

4-2019

Ghosts of the Anthropocene

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Ghosts of the Anthropocene;
On the Colonial Present, Play, and Possibilities of Survival

A thesis submitted in partial fulfillment of the requirement
for the degree of Bachelor of Arts in Philosophy from
The College of William and Mary

by

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Accepted for _____
(Honors, High Honors, Highest Honors)

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Table of Contents

<i>Acknowledgments</i>	5
<i>Setting the Stage</i>	7
<i>Philosophy, Bureaucracy, and Violence</i>	12
<i>Substance with Accidents, Metaphysics of Presence</i>	14
<i>Categories, Essences, and Colonial Violence</i>	17
<i>Agrilogistics and Bureaucracy</i>	25
<i>Interlude: Play</i>	30
<i>Ghosts: An Ontology of Play</i>	34
<i>Withdrawnness</i>	36
<i>Stickiness</i>	44
<i>Temporal Polyphony</i>	49
<i>Spectral Vibrancy and an Ontology of Play</i>	53
<i>Tuning</i>	56
<i>Solidarity</i>	68
<i>Taking Things on Their Own Terms</i>	71
<i>Playing the Fool</i>	73
<i>The Open Ending</i>	78
<i>Bibliography</i>	80

Acknowledgments

There are many people to thank for their help in the production of this thesis, human and nonhuman alike. Too many to do justice to here, so I will name only a few.

Firstly, my parents, for their unyielding love and support through everything. I couldn't have done this without you. My advisor, Aaron Griffith, for your patience and guidance through theoretical terrain unfamiliar to us both. To Adela Amaral and Andrea Wright, who taught me so much; your courses and insights opened my critical eye and inspired a passion towards understanding and bettering the messes of the world that I cannot shake off. Thank you. Many thanks also to my comrades across so-called Virginia and the world, who give me hope for a better future. To the forest critters. To the many poets among us.

For the tree huggers and sitters

For Heather Heyer

Setting the Stage

This is a thesis about ghosts. Ghosts, as I engage with them throughout the following pages, are not merely those entities that haunt the fringes of the human psyche; the uncanny encounters that, when they are spoken of, are endlessly qualified with the many different ways there are of saying "I don't believe in ghosts, *but...*" Ghosts, as I will argue, are materially constitutive of the world; they are the chair you sit on, the mass extinction event you are living through; they are the paper you hold in your hands and the thoughts you have as you read these words.

Thinking things as ghosts is inherently tricky. It requires approaches that are at odds with many of the material, political, philosophical, and linguistic structures we are comfortable with. As such, many of the arguments made in this thesis aim to subvert the dominant (material, political, philosophical, ideological) narratives that structure our thought and means of organizing ourselves. It is for this reason that the language and argument structure of the ontology I outline within avoids the well-travelled thoroughfares of much contemporary philosophical discourse, following instead those roadside pathways that meander along deer trails to creekbeds and fallen trees and things that go bump in the night, seeking, through experimentation in language and form, to (re)establish relations with things beyond the human; decentering and unsettling *humankind* and reaching toward new political and philosophical imaginaries in the process. Through this play with language we can begin to catch glimpses of the flickering, shimmering real that bureaucratized philosophies and practices have devoted themselves to sterilizing.

The philosophical works I reference throughout draw mainly from the fledgling camp of speculative realism, particularly the field of *object-oriented ontology* (OOO), whose special

blend of phenomenology and realism, I believe, has the best chance of navigating the many worlds of the Anthropocene.¹ Much theoretical guidance has also come from the field of anthropology, notably the work of Anna Tsing, whose work *The Mushroom at the End of the World* inspired me to pursue a thesis in the first place. The people I've met throughout my participation in political organizing have also greatly influenced my understanding of the world and the arguments I put forward here. Many of the things I learned while researching for this thesis could not have happened without their love and immense knowledge, nor without the lessons in humility that can only be learned through the joys and frustrations of organizing.

This thesis is divided, roughly, into three sections. The first works to conjure the ghosts of colonialism and colonization into view, connecting the metaphysical views that underwrite colonial thought with the immense violence they unleashed and continue to enact in the world. The second seeks to outline an ontology, a belief about the nature of being, that allows for a broader spectrum of the spectral vibrancy of materials to become thinkable; it is an attempt to theorize 'things' as lively, active members of the worlds they inhabit and create; a kind of being in the world I explore through thinking things as ghosts. The third and final section posits some principles of coexistence with these ghosts, these lively materials, drawing from relational practices of *resonance* to posit *tuning* as an ethical orientation.

As I have already invoked the term, it deserves a brief introduction. What is the *Anthropocene*? Generally, it is the geological epoch marked by anthropogenic deposits of concretes, pesticides, plastics, and radioactive isotopes in the Earth's crust.² These

¹ More on this term in a moment.

² Waters, C. N., J. Zalasiewicz, C. Summerhayes, A. D. Barnosky, C. Poirier, A. Ga uszka, and A. Cearreta et al. 2016. "The Anthropocene Is Functionally And Stratigraphically Distinct From The Holocene". *Science* 351 (6269): aad2622-aad2622. doi:10.1126/science.aad2622.

"technofossils" are created by humans; the *anthropos* of the *Anthropocene*. Naming this epoch as the *Anthropocene* is hotly debated, however; terms such as *Capitalocene* and *Plantationocene* have also been introduced to emphasize the role of capitalism and colonial plantation agriculture, respectively, in the production of this epoch. Donna Haraway suggests this era deserves many names, among them the *Chthulucene*, a term that "entangles myriad temporalities and spatialities and myriad intra-active entities-in-assemblages—including more-than-human, other-than-human, inhuman, and human-as-humus."³

Capitalocene, *Plantationocence*, and *Chthulucene* all point to very important aspects of the geophysical era we live in: It is certainly true that many of the anthropogenic deposits in Earth's crust emerged from capitalist webs of production, which themselves emerged from plantation-style colonial agricultural practices; webs that snare and enlist human, more-than-human, other-than-human, and inhuman entities. However, throughout this thesis I will name the geological era we live in as the *Anthropocene* for a few reasons, though I could probably be talked out of it. Firstly, the *Anthropocene* has, in recent years, united scientists, theorists, poets, writers, musicians, and artists of all stripes in investigating the impact of humankind on the ecological assemblages in which we are immersed and fostered a great deal of cross-disciplinary discussions on possibilities for addressing and surviving these impacts alongside our fellow critters. This, I believe, is a testament to its versatility. Secondly, *Anthropocene* cuts right to the chase with respect the party responsible: humankind. Greenhouse gas emissions, plastics, and radioactive waste all have severe impacts on ecologies, regardless of the gender, race, or ideological affiliation of the humans who produce or use them, even as some humans are

³ Haraway, Donna. 2015. "Anthropocene, Capitalocene, Plantationocene, Chthulucene: Making Kin". *Environmental Humanities* 6 (1): 159-165. doi:10.1215/22011919-3615934.

certainly more implicated in the emergence and spread of those materials than others, and as the toxic presence of these materials in ecological arrangements is distributed through unequal relations of power amongst humans and nonhumans. However, the fact remains that it is humankind that precipitated the Anthropocene, not jellyfish or bacteria; "man is the only animal to voraciously, relentlessly, and viciously wreck the lifeworld of earth."⁴

Though my use of the term *Anthropocene* remains precarious, this much is certain: we *anthropos*, alongside everything else on Earth, are caught in the vice grip of an entity that extends beyond the bounds of imaginable time and threatens to render the planet unlivable, and insofar as any of us use air conditioning, produce carbon emissions, or consciously or unconsciously uphold destructive material relations of power, we are implicated in its perpetuation. Its boundaries are unclear, and we have barely begun to understand its effects. Thinking and doing differently, in ways that will not force us into choosing extinction, is an urgent necessity. Before we can do that, however, we ought to ask ourselves; *how did we get here?*

⁴ Bird Rose, Deborah. 2017. "Shimmer; When All You Love Is Being Trashed". In *Arts Of Living On A Damaged Planet*, G51-G63. University of Minnesota Press, G55.

The Marrow

There was a word inside a stone.
I tried to pry it clear,
mallet and chisel, pick and gad,
until the stone was dropping blood,
but still I could not hear
the word the stone had said.

I threw it down beside the road
among a thousand stones
and as I turned away it cried
the word aloud within my ear
and the marrow of my bones
heard, and replied.⁵

⁵ LeGuin, Ursula. 2017. Qtd in "Deep in Admiration". In *Arts Of Living On A Damaged Planet*, M15-M21. University of Minnesota Press, M17.

I think the economic logic behind dumping a load of toxic waste in the lowest-wage country is impeccable and we should face up to that ... I've always thought that countries in Africa are vastly under polluted; their air quality is probably vastly inefficiently low compared to Los Angeles ... Just between you and me, shouldn't the World Bank be encouraging more migration of the dirty industries to the Least Developed Countries?

—Lawrence Summers, in an internal memo to the World Bank

Anyone who denies the law of non-contradiction should be beaten and burned until he admits that to be beaten is not the same as not to be beaten, and to be burned is not the same as not to be burned.

—Avicenna

In decolonization, there is therefore a need of a complete calling in question of the colonial situation.

—Frantz Fanon, *The Wretched of the Earth*

Philosophy, Bureaucracy, and Violence

Abstract: The ghosts of Mesopotamia haunt our thoughts. In their fear for the playfulness of being, farmers in the cradle of Civilization spread bureaucracy throughout the planet; plowing through ecologies and possessing the whole of anthropos in the process. Colonization brought this mutilation of the real to a planetary scale, and blinded us to its effects. The discovery of the Anthropocene is the discovery of the wreckage of bureaucracy, the wreckage wrought by Civilization.

There are many blocks to thinking global warming and the Anthropocene. Many of these blocks relate to the fact that the lenses and languages we have to think through, notably the modernist construct of Progress and the hierarchies and notions of purity it ships with it, are not

only structurally incapable of accommodating the entities we encounter in the Anthropocene but are directly implicated in its emergence. The aim of this section is to connect some of the philosophical foundations of modernist projects, among them settler colonialism and the continued colonial present, to the violence they unleashed into the world that today manifests as the Anthropocene. What we discover in illuminating these ties is that the ontological grounding that justifies colonialism and the ecological violence that precipitated the Anthropocene did not first appear in modern, liberal philosophies, but finds its first expression through the bureaucratic foundations of Mesopotamia—that is, in the very basis of Modern Civilization.

It should be made clear that no amount of theoretical discussion can begin to do justice to the horrors of colonization. Because the aim of this thesis is primarily philosophical rather than historical, in this respect the discussions of colonization that follow are incredibly limited. For a fuller history and theoretical discussion of the violence enacted through the process of colonization, see Byrd (2011).

Before we can think the Anthropocene and its causes as a cacophony of entities operating at and across a plethora of scales, we have to be able to think violence beyond the spectacular. Hitting someone over the head with a stick is an easy-to-think, human-sized violence; we can see it happen and can usually pick out the parties involved with relative ease. But violence of this spectacular kind is far from the only sorts of violence that happen, and far from the only sort humankind is implicated in. There are also the many different forms of *slow violence*, a term I borrow from Rob Nixon. Slow violence is "a violence that occurs gradually and out of sight, a violence of delayed destruction that is dispersed across time and space, an attritional violence

that is typically not viewed as violence at all . . . [whose] calamitous repercussions [play] out across a range of temporal scales."⁶

Thinking slow violence poses many challenges, "not only because it is spectacle deficient, but also because the fallout's impact may range from the cellular to the transnational and (depending on the specific character of the chemical or radiological hazard) may stretch beyond the horizon of imaginable time."⁷ The overlapping and enfolded scales of the cellular and the transnational, coupled with the inconceivably large time scales at which entities like radioactive waste and carbon emissions exist seriously problematize, or, more accurately, tear to shreds, ways of thinking that can't be bothered to think beyond human-size, much less beyond the human. In particular, the massive entities revealed through thinking slow violence, what Timothy Morton calls *hyperobjects*,⁸ burst the bubble of the longstanding 'substance-with-accidents' model of the universe that underpins the modern nation-state, along with its logical relative, the *metaphysics of presence*.

Substance with Accidents, Metaphysics of Presence

The substance-with-accidents ontology is first articulated through Aristotle, who formalized an ontology cleaved into *matter* and *form*.⁹ In the Aristotelian ontology, "matter is

⁶ Nixon, Rob. 2011. *Slow Violence And The Environmentalism Of The Poor*. Cambridge, Mass.: Harvard University Press, 2.

⁷ *Ibid.*, 47.

⁸ A further discussion of hyperobjects is the subject of *Ghosts: An Ontology of Play*.

⁹ The target here is not so much Aristotelian thought in all its iterations as it is the particular elements of Aristotelian thought that *do* provide the philosophical foundation for enacting structural violence. Regardless of the benefits of certain aspects or contemporary reformulations of Aristotelian thought, of which there are a few among the object-oriented view, some of his philosophical positions directly enable violence at many scales and are the basis of many institutions and practices that continue to do immense harm in the world. These are the targets of this section.

nothing definite at all until enformed;"¹⁰ it is an easy think matter, a bland, shapeless whatever. This compound of matter and form makes a *substance*, the particular things of the world like a horse or shelf. The particular qualities substances have, like being green or pale or stringy, are not, in Aristotle's view, reflective of the inner reality of substance, but are instead merely sprinkled on top of whatever emerges from the marriage of matter and form; qualities are contingently held, decorative accidents. Further, *form just is the primary kind of substance* in Aristotle's view; the essences of things are the base level of their reality, and their appearance in the world as tired, sad, growing, or pink are not only irrelevant to an understanding of their core being, they may just as well be accidents—distractions from whatever lies beneath.¹¹

Judith Butler notes how Aristotle, along with many other Greek philosophers, coarticulate *matter* with the feminine—already leading us toward some of the social relations presupposed and reproduced by this ontology.¹² Matter remains inert, a pure kind of potentiality, until it is contacted by some essence, or *form*, which is the primary existent in Aristotelian thought. "In reproduction," Butler adds, "women are said to contribute the matter; men, the form."¹³ The substance-with-accidents ontology presents the subjugation of women as a basic fact of being.

The substances-with-accidents ontology is what underlies the kind of agricultural devastation witnessed in the dust bowl. Indeed, the Aristotelian ontology is the formalized

¹⁰ "Aristotle". 2015. *Stanford Encyclopedia Of Philosophy*. <https://plato.stanford.edu/entries/aristotle/>.

¹¹ I refer to *essences* here in the kind of fixed, immutable form they are traditionally conceived.

¹² Butler, Judith. 1993. *Bodies That Matter*, 31.

¹³ *Ibid.* Butler continues this section to rearticulate a possible redeployment of some Aristotelian terminology to serve contemporary feminist projects and motivate new ways for bodies to matter.

agrilogistic ontological position; the belief about being necessary to justify the spread of homogenized agriculture.¹⁴ In the Aristotelian view, a field remains a field regardless of how it is sown, fertilized, depleted, or developed, because its particular qualities are never reflective of the form or essence of the field, which is the more real version anyway. All we're doing when we homogenize vast swaths of crops is messing around with lumpy old matter! It's still a field! Never mind the pesticides and drought. "A field is a substance underlying its accidents: cats happen, rodents happen, bees and flowers happen, even wheat happens; the slate can always be wiped clean."¹⁵ In positing substance as entirely distinct from its appearance, the substance-with-accidents ontology inherently promotes a blindness to the effects of human engagement with our surroundings; claiming that nothing *really* happens to the field when we plow it, grow things on it, clear-cut it, or build a mall on it—it remains essentially the same field throughout all these engagements. Agrilogistics can't yet plow ahead, however, without the added condition that form is fundamentally knowable; that is, entirely subsumable into its relationships with humans.

