting locally brings about an emphasis on the community and land ethic, or an eco-cosmopolitanism. Acting locally prompts agents of change to resist and obstruct industrial excess because of an allegiance to the local community they are a part of physically, and the global community they share with every other local community. Developing an ethic that is always cognizant of how an action could play out on the global scale is the move toward political ecology I am advocating for. Aldo Leopold defines an ecological ethic as “a limitation on freedom of action in the struggle for existence,” and a philosophical ethic as one that differentiates social from anti-social conduct.⁸⁴ An ethic involves interdependent persons developing around and being responsive to each other as they come to cooperate and flourish together.⁸⁵ Flourishing involves storytelling, reflection, acceptance of nontraditional parties into a collective deliberating body, and ethical inquiries into limitations on freedoms to things. Freedom to cultivate, exploit, or own property in the Lockean style necessarily involves the ordering of beings onto a hierarchy; a responsive political ecology must develop an ethic that reasonably precludes hierarchization out of respect for its global consequences.

Political ecology must also incorporate local activists, especially Indigenous activists or other marginalized groups who have unique ways of understanding ecology, without Western scientists becoming overly preachy. Scientists who do science in the Western way, or any hegemonic way for that matter, must take up, in good faith, the arguments, experiences, and scientific methods of other stakeholders in a community, or no progress

⁸⁴ Leopold, Aldo, *A Sand County Almanac: With Essays on Conservation From Round River*, 238.

⁸⁵ *Ibid.*, 238.

will ever be made. In acting locally, the ideal is that deliberations on science, policy, and any other items of concern will engage the entire community without excluding voices from those who do not trust experts or do not do science in the Western style or even who do not speak in traditional anthropocentric ways. This could be where the philosopher steps in, as a mediator in deliberations who can remain conscientious to which values are at stake when deciding what information counts as a fact.⁸⁶ A public philosopher who engages critically with a local community to help all stakeholders convey their message while also helping stakeholders cultivate the skills of listening and understanding others who share their experiences will be working toward a responsive political ecology. The philosopher's impact here is significant because this person can act as a facilitator of discourse and storytelling. Unlike the scientists, farmers, economists, and other stakeholders, the philosopher is concerned with the values of those stakeholders and ensuring that all stakeholders in a community are heard, recognized, and present for discussion, at least in an ideal deliberative setting. Of course, this means the philosopher could do the most damage if this person is not reflective and critical of their own predispositions but bringing in the widest pool of stakeholders can help keep everybody in check.

A political ecologist could be anybody in this entire collection of stakeholders: the public philosopher, the expert (although attitudes may differ as to who sees this person as an expert), the citizen, etc. In buying into the idea of a public political ecology, one buys into the idea that facts can indeed be disputed because tension between what is generally accepted as true and what could alternatively be true always exist. I want to get away

⁸⁶ Piso, Zachary (forthcoming). "Public Philosophy, Sustainability, and Environmental Problems."

from the traditional idea of political ecology here because, as mentioned earlier, it has historically been a field dominated by the social sciences. In a responsive and public political ecology, deliberations must include natural sciences too, for these are one of the strongest ways of trying to hear nonhuman persons speak to the public. While not the only way, it is important to try where possible to include all relevant stakeholders all the time.

Listening to various natures in political ecology can be likened to walking a stubborn dog: nonhuman natures, like a stubborn dog, will change course and inadvertently mix up the leash. In using this analogy, I want to emphasize that domination need not exist between a dog and dogwalker, the leash should be used as a way to help guide the dog and keep them safe from the dangers of human institutions like animal control. This analogy is about human animal and nonhuman animal flourishing together, not about humans tethering natures to a leash and controlling them. So, there are a few solutions to solving the tangled leash problem, each with their own drawbacks: take off the leash, force the dog to unwind themselves and straighten course, or roll with the changes and correct yourself. Taking the leash off is dangerous for the dog; they do not comprehend the rationale behind why they were leashed, and (presumably, as far as we can tell) they do not have the foresight to understand that without a leash they could be impounded via animal control, just as the natural world does not respond to human institutions, regardless of how powerful an institution may be. Forcing the dog to unwind and straighten course can be difficult and painful because you may have to use force on an innocent individual who, again, does not understand the merits of the leash-while-walking system. And because we have no effective way of communicating to the dog that

mixing the leash up around your legs is dangerous, forcing the dog to readjust course every time is ineffectual. This relates to creating sea walls to combat sea level rise; sea walls do nothing to change the actions or attitudes that led to sea level rise in the first place. That leaves us with the final option: adjust your own path to align properly with the dog's so that you both can flourish on the walk, even if it takes extra effort on your part. The rationale is quite simple too: you understand why the leash is important and you comprehend what happens when the leash is tangled around your legs. Since these facts are reasonable to you, but cannot be effectively communicated to the dog, the onus is on you to adjust course and let the dog go unobstructed, otherwise all parties are harmed. This example is an analogy for letting nature guide the way while we do our best to create an environment conducive to the flourishing of ourselves and the various natures we cohabit with.