Enter the metaphysics of presence. In tandem with the flavorless lump ontology given to us by agrilogistics, and formalized by Aristotle, the metaphysics of presence asserts that "to exist is to be constantly present,"¹⁶ which is to say entirely transparent. Being means to be as given; there is no opacity, nothing in excess, to any particular relation (or, at least, to human relations with nonhumans). "Here is the field: I can plough it, sow it with this or that or nothing, farm cattle, yet it remains constantly the same. The entire system is construed as constantly present,

¹⁴ *Agrilogistics* is Timothy Morton's term for the twelve-thousand-year functioning of a specific logistics of agriculture, that arose in the Fertile Crescent and continues to plow ahead today; dominating agricultural techniques planetwide. Morton develops this definition throughout Morton (2016).

¹⁵ Morton, Timothy. 2016. *Dark Ecology*. Columbia University Press, 50.

¹⁶ *Ibid.*, 48.

rigidly bounded, separated from nonhuman systems."¹⁷ Agrilogistics, the substance-with-accidents ontology combined with the metaphysics of presence, is an aggressively reductive and exploitative system; not only is *matter*, the physical stuff of the world, entirely formless and thus endlessly and inconsequentially malleable, the *forms* of things, their true, inner realities, are "mixed into the preconceived transparency of universal models"¹⁸ and thus rendered fully visible to human correlators, their being entirely exhaustible within human systems.¹⁹

There are a few basic mechanics of the substance-with-accidents ontology and the metaphysics of presence that are of particular importance in colonizing projects that are worth conjuring explicitly, as it may help to connect their operation in contemporary modernity and political liberalism to their emergence in early Mesopotamian society. These are; the production of discrete and identifiable categories (particularly in hierarchized binaries), naturalization of said categories, and the imposition of few and simple rules to govern by; rules founded on, and employed in defense of, these discrete, 'Natural' categories. Each of these mechanics is foundational to bureaucratic reasoning, which David Graeber credits with the top-down managerial capability that provides the logistical and ideological foundation of the modern nation-state.

Categories, Essences, and Colonial Violence

"Colonial authority," writes Ann Stoler, "was constructed on two powerful but false premises. The first was the notion that Europeans in the colonies made up an easily identifiable

¹⁷ Ibid.

¹⁸ Glissant, Édouard, and Betsy Wing. 2010. *Poetics Of Relation*. Ann Arbor: University of Michigan Press, 193.

¹⁹ Discussions of the metaphysics of presence and its hostility towards ecological thinking have been a primary target for deconstruction. See Derrida (1976).

and discrete biological and social entity . . . The second was the related notion that the boundaries separating colonizer and colonized were self-evident and easily drawn."²⁰ Here, we can see the substance-with-accidents ontology and the metaphysics of presence hard at work: The European form is cast as a substance, "a 'natural' community of common class interests, racial attributes, political affinities, and superior culture;"²¹ the colonial community is an undifferentiated lump of European-ness. This lump, true to the functioning of the metaphysics of presence, is knowable—the dotted line between colonizer and colonized is self-evident, one merely needs to cut along it.

The production of discrete, identifiable, and easily drawn categories of being is the "systematic form of organizing knowledge" that made it "possible to debate [ideas about classification] in rational and 'scientific' ways."²² Scientific rationalism, most famously championed by René Descartes, came to dominate colonial thought, and "the production of knowledge, new knowledge and transformed 'old' knowledge, ideas about the nature of knowledge, and the validity of specific forms of knowledge, became as much commodities of colonial exploitation as other natural resources."²³ Further, "these systems for organizing, classifying, and storing new knowledge, and for theorizing the meanings of such discoveries, constituted research. In a colonial context, however, this research was undeniably also about

²⁰ Stoler, Ann. 2010. *Carnal Knowledge And Imperial Power*. Berkeley, CA: University of California Press, 42.

²¹ Ibid.

²² Smith, Linda Tuhiwai. 2010. "Colonizing Knowledges". In *Indigenous Archaeologies; A Reader On Decolonization*, 57-62. Left Coast Press, 57.

²³ Ibid., 58.

power and domination."²⁴ As Frederick Douglass remarks, "this is, you know, an age of science, and science is favorable to division."²⁵

The division between colonizer and colonized was articulated largely through a binary that separated Nature and Civilization.²⁶ Within the ontological system established by agrilogistics, Nature is merely "the inert stage on which historical events take place," a purely "passive material with which [white, male, European] humans make their world;"²⁷ Nature is *matter*, and Civilization is *form*. Indigenous peoples, identified by colonists as distinctly outside of Civilization, "were classified alongside the flora and fauna."²⁸ In the colonial imaginary, "this world divided into compartments, this world cut in two is inhabited by two different species;"²⁹ the colonizer—bringer of Civilization, and the colonized—backward, passive, and brute. As Fanon remarks; "when the settler seeks to describe the native fully in exact terms he constantly refers to the bestiary."³⁰

According to Fanon, the ideological division between Nature and Civilization embodied in the material division between colonizer and Native is "obedient to the rules of pure Aristotelian logic, they both follow the principle of reciprocal exclusivity." Further, between

²⁴ Ibid.

²⁵ Douglass, Frederick. 1854. "The Claims Of The Negro, Ethnologically Considered." Address, Western Reserve College, 1854, 9.

²⁶ This binary has near-endless iterations, though many of them carry similar, if not the same, theoretical baggage. The stark division between Subject and (non-OOO) Object is one that will be challenged in the following section.

²⁷ Coronil, Fernando. 2008. *The Magical State*. Chicago: University of Chicago Press, 23.

²⁸ Linda Tuhiwai Smith, "Colonizing Knowledges", 58.

²⁹ Fanon, Frantz. 1963. *The Wretched Of The Earth*. New York: Grove Press, 40.

³⁰ Ibid., 42.

these parts, "no conciliation is possible, for of the two terms, one is superfluous."³¹ Just as, for Aristotle, *form* is the base level of reality and *matter* is merely the passive means through which form expresses itself, for the colonist the same relation pertains; between Civilization and Nature, the forces and peoples of Civilization are the primary existent and Nature, which in colonial thought includes naturalized Indigenous peoples, women (both human beings and popular imaginaries such as Mother Earth), manufactured Others, and any and all nonhumans, are the raw *matter* through which Civilization enacts itself.

"The instruments or technologies of research" utilized in this colonial rationalist context "were also instruments of knowledge and instruments for legitimating various colonial practices."³² The scientific compartmentalization of Nature and Civilization situated within the agrilogistic ontology necessarily produced "hierarchical typologies of humanity and systems of representation," which were "fueled by new discoveries"³³ made by the major European powers in the colonial laboratory of the 'new' world. "Hence," Linda Tuhiwai Smith writes, "some indigenous peoples were ranked above others in terms of such things as the belief that they were 'nearly human,' 'almost human' or 'sub-human.'"³⁴ Never accepted as full human persons, however, "ideas, images, and experiences about the [Native] Other helped to shape and delineate the essential differences between Europe and the rest."³⁵ These preconceived essential

³¹ Ibid., 38-39.

³² Linda Tuhiwai Smith, "Colonizing Knowledges", 58.

³³ Ibid.

³⁴ Ibid.

³⁵ Ibid.

differences were then "recast within the framework of Enlightenment philosophies, the industrial revolution and the scientific 'discoveries' of the eighteenth and nineteenth centuries."³⁶

The essentialized difference between European colonists and colonized peoples was expressed through practices aimed at preserving the 'purity' of colonial powers. The perceived transparency of essence, a consequence of the metaphysics of presence, lent the standards of purity divined from colonial science and European cultural imaginaries the legitimacy of lucid, scientifically sound demarcations of the essential differences imposed between colonizers and colonized Natives. Boundaries between Europeans and Native peoples were established and subsequently enforced through regulation and violence, as we have already addressed. One particularly involved colonial effort, notes Ann Stoler, was the focus on sexual encounter as a means of regulating inclusion and exclusion: "Colonial observers and participants in the imperial enterprise appear to have had an unlimited interest in the sexual interface of the colonial encounter. No subject is discussed more than sex in colonial literature and no subject more frequently invoked to foster the racist stereotypes of European society."³⁷ The "gender-specific sexual sanctions and prohibitions not only demarcated positions of power but also prescribed the personal and public boundaries of race."³⁸

So, too, were internal national boundaries enforced along similar criteria.

While lands colonized by American westward expansion were economically rationalized and developed to serve the rapidly growing industrial needs of the nation (through the

³⁶ Ibid.

³⁷ Ann Stoler, *Carnal Knowledge And Imperial Power*, 43.

³⁸ Ibid., 42.

application of agrilogistics), environmentalist movements began to emerge across the country in response to the destruction of what they believed were some of the most important national wonders. Less than a century after Native peoples were officially considered persons by the federal government,³⁹ Aldo Leopold, in 1949, lamented that human use of wilderness was destroying "the pure essence of outdoor America."⁴⁰ Early articulations of environmentalist concerns were, and to a great extent still are, operating within the substance-with-accidents ontology and were employed in benefit of the expansion of colonial power throughout the 'new' world as well as the perpetuation of discourse surrounding racial and national purity—empowering empire towards a more thorough eradication of Native peoples in colonized lands. As Jake Kosek points out, pro-environment discourses concerned with the destruction of Natural spaces were articulated through the very same frameworks that bracketed colonial discussions of race and exclusion; "understandings of and fears surrounding race at the turn of the twentieth century became the raw substance out of which wilderness as an idea and a landscape was formed."⁴¹

An obsession with 'pure' Nature built on the stark division between the 'impure' functions of modern society and the racialized purity of 'uncontaminated' Wilderness manifested yet another iteration of the colonial myth about the strict difference between Nature and Civilization. "By feeding on the prevailing fears of that particular moment in American history, [early environmentalists] galvanized support for wilderness preservation; the importance of

³⁹ Indian people were not considered persons in federal law until 1879. See Echo-Hawk (2000).

⁴⁰ Qtd. in Kosek, Jake. 2004. "Purity And Pollution: Racial Degradation And Environmental Anxieties." In *Liberation Ecologies: Environment, Development, Social Movements*. Routledge.

⁴¹ Ibid., 97.

maintaining in perpetuity the purity of the nation's environment—the very environment that was said to embody white nationalism and help forge the nation's individual character and institutions—resonated with popular understandings and fears of the nature of race."⁴² True to one radical pamphlet's observation, that "so long as there exists man and environment, the police will be there between them," the US Army was deployed to "keep out undesirables," in Yosemite, namely "Hispanics and Native American grazers."⁴³ "Indeed," Kosek points out, "this type of 'pure,' 'natural' space, created by the elimination of Native Americans and others who were deemed to have 'no right to the landscape,' became the basis for the National Park system in the United States."⁴⁴

If it weren't explicit enough, the extent to which violence is involved in the enforcement and perpetuation of colonial ideology, as well as the extent to which agrilogistic philosophies and practices are implicated in the material organization of space, should be reiterated. Built on the philosophic foundations of the substance-with-accidents ontology and the metaphysics of presence, "the colonial world is a world divided into compartments. It is probably unnecessary to recall the existence of native quarters and European quarters, of schools for natives and schools for Europeans; in the same way we need not recall apartheid in South Africa."⁴⁵ The rigidly bounded categories that separate Nature and Civilization, colonized and colonizer, though cooked up in the colonial philosopher's lab, can only be enforced by the barrel and butt of the

⁴² Ibid., 102.

⁴³ Ibid., 103.

⁴⁴ Ibid.

⁴⁵ Frantz Fanon, *The Wretched of the Earth*, 37.

gun, the deliberate spread of disease, and the intense stratification and segmentation of social organization. In other words: by violence. A rigid division of being into neat, tidy compartments is just *not reflective of reality*, and such compartments can only be maintained through real violence. Today, we can see continued colonial effects in the ongoing exploitation of the global periphery by colonial powers and transnational corporations,⁴⁶ the prison industrial complex in the so-called U.S. as a modern iteration of the institution of slavery,⁴⁷ the erasure and disenfranchisement of Indigenous peoples throughout the colonial world,⁴⁸ and the emergence of global warming and the Anthropocene.

The agrilogistic ontological view paved through both human and nonhuman worlds, and is the driving force behind the Anthropocene. The process of colonization, in fact, killed so many people and disrupted so many ecologies that it actually changed the global climate hundreds of years before the industrial revolution.⁴⁹ Today, we are at the point where "those beliefs were hardwired into Earth's surface in a way so effective that millions of lifeforms are now going extinct."⁵⁰ The mass extinction of nonhuman species due to human activity (to the magnitude of

⁴⁶ This analytical framework may distract from the core issue, see Coronil (2000); 6-8.

⁴⁷ For an extended discussion, see Davis, and Alexander (2012).

⁴⁸ In the so-called U.S., only 573 of the thousands of tribes are federally recognized, and their homes and sacred sites are under continual attack. Standing Rock is but one of many examples.

⁴⁹ Koch, Alexander, Chris Brierley, Mark M. Maslin, and Simon L. Lewis. 2019. "Earth System Impacts Of The European Arrival And Great Dying In The Americas After 1492". *Quaternary Science Reviews* 207: 13-36. doi:10.1016/j.quascirev.2018.12.004.

⁵⁰ Timothy Morton, *Dark Ecology*, 30.

dozens a day),⁵¹ deforestation of critical ecological environments like the 'Amazon lung,' dumping and spillage of hundreds of thousands of gallons of wastes into waterways,⁵² irradiated US military munitions alone contaminating nearly 15 million acres of land,⁵³ the choking out of vast swaths of sea life via plastics and islands of trash deposited in the ocean, and the unfathomable levels of pesticides used to maintain homogenous crop growth spilling into water tables are but a few examples of the violence, across many spaces and timescales, that is not only destroying lifeforms at unprecedented levels, but destroying the refuges where lifeforms may recoup from human-inflicted violence. "Right now, the earth is full of refugees, human and not, without refuge."⁵⁴

The colonial situation we are calling into question, then, to reinvolve Fanon's epigraph to this section, is not merely theoretical; it is the very fabric of the material and social organization of modernity, and has devastating effects at a planetary magnitude.

Agrilogistics and Bureaucracy

What does all of this have to do with bureaucracy? The substance-with-accidents ontology and the metaphysics of presence provide necessary philosophical groundings for bureaucratic organization—the top-down managerial capacity that led to the rise of the nation-state. Bureaucracy, like agrilogistics, fundamentally relies on a set of beliefs that render the

⁵¹ This is against a "background rate" of about one to five per year. The WWF has noted how, in 2014, 50 percent of animals on Earth had disappeared in the last forty years. See "The Extinction Crisis". 2019. *Biologicaldiversity.org*. https://www.biologicaldiversity.org/programs/biodiversity/elements_of_biodiversity/extinction_crisis/.

⁵² The pipeline leakage in Standing Rock, as but one example.

⁵³ "The Environmental Challenge Of Military Munitions And Federal Facilities | US EPA". 2019. *US EPA*. <https://www.epa.gov/enforcement/environmental-challenge-military-munitions-and-federal-facilities>.

⁵⁴ Donna Haraway, "Anthropocene, Capitalocene, Plantationocene, Chthulucene: Making Kin", 160.

world a place where "nothing is real that cannot be quantified, tabulated, or entered into some interface or quarterly report,"⁵⁵ reinforcing "the sense that we live in a universe where accounting procedures define the very fabric of reality."⁵⁶ The two-poled ontological system of the substance-with-accidents model and the metaphysics of presence readily supplies this belief; substance is the primary existent, and is fully knowable through the proper application of reified, colonial Reason. Weber, incidentally, describes bureaucracy as reason in action.