Developing a responsive political ecology will be hard work, and the exact implications of this style of living are still elusive to me. Organizing a community around open deliberations and exploring values that feed one's epistemology will never happen overnight. It takes time, trust, and care, especially as reasonable people in all walks of life become increasingly resolute in their value systems. People have valid reasons for disagreeing on what constitutes a fact, while at the same time people have valid reasons for arguing that another person's valid reasons are invalid. It does not mean that no community will ever be able to compromise, come up with a plan for action, and execute that plan though.

Deliberations on how to reinvent the world may never fully satisfy everyone in practice, but open resistance to hegemonic oppressors is one area where political ecology

can shine exceptionally. Resistance is another framework through which people can understand the objective world, and it is a framework that is incredibly flexible and accessible. Resistance must not necessarily mean violence; resistance can be any instance of a politically, socially, or financially disadvantaged group causing inconveniences for institutionalized exploiters. Inconveniences can range from demonstrations at site-based operations for fossil fuel companies that keep machinery from being used to the drowning out of fascist media by prosocial K-pop stans, and much more.⁸⁷ A responsive political ecology incorporates these localized instances of resistance because they too embody the concept of acting local while remaining cautious to the impacts of a mode of thinking in a global context.

Around the globe, many “regular” communities engage in resistance efforts in a phenomenon that has been termed Blockadia. The term was popularized by Naomi Klein in *This Changes Everything* to refer to groups of, as she says, “regular” people who put their bodies on the line to protect everyone from the exploitative actions taken by corporations.⁸⁸ At the forefront of Blockadia are indigenous communities who often work at the vanguard of resistance movements on behalf of all of us and the Earth. As Professor Joan Martínez-Alier explains, “since the 1990s, communities and organizations from Ecuador to Nigeria and the Philippines and many other countries, oppose coal, oil or gas extraction and burning not only because of local health and livelihood reasons but

⁸⁷ Leong, Dymples, “K-pop ‘Stans’ Unleashed: Hijacking Hashtags for Social Action,” *The Interpreter*, June 25, 2020, <https://www.lowyinstitute.org/the-interpreter/k-pop-stans-unleashed-hijacking-hashtags-social-action>.

⁸⁸ Klein, Naomi, *This Changes Everything: Capitalism vs the Climate*, 294.

also because of the need to keep the ‘unburnable fuels’ in the ground to prevent climate change,” so we all are benefitting from the efforts of a few.⁸⁹

The most interesting thing about Blockadia is that it is not a centralized international organization, but rather an idea that props up action wherever exploitation is occurring. Naomi Klein calls it a “roving transnational conflict zone that is cropping up with increasing frequency and intensity wherever extractive projects are attempting to dig and drill.”⁹⁰ There is no top-down organizational strategy because the focus is on local needs. In fact, many Blockadia protests are not even about global climate change, but rather concern local land, forest, and water rights for communities that rely on these resources.⁹¹ The emphasis on the local is important here because Blockadia efforts are successful in their diversity and interconnectedness. From India to the United States, cooperation among indigenous communities and environmental advocates of various backgrounds augments the practical power behind demonstrations.

While maintaining the local emphasis, large scale community building is also being done to support Blockadia activists. One example is the Blockadia map, which helps activists and researchers conceptualize the impact of their efforts. The map is maintained through the teamwork of researchers at the Autonomous University of Barcelona, Lund University (Sweden), and Universidad del Magdalena (Colombia) and cases reported by the Environmental Justice Atlas.⁹² I like to point this fact out because it shows how

⁸⁹ Professor Joan Martínez-Alier from ICTA-Universitat Autònoma de Barcelona In Rivin, Daria and Alice Owen, “This is Blockadia,” Common Dreams, Resilience, November 17, 2017, <https://www.resilience.org/stories/2017-11-17/this-is-blockadia/>

⁹⁰ Klein, Naomi, *This Changes Everything: Capitalism vs the Climate*, 294.

⁹¹ Rivin, Daria and Alice Owen, “This is Blockadia,” Common Dreams, Resilience, November 17, 2017, <https://www.resilience.org/stories/2017-11-17/this-is-blockadia/>

⁹² Ibid.

interdisciplinary skillsets are valuable in resistance efforts and reflects the varied epistemologies that will always be present in localized efforts to do responsive political ecology. Blockadia shows the significance of resistance efforts that are localized to a region's specific problems with the support of a wider group outside that region if possible. But the reason I talk about Blockadia is also the ways in which it ties into what a responsive political ecology looks like. There is no top-down organizational strategy that is copied and pasted in each area where extraction occurs. Every front in the Blockadia resistance crops up as a response to the domination of local natures by a corporate entity. In this way, Blockadia is flexible and can represent the values of any community that acts in the name of blocking extraction while emphasizing the experiences of local groups first and foremost. By virtue of its malleability, Blockadia and its activists can remain cognizant to the global precedents their actions may set and respond to those when they resist extraction in their own areas.