As the "water in which we swim,"⁵⁷ it is difficult to identify the functioning of bureaucracy, even as it has come to inform nearly every aspect of our existence: we currently live, according to David Graeber, in an age of "total bureaucratization." Wrought by "the gradual fusion of public and private power into a single entity, rife with rules and regulations whose ultimate purpose is to extract wealth in the form of profits,"⁵⁸ the influences of bureaucracy are difficult to point to precisely because they have become the pretext upon which nearly every social encounter is mediated; "one can see its effects in every aspect of our lives. It fills our days with paperwork. Application forms get longer and more elaborate. Ordinary documents like bills or tickets or memberships in sports or book clubs come to be buttressed by pages of legalistic fine print."⁵⁹ However, bureaucratic functioning has effects beyond mere form-filling. "The

⁵⁵ Graeber, David. 2015. *The Utopia Of Rules*. Melville House Publishing, 27.

⁵⁶ Ibid., 107.

⁵⁷ Ibid., 6.

⁵⁸ Ibid., 14.

⁵⁹ Ibid., 14.

bureaucratization of daily life," Graeber argues, "means the imposition of impersonal rules and regulations"⁶⁰ applies throughout the whole gamut of social organization.

Because these rules and regulations are impersonal, not produced nor controlled by the persons they are applied to, they can "only operate if they are backed up by the threat of force."⁶¹

An increase in the operation of bureaucracy spells "an increase of the range and density of social relations that are ultimately regulated by the threat of violence."⁶² We have already observed this in the case of colonial rule. The strict compartmentalization of Nature and Civilization, motivated by the substance-with-accidents ontology and the metaphysics of presence, was an impersonal schema; that is, a schema crafted without regard for the particular context in which it operated, applied at every level of colonial social organization to humans and nonhumans alike, and enforced strictly through violence or the threat of violence. Non-European peoples were cordoned off from European social space, their enslavement was rationalized as the Natural order of things, and Indigenous ways of life and systems of knowledge were systematically denigrated, disrupted, and destroyed. The production, naturalization, and violent enforcement of simple, impersonal schema *just is the function of bureaucracy*.

"The totalitarian-ideological class in power is the power of a topsy-turvy world: the stronger it is, the more it claims not to exist, and its force serves above all to affirm its nonexistence."⁶³ Bureaucratic functioning has become so deeply normalized that it seems almost

⁶⁰ Ibid., 21.

⁶¹ Ibid.

⁶² Ibid.

⁶³ Debord, Guy. 2016. *Society Of The Spectacle*. Black & Red, 106.

absurd to name it as an arbitrary and necessarily violent mode of organization, yet it is crucial that we understand it in this way. To secure this point, Graeber is worth quoting at length:

"We are not used to thinking of nursing homes or banks or even HMOs as violent organizations — except perhaps in the most abstract or metaphorical sense. But the violence I'm referring to here is not abstract. I am not speaking of conceptual violence. I am speaking of violence in the literal sense: the kind that involves, say, one person hitting another over the head with a wooden stick. All of these are institutions involved in the allocation of resources within a system of property rights regulated and guaranteed by governments in a system that ultimately rests on the threat of force. 'Force' in turn is just a euphemistic way to refer to violence: that is, the ability to call on people dressed in uniforms, willing to threaten to hit others over the head with wooden sticks.

It's curious how rarely citizens in industrial democracies actually think about this fact, or how instinctively we try to discount its importance. This is what makes it possible, for example, for graduate students to be able to spend days in the stacks of university libraries poring over Foucault-inspired theoretical tracts about the declining importance of coercion as a factor of modern life without ever reflecting on the fact that, had they insisted on their right to enter the stacks without showing a properly stamped and validated ID, armed men would have been summoned to physically remove them, using whatever force might be required. It's almost as if the more we allow aspects of our everyday existence to fall under the purview of bureaucratic regulations, the more everyone concerned colludes to downplay the fact (perfectly obvious to those actually running the system) that all of it ultimately depends on the threat of physical harm."⁶⁴

Bureaucratic functioning predates even the emergence of agricultural society, which, as Derrida points out, itself presupposes industry.⁶⁵ "Agriculture is already an industry from the beginning, and not just logically but physically: it requires metal, wheels, and all kinds of implements. And it demands an 'industrial' view of the world as much as it carves out such a view and literally

⁶⁴ David Graeber, *The Utopia of Rules*, 36.

⁶⁵ Derrida, Jacques, Gayatri Chakravorty Spivak, and Judith P Butler. 1967. *Of Grammatology*. Baltimore: The Johns Hopkins University Press. Qtd. in Timothy Morton, *Dark Ecology*, 83.

ploughs ahead with it."⁶⁶ The industrial view of the world is an agrilogistic view—the substance-with-accidents ontology and its accomplice, the metaphysics of presence—and functions through the application of simple schema to understand and manage the complexities of real existence; which is to say, it functions bureaucratically.

In order to subvert bureaucracy and begin to understand and engage with things in ways that aren't predicated on violence, a necessary step towards living and dying well in the Anthropocene, we have to look towards its causes. Graeber, towards the end of his study of bureaucracy, *The Utopia of Rules*, offers an answer: "what ultimately lies behind the appeal of bureaucracy is a fear of play."⁶⁷ What, then, is *play*, and how might we begin to understand play as not only an anxiety that precipitated the formation of bureaucratic society, but as something that underlies it, as a quality intrinsic to being at all?

Let us now turn to these questions.

⁶⁶ Timothy Morton, *Dark Ecology*, 82.

⁶⁷ David Graeber, *The Utopia of Rules*, 109.

Without Man and Nature, all creatures can come back to life.

—Anna Tsing

Our reasoning, so sure of itself among things inert, feels ill at ease on this new ground.

—Henri Bergson

Interlude: Play

We have just seen how the substance-with-accidents ontology and the metaphysics of presence, through their bureaucratic functioning, underpin the immense violence of colonialism and the continued colonial present and are active contributors to the emergence of the Anthropocene. If Graeber is right in his assessment, and I think he is, that bureaucratic functioning is underpinned by a fear of *play*, orienting ourselves towards play may be the best chance we have at subverting bureaucracy and agrilogistics. In orienting ourselves towards play, the uneasy, ambiguous, shimmering⁶⁸ real suffocated by the metaphysics of presence can once again breathe in our worlds; all creatures can come back to life.

So, what, exactly, is *play*?

For Graeber, play insinuates a kind of unbounded freedom; a "pure expression of creative energy,"⁶⁹ which itself cannot, intrinsically, be rule-bound. Play, in this sense, can only exist as an abstract concept, a general potentiality. But there is also, as Whitehead notes, a 'real'

⁶⁸ "It is a capture that is all over the place: water capturing and reflecting the sun, the sun glinting on the water, the eyes of the beholders captured and enraptured, the ephemeral dance of it all. It is equally a lure: creatures long to be grabbed, to experience that beauty, that surprise, that gleaming ephemeral moment of capture." From Deborah Bird Rose, "Shimmer", G53.

⁶⁹ David Graeber, *The Utopia of Rules*, 111.

potentiality as well, "which is conditioned by the data provided by the actual world."⁷⁰ Here, Marx may put it best: people "make their own history, but they do not make it just as they please; they do not make it in circumstances chosen by themselves, but under circumstances directly encountered, given and transmitted from the past."⁷¹

Play in the real is not 'freedom' in the sense Western thought typically conceives it; play is a lot more like wiggle room, the 'real' potentiality Whitehead associates with creativity.⁷² Though we may be strung in all directions by (physical, social, psychological, political) rules, *games* we have no say in,⁷³ these rules are always strangely distant from any particular situation—allowing us some space to shimmy in a way that cannot be attributed to mere ignorance. That is; *play* is an ontological condition, not merely an epistemological one. Being, not just knowing, entails ambiguity. This is due in part to the radical *withdrawnness* of objects, which will be discussed at length below.

Play pervades every relation, whether those relations are between nonhuman beings, nonliving things, or even an entity and its own internal qualities. In evolutionary theory, for example, play manifests as a kind of performativity called *satisficing*: "as a duck, you just have to look and quack enough like a duck to pass on your genes";⁷⁴ the rules of the game of species-being, against the assertions of the metaphysics of presence, are never clearly available.

⁷⁰ Whitehead, Alfred North. 1978. *Process And Reality; An Essay On Cosmology*. Free Press, 65. Qtd. in Halewood.

⁷¹ Marx, Karl, and David McLellan. 2009. *Selected Writings*. Oxford: Oxford Univ. Press, 300. Qtd. in Halewood.

⁷² Whitehead actually coined the term creativity, and argued that everything, not only humans, are creative.

⁷³ Games are rule-governed systems designed to eliminate ambiguity. Graeber notes how bureaucracies are games, just games that are in no sense fun. The same is true of States, Economies, etc.

⁷⁴ Morton, Timothy. 2013. *Hyperobjects*. University of Minnesota Press, 41.

Performing duck-ness (or human-ness or cat-ness etc.) is an ambiguous, uneasy play between the perceived rules of duck-ness and the actual scenario at hand. This kind of performativity is true even of nonliving things; not even electrons know exactly what it is to be an electron! "Quantum theory is performative too: If it walks and quacks like an electron, it is one."⁷⁵

Importantly, there is no level at which an ultimate game resides; no point from which all of reality can be played open and objectively examined as the result of a few rules.⁷⁶ Reality, rough approximations aside, is not a machine. Because of this, we must hold the lenses through which we examine the world lightly, recognizing that they are indeed *games* through which we render the world intelligible, and as such are irreducibly limited in their access to the real. This conclusion comes on the back of the findings of deconstruction, where everything is a metaphor in a strong sense. Even saying everything is a metaphor is a metaphor for the deeper rumblings of incomprehensibility that pervade the contextually dependent meaning of speech, and indeed language itself. Though, because things are real, some metaphors are undeniably precise in their assessments. But this does not entail they are the end-all-be-all of inquiry. There is no one game, no one lens, to rule them all, even as some bring us deeper into the real than others.

It is amidst this profound, playful ambiguity that the ontology of play pitches its tent.

In navigating this ambiguity, I have found that an experimental approach to writing has been the most fruitful for my understanding. The intention is not to discredit the efforts of more scientific, technical writing styles; indeed, many of the works I draw from articulate their views in such a way. Rather, the intention with experimental approaches to writing is to open the field

⁷⁵ Ibid.

⁷⁶ This is because, for OOO, there is nothing but the interiors of objects. It is objects all the way up and all the way down. This will be addressed further in the following section.

of meaning-making and apply a careful eye to the exceptions and particulars that inhabit, and ultimately subvert, the generalizing assumptions of traditional scientific systems.⁷⁷ Lynn Keller, discussing the approach to experimental writing taken by Adam Dickinson, provides a succinct articulation: "in Dickinson's view, we need to recognize the semiotic nature of science as well as the contributions experimental poetics can make to understanding the world science explores by expanding the current field of signification"⁷⁸ In Percy Shelley's words, experimental writing is one of the means through which we can "imagine that which we know."⁷⁹

An Ontology of Play, then, is less a rigid set of arguments and more the animating impulses that drive my continued engagement with the real. *An Ontology of Play* consists of snapshots of an understanding-in-motion. Eschewing the metaphysics of presence, the idea that to be real is to be constantly present, means that we have to think things as weird; flickering in and out of perception, haunting us from the unthinkable implied in any system of thought. It means thinking things as ghosts.

Throughout what follows, I'll refer to these ghosts as *objects*, *bodies*, and *entities*. *Objects*, for the technical heft imbued in that term through the efforts of the object-oriented ontologists. *Bodies*, to emphasize their materiality; to help us think of the caress of the wind on our skin as a relation between ghosts. *Entities*, finally, to emphasize their ethereal, uncanny qualities. That is, to emphasize that they are ghosts.

⁷⁷ As Agamben points out, exceptions to systems are not merely incidental, but are actively constructed by the system. If traditional science has excepted ghosts, a path to subverting its violent machinations may be found in turning our attention to such ghosts.

⁷⁸ Keller, Lynn. 2018. *Recomposing Ecopoetics*. Charlottesville: University of Virginia Press, 68.

⁷⁹ Shelley, Percy Bysshe, Donald Henry Reiman, and Neil Fraistat. 2002. *Shelley's Poetry And Prose*. New York: W.W. Norton & Company, 509-535.

"I look around and look around again. It is an emptiness now, this land. It is an emptiness of the dead creatures and plants. It is a ghost land, a spirit land of keening winds. And the winds are voices, the whispering sorrow of creations gone before their time."

—Peter Blue Cloud/Aroniawenrate

"The winds of the Anthropocene carry ghosts—the vestiges and signs of past ways of life still charged in the present."

—*Arts of Living on a Damaged Planet*

"Yes, the whole world is haunted! Only is haunted? Nay, it itself 'walks,' it is uncanny through and through."

—Max Stirner

Ghosts: An Ontology of Play

Abstract: Objects are everything, and everything is an object. Objects are entangled, in twists and knots, in playful confederations of being from which no object can escape. These objects are never fully present, they are ghosts; their smell, their taste, how they sound when we tap them with our fingers, even their physicality is but a sliver of the murky depths beyond appearance. Objects pulse in and out of our worlds according to rhythms that are their own, living vibrant lives elsewhere among other quivering, ghostly bodies. From the mesh they emerge, and to the mesh they shall return. The mesh, too, is an object; a ghost in its own.

As it stands, humankind (whether any humans are alive or not) will echo through the geological record and in ecological arrangements for eons to come. The very large finitude of hyper-scale objects like global warming is difficult to conceive from the get-go: many of us have

difficulty imagining what we'll be doing in five years, much less what society will look like when spent Uranium cores from nuclear power plants breathe their last irradiated breath some hundreds of thousands of years from now. Yet, here we are, among styrofoam cups and mountains; entities that inhabit worlds with radically different arrangements of *spacetime mattering*⁸⁰ than our own, entities we must be able to fathom if we are to exist among them in ways that do not force us into choosing extinction. Fortunately, since *all* objects, are *hyperobjects* (just not relative to us), we can still identify some of their key features at slightly-less-than-hyper scales. Hurricanes provide a good middle ground to work from.

Hurricanes have the nasty habit, though helpful for our purposes, of tearing through many of the same human-centric constructions this thesis seeks to tackle. More concisely, they twist and tatter the notion of a clearly demarcated human *world*, that mythical border between Civilization and Nature, life and nonlife, Here and There, and, of particular importance for OOO, Subject and Object. Hurricanes are powerful beings, and through them we can begin to think some of the core elements that all objects share. Namely, that they are *withdrawn*, *sticky*, *temporally polyphonic*, and *spectrally vibrant*. These features coalesce into what I'm calling an *ontology of play*, where we find that play is always already a playing-*with*.

Before delving into these qualities of objects, I would first like to stress the inherently relational way in which objects exist. Though some qualities of objects, what Graham Harman refers to as their interior *notes*, remain vacuum-sealed beyond access (according to their withdrawnness), every object is suspended in a web of relations from which it emerges and into

⁸⁰ This is Karen Barad's term for the active process (thus the verb form) of iterative reconstituting of particular arrangements of space, time, and matter. One of the main breakthroughs of quantum theories is that space and time are entangled in such a way that referring to them as separate does not, indeed *can* not, grasp them in a way that is reflective of their reality. Barad argues that such entanglements also include matter in Tsing et. al. (2017; G103-120).

which it will dissolve. There is no object that stands outside relations with other objects. Even in *thinking* this 'outside' we send a signal, however weak, inaccurate, or misguided, to the fringes of thinkability and rouse the outside from its slumber. In other words, we relate to it.

The medium of these relations, which will be discussed in more detail shortly, is the *mesh*. Here, I consider the mesh as the body of relations writ large, in which my preferred unit of analysis is the *assemblage* as articulated by Deleuze and Guattari. Assemblages are open-ended collectives of entangled bodies, with uneven topographies and distributions of effectivity. Their open-endedness means that assemblages leak into the mesh, and the mesh leaks into assemblages; there are little bits of everything in everything. Just as Foucault encourages us to look at individuals as both being formed by nets of power as well as being vehicles of power themselves, assemblages are characterized by strange, loop-like, co-constitutive relations between related elements, which includes the assemblage itself as an entity independent of the elements within it. Assemblages can be thought to have a structure akin to a rhizome, where each component contains information about the whole. This is how plants like tubers can regrow from clippings; though the clipping is a mere sliver of the plant, it contains information about the whole from which the entire organism can emerge. Visually, we might view assemblages as taking the form of *mycorrhiza*, or the root structure of rhizomes. That such roots resemble meshes is all the better for our metaphorical coherence. Now, on to *withdrawnness*.

Withdrawnness

"Objects always lie beyond any possibility of total presence,"⁸¹ which is to say there is no mode of access (touching, thinking, pouring-water-on) that exhausts an object or brings it fully

⁸¹ Harman, Graham. 2005. *Guerrilla Metaphysics*. Chicago, IL: Open court Publishing Company, 3.

into our comprehension.⁸² This is because an object always is, in Graham Harman's words, "aloof from its dealings with the world."⁸³ Irreducibly withdrawn, objects are "neither a phenomenon nor any set of phenomena, but [real forces] throwing [their] weight around in the world and demanding to be taken seriously."⁸⁴ Ettore Majorana, a brilliant physicist who disappeared under mysterious circumstances, affirmed as much: "disappearance is the only way in which the real can peremptorily be affirmed as such and thus avoid the grasp of calculation."⁸⁵ Always already present, objects haunt us, each other, and the landscapes they inhabit, leaving only traces of their ephemeral passages for others to grasp at; hurricanes and drought are traces of global warming, cancers the traces of some long-past endocrine disruptor or stray gamma rays; they are *hauntings*, the passages of past relations charged in the present.

Withdrawnness, the impossibility of an object's total presence, is easily thought through how hurricanes impose themselves on humans and our worlds. Regardless of where and how one experiences a hurricane—at sea, cast in the waves churned by high winds, in a helicopter hovering in the eye, following along with satellite projections online—the totality of the hurricane always lies beyond these experiences. Hurricanes, and objects in general, defy total presence. Each appearance of them is an appearance-*for*; appearance-*for* the weather satellite tracking its movement, appearance-*for* me in my house as rain and winds batter the windows, appearance-*for* the frogs and fish plucked from creeks and tides and unceremoniously deposited

⁸² "Formed on the basis of the Latin word, *comprehendere*, "to seize," which is formed from the roots: *con-* (with) and *prendere* (to take)." Édouard Glissant, *Poetics of Relation*, xiv.

⁸³ Graham Harman, *Guerilla Metaphysics*, 19.

⁸⁴ *Ibid.*, 17.

⁸⁵ Agamben, Giorgio. 2018. *What Is Real?*. Stanford University Press, 43.

on shore. "In each of these cases, the [hurricane-object] remains somewhat different from whatever these entities encounter of it, since none of them ever fully plumbs the depths of the [hurricane]."⁸⁶ This incompleteness of interaction holds for both the living *and* nonliving entities that encounter the object; the birds weathering the storm as well as the roads flooded by it. Each entity encounters merely a sliver of the massive, whorling hurricane-object.

In suggesting that objects, the supposedly passive nonhuman 'things' that make up the brute matter of the world, do *access* the objects around them in an imperfect way, I (and OOO more generally) have broken with the anthropocentric trajectory that has dominated philosophy for centuries. However, as we have already seen, the strict divide between Nature (*matter*) and Civilization (*form*), mirrored in the divide between (non-OOO) Object (*matter*) and Subject (*form*), is an agrilogistic construct; such a divide is only feasible in conjunction with an immense deployment of violence. There is also another, more basic force behind the assertion that nonhumans, including inanimate beings, fail to exhaust the objects they come in contact with: "All loose initial prejudice concerning the supposed gradation between different types of living and inanimate entities must not be smuggled into the realm of basic ontological assertions."⁸⁷ In other words; it is the twelve-thousand-year history of agrilogistic functioning that has conditioned us to be hostile to any and all notions that might suggest that nonhuman things access the world rather than merely compose it. Recognizing the vibrancy of materiality, waking up from our anthropocentric dreaming, would mean we would have to face up to the violence we

⁸⁶ Graham Harman, *Guerilla Metaphysics*, 18.

⁸⁷ *Ibid.*, 190.

have inflicted against what we have thought of as mere *matter* for thousands of years; that is, we would have to face up to the horrors of the Anthropocene.

Between what a thing *is* and how it *appears*, whether that thing is a human, a tree, a dry-erase marker, or a geological epoch, there is an unbridgeable schism. Objects "cannot be splayed open and totally grasped by anything whatsoever, including themselves."⁸⁸ This holds true of both theory *and* praxis; "the central rift is not between conscious and unconscious human activity, but between objects and our relations with them, whether these relations be explicit and lucid or tacit and vague."⁸⁹ This is the radical conclusion drawn by Kant's correlationism, though Kant himself shied away from the implications. Correlationism holds that "when I try to find the thing in itself, what I find are thing data, not the thing in itself."⁹⁰ Further, "I grasp that data in such a way that a thing does not (meaningfully) exist (for me) outside the way I . . . correlate that data."⁹¹

This stands in stark contrast to the features of agrilogistic and bureaucratic functioning we examined earlier. That everything is a correlator means that there is no place where the metaphysics of presence holds: *there is no level of the real at which everything can be rendered fully present*. Though Kant tried to backtrack away from this discovery, claiming that it was only the Rational Human who correlated, the ontological position that underpins that move is the very same substance-with-accidents model already addressed; there is *matter* over there, the bland,

⁸⁸ Timothy Morton, *Dark Ecology*, 16.

⁸⁹ Graham Harman, *Guerilla Metaphysics*, 190.

⁹⁰ Timothy Morton, *Dark Ecology*, 16.

⁹¹ *Ibid.*

lifeless stuff of the world, and We Correlators over here. But this is precisely what the conclusions of correlationism say *cannot* be true! There is no mutual contact between the things-in-themselves. Humans see human-flavored correlates of things, just as cats see cat-flavored correlates of things and bees see bee-flavored correlates of things. Saying that only humans can correlate is to default to the very same ontological position responsible for the mess of the Anthropocene.

While we are bound to *anthropo-morphize*—to have human-flavored correlates of things and not cat or table-flavored ones—that doesn't mean we are bound to *anthropo-centrism*, which posits humans as the superior or sole correlators. To tune correlationism to frequencies beyond the human, and to begin understanding the strange and mystical worlds in which we find ourselves, we merely need to relax the "anthropocentric copyright control on correlationism, allowing nonhumans like fish . . . the fun of not being able to access the in-itself."⁹²

On this view, where objects never fully plumb the depths of other object's being "even when they smack headlong into one another,"⁹³ causality is necessarily indirect, because the withdrawn nature of objects means that "*no two objects can encounter each other directly.*"⁹⁴

There is no mutual contact between the bedrock inner realities of the things-in-themselves. In lieu of a direct, mechanical theory of causation (of the sort we imagine when billiard balls smack into each other), the withdrawn nature of objects means that they influence each other in the

⁹² Ibid., 18.

⁹³ Timothy Morton, *Hyperobjects*, 36.

⁹⁴ Graham Harman, *Guerilla Metaphysics*, 19. Emphasis in original.

aesthetic-causal realm: a strange, thick medium between objects that is simultaneously distant from and intimate with them.⁹⁵

Cause and effect, rather than churning below objects, actually happens in *front* of them (ontologically, not spatially). In order for causality to happen, objects must already share a medium. This medium does not exhaust the objects within it, undermining them into a purely mechanical substratum, nor do the objects within it exhaust that medium—fully plumbing the depths of all relations that occur within it. The medium of causality between objects, then, is itself an object. In other words, in order for there to be causality at all there must always already be objects. Timothy Morton calls this causal realm that waves in front of things, squarely situated in the realm of aesthetics, that is, the realm of their appearances-*for* other objects, and not in some underlying beyond, the *mesh*.

The relations between meshing bodies are, too, bona-fide objects themselves; entities that cannot be exhausted by their interactions with other bodies. None of the objects engaged in relations are exhausted by those relations, nor *is the relation itself exhaustible*; "there is an effectivity proper to the grouping as such."⁹⁶ This means that the mesh, rather than existing as a neutral container of the sort that we are used to in thinking the Cartesian void, which holds things while remaining uncontaminated by them, is actually an emergent property of interobjective relations. Relations are objects, and as such have all of the basic features of objects discussed here. This means that *any* relation, whether conscious or unconscious, in theory or in praxis, not only relates to other objects but looses new entities unto the world.

⁹⁵ Indirect causation seems implied in the discovery of "spooky action at a distance," where entangled particles can affect each other instantaneously across great distances.

⁹⁶ Bennett, Jane. 2010. *Vibrant Matter*. Durham, N.C.: Duke University Press, 24.

Meshes are powerful tools for thinking this shimmery realm of effect and affect, because they imply both hard-forged connection as well as conspicuous absence. There are a few shortcomings to the term, however. Though bodies do, as literally as it is possible to state it, *mesh* together as the synchromesh in the manual transmission of a car does, meshing is not a purely mechanical phenomena (nor could it be, due to the nature of causality). Here, I believe Jane Bennet's description of assemblages invokes the mood more precisely: meshings between objects, far from lifeless, mechanical configurations, are "living, throbbing confederations that are able to function despite the persistent presence of energies that confound them from within. They have uneven topographies, because some of the points at which the various affects and bodies cross paths are more heavily trafficked than others, and so power is not distributed equally across its surface."⁹⁷ Importantly, no one element in the mesh has absolute authority; there are no dictators in the assemblage. *Play*, as I have noted, pervades every relation, and as such no entity can consistently determine the trajectory of an assemblage—there is always the possibility of subversion.

Through the fleshy, meshy realm of vicarious causation, objects leak into each other's worlds and carve themselves into each other's forms. Bodies are "surfaces onto which causality has been inscribed."⁹⁸ Think of a hard drive. When you save something to your computer, that data is physically written onto the storage disk in a language the computer can understand so it can be recalled for use later on. The surface of the hard drive becomes a record of everything that was ever written on to it, even when data is erased or rewritten. The form of an object is the

⁹⁷ Jane Bennet, *Vibrant Matter*, 23-24.

⁹⁸ Timothy Morton, *Hyperobjects*, 91.

memory of everything that has ever happened to it. But form never totally encompasses or reflects memory; there is always a loss in translation. The bits and bytes read from a hard drive don't fully capture the object that was written on to it.⁹⁹

The strange entanglements of form and memory render the mesh a kind of spectral plain, where a flower "is a speaker for the dead"¹⁰⁰ and long-extinct megafauna can be found in the regeneration ability of oak trees.¹⁰¹ In the mesh, objects are both *haunted*, scarred and molded by barely discernible others, and *haunting*, scarring and molding other objects as they encounter them in their wanderings. These "hauntings are not immaterial. They are an ineliminable feature of existing material conditions."¹⁰² Objects, leaking "through a thousand sieves, emerging as translated information on the other side of the mesh,"¹⁰³ shake us from our anthropocentric dreaming as visitors, quite literally, from other worlds. Whether we can understand them or not, "*they're here*."¹⁰⁴

For the very same reason that an object can never be totally present, the unbridgeable schism between what an object is and how it appears means that there is no transcending the

⁹⁹ songs and pictures are "compressed," information is cut out to reduce file size

¹⁰⁰ Haraway, Donna. 2017. "Sybiogenesis, Sympoiesis, and Art Science Activisms for Staying with the Trouble". In *Arts Of Living On A Damaged Planet*, M25-M50. University of Minnesota Press, M33.

¹⁰¹ Svenning, Jens-Christian. 2017. "Future Megafaunas; A Historical Perspective for a Wilder Anthropocene". In *Arts Of Living On A Damaged Planet*, G67-G86. University of Minnesota Press.

¹⁰² Barad, Karen. 2017. "No Small Matter; Mushroom Clouds, Ecologies Of Nothingness, And Strange Topologies Of Spacetimemattering". In *Arts Of Living On A Damaged Planet*, G103-G120. University of Minnesota Press, G107.

¹⁰³ Timothy Morton, *Hyperobjects*, 77.

¹⁰⁴ Hooper, Tobe. 1982. *Poltergeist*. Film.

mesh, that there are no emergency exits out of the spectral plain. We cannot "rise above the murmuring sensuality of the world in which [we] bathe"¹⁰⁵ to the place of total, immanent presence promised by the metaphysics of presence. Instead, we always find ourselves *somewhere* (a bedroom, a boardwalk, an *episteme*), doing *something* (eating a bagel, admiring a sunset, humming along to music). That is, we are always already playing-*with* the objects among us; there is no 'outside' of relations with other bodies, nor is there an 'objective,' uncontaminated standpoint from which to assess them. The inescapable sincerity with which we engage with objects hints at another one of their shared qualities: *stickiness*. It is towards this stickiness we will now turn.

Stickiness

The stickiness of objects describes their uncanny ability to never be fully escapable. That is, for OOO, the world is made of nothing but the interiors of objects.¹⁰⁶ Wherever we go, whatever we do, objects cling to us—immersing us in their worlds and writing us into their histories. The more we learn about evolution, for instance, the more we find how stuck in it we are. Some evolutionary biologists, finding symbiotic relations to be so essential to life that organisms cannot rightly be considered individuals, have turned instead to the *holobiont* collective to describe living entanglements.¹⁰⁷ Bacteria, viral insertions, calcium; objects so

¹⁰⁵ Graham Harman, *Guerilla Metaphysics*, 39.

¹⁰⁶ *Ibid.*, 192.

¹⁰⁷ The *holobiont* is defined as "the multicellular eukaryote plus its colonies of persistent symbionts." The findings of this research dissolve the biological individual into a collaborative effort between many different entities, living and nonliving alike. Living bodies are much closer to collective living arrangements than individuals. Or, in the researcher's words, "we are all lichens." Gilbert, Scott F., Jan Sapp, and Alfred I. Tauber. 2012. "A Symbiotic View Of Life: We Have Never Been Individuals". *The Quarterly Review Of Biology* 87 (4): 325-341. doi:10.1086/668166.

thoroughly knotted and congealed into human form they are not merely in our face, "they *are* our face."¹⁰⁸ Humans beings are irredeemably stuck to bacteria and bone, our bodies are *chimera*; monstrous beings with no central head, no dictator.

Objects are sticky in part because they are nonlocal—that is, they are not easily pinned to any particular position in spacetime; objects elude the boundaries we impose on them (another testament to their playfulness). More precisely, nonlocality indicates that being 'place'-able in time or space is an epiphenomenon resting on top of an otherwise aspaciotemporal substratum. Place-ability may be a feature of our experience of the world, but it is not a part of the bedrock structure of the world as such. Any one hurricane-event, for instance, stretches beyond merely the time of raging seas and high winds. Hurricanes continue to haunt us, to stick to us, as we rebuild, for years, in their wake. But the hurricane does not stretch on *infinitely*. There is a point at which its effects are no longer felt, though we can't ever point to exactly when that occurs. The hurricane is a very large finitude, not an infinity, but its boundaries are blurry and porous rather than thin and rigid.