Another instance of resistance deals with the democratization of power grids, or energy democracy. Rather than touting a green democracy or some other solution that revolves around political organization, energy democracy focuses on the production and use of energy. Through ballot initiatives in municipalities, people can take financial and political power away from fossil fuel corporations and taking back their power grids. Privatized energy and utility companies have merely the bottom line in mind when making decisions, and this bottom-line casts not even an ephemeral glance toward the sustenance of ecology and human societies. An example of this is in Boulder, Colorado, a town that did take back its energy grids. The private energy company, Xcel Energy, was coal-dependent and helped turn Boulder into one of the most carbon intensive cities in the

country.⁹³ Xcel fought any attempts to reimagine the energy production, but Boulder's citizens saw a path forward without coal. They appealed to the Public Utilities Commission of Colorado to implement their plan for divesting from fossil fuels, with Xcel fighting at every turn. Rather than rely on coal, Boulder's citizens are looking to transition to natural gas, solar, wind, and hydroelectric power by 2030, and these four sources would indeed make up the full 100% of their energy needs.⁹⁴ Boulder has set an example for breaking up energy monopolies in municipalities all over the country, but they have no intention of expanding their campaign into a nationalized organization.

Energy democracy is not supposed to be national or international, the same way Blockadia is not national or international. Energy democracies must be responsive to the local energy concerns of their populations. Public operation of the power grid means the citizens who actually use the energy and know where it is needed are in control. This is not a framework that lends itself well to nationalization because a reasonable citizen in Texas, for example, cannot, and should not, be in charge of how energy is produced in South Dakota. Energy democracy, too, is an idea, not a governmental process. There is no single way to do energy democracy, just as there is no one way to do political ecology. The concepts are differentiated, by design, to incorporate the needs to each public. A responsive political ecology will constantly change to keep pace with the objective conditions of the world and the social machinations of those deliberators who enter into discussion with their neighbors. Responsiveness is crucial, and it requires self-reflection and listening during storytelling, as well as the flexibility to incorporate actions of

⁹³ Buxton, Nick, "Empowering Our Future, Boulder, United States," Transnational Institute, December 12, 2016, <https://energy-democracy.net/boulder-colorado-united-states/>.

⁹⁴ Ibid.

resistance if common agreements about what to do next cannot be found. There is always work to be done; it is possible that no solution to the climate crisis will ever be fully enacted by every local community. There will be problems that arise in reorienting one's framework to garner a new understanding of the individual, of the persona. But one thing a critical political ecology can always work toward is the open resistance of reified thought processes. Resisting industrial society's totalizing instruments is a critical political ecology, perhaps the only universal one.

Conclusion

This project was borne of hopelessness in the face of the climate crisis. Over the last year and a half, I have explored many different approaches to this hopelessness: a turn to the amorphous in deep ecology, a turn to the markets in ecocapitalism, a turn to the explicitly violent in ecofascism, and many more. Of all the approaches I have come across, most pretend to have figured out the problems and diagnosed the solutions, which leaves the discourse stagnated. After all this research, it appears that stagnation is the single worst approach because industrial society will never stagnate. Innovation is the vehicle, efficiency the destination; stagnation is a symptom of our entrapment in industrial society's mode of thinking. This is why I believe so much in the critical models Adorno writes about. Settling for one approach to solving the climate crisis will always lead to failure, just as living life through one single perspective is unfulfilling. Diversity and discourse are integral, not just because they incorporate both storytelling and self-reflection, but because they both perpetuate a continued reflection and sharing of experiences for generations. Stagnation no longer becomes the obstacle because people are instead challenged to improve their listening and reflection skills.

If there is a single warning to take away from this project, it is that mechanized thought is dangerous and must be responded to by critically challenging the standard ways of thinking. The traffic jams mentioned in the prelude do not have to be the default way of living; we are free to think up alternatives to challenge that model of transportation. Instead of wiping out bird's nests, setting off bug bombs to rid a house of spiders, or

swatting beehives down with broomsticks, we can conceive of alternate ways to cohabitate with these nonhuman persons. They are part of us, and we are part of them. Developing critical models and working toward responsive political ecology will be difficult, but luckily, we have innumerable ecological intelligences full of individuals willing to teach us their methods for living. We just need to open up to their stories by deconstructing ideologies of domination. The path to human liberation runs through the liberation of nonhuman plants and animals.

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