Magnified down at the quantum level, nonlocality appears to be foundational to the way the universe operates. The advent of quantum physical theories has encouraged us to look at particles, like electrons, as less of a rigid, bounded thing and more "a blob that contains something like a particle, distributed . . . across a range of locations according to probability."¹⁰⁹ These probabilistic blobs span massive amounts of *spacetime*, leading some physicists

¹⁰⁸ Timothy Morton, *Hyperobjects*, 28.

¹⁰⁹ *Ibid.*, 46.

to use the Solar System as the starting frame of reference for finding the location of a single particle.¹¹⁰

Particles, especially very tiny ones like quanta, will also 'stick' to the devices used to measure them, offering another insight into the stickiness of objects. Measurement, which at the quantum level is really just *deflection*,¹¹¹ occurs within the mesh, since there can be no direct communication between subterranean realities of objects as we have already seen. Being in the position to measure an object, then, requires *already being inside the influence of that object*.¹¹²

That is, as Husserl has shown, "it is false to think that we [or any other object] encounter particular visible manifestations of a thing before we encounter the thing as a whole."¹¹³ A satellite tracking a hurricane's movement doesn't receive information at a comfortable, detached distance. Rather, the satellite is just as looped in with the hurricane it measures from outside the atmosphere as the flotsam, toads, and coastal marshes are looped in with the hurricane on the Earth's surface, though none of them fully capture the totality of the hurricane-object. If the satellite measures the hurricane, it is always already inside of the hurricane. In the physics world this is called *complementarity*, "in which what we see is glued to the equipment that sees it."¹¹⁴

¹¹⁰ Ibid.

¹¹¹ In the quantum world, measurements are conducted via collisions between electrons, photons, quarks, etc. Karen Barad (2017) contends, along with other quantum physical theorists, that there is no divide between the quantum world and the macro-scale world. This would mean that *all* measurement, of any kind, relies on some sort of deflection.

¹¹² If we accept that the spacetimemattering blob of any particle extends to at least the edge of the Solar System, this is not a far conceptual leap.

¹¹³ Graham Harman, *Guerilla Metaphysics*, 191.

¹¹⁴ Timothy Morton, *Hyperobjects*, 37.

Complementarity, in this sense, is really just the physics word for correlation. As Kant already noted, we never encounter the things-in-themselves (what here we have discussed as the withdrawn notes of objects), but only the thing-data. The equipment used to measure objects never brings those objects fully into perception but instead translates them into intelligible chunks of thing-data. This thing-data is always produced within a context, *among* the objects encountered and not at some metaphysical outside. This holds whether the equipment making the measurements is an eye, a finger, a theoretical tool, a language, or computer modelling software. What answers we receive about objects is intimately related to the questions we ask of them; what we see is glued to the equipment that sees it.

Inside hyper-scale objects like global warming, this stickiness is even stranger. Humans are stuck to hurricanes as we rebuild from their devastation, but in an even more intimate way hurricanes themselves are monstrous prothesis of *humankind*;¹¹⁵ the *anthropos* of the *Anthropocene*. Precipitated by the increasingly unstable atmospheric conditions wrought by global industrial production, hurricanes are thus a part of our *extended phenotype*. Like a spider's web, produced by spiders yet also *not* a spider, humankind's extended phenotype "doesn't stop at the edge of [our] skin but continues into all the spaces [our] humanness has colonized."¹¹⁶ Hurricanes are stuck to humans because hurricanes are always a manifestation of global warming,¹¹⁷ a geophysical force with which we *anthropos* are inescapably and irrefutably bound.

¹¹⁵ *Humankind* refers to the geophysical entity of which each individual human is a manifestation—the "you" that is reading this is a human-drop from the storm of *humankind*.

¹¹⁶ Our extended phenotype also includes entities like solo cups, styrofoam, and books. *Ibid.*, 27.

¹¹⁷ Just as, inside a hurricane, each raindrop or gust of wind is always a manifestation of the hurricane.

Already, in thinking humankind at the geophysical level—where islands of trash, oil spills, and hurricanes are but a few of our chimeric appendages—we are stretching beyond anthropocentrism. The species of which we are a part resides at a scale far larger than our own; it is a monster, and you are a cone in one of its eyes.¹¹⁸ It is the monster responsible for the Anthropocene. You have been unconsciously enacting its bidding. Clearly, no individual human has control over hurricanes, and indeed each individual's contribution to the warming of the planet is statistically insignificant.¹¹⁹ Yet, as *humankind* turns millions of keys in millions of ignitions all over the Earth, the result is a blanket of carbon that suffocates ecologies and shrink-wraps us together with hurricanes and global warming.

Waking up in the Anthropocene, we find that humankind is among a great many other monsters; jellyfish, too, are monsters. Ushered into too-warm seas emptied by overfishing, "the richness of earlier marine assemblages is overwhelmed. The ocean turns monstrous. Filling the seas with sloshing goo, jellyfish are nightmare creatures of a future where only monsters can survive."¹²⁰ This is the kind of weirdness we need to be able to think if we are to live and die well in the Anthropocene, and it is precisely the kind of weirdness agrilogistics is designed to eliminate. The substance-with-accidents ontology cannot think monsters, because the existence of monsters defies the notion that a lack of fish and increased sea temperatures are mere 'accidental' qualities on top of an otherwise stable substance. Overfishing and rising sea temperatures are not mere accidents, they enact irreversible changes in ecological arrangements.

¹¹⁸ Timothy Morton, *Dark Ecology*, 42.

¹¹⁹ Some individuals, of course, have a significantly higher impact than others. The richest 10% of humans, for instance, can be tied to the expulsion of over 70% of total carbon emissions.

¹²⁰ Swanson, Heather, Anna Tsing, Nils Bubandt, and Elaine Gan. 2017. "Bodies Tumbled Into Bodies". In *Arts Of Living On A Damaged Planet*, M1-M12. University of Minnesota Press, M1.

The metaphysics of presence cannot think beyond the human to the level of humankind, that is, the species, because humankind is strangely distant from any individual human. It is a ghost that possesses us, not a clearly identifiable and constantly present thing.

The rift between the *humankind* that drives the Anthropocene, a world-geologic event spanning hundreds of thousands of years, and any individual human, which, even if lucky, will on average live less than a century, illuminates another quality of objects that merits discussion: the murmuring, sensuous currents of polyphonic time in which we are immersed.

Temporal Polyphony

If the mesh is an emergent property of interobjective relations that is itself an object, as discussed above, so too is time. If objects actually *create* time rather than merely move through it as an inert medium, then movement through the mesh is not characterized by a smooth transition along a linear axis of time.¹²¹ Rather, objects immersed in the mesh are awash in a veritable *temporal polyphony*, a term I borrow from Anna Tsing. Temporal polyphony is more or less a fancy way of saying that each body dynamically unfolds according to its own private rhythm rather than synchronizing to some master Time; each object has its own time scale. Temporal polyphony points to the reality of time as a "constitutive dimension of social reality."¹²² In other words, time is a *dimension* of relations, not merely a measure of them. "To even notice" this polyphony, Tsing says, "we must evade assumptions that the future is that singular direction ahead."¹²³ The notion of time as a linear succession of 'now' points, the smooth passage through

¹²¹ The notion that objects emit time is supported by recent gaussian theories of spacetime.

¹²² Fabian, Johannes, and Matti Bunzl. 1983. *Time And The Other*. Columbia University Press, 24.

¹²³ Tsing, Anna Lowenhaupt. 2015. *The Mushroom At The End Of The World*. Princeton, N.J.: Princeton University Press, viii.

a neutral container of Time, is the view given to us through narratives of Progress. In contrast to these narratives, Tsing offers a view of "open-ended assemblages of entangled ways of [being], as these coalesce in coordination across many kinds of temporal rhythms."¹²⁴ Objects demand that we recognize this polyphonic time, "time drawn out like taffy, twisted like hot metal, cooled, hardened, and splintered,"¹²⁵ as communication with them ultimately relies on our ability to mesh with objects inside a shared time-space. Synchronizing to objects in this time-space happens through what Johannes Fabian calls *coevalness*. This shared time-space does not preexist our relations with other bodies in the mesh. Rather, "coevalness has to be *created*."¹²⁶

Coevalness, because of the strange, loop-like relations between objects, has a strange, loop-like form; like a mobius strip. A mobius strip is a *twist* that joins two sides of a surface into one. However, there is no particular place where the twist happens. Rather, the twist is *always* happening; there is nowhere in a mobius strip that *is not already* the twist. In the case of time, the twist happens as the *past* (the appearance of an object)¹²⁷ and the *future* (the always-unfulfilled object in its totality) wash into each other, creating a perpetual *coevalness* or *nowness* that occurs at no specific point; it is always already happening as the result of uncanny, indeterminate meshing. Coevalness is an object, and as such it, too, is playful.¹²⁸

¹²⁴ Ibid.

¹²⁵ Karen Barad, "No Small Matter", G106.

¹²⁶ Johannes Fabian, *Time And The Other*, 31. Emphasis in original.

¹²⁷ Appearances are always the past. The delay in seeing something, as it takes a period of time for photons to travel from the surface of an object to your eye, is a good example of this.

¹²⁸ We can watch a hurricane unfold as a linear process from our human scale, so it may be tempting to deny the strange loopiness of time. However, hop up a dimension (and include other weather processes) and you find an attractor; a multidimensional map of chaotic events, like climate. Attractors were first discovered by Edward

Francisco López's *La Selva*, "an immersion into the sound environments of a tropical rain forest in the Caribbean lowlands of Costa Rica,"¹²⁹ is a beautiful rendition of temporal polyphony. López recorded *La Selva* using minimal equipment, just two microphones on the forest floor, and the result is "an astonishing . . . sonic web created by a multitude of sounds from rain, waterfalls, insects, frogs, birds, mammals and even plants, through a day cycle during the rainy season."¹³⁰ Calls and cries amplify and distort each other, threatening the listener with a solid block of rippling jungle-sound. *La Selva* resists division; the cacophony assaults the listener as an object in its own right, something beyond merely all of the sounds put together. Any attempt to elevate an individual entity to pampered isolation, as recordings used for identification purposes strive to do, ruptures the fragile resonance that binds the whole aural web together. As López explains; "the birdsong we hear in the forest is as much a consequence of the bird as of the trees or the forest floor. If we are really listening, the topography, the degree of humidity in the air or the type of materials in the topsoil are as essential and definitory as the sound-producing animals that inhabit a certain space."¹³¹ The rhythms of birds, frogs, crickets, trees, climate patterns, and geologic time all interweave to form a shimmering, menacing tapestry of temporal arrangement, in which severing foreground and background cannot occur without fracturing the sound-object.¹³²

Lorenz. The shape of a Lorenz attractor is a loop. Linear time is a human-flavored sliver of the more broadly loop-like structure of temporal happening.

¹²⁹ López, Francisco. 1998. "Francisco López [Essays // Environmental Sound Matter]". *Franciscolopez.net*. <http://www.franciscolopez.net/env.html>.

¹³⁰ Ibid.

¹³¹ Ibid.

¹³² Ibid.

The interweaving rhythms that compose the mesh are the temporal fragments of object's *executions*¹³³ setting up shop in each other's experiential space: the dynamic *becoming* of its notes echoing through the frequencies of *spacetime mattering* we and others are equipped to tune in to. Because their being is unfolding in a space beyond what we can experience directly, "we can only experience somewhat constrained slices of [objects] at any one time."¹³⁴ Or, as Jane Bennet puts it, objects "appear as such because their becoming proceeds at a speed or a level below the threshold of human discernment."¹³⁵ Understanding this polyrhythmic execution is essential for understanding objects, especially hyper-scale ones like global warming, because it explains how objects can seem to fall out of our worlds even while we remain stuck inside them.

I am always already 'inside' evolution, even though nowhere in my daily experience can I point to it unfolding explicitly (at least in myself and my fellow humans), just as I am always already inside global warming even when it's cold outside. We cannot grasp objects completely from our three-dimensional human scale for the simple reason that objects inhabit more than merely these dimensions and scales; they are never fully present in our cognitive space, but merely pass through it when their unfolding overlaps with ours; when coevalness is happening through relation. We can witness a hurricane form, grow, and unleash its power as a *process*—that is, a series of events occurring over a period of time—but never the unity of the process or a full presence of all its stages. This incompleteness is because we are experiencing the hurricane-

¹³³ That objects *execute* is the aspect of Heidegger's tool-analysis from which OOO takes its cue. Heidegger contends that while an object *executes*, it withdraws. It is only when a tool breaks that it appears ready-to-hand, or available to experience. The ready-to-handedness of an object reveals how we had always already been taking it for granted.

¹³⁴ Timothy Morton, *Hyperobjects*, 74.

¹³⁵ Jane Bennet, *Vibrant Matter*, 58.

object "from a standpoint that is $1 + n$ dimensions lower than that object's dimensionality."¹³⁶

The bit of the hurricane that I can see, hear, and feel as rain on my skin is but a small spacetime-mattering region of the much, much larger object that grips me. Speaking of time is not to speak of an empty container which persists even if every object were to be annihilated, nor a mere relational quality between objects. "Instead, to speak of time is to speak of the black noise on the interior of any object";¹³⁷ time is "something audible that accompanies a central message while somehow remaining extraneous,"¹³⁸ it is an object in its own right. Thinking temporal polyphony tunes us to the "countless times" we are immersed in, "one for every object."¹³⁹

Spectral Vibrancy and an Ontology of Play

Through *withdrawnness*, *stickiness*, and *temporal polyphony*, we can begin to hear the *spectral vibrancy* of things murmuring in the world. *Spectral vibrancy* names the way in which objects enact and reveal their being as positively existing entities despite their radical withdrawnness; how they remind us that they exist beyond their appearance. In Jane Bennet's words, spectral vibrancy is "the capacity of things—edibles, commodities, storms, metals—not only to impede or block the wills and designs of humans but also act as quasi agents or forces with trajectories, propensities, or tendencies of their own."¹⁴⁰ It is a vibrancy that has a distinctly

¹³⁶ Timothy Morton, *Hyperobjects*, 73.

¹³⁷ Graham Harman, *Guerilla Metaphysics*, 250.

¹³⁸ *Ibid.*, 204.

¹³⁹ *Ibid.*

¹⁴⁰ Jane Bennet, *Vibrant Matter*, viii.

spectral quality, as we only ever encounter flickering (that is, not fully present) traces of vibrant bodies even as we are wholly inside of them.

Because being is relational, because we are always already among the ethereal traces of rippling, writhing objects, our play with objects is always already a playing-*with*. In play, there is always another entity—a friend, a toy, a swingset—that makes demands on those playing-with it, lest it get angry or break. There is a tinge of horror to this: not only is play inescapable, but we can never be quite sure whether what we're playing-with is a squeaky toy or a trickster god, because the object at hand is always withdrawn. Like Marie Curie in her laboratory, our play is always with ghosts we cannot begin to fathom, ghosts that play with us just as we play with them. The horror we feel when the twins in *The Shining* invite Danny to come play with them is precisely the horror of play in the spectral plain.

This horror only gets deeper as we learn more about the ways in which humankind has been playing with other objects since the emergence of agrilogistics. Not only have we smothered objects under the shapeless blanket of passive *matter*, we have mutilated them as they did what they cannot help to do: relate to other objects. Indeed, because objects are inherently relational, the colonial drive towards compartmentalization has severed uncountable relations between objects that sustain life on Earth as it strove to segment the world into neat, clean categories; seeking to pave over the weird loopiness of things. The violence of rigid categorization is not merely metaphorical, it has real implications and consequences. Before we can begin to play with objects in fortuitous ways, then, we must abandon another longstanding hangover from our collective anxiety of play: The Law of Noncontradiction, and its logical relative the Law of Excluded Middle. There is, as it turns out, no formal proof for these laws.

Thus, as with other impersonal schema, it can only be enforced through violence. We might recall Avicenna's epigraph to the first chapter, which summarizes this point quite well.¹⁴¹

Our horror cannot give way to defeatism, however. As play pervades being, there is always the possibility of subversion, of something *better*. And, since we *anthropos* are the ones responsible for the Anthropocene, we are the ones obligated to find ways of living and dying well amongst our fellow critters. The radical withdrawnness of objects means there is no one theory, one mode of social organization to rule them all; thinking or measuring or pouring-water-on a thing cannot happen from anywhere other than *where we are*, and where we are is always a *somewhere* that glues itself to experience. Moving away from oppressive regimes of knowledge and material organization that try to paper over this withdrawnness means that it's time for us to get *playful*.

It means it's time for us to start *tuning*.

¹⁴¹ The epigraph can be found on page 12 of this document.

Queremos un mundo donde quepan muchos mundos.

We want a world where many worlds fit.

—Zapatista organizing principle

We'll work it all out as we go along. Let our practice form our doctrine, thus assuring precise theoretical coherence.

—Doc Sarvis, *The Monkey Wrench Gang*

Everywhere, a new idea of communism is to be elaborated.

—*The Coming Insurrection*

Tuning

Abstract: Circumstances as such demand we start going about things differently.

'Differently' how? My Suggestion is tuning. Tuning engages with bodies outside the academy; tuning is tired leg burnings on a crisp walk at night, laughing along with a friend, disrupting the function of agrilogistics at every turn. A tuning body aspires for resonance with other bodies, to wiggle and waggle, always to its own rhythm, alongside them. Resonances between bodies birth new symphonies, themselves resonating with other bodies, bathing in the real birthing symphonies of their own. A resonance is always a creation. What bodies we create we are responsible for, and Anthropos is responsible for a great many monsters; those wicked ghosts that are and are of the Anthropocene. Tuning may help us to live and die well among ghosts.

The prior section outlined an *Ontology of Play*, a relational ontology that seeks to let the shimmering, spectral qualities of objects pierce through the liminal spaces paved over by

traditional metaphysics; seeking the shine of that strange and ghostly middle banished by the Laws of Noncontradiction and Excluded Middle. This section ventures to answer the questions begged by the last: How do we coexist with objects, those ghosts that are and of the Anthropocene? How do we navigate the world in ways that no longer force us into choosing extinction? For this task, I propose *tuning*. Tuning is the process through which we find and create commonalities with other bodies, a process which is intimately bound up with the language we have to speak that which is common, and therefore with the ways that we organize ourselves materially and politically. Tuning is a relational practice, guided by principles rather than strict moral laws. The principles of tuning that I'll explore in this paper are the principles of solidarity, taking things on their own terms, and a willingness to play the fool. Before spelling out the content of these principles, however, some more background is in order.

Heeding Vine DeLoria Jr.'s warning, that "abstract theories create abstract action,"¹⁴² a body that tunes engages in "the world in which problems are solved";¹⁴³ that is, the world of sea foam, plastic bottles, earthworms, and the ongoing mass extinction event caused by anthropogenic global warming—an event (or, rather, a cacophony of events) that is rapidly desertifying the planet.¹⁴⁴ Desertification is the process by which, through deforestation,

¹⁴² DeLoria, Vine. 1988. *Custer Died For Your Sins*. Norman: Univ. of Oklahoma Press, 86.

¹⁴³ Ibid.

¹⁴⁴ "Our data indicate that beyond global species extinctions Earth is experiencing a huge episode of population declines and extirpations, which will have negative cascading consequences on ecosystem functioning and services vital to sustaining civilization. We describe this as a 'biological annihilation' to highlight the current magnitude of Earth's ongoing sixth major extinction event." Ceballos, Gerardo, Paul R. Ehrlich, and Rodolfo Dirzo. 2017. "Biological Annihilation Via The Ongoing Sixth Mass Extinction Signaled By Vertebrate Population Losses And Declines". *Proceedings Of The National Academy Of Sciences* 114 (30): E6089-E6096. doi:10.1073/pnas.1704949114.

drought, or destructive agricultural practices, once fertile land is turned to desert.¹⁴⁵ Oceans, too, can become deserts. When coral reefs bleach, due to rising ocean temperatures and toxicity, the many other lifeforms that depend on the reefs for food and shelter are put under extreme stress. Many die out. The Anthropocene is a time of deserts.

"To survive at all . . . the desert dweller must develop a prodigious sense of orientation."¹⁴⁶ Just as, in order for us to hear, our eardrums must waggle along with the soundwaves that bombard them, orienting to the bodies around us, with their chorus of ephemeral qualities and temporal rhythms, entails a measure of *resonance* with them. Resonance happens when we encounter something in common with another body or share in an effect of its presence; "something that is constituted here resonates with the shockwave emitted by something over there,"¹⁴⁷ quivering along with it like the drums in our ears quiver along with the pulsing atmospheric pressure that we interpret as sound. In this sense, resonance between bodies is not "a linear process," a process that, after some initial spark (like reading about it for the first time), "spreads from place to place" across bodies.¹⁴⁸ Rather, like the polyphonic chorus in *La Selva*, resonance "takes the shape of a music, whose focal points, though dispersed in time and space, succeed in imposing the rhythm of their own vibrations."¹⁴⁹ Tuning, as a relational practice, aspires for resonance. Or, rather, since a body that exists is always already resonating with many

¹⁴⁵ In 2014, UN estimates placed this rate at approximately 12 million hectares per year.

¹⁴⁶ Chatwin, Bruce. 1987. *The Songlines*. Penguin Books, 200.

¹⁴⁷ *The Coming Insurrection*. 2009. Los Angeles, CA: Semiotext(e), 12.

¹⁴⁸ Ibid.

¹⁴⁹ Ibid. Discussion of *La Selva* can be found on page 48 of this document.

others as a condition for its own existence, tuning aspires to foster an awareness of these resonances, to 'tune in' to them as a radio does a station frequency, and to guide those resonances to more fortuitous ends.

Merleau-Ponty remarks; "like crystal, like metal, and many other substances, I am a sonorous being."¹⁵⁰ Reverberating with the rhythms they impose, we resonate among the other objects quivering with the mesh. However, because "a body that resonates does so according to its own mode,"¹⁵¹ resonance is entirely sincere; that is, frozen in its own phenomenal sphere. This has already been discussed elsewhere but is worth revisiting, as it helps us to contend with ethical practice as something other than adherence to an absolute set of moral laws, whether those laws are ordained by a deity or deities, derived *a priori*, or given to us through any other 'objective' or 'impartial' means.

As Graham Harman points out, while discussing an insight of Husserl's; "there is no absolute boundary between passively received sensation and actively formed objects . . . no dualism . . . between sensation and thought, but only a ubiquitous schism between the thing as a unit and the myriad sensual facets by which it appears."¹⁵² The schism between the thing as a unit and the myriad sensual facets by which it appears, facets which engage both our sensual and cognitive capabilities, is precisely what freezes us to our phenomenal sphere and keeps the totality of entities forever out of our full perception. This 'frozenness,' our always being *somewhere*, means that we are always sincere in our dealings with bodies. Sincerity, Harman

¹⁵⁰ Merleau-Ponty, Maurice, Claude Lefort, and Alphonso Lingis. 1968. *The Visible And The Invisible*. Northwestern University Press, 144.

¹⁵¹ *The Coming Insurrection*, 12.

¹⁵² Graham Harman, *Guerilla Metaphysics*, 39.

continues, "is not located at a single pampered point in reality, but spreads everywhere like a vapor or a drifting rain."¹⁵³ Every perceptive act "is always already an interpretation,"¹⁵⁴ a relation between bodies that produces new bodies—the objects of experience—that then echo into the world along their own trajectories, themselves never fully fusing with other bodies.

What aspects of other bodies *do* appear for an observer, however, will depend on the language available to that observer, that is, the means through which that observer identifies and engages with other bodies in the world. Each language carries with it an ontology, a set of beliefs about what things are. For example, it is difficult for many people in the "Standard Average European" (SAE)¹⁵⁵ linguistic group to grasp relativity theories when they first encounter them. This is not because the Newtonian notions of space, time, and matter are sensed by *everyone* intuitively and general relativity, as a sophisticated physical theory, disrupts our intuition, but rather because Newtonian space, time, and matter "are receipts from culture and language. That is where Newton got them."¹⁵⁶ Our supposed *a priori* concepts of things are far from uncontaminated, 'pure' concepts, they are inherited through the very language that speaks our thought, and thus the assemblages of power dynamics and material relations that shape that language.

¹⁵³ Ibid., 43.

¹⁵⁴ Ibid., 47.

¹⁵⁵ This term is Benjamin Whorf's. SAE includes "english, french, german, or other european languages with the possible (but doubtful) exception of balto-slavic and non-indo-european" languages. Whorf, Benjamin Lee, and John B Carroll. 1956. *Language, Thought, And Reality*. Cambridge, Mass.: M.I.T. Press, 138.

¹⁵⁶ Ibid., 153.

SAE smuggles the substance-with-accidents model of the universe through its very syntactical structure. Because "our [SAE] language patters often require us to name a physical thing by a binomial that splits the reference into a formless item plus a form," like *glass of water* or *lump of dough*, "with SAE people the philosophic 'substance' and 'matter' are also the naïve idea; they are instantly acceptable, 'common sense.' It is so through linguistic habit."¹⁵⁷ It is no wonder, then, that Einstein could only describe the rippling, Gaussian spacetime he observed as a "reference-mollusk," because his discoveries stretched beyond the ontology implicit in the language he had available to speak of space and time. Relativity, and any theories that work with its findings, "must be talked about in what amounts to a new language."¹⁵⁸

Ontologies are not value neutral, as we have seen in the case of the Aristotelian substance-with-accidents ontology that imported the subjugation of women as a basic ontological fact. Since languages import ontology, languages are not value neutral either. What language we have available to speak things is in a reciprocal relationship not only on our linguistic structure, as Whorf observes, but in our material and cultural arrangements as well. Languages develop in relation to the materials and actions employed in their expression. That is, the assemblages from which languages emerge are not merely linguistic.

The English language could not proliferate without material elements like pencils, paper, notebooks, schooling programs, and the great many other prosthesis required to speak the language and render it intelligible to others. Further, what language prosthesis are available to express language influence the evolution of language itself; "The opening and closing of

¹⁵⁷ Ibid., 141.

¹⁵⁸ Ibid., 152.

suckling mammalian lips around the nipple makes an /m/ sound that is surely the basis of words such as 'mamma.'¹⁵⁹ Contemporary chaos theories and the language we have to speak of strange attractors, high-dimensional renderings of phased entities like climate, could not have developed without the aid of the computer modeling software that charts these massively distributed, transdimensional entities. The graphics that draws these attractors doesn't merely provide us with an incidental visual aid, it is "the scientific work as such,"¹⁶⁰ both revealing new information about attractors *and* influencing how we think and speak of them.

The assemblages of power that produce languages, too, reveal themselves in a negative sense. What is unspoken in language reveals that which the language does not value, or which it would prefer to keep behind the veil. Jane Bennet notes how the interjection of formerly ignored bodies into the open can radically alter the regime of the visible, thus reconfiguring the relations of the visible and the sayable.¹⁶¹ In a similar vein, Gayle Rubin contends that the power of the term 'capitalism' "lies in its implication that, in fact, there are alternatives to capitalism."¹⁶² That is, had we not had the language to speak capitalism, it may have been able to elude our notice, much like how the resistance of SAE languages to speaking the vibrancy of materiality or the strangeness of relativity exposes the gaps in our ability to speak of the world with the tools at our disposal; how entities are excluded by way of the very structure of language.

¹⁵⁹ Morton, Timothy. 2017. *Humankind*. Verso, 18.

¹⁶⁰ Timothy Morton, *Hyperobjects*, 73.

¹⁶¹ Jane Bennet, *Vibrant Matter*, 105.

¹⁶² Rubin, Gayle. 1975. "The Traffic In Women: Notes On The 'Political Economy' Of Sex". *Toward An Anthropology Of Women*, 168.

English, as with all other languages, is bound up with the myriad modes by which it is expressed and enacted in the world in a reciprocal, co-constitutive relation; which is to say, in a *twist*. In the case of English and many other European languages, these relations are entangled with the birth and amplification of conquest and colonization. The ontology that colonizing languages import cannot be severed from the actions and modes of organizing these ontologies engender. This is clear not only in the material aspect, where written language prothesis like pens and notepads are produced en masse via capitalist modes, but also linguistically in the form of common phrases like *spending time*, which engages with time through an economic relation, treating time as the kind of thing that can be 'spent.' In other words, capitalist relations, and social relations more generally, exert causal pressure on our languages, enabling and encouraging us to speak of things in some ways and not in others. Language does not exist as a pure or direct mode of contact with other bodies, but as a means of communicating that carries with it biases and assumptions about what those entities are and how they should be treated.

Here, we can see how languages are spoken with a material heft. In order for a language to proliferate it must inscribe itself into other surfaces, like how writing a letter engages not only with the abstract concepts the words convey but also the mutual effect between pencil and paper, or how speaking to a friend requires that their eardrums physically waggle along with the aural pulses of your words. A language is a resonance with other bodies, a mutual relation that is received and translated by the bodies that resonate with it, producing effects that are themselves full-fledged bodies. Fanon notes how "the agents of government speak the language of pure force,"¹⁶³ a force driven towards compartmentalization and domination.

¹⁶³ Frantz Fanon, *The Wretched of the Earth*, 38.

As noted previously, no body, human or otherwise, can escape sincere interaction with other bodies. Every body has a language, because a body "is not only a material process but is *in* and *of* language."¹⁶⁴ Sincerity makes the existence of an absolute *metalanguage*, a language "that could account for things while remaining uncontaminated by them,"¹⁶⁵ impossible. There is no 'top' or 'bottom' layer of language, just as there is no top or bottom layer of reality. Deconstruction has taught us, exhaustively, that languages do not operate in some metaphysical lounge above the quibbling of the world, but are immersed in other bodies—pencils, throat muscles, atmospheric conditions, economic production—and are formed and enacted through them. To adapt a phrase of Clifford Geertz'; languages don't speak *on* being, they speak *in* being.¹⁶⁶

The contextually situated nature of language, and of being in general, means that universal or transcendental Good and Bad moral laws are some of the biggest obstacles to us actually behaving morally! By collapsing a body to whatever caricature is thinkable within any particular moral context, assuming it can be fully described by whatever language is available to speak it and thus reducing its full reality to what appears in experience, so-called 'objective' morality actually engages with moral thought in an even narrower sense than those who do so with a more 'subjective' lens, despite grandiose claims to universality. As Glissant observes;

¹⁶⁴ Barrett, Estelle. 2015. "Materiality, Language And The Production Of Knowledge: Art, Subjectivity And Indigenous Ontology". *Cultural Studies Review* 21 (2): 101-119. doi:10.5130/csr.v21i2.4316, 103.

¹⁶⁵ Timothy Morton, *Hyperobjects*, 2.

¹⁶⁶ The oft-quoted original phrase is "Anthropologists don't study villages, they study *in* villages."

"Generalization is totalitarian: from the world it chooses one side of the reports, one set of ideas, which it sets apart from others and tries to impose by exporting as a model."¹⁶⁷

In their apathy or deliberate disregard for the realities of objects beyond what we humans can make of them, the moral decrees passed on by the anthropocentric philosophies of theologians, humanists, or eliminative materialists will always fail to navigate the real, because they still only engage with reality as something unique to some pampered layer of the real or some entity within it; a morality that stems from an ontology that posits a 'more real' or supreme level of being will always fail to coexist with objects as things that exist in excess of their relations, regardless of whether that supreme level, or metalanguage, appears as God, Man, or Molecule (or, in Aristotle's case, as *form*).

Tuning, then, makes no appeal to an 'objective' moral compass; it is unabashedly sincere. But to allow for the sincerity of all languages is not to allow that all languages deserve the same consideration, and thus tuning can avoid many of the objections levelled against 'subjective' moral views. Often, these objections stem from the assumption that, without the firm ground of a deity or moral objectivity to stand on, any view that posits moral relativism must grant all moral views equal weight. These objections, however, still rely on the substance-with-accidents model of the universe, a model that does not accurately represent things in the world and actively enables violence against them. By presuming that a recognition of relativity in value entails that all values stand on equal footing is to presume some kind of featureless value-lump is what underlies all values, upon which the particular values inherent in being a person or a tree or a

¹⁶⁷ Édouard Glissant, *Poetics of Relation*, 20.

possum are merely accidents; sprinkles on the cake of what is otherwise an entirely bland, 'easy-bake' substance.

What tuning is grounded in isn't a 'ground level' of reality or an 'objective' assessment of moral codes, but the real existence of other bodies. These bodies have a reality beyond what we happen to be able to make of them, and have wants, needs, or trajectories that are their own and are independent of whatever interpretation is projected on to them, by a human or any other correlator. A moral position that states that the destruction of bird nests is permissible, and another that says it is not, do not stand on equal footing *because there is a real bird that is affected by the destruction of the nest in a way that is good or bad for it*. Eduardo Kohn puts it simply; "our moral worlds can affect [other] beings precisely because there are things that are good or bad for them."¹⁶⁸

A failure to recognize bodies as entities independent of our languages for them begets strange, unintended, or disastrous results: In 2016, staff at the United States embassy in Cuba began complaining of headaches, nausea, and a loss of memory and hearing, attributing the cause to constant high-pitched sounds echoing throughout the building. Some believed the embassy was under assault by a sonic weapon. After recordings of the sound were analyzed, however, the culprit turned out to be much more benign; amplified and distorted by the walls of the building, the oscillating chirp of a cricket is the likely cause of the worker's ailments. The embassy, which had been built without taking into account the acoustic signaling of the local insects, became a sounding board from which the crickets calls coalesced into pulses strong enough to make the embassy staff incredibly ill. The anthropocentric architectural language with which the embassy

¹⁶⁸ Kohn, Eduardo. 2013. *How Forests Think*. University of California Press, 134.

was constructed is not tuned to the local specificities of Havana, though the building was constructed *in Havana* and not in some placeless modernity. In addition to the strange emergence of the nausea-inducing sound-object as a consequence of its ignorance, the building has numerous problems with climate control. It was built with "large expanses of unshielded glass in a hot, sunny climate,"¹⁶⁹ and both the cooling and ventilation systems consistently failed to function as planned.¹⁷⁰

Tuning to other bodies, that is, aspiring for a fortuitous resonance with them, requires languages. Languages, as we have seen, are not merely linguistic but entangled in material interactions and political arrangements as well in a co-constitutive, symbiotic relationship, and as such carry with them an implicit view on what things are real and deserving of recognition. The material arrangement of the United States embassy in Havana did not account for local cricket populations, nor, apparently, for the sun, and plagued its residents with ghostly, piercing vibrations and harsh temperatures as a consequence. Though the embassy is but one withdrawn entity in the mesh of withdrawn entities, it shares *worlds* with them and thus affects and is affected by them. This world sharing, in a non-anthropocentric reading of *world*, is what allows us to have things in common with other bodies and is what brings us to the first relational principle of tuning; the principle of *solidarity*.

¹⁶⁹ Wise, Michael Z. 2014. "The Architectural Importance Of The U.S. Embassy In Havana, Cuba". *Architectmagazine.Com*. https://www.architectmagazine.com/design/the-architectural-importance-of-the-us-embassy-in-havana-cuba_o.

¹⁷⁰ This example is, of course, not to overlook the emergence of the Anthropocene as stemming from the very same failure to recognize objects as something other than mere *matter*.

Solidarity

Solidarity describes "a state of physical and political organization, and it describes a feeling."¹⁷¹ Paradoxically, solidarity can happen precisely because we *are not* solid; because we exist in a relational way, sharing our human worlds with other bodies and worlds that are not human. We have discussed this relational medium above as the *mesh*. From our childhood, we are "involved with flows of milk, smells, stories, sounds, emotions, nursery rhymes, substances, gestures, ideas, impressions, gazes, songs, and foods . . . tied in every way to places, sufferings, ancestors, friends, loves, events, languages, memories, to all kinds of things that obviously *are not [us]*."¹⁷² All of these not-us-es do not coalesce to form some kind of rigidly bounded identity or individual, a thing that is easily pointed to and constantly present, but rather a shared, living, and dynamic *world*.

World, or the process of *worlding*, is actually very cheap. To have a world you just need to get on with things, "and your world emerges from this getting on."¹⁷³ Heidegger, when he first articulated the concept of *world*, actually went against his own thinking when he claimed that humans were the only worlding beings. Relaxing the anthropocentric copyright on *worlding*, just as, in the prior section, we relaxed the anthropocentric copyright on correlating, means that lizards, worms, and water bottles can be worlding beings too. Resonance is the "noise made by the uneasy, ambiguous relationship"¹⁷⁴ between worlds as they play with each other, and

¹⁷¹ Timothy Morton, *Humankind*, 41.

¹⁷² *The Coming Insurrection*, 31.

¹⁷³ Timothy Morton, *Humankind*, 208.

¹⁷⁴ *Ibid.*, 44.

solidarity is the principle that motivates mutually fortuitous material, physical, and emotional relationships within these worlds.

Thinking worlding in this weak, perforated way "draws [our] attention sideways, away from an ontologically ranked Great Chain of Being and toward a greater appreciation of the complex entanglements of humans and nonhumans."¹⁷⁵ This appreciation allows us to "admit that humans have crawled or secreted themselves into every corner of the environment; admit that the environment is actually inside human bodies and minds, and then proceed politically, technologically, scientifically, in everyday life, with careful forbearance."¹⁷⁶ Bodies have perforated, communal worlds because to be a body is to be a perforated, communal thing, inhabited and traversed by strangers like gut bacteria, electricity, and ideology, which all visit our worlds from worlds of their own. From the tattered and spongy notion of world can emerge what Jane Bennet calls "the self of a new self-interest",¹⁷⁷ a worlding self that is interlinked with a great many other worlding selves.¹⁷⁸

When we act in solidarity, say, with prisoners striking against their enslavement,¹⁷⁹ by staging noise demonstrations outside their cells, banner drops, or fundraisers for money and

¹⁷⁵ Jane Bennet, *Vibrant Matter*, 112.

¹⁷⁶ *Ibid.*, 116.

¹⁷⁷ *Ibid.*, 113.

¹⁷⁸ Here, we can see the truth of the Zapatista organizing principle that opened this paper; every *world* is a world where many worlds fit. That is the *world* we want. It is the only *world* that has the possibility of navigating the Anthropocene.

¹⁷⁹ For more information on the prison labor strikes that occurred across the world in the late summer of 2018, see: Pilkington, Ed. 2019. "US Inmates Stage Nationwide Prison Labor Strike Over 'Modern Slavery'". *The Guardian*. <https://www.theguardian.com/us-news/2018/aug/20/prison-labor-protest-america-jailhouse-lawyers-speak>.

supplies, we are tuning in to a mutual harm that plagues us. Though those of us on the outside suffer from the prison industrial complex, with its prosthetic swarms of laws, police, and surveillance apparatuses, in ways that are very different from the people who are forced to live their lives inside prison walls, we all suffer from the existence of prisons and the material and ideological institutions that support them.¹⁸⁰ This shared experience of harm is precisely what, for John Dewey, leads to a "public;" a "confederation of bodies, bodies pulled together not so much by choice (a public is not exactly a voluntary association) as by a shared experience of harm."¹⁸¹ Acts of solidarity work to navigate, alleviate and repair that harm, leading to an increased enjoyment for all those who share in it.

Through the principle of solidarity, a tuning body can resonate with other bodies to further a mutual enjoyment of the many worlds that constitute their world. How we as tuning bodies can come to learn what other bodies enjoy requires another principle, which for lack of a better formulation I am recognizing as *taking things on their own terms*. Taking things on their own terms means that we cannot reduce the totality of a thing to its appearance in any particular context, nor to the sum of its appearances in a great many contexts, and must therefore treat it as something that exists in excess of how it appears for any observer. This is a point that has been stressed throughout the entirety of this thesis, but because it has some particular implications for how we approach objects from an ethical perspective, that is, how we *tune* to them, it is worth revisiting.

¹⁸⁰ This is not to overlook the drastic difference in the ways in which these swarms are applied to different groups of humans through hierarchical assemblages of power.

¹⁸¹ Jane Bennet, *Vibrant Matter*, 100.

Taking Things on Their Own Terms

Learning to take things on their own terms requires that we expand our ability to understand and respond to the demands bodies make on other bodies.¹⁸² Existing in general means responding to demands; eating food, using a hammer, or going on a walk all require responding to the demands made by your body, the hammer, and the path being followed. And, because existing in general also means sharing a world with a great many other worlds, we are always already responding to the demands of the great many bodies we coexist with. We can, of course, fail to meet these demands, and it is precisely this failure to meet the demands of the bodies (outside those recognized as "real" by the oppressive entities of Capital, colonialism, et. al., that is, outside those that can be rationalized into bureaucratic relations) that has precipitated the horrors of colonialism and Anthropocene.

Taking things on their own terms is no easy task, especially within the bounds of a (social, linguistic, material, political) language that is systematically hostile to the spectral vibrancy of things. How exactly we can make languages more friendly toward these demands will be discussed in the final section of this paper, for now it will suffice to deconstruct the notion of *symmetrical reciprocity* that, although it can begin to allow nonhumans in ethical consideration and thus enable us to consider the existence of demands beyond the human (not to mention within the human), still fails to grapple with them in the ways the numerous ecological emergencies we exist in require.

¹⁸² This is, for Alphonso Lingis, how we navigate the world. His term for what I here refer to as "demands" is "directives."

Symmetrical reciprocity, first coined by philosopher Iris Young, is "the belief that one can put oneself in another's situation and imagine the world from [their] point of view."¹⁸³ When people perform symmetrical reciprocity, "they get no further than themselves . . . that is, they put themselves, with their background, knowledge, experience, *and privilege* into what they suppose is the situation of another."¹⁸⁴ Often, this works to "efface difference and disguise relations of power."¹⁸⁵ That tuning challenges this notion may seem odd at first, as imagining the world from another's point of view sounds eerily similar to empathy; a capacity which many view as necessary to have any ethical dealings with others at all.¹⁸⁶ But what tuning is after isn't empathy, it's after something below that: Solidarity. It requires no training, no imagining; solidarity is just *the base mode of existence*. Every lifeform on the planet displays solidarity, and Petr Kropotkin has argued that it is through solidarity, what he calls *mutual aid*, that lifeforms coexist with each other.¹⁸⁷ To put it more simply, "the ground/ is pro-Communist."¹⁸⁸

To avoid the pitfalls of an ethics based on symmetrical reciprocity, striving instead for a tuning "beyond the human that does not merely project human qualities everywhere,"¹⁸⁹ we have

¹⁸³ Kulick, Don. 2015. *Loneliness And Its Opposite*. North Carolina: Duke University Press, 267.

¹⁸⁴ *Ibid.*, 266. Emphasis in original.

¹⁸⁵ *Ibid.*, 277.

¹⁸⁶ Empathy is what grounds Adam Smith's theory of ethics, for example.

¹⁸⁷ Kropotkin argues for this throughout his *Mutual Aid: A Factor in Evolution*. Mutual aid as he defines and defends it throughout, is not based on empathy or love, but "it is a far wider, even though more vague feeling or instinct of human solidarity and sociability which moves me. So it is also with animals." Kropotkin, Petr Alekseevich. 2016. *Mutual Aid; A Factor In Evolution*. 8.

¹⁸⁸ Excerpted from "The Call of the Wild" in Snyder, Gary. 2008. *Turtle Island*. New York: New Directions.

¹⁸⁹ Eduardo Kohn, *How Forests Think*, 133.

to be receptive to the actual demands of other bodies, recognizing that those demands are both "necessarily different from, and may actually challenge, ours."¹⁹⁰ How can we, bound as we are to anthropomorphize, not fall prey to symmetrical reciprocity, that is, centering our own experience in our dealings with others? Learning about and dismantling the material and ideological structures of power that limit our ability to stretch beyond symmetrical reciprocity is a good first step. Beyond that, a willingness to play the fool seems necessary. *Playing*, here, is key, as it can help to stretch and wiggle out from underneath the anthropocentric (social, political, material, linguistic) customs that impede our tuning to nonhumans.

Playing the Fool

Because objects are irreducibly withdrawn, we share worlds with them but never fully fuse with them or reveal their being completely, bodies require new and creative ways of tuning in order to break from the vampiric and devastating oppressive cycles to which we have subjected them and ourselves. We share our worlds with plastic debris, and as masses of it coagulate into islands, choking out lifeforms as it rides the ocean currents and producing cascading extinction, there is a social and political necessity to understanding them; how these trash islands form, what effects they have, or how their effects might be mitigated and rectified are all urgent problems to address. But where to begin? How do we understand trash islands as bodies? There is no easy answer, nor is there any one *right* answer. Trash eludes human control, even if it is the product of (partially) human endeavors. What we have to do it *play* with it, even if it means breaking from convention to do so. *Especially* if it means breaking from convention, since convention is precisely what brought us to this point! I take convention, in this sense, to

¹⁹⁰ Don Kulick, *Loneliness and its Opposite*, 268.

mean the socially acceptable forms of relating to other objects regulated by the *polis*; the political community and place of Rational order, and the etymological root of both "politeness" and "police."¹⁹¹ Nietzsche crying along with the horse being beaten is not a bad example of playing the fool.

Play is foundational to tuning, because it is foundational to being, as we explored in *an ontology of play*. When Felix Hess sped up an audio recording he made outside his apartment, playing with the ordinary temporal flow of sound humans are ordinarily attuned to, he uncovered a hyperobject; "a humming sound or a rich, deep drone, audible like a multi-engined heavy airplane in the distance. This deep droning sound, at times all but inaudible, is formed by oscillations in the atmosphere—microbaroms—caused by standing water waves on the Atlantic Ocean, far away."¹⁹² The recorded fluctuations lie in the range of infrasound, and are quite literally unheard of unless tuned to with this kind of audio equipment. Without a willingness to explore new or strange avenues of tuning (what happens if I speed this sound up 360 times?), we won't be able to grapple with the immensity, not to mention the immense number, of the overlapping, enfolded bodies we coexist with.

Playing the fool precludes any kind of top-down fix to any problem, not to mention that such "solutions" are ontologically impossible (because there is no 'top' or 'bottom' level of reality, only the interiors of objects). This is to say there is no absolutely 'right' way to play with another body, only degrees of getting along, and getting along in ways that don't generalize about the demands of any particular context. Even global warming, a massive, distended object which

¹⁹¹ David Graeber, *The Utopia of Rules*, 95.

¹⁹² "Felix Hess - Air Pressure Fluctuations". 2019. *Discogs*. <https://www.discogs.com/Felix-Hess-Air-Pressure-Fluctuations/release/406072>.

every being on the planet engages with in some way or another, has its local specificities; "the conditions we breathe in are collective and unequally distributed, with particular qualities and intensities that are felt differently through and across time."¹⁹³ That even the UN admits small-scale farming is the only way to sustain global food supply should give us a hint as to the inadequacy of one-size-fits-all approaches to broad social problems.¹⁹⁴

Tuning precludes organizing in states. It is spoken multilingually, like Glissant's *Relation*; and as such goes "beyond the impositions of economic forces and cultural pressures, . . . rightfully [opposing] the totalitarianism of any monolingual intent."¹⁹⁵ State structures are incapable of tuning, because they rely on bureaucratic reason, a top-down, one-size-fits-all structure, and as such are woefully underequipped to handle the many ecological emergencies we must contend with. Even the ostensibly communist state solutions to environmental problems mirrored the capitalist ones; Lenin famously advocated pumping fertilizers into the soil to increase food production efficiency. The flexible, playful, contextually rooted cultivation of resonance I have outlined here as tuning compels us towards a "polity with more channels of communication,"¹⁹⁶ which I contend has the shape of anarchical groupings. "If one knows how to move, a lack of schema is not an obstacle but an opportunity."¹⁹⁷

¹⁹³ Simmons, Kirsten. 2017. "Settler Atmospheric". *Culanth.Org*. <https://culanth.org/fieldsights/settler-atmospherics>.

¹⁹⁴ United Nations Conference on Trade and Development. 2013. "Wake Up Before It Is Too Late: Make Agriculture Truly Sustainable Now for Food Security in a Changing Climate," Trade and Environment Review 2013. New York: United Nations.

¹⁹⁵ Édouard Glissant, *Poetics of Relation*, 19.

¹⁹⁶ Jane Bennet, *Vibrant Matter*, 104.

¹⁹⁷ *The Coming Insurrection*, 19.

This is not as radical as it might seem. In fact, a playful, non-hierarchical (or, at least, transiently heterarchical) approaches to social organization is how humans have arranged themselves for the vast majority of our existence on this planet, even after the agricultural revolution drove us towards city-states (the real story, as one might suspect, is much more complicated). What appears to have been most common across many different societies was a seasonal, cyclical pattern of social organization, revealing that "from the very beginning, human beings were self-consciously experimenting with different social possibilities."¹⁹⁸ Further, these societies were not confined exclusively to small bands, as we are often told was the case of our distant ancestors, but often aggregated in large groups:

"At less favourable times of year, at least some of our Ice Age ancestors no doubt really did live and forage in tiny bands. But there is overwhelming evidence to show that at others they congregated *en masse* within the kind of 'micro-cities' found at Dolní Věstonice, in the Moravian basin south of Brno, feasting on a super-abundance of wild resources, engaging in complex rituals, ambitious artistic enterprises, and trading minerals, marine shells, and animal pelts over striking distances. Western European equivalents of these seasonal aggregation sites would be the great rock shelters of the French Périgord and the Cantabrian coast, with their famous paintings and carvings, which similarly formed part of an annual round of congregation and dispersal."¹⁹⁹

Further, there is little evidence to suggest that these micro-cities had any rigid hierarchical form. If that were the case, "we'd also be finding fortifications, storehouses, palaces—all the usual

¹⁹⁸ Graeber, David, and David Wengrow. 2018. "How To Change The Course Of Human History". *Eurozine.com*. <https://www.eurozine.com/change-course-human-history/>.

¹⁹⁹ Ibid.

trappings of emergent states. Instead, over the vast majority of human history and spaces where humans lived, we see monuments and magnificent burials, but little else to indicate the growth of ranked societies."²⁰⁰ The principle that drove much of this social experimentation, Davids Graeber and Wengrow suggest, was an "understanding that no particular social order was ever fixed or immutable," precipitating a history where humans succeeded in "confining inequality to ritual costume dramas, constructing gods and kingdoms as they did their monuments, then cheerfully disassembling them once again"²⁰¹ for tens of thousands of years.

The living alternatives to capitalist and state organization are many; The Zapatista rebellion has sustained a vibrant community in the Mexican hillsides of Chiapas since 1994. Many Kurdish peoples in Rojava, whose YPG and YPJ militias have garnered international attention, organize themselves through the model of democratic confederalism developed by Abdullah Öcalan. In the so-called United States, the myriad communities in Standing Rock, the Hellbender Autonomous Zone, Camp White Pine, and the many other tree sits spread across the country have all forged living alternatives to state capitalist organization through their resistance to pipeline construction. In so doing, all of these communities seek to break the devastating cycles of industrial capital and environmental racism and renew and repair relations with the other bodies, human and nonhuman, with which we all coexist. These are perhaps the most powerful examples of tuning I can offer.

²⁰⁰ Ibid.

²⁰¹ Ibid.

The Open Ending

In this thesis, I have argued that the bureaucratic functions, both ideological and material, that underpin the very basis of modern Civilization are the very same functions responsible for the emergence of the Anthropocene; the cacophony of ecological emergencies wrought by human activities that today threaten the livability of the planet. In lieu of bureaucratic thinking and doing, which relies on the belief that to be real is to be fully and completely present at all times, I have sought to think things as rippling, writhing *objects*. That is, as ghosts. To coexist with ghosts, we need ethical orientations that can allow for play, for experimentation, for the possibility of organizing *alongside* objects in ways that do not force us into choosing extinction. Living and dying well in the Anthropocene alongside our fellow critters depends on our forging resonances with entities that engage with wider frequencies of their contours; their material existences as much as their speculative, theoretical ones.

The praxis of decoloniality . . . is just this: the continuous work to plant and grow an otherwise despise and in the borders, margins, and cracks of the modern/colonial/capitalist/heteropatriarchal order. The pedagogies of this praxis are multiple. They are sown and grown in the contexts of decolonial struggle, wherever and however this struggle is conceived, situated, and takes form.

—Catherine E. Walsh and Walter D. Mignolo, *On Decoloniality*

Bibliography

- Agamben, Giorgio. 2018. *What Is Real?*. Stanford University Press.
- Alexander, Michelle. 2012. *The New Jim Crow (Revised)*. New Press.
- "Aristotle". 2015. *Stanford Encyclopedia Of Philosophy*.
<https://plato.stanford.edu/entries/aristotle/>.
- Barad, Karen. 2017. "No Small Matter; Mushroom Clouds, Ecologies Of Nothingness, And Strange Topologies Of Spacetime-mattering". In *Arts Of Living On A Damaged Planet*, G103-G120. University of Minnesota Press.
- Barrett, Estelle. 2015. "Materiality, Language And The Production Of Knowledge: Art, Subjectivity And Indigenous Ontology". *Cultural Studies Review* 21 (2): 101-119.
doi:10.5130/csr.v21i2.4316.
- Bennett, Jane. 2010. *Vibrant Matter*. Durham, N.C.: Duke University Press.
- Bird Rose, Deborah. 2017. "Shimmer; When All You Love Is Being Trashed". In *Arts Of Living On A Damaged Planet*, G51-G63. University of Minnesota Press.
- Butler, Judith. 1993. *Bodies That Matter*.
- Byrd, Jodi A. 2011. *The Transit Of Empire*. Minneapolis: University of Minnesota Press.
- Ceballos, Gerardo, Paul R. Ehrlich, and Rodolfo Dirzo. 2017. "Biological Annihilation Via The Ongoing Sixth Mass Extinction Signaled By Vertebrate Population Losses And Declines". *Proceedings Of The National Academy Of Sciences* 114 (30): E6089-E6096.
doi:10.1073/pnas.1704949114.

Chatwin, Bruce. 1987. *The Songlines*. Penguin Books.

Coronil, Fernando. 2008. *The Magical State*. Chicago: University of Chicago Press.

Davis, Angela. n.d. "Masked Racism: Reflections On The Prison Industrial Complex". *Historyisaweapon.com*.

<https://www.historyisaweapon.com/defcon1/davisprison.html>.

Debord, Guy. 2016. *Society Of The Spectacle*. Black & Red.

Deloria, Vine. 1988. *Custer Died For Your Sins*. Norman: Univ. of Oklahoma Press.

Derrida, Jacques, Gayatri Chakravorty Spivak, and Judith P Butler. 2016. *Of Grammatology*. Baltimore: The Johns Hopkins University Press.

Douglass, Frederick. 1854. "The Claims Of The Negro, Ethnologically Considered.". Speech, Western Reserve College, , 1854.

Echo-Hawk, Roger C. 2000. "Ancient History In The New World: Integrating Oral Traditions And The Archaeological Record In Deep Time". *American Antiquity* 65 (02): 267-290. doi:10.2307/2694059.

Fabian, Johannes, and Matti Bunzl. 1983. *Time And The Other*. Columbia University Press.

Fanon, Frantz. 1963. *The Wretched Of The Earth*. New York: Grove Press.

"Felix Hess - Air Pressure Fluctuations". 2019. *Discogs*. <https://www.discogs.com/Felix-Hess-Air-Pressure-Fluctuations/release/406072>.

- Gilbert, Scott F., Jan Sapp, and Alfred I. Tauber. 2012. "A Symbiotic View Of Life: We Have Never Been Individuals". *The Quarterly Review Of Biology* 87 (4): 325-341.
doi:10.1086/668166.
- Glissant, Édouard, and Betsy Wing. 2010. *Poetics Of Relation*. Ann Arbor: University of Michigan Press.
- Graeber, David, and David Wengrow. 2018. "How To Change The Course Of Human History". *Eurozine.Com*. <https://www.eurozine.com/change-course-human-history/>.
- Graeber, David. 2015. *The Utopia Of Rules*. Melville House Publishing.
- Halewood, Michael. 2019. *There Is No Meaning To "Creativity" Apart From Its "Creatures"*. Ebook. Accessed April 10.
- Haraway, Donna. 2015. "Anthropocene, Capitalocene, Plantationocene, Chthulucene: Making Kin". *Environmental Humanities* 6 (1): 159-165. doi:10.1215/22011919-3615934.
- Haraway, Donna. 2017. "Sybiogenesis, Sympoiesis, and Art Science Activisms for Staying with the Trouble". In *Arts Of Living On A Damaged Planet*, M25-M50. University of Minnesota Press.
- Harman, Graham. 2005. *Guerrilla Metaphysics*. Chicago, il: Open court Publishing Company.
- Keller, Lynn. 2018. *Recomposing Eco-poetics*. Charlottesville: University of Virginia Press.
- Koch, Alexander, Chris Brierley, Mark M. Maslin, and Simon L. Lewis. 2018. "Earth System Impacts Of The European Arrival And Great Dying In The Americas After 1492". *Quaternary Science Reviews* 207: 13-36. doi:10.1016/j.quascirev.2018.12.004.

- Kohn, Eduardo. 2013. *How Forests Think*. University of California Press.
- Kosek, Jake. 2004. "Purity And Pollution: Racial Degradation And Environmental Anxieties." In *Liberation Ecologies: Environment, Development, Social Movements*. Routledge.
- Kropotkin, Petr Alekseevich. 1902;2016. *Mutual Aid; A Factor In Evolution*.
- Kulick, Don. 2015. *Loneliness And Its Opposite*. North Carolina: Duke University Press.
- LeGuin, Ursula. 2017. "Deep In Admiration". In *Arts Of Living On A Damaged Planet*, M15-M21. University of Minnesota Press.
- López, Francisco. 1998. "Francisco López [Essays // Environmental Sound Matter]". *Franciscolopez.Net*. <http://www.franciscolopez.net/env.html>.
- Marx, Karl, and David McLellan. 2009. *Selected Writings*. Oxford: Oxford Univ. Press.
- Merleau-Ponty, Maurice, Claude Lefort, and Alphonso Lingis. 1968. *The Visible And The Invisible*. Northwestern University Press.
- Morton, Timothy. 2016. *Dark Ecology*. Colombia University Press.
- Morton, Timothy. 2017. *Humankind*. Verso.
- Morton, Timothy. 2013. *Hyperobjects*. University of Minnesota Press.
- Nixon, Rob. 2011. *Slow Violence And The Environmentalism Of The Poor*. Cambridge, Mass.: Harvard University Press.

- Pilkington, Ed. 2019. "US Inmates Stage Nationwide Prison Labor Strike Over 'Modern Slavery'". *The Guardian*. <https://www.theguardian.com/us-news/2018/aug/20/prison-labor-protest-america-jailhouse-lawyers-speak>.
- Rubin, Gayle. 1975. "The Traffic In Women: Notes On The 'Political Economy' Of Sex". *Toward An Anthropology Of Women*.
- Shelley, Percy Bysshe, Donald Henry Reiman, and Neil Fraistat. 2002. *Shelley's Poetry And Prose*. New York: W.W. Norton & Company.
- Simmons, Kirsten. 2017. "Settler Atmospherics". *Culanth.Org*. <https://culanth.org/fieldsights/settler-atmospherics>.
- Smith, Linda Tuhiwai. 2010. "Colonizing Knowledges". In *Indigenous Archaeologies; A Reader On Decolonization*, 57-62. Left Coast Press.
- Snyder, Gary. 2008. *Turtle Island*. New York: New Directions.
- Stoler, Ann. 2010. *Carnal Knowledge And Imperial Power*. Berkeley, CA: University of California Press.
- Svenning, Jens-Christian. 2017. "Future Megafaunas; A Historical Perspective for a Wilder Anthropocene". In *Arts Of Living On A Damaged Planet*, G67-G86. University of Minnesota Press.
- Swanson, Heather, Anna Tsing, Nils Bubandt, and Elaine Gan. 2017. "Bodies Tumbled Into Bodies". In *Arts Of Living On A Damaged Planet*, M1-M12. University of Minnesota Press.
- The Coming Insurrection*. 2009. Los Angeles, CA: Semiotext(e).

"The Environmental Challenge Of Military Munitions And Federal Facilities | US EPA".

2019. *US EPA*. <https://www.epa.gov/enforcement/environmental-challenge-military-munitions-and-federal-facilities>.

"The Extinction Crisis". 2019. *Biologicaldiversity.org*.

https://www.biologicaldiversity.org/programs/biodiversity/elements_of_biodiversity/extinction_crisis/.

Tsing, Anna Lowenhaupt. 2015. *The Mushroom At The End Of The World*. Princeton, N.J.: Princeton University Press.

United Nations Conference on Trade and Development. 2013. "Wake Up Before It Is Too Late: Make Agriculture Truly Sustainable Now for Food Security in a Changing Climate," Trade and Environment Review 2013. New York: United Nations.

Waters, C. N., J. Zalasiewicz, C. Summerhayes, A. D. Barnosky, C. Poirier, A. Gauszka, and A. Cearreta et al. 2016. "The Anthropocene Is Functionally And Stratigraphically Distinct From The Holocene". *Science* 351 (6269): aad2622-aad2622. doi:10.1126/science.aad2622.

Whitehead, Alfred North. 1978. *Process And Reality; An Essay On Cosmology*. Free Press.

Whorf, Benjamin Lee, and John B Carroll. 1956. *Language, Thought, And Reality*. Cambridge, Mass.: M.I.T. Press.

Wise, Michael Z. 2014. "The Architectural Importance Of The U.S. Embassy In Havana, Cuba". *Architectmagazine.com*. https://www.architectmagazine.com/design/the-architectural-importance-of-the-us-embassy-in-havana-cuba_o